WASHINGTON STATE
DEPARTMENT OF
ECOLOGY

As required by
the Washington State Administrative Procedures Act
Chapter 34.05 RCW

CONCISE EXPLANATORY STATEMENT
AND
RESPONSIVENESS SUMMARY
FOR THE ADOPTION OF
Chapter 173-350 WAC
Solid Waste Handling Standards

January 8, 2003

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Prepared by:
Washington State Department of Ecology
Solid Waste and Financial Assistance Program

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CONCISE EXPLANATORY STATEMENT

I. Introduction and Background

Purpose

The purpose of this rule making effort is to provide solid waste handling standards that adequately address current conditions, address statutory changes that resulted from legislation passed during the 1998 Legislative Session, and present the criteria in a clear, easily used format. There have been many changes in how solid wastes are managed since the current rule, the *Minimum Functional Standards for Solid Waste Handling* (MFS), chapter 173-304 WAC, was first promulgated in 1985. Waste management priorities have substantially changed, with waste reduction, beneficial use, and recycling being at the top of the hierarchy. Because the MFS was originally intended to address the priorities of the mid-1980s it is significantly out of line with modernized priorities. Furthermore, there have been a number of technological advancements in environmental protection at solid waste disposal facilities that are not adequately addressed in ch. 173-304 WAC. For these reasons, and others described below the Department of Ecology is adopting a new rule, ch. 173-350 WAC, *Solid Waste Handling Standards.*

Background

The *Minimum Functional Standards for Solid Waste Handling* (MFS), Chapter 173-304 WAC, first became effective on November 27, 1985. The MFS implements the statutory requirements set forth by the legislature in chapter 70.95 RCW, and was intended to create a set of comprehensive location, design, and operational requirements for all solid waste handling facilities. The rule was last amended in 1987. The rule amendment was limited to developing criteria to implement the legislatively mandated requirements for closure and post-closure care period financial assurance at solid waste disposal facilities.

Recognizing that the MFS did not adequately address many aspects of solid waste management Ecology originally began a substantive revision process in 1990. Issue papers were developed that examined some of the needs for revisions that had been identified by staff. The issue papers were presented for comment at public workshops that were conducted around the state. However, this effort was halted because of a change in federal solid waste rules. The United States Environmental Protection Agency issued a new rule, *Solid Waste Disposal Facility Criteria*, 40 CFR 258, which provides a reasonable amount of flexibility to states with "approved programs". In order to attain approved state program status Ecology was required to promulgate a new state rule, *Municipal Solid Waste Landfill Criteria*, chapter 173-351 WAC, that was at least as stringent as the federal rules. Because it was determined that development of ch. 173-351 WAC was the higher priority, work on revising the MFS was stopped and staff were reassigned to the new rule development effort.

The current rule revision project began in 1997 with formation of an internal Ecology workgroup to assess the needs and priorities for rule revisions. The product of the workgroup, a prioritized list of issues, was presented to the State Solid Waste Advisory Committee, and the Environmental Health Directors Association as a first step toward stakeholder involvement in the process.

The 1998 Washington State Legislature further shaped the focus of the rule revision with passage of Engrossed Substitute Senate Bill (ESSB) 6203 and Substitute House Bill (SHB) 2960. Both bills stemmed from a study of the permit system that the Legislature directed Ecology to conduct in Engrossed Substitute House Bill (ESHB) 1419.

The intent of ESSB 6203 is to encourage recycling and reuse opportunities. In order to accomplish this goal the legislation directs Ecology to write rules that change the existing permit system, including providing a procedure for issuing permit exemptions for the beneficial use of solid waste. The legislation also authorized Ecology to exempt from permitting some categories of solid waste handling facilities.

The focus of EHB 2960 is specific to compost facilities and material recovery facilities. The bill directs Ecology to provide a study to the Legislature that provides recommendations for improved permit consistency, examines the use of permit-by-rule system, as well as the applicability of a best available control technology (BACT) approach to regulating these facilities. Ecology completed the study and recommended developing compost facility standards as part of the MFS Revisions process.

It should also be noted that the original intent of this rule-making process was to revise ch. 173-304 WAC, the existing rule. Several factors caused Ecology to modify the original approach and pursue adopting a new rule. Among these factors was the need to maintain the MFS to provide regulatory coverage for closed facilities. Due to this we determined that maintaining coverage with the existing rule for the interim was beneficial and therefore existing facilities will be required to meet the new regulation in phases. Once effective the final rule will immediately apply to all new facilities. It is our intent to systematically repeal appropriate sections of ch. 173-304 WAC over the next 3-4 years.

Key Elements

Based on the issues that have been identified by stakeholder groups, the Legislature, and Ecology staff, the proposed rule includes the following key elements:

Beneficial Use

Pursuant to RCW 70.95.300 the final rule includes an application, evaluation and comment process for exempting certain beneficial uses of solid waste from the permit process . The major criteria to consider are: (a) is the proposed use a beneficial use; and, (b) does the beneficial use of the waste present threats to human health or the environment. In a role reversal from the traditional solid waste regulatory system the legislature appointed Ecology as the lead agency for evaluating and approving the exemption applications. All local health jurisdictions will have opportunity to review and comment on beneficial use applications. Once issued, beneficial use exemptions are effective statewide.

Permit Deferral

Pursuant to RCW 70.95.310 the final rule establishes a process by which a local health jurisdiction can defer solid waste permitting to other environmental (e.g., air quality, water quality) permits.

Categorical Exemptions
RCW 70.95.305 allows for exempting certain classes of solid waste handling facilities from permitting. The proposed rule provides various categorical permit exemptions for facilities that present little or no risk to the environment. All categorical exemptions carry terms and conditions. Violations of the terms and conditions can result in revocation of a facility's ability to operate under the categorical exemption and/or civil penalty.

Simplified Criteria for Landfills
Currently the MFS has landfill standards specific to the type of waste managed. Because of the numerous and varied types of waste that exist this approach has proven cumbersome and confusing. The final rule provides for only two types of non-municipal solid waste landfills (municipal solid waste landfills are addressed by ch. 173-351 WAC). The two types of landfills are inert waste landfills and limited purpose landfills.

Inert waste landfills may only manage concrete, asphalt, masonry, ceramics, glass, aluminum, and stainless steel. In order for other materials to be considered inert it must be demonstrated that the material exhibits similar characteristics to the listed waste. Inert waste landfills are not required to provide any significant environmental controls as they do not pose significant environmental risk.

Limited purpose landfills will be available to accept many other types of wastes including industrial waste, demolition waste, problem waste, and wood waste. Limited purpose landfills are subject to location standards, design and operating criteria, ground water monitoring, and financial assurance. Design criteria are performance based rather than prescriptive. Additionally, there are other opportunities for limited purpose landfills to demonstrate that location or operating standards are unnecessary for their particular facility.

Compost Facility standards.
The standards for compost facilities are based largely on existing guidance and stakeholder input. The standards include facility design and operating criteria. The criteria also include several categorical exemptions from permitting (e.g., small scale facilities, agricultural) in an effort to encourage composting across the state.

Moderate Risk Waste
The proposed rule provides the first state regulations for moderate risk waste facility design and operations. The requirements are based largely on existing guidance, and input from stakeholders.

Waste Tires
The proposed rule provides clear design and operating requirements for tire storage facilities, including requiring financial assurance. Additionally, we have incorporated the tire carrier and storage site licensing requirements of ch. 173-314 WAC. Ch. 173-314 WAC will be repealed once the proposed new rule becomes effective.

Surface impoundments and piles
In some cases the current standards for surface impoundments and waste piles were not adequate to protect human health and the environment, or were in conflict with other state regulations. We have revised these standards to address these concerns. We have also categorically exempted some low risk piles from permitting.

Administrative organization and readability

In an effort to maximize the usability of the rule, cross-referencing has been eliminated to the maximum extent practicable. In the cases where cross-referencing was necessary we have provided clear direction to the user as to which sections are applicable.

Evaluating Technical Information Memoranda and guidance for incorporation into the rules
In accordance with the intent of Executive Order 97-02 and RCW 34.05.230, Administrative Procedure Act, we have examined the existing Technical Information Memoranda and other guidelines/guidance documents and have incorporated them into the rule as appropriate.

Consistency with chapter 173-351 WAC
Because many of our stakeholders operate facilities subject to ch. 173-351 WAC we felt that it was critical to provide consistency wherever there was overlap in the rules. In order to do this we have included appropriate aspects of the location standards, operational criteria, groundwater monitoring and financial assurance requirements of ch. 173-351 WAC into the proposed rule.

Adoption and Effective Dates
Chapter 173-350 WAC, *Solid Waste Handling Standards*, will be adopted on January 10, 2003. The effective date will be February 10, 2003.

II. Describe Differences Between Proposed and Final Rule

As a result of public comment and additional internal review, the adopted rule has been revised from the version proposed with the CR-102 filing at the Office of the Code Reviser. Those revisions are discussed below. The text of the proposed rule that is being changed is in the strikethrough format and the new text is underlined.

Chapter 173-350 WAC

SOLID WASTE HANDLING STANDARDS

NEW SECTION

WAC 173-350-010 Purpose. This chapter is adopted under the authority of chapter 70.95 RCW, Solid waste management--Reduction and recycling, to protect public health, to prevent land, air, and water pollution, and conserve the state's natural, economic, and energy resources by:

(1) Setting minimum functional performance standards for the proper handling and disposal of solid waste originating from residences, commercial, agricultural and industrial operations and other sources;

(2) Identifying those functions necessary to assure effective solid waste handling programs at both the state and local level;

(3) Following the priorities for the management of solid waste as set by the legislature in chapter 70.95 RCW, Solid waste management--Reduction and recycling.

(4) Describing the responsibility of persons, municipalities, regional agencies, state and local government related to solid waste;

(5) ~~Requiring use of the best available technology for siting, and all known available and reasonable methods for designing, constructing, operating and closing solid waste handling facilities~~ Requiring solid waste handling facilities be located, designed, constructed, operated and closed in accordance with this chapter;

Reason for change

This change was made because the phrases "best available technology" and "all known available and reasonable methods" provided the potential for confusion since similar terms are used for specific purposes in air and water quality rules. The modification clarifies the intended purpose of the chapter.

(6) Promoting regulatory consistency by establishing statewide minimum standards for solid waste handling; and

(7) Encouraging the development and operation of waste recycling facilities and activities needed to accomplish the management priority of waste recycling.

NEW SECTION

WAC 173-350-020 Applicability. This chapter applies to facilities and activities that manage solid wastes as that term is defined in WAC 173-350-100. This chapter does not apply to the following:

(1) Overburden from mining operations intended for return to the mine;

(2) Wood waste used for ornamental, animal bedding, mulch and plant bedding, or road building purposes;

(3) Wood waste directly resulting from the harvesting of timber left at the point of generation and subject to chapter 76.09 RCW, Forest practices;

(4) Land application of manures and crop residues at agronomic rates;

(5) Home composting as defined in WAC 173-350-100;

(6) Single-family residences and single-family farms whose year round occupants engage in solid waste disposal regulated under WAC 173-351-700(4);

(7) Clean soils and clean dredged material~~spoils~~ as defined in WAC 173-350-100;

(8) Dredged material as defined in 40 CFR 232.2 that is subject to:

(a) The requirements of a permit issued by the U.S. Army Corps of Engineers or an approved state under section 404 of the Federal Water Pollution Control Act (33 U.S.C. 1344;

(b) The requirements of a permit issued by the U.S. Army Corps of Engineers under section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C 1413); or

(c) In the case of U.S. Army Corps of Engineers civil works projects, the administrative equivalent of the permits referred to in paragraphs (a) and (b) of this subsection, as provided for in U.S. Army Corps of Engineers regulations, including, for example, 33 CFR 336.1, 336.2, and 337.6;~~Dredge spoils regulated under section 404 of the Federal Clean Water Act;~~

Reason for change

This subsection has been amended to clarify its applicability to dredged material.

(9) Biosolids that are ~~beneficially used or otherwise~~ managed under chapter 173-308 WAC, Biosolids management;

Reason for change

This change was made to eliminate any confusion that may have arisen between the applicability of chapter 173-308 WAC and the beneficial use permit exemptions in this rule.

(10) Domestic septage taken to a sewage treatment plant permitted under chapter 90.48 RCW, Water pollution control;

(11) Liquid wastes, the discharge or potential discharge of which, is regulated under federal, state or local water pollution permits;

(12) Domestic wastewater facilities and industrial wastewater facilities otherwise regulated by federal, state, or local water pollution permits;

(13) Dangerous wastes fully regulated under chapter 70.105 RCW, Hazardous waste management, and chapter 173-303 WAC, Dangerous waste regulations;

(14) Special incinerator ash regulated under chapter 173-306 WAC, Special incinerator ash management standards;

(15) PCB wastes regulated under 40 CFR Part 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions, except for:

(a) PCB household waste; and

(b) PCB bulk product wastes identified in 40 CFR Part 761.62(b)(1) that are disposed of in limited purpose landfills;

Reason for change

The Federal rule regulating PCB, 40 CFR Part 761, allows disposal of limited types of PCB wastes in non-hazardous, non-MSW solid waste landfills. This revision was made so that the rule would apply to these PCB wastes, allowing them to be handled in solid waste facilities as provided in 40 CFR Part 761.

(16) Radioactive wastes, defined by chapter 246-220 WAC, Radiation protection--General provisions, and chapter 246-232 WAC, Radioactive protection--Licensing applicability;

(17) Landfilling of municipal solid waste regulated under chapter 173-351 WAC, Criteria for municipal solid waste landfills;

(18) Drop boxes used solely for collecting recyclable materials;

(19) Intermodal facilities as defined in WAC 173-350-100; and

(20) Solid waste handling facilities that have engaged in closure and closed before the effective date of this chapter.

NEW SECTION

WAC 173-350-025 Owner responsibilities for solid waste. The owner, operator, or occupant of any premise, business establishment, or industry shall be responsible for the satisfactory and legal arrangement for the solid waste handling of all solid waste generated or accumulated by them on the property.

NEW SECTION

WAC 173-350-030 Effective dates. (1) *Effective dates - ~~New facilities and new solid waste handling units.~~* ~~New facilities and new solid waste handling units permitted after the effective date of this chapter shall comply with all the requirements of this regulation.~~These standards apply to all facilities, except existing facilities, upon the effective date of this chapter.

Reason for change

This section was modified to clarify the applicability of effective dates to existing and other facilities or solid waste handling units. The term "new facility" has been eliminated from use.

(2) *Effective dates - Existing facilities.*

(a) The owner or operator of existing facilities shall:

(i) ~~Meet all applicable operating standards within twelve months of the effective date of this chapter;~~

~~(ii)~~ Meet all applicable operating, environmental monitoring, closure and post-closure planning, and financial assurance requirements of this chapter within twenty-four months of the effective date of this chapter; and

Reason for change

This change was made so that existing facilities would have sufficient time to meet the requirements of local ordinances adopted to implement this rule.

(ii~~iii~~)~~-~~ Meet all applicable performance and design requirements, other than location or setback requirements, within thirty-six months of the effective date of this chapter.

(b) These standards apply to all new solid waste handling units at existing facilities upon the effective date of this chapter.

Reason for change

This modification was made to clarify the applicability of effective dates to new solid waste handling units.

(c~~b~~) The owner or operator of existing facilities shall initiate the permit modification process outlined in WAC 173-350-710(4) within ~~twelve~~ eighteen months after the effective date of this chapter. If a permit modification is necessary, every application for a permit modification

shall describe the date and methods for altering an existing facility to meet (a)(i) through (iii) of this subsection.

Reason for change

This change was made so that existing facilities would have sufficient time to meet the requirements of local ordinances adopted to implement this rule.

(dc) The jurisdictional health department shall determine if a new permit application is required based on the extent of the changes needed to bring the facility into compliance.

(ed) An existing facility completing closure within twelve months of the effective date of this chapter may close in compliance with the requirements of chapter 173-304 WAC, Minimum functional standards for solid waste handling. Any facility that does not complete closure within twelve months of the effective date of this chapter shall close in compliance with applicable requirements of this chapter.

NEW SECTION

WAC 173-350-040 Performance standards. The owner or operator of all solid waste facilities subject to this chapter shall:

(1) Design, construct, operate, and close all facilities in a manner that does not ~~present risks~~pose a threat to human health or the environment;

Reason for change

The unqualified use of the term "risk" was eliminated from the rule because it represents any chance of harm. Some level of risk is present in any activity or situation.

(2) Comply with chapter 90.48 RCW, Water pollution control and implementing regulations, including chapter 173-200 WAC, Water quality standards for ground waters of the state of Washington;

(3) Conform to the approved local comprehensive solid waste management plan prepared in accordance with chapter 70.95 RCW, Solid waste management--Reduction and recycling, and/or the local hazardous waste management plan prepared in accordance with chapter 70.105 RCW, Hazardous waste management;

(4) Not cause any violation of emission standards or ambient air quality standards at the property boundary of any facility and comply with chapter 70.94 RCW, Washington Clean Air Act; and

(5) Comply with all other applicable local, state, and federal laws and regulations~~; and~~

~~(6) Not dilute a waste, or the residual from treatment of a waste, as a substitute for treatment or disposal~~.

Reason for change

This performance standard was proposed to prevent a person from merely diluting toxic or hazardous constituents in a waste that would be released to the environment instead of performing treatment to mitigate the toxicity or hazard. The primary activity that Ecology believed needed to be addressed to protect human health and the environment was the simple

dilution of contaminated soils, or solid wastes used to make soils, in lieu of effective treatment. In order to address the problems associated with applying the restriction to all solid wastes, and to clarify the intent, the prohibition on dilution in lieu of treatment or disposal has been moved into subsection 320(4)(f) which is applicable to the storage and treatment of contaminated soils and dredged material.

NEW SECTION

WAC 173-350-100 Definitions. When used in this chapter, the following terms have the meanings given below.

"Active area" means that portion of a facility where solid waste recycling, reuse, treatment, storage, or disposal operations are being, are proposed to be, or have been conducted. Setbacks shall not be considered part of the active area of a facility.

"Agricultural composting" means composting of agricultural waste as an integral component of a system designed to improve soil health and recycle agricultural wastes. Agricultural composting is conducted on lands used for farming.

"Agricultural wastes" means wastes on farms resulting from the raising or growing of plants and animals including, but not limited to, crop residue, manure and animal bedding, and carcasses of dead animals weighing each or collectively in excess of fifteen pounds.

"Agronomic rates" means the application rate (dry weight basis) that will provide the amount of nitrogen or other critical nutrient required for optimum growth of vegetation, and that will not result in the violation of applicable standards or requirements for the protection of ground or surface water as established under chapter 90.48 RCW, Water pollution control and related rules including chapter 173-200 WAC, Water quality standards for ground waters of the state of Washington, and chapter 173-201A WAC, Water quality standards for surface waters of the state of Washington.

"Air quality standard" means a standard set for maximum allowable contamination in ambient air as set forth in chapter 173-400 WAC, General regulations for air pollution sources.

~~**"Aquifer"** means a geologic formation, group of formations, or part of a formation capable of yielding a significant amount of ground water to wells or springs.~~

Reason for change

The proposed definition of aquifer was found to be confusing and unclear. The definition and the use of the term have been eliminated from the rule.

~~**"Ashes"** means the residue including any air pollution flue dusts from combustion or incineration of material including solid wastes.~~

Reason for change

This definition was deleted because it was not needed.

"Below ground tank" means a device meeting the definition of "tank" in this chapter where a portion of the tank wall is situated to any degree within the ground, thereby preventing visual inspection of that external surface of the tank that is in the ground.

"Beneficial use" means the use of solid waste as an ingredient in a manufacturing process, or as an effective substitute for natural or commercial products, in a manner that does not pose a threat to human health or the environment. Avoidance of processing or disposal cost alone does not constitute beneficial use.

"Biosolids" means municipal sewage sludge that is a primarily organic, semisolid product resulting from the wastewater treatment process, that can be beneficially recycled and meets all applicable requirements under chapter 173-308 WAC, Biosolids management. Biosolids includes a material derived from biosolids and septic tank sludge, also known as septage, that can be beneficially recycled and meets all applicable requirements under chapter 173-308 WAC, Biosolids management.

"Buffer" means a permanently vegetated strip adjacent to an application area, the purpose of which is to filter runoff or overspray from the application area and protect an adjacent area.

~~**"Buy-back recycling center"** means any facility which collects, receives, or buys recyclable materials from household, commercial, or industrial sources for the purpose of accumulating, grading, or packaging recyclable materials for subsequent shipment and reuse, other than direct application to land.~~

Reason for change

This definition has been deleted from the rule because the term is no longer used.

"Cab cards" means a license carried in a vehicle that authorizes that vehicle to legally pick up waste tires and haul to a permitted, licensed facility or an exempt facility for deposit.

"Captive insurance companies" means companies that are wholly owned subsidiaries controlled by the parent company and established to insure the parent company or its other subsidiaries.

"Channel migration zone" means the lateral extent of likely movement of a stream or river channel along a stream reach.

"Clean soils and clean dredged material~~spoils~~" means soils and dredged material~~spoils~~ that do not contain contaminants at concentrations which could negatively impact the existing quality of air, waters of the state, soils, or sediments; or pose a threat to the health of humans or other living organisms.

Reason for change

The term "dredge spoils" has not been commonly used within the industry for many years. The term was a carry over from the previous rule, Chapter 173-304 WAC, but has been replaced with "dredged material" throughout the final rule.

The definition has been amended to clarify the intent to ensure that clean soils and dredged material do not negatively impact the *existing* quality of the site where they are placed.

"Closure" means those actions taken by the owner or operator of a solid waste handling facility to cease disposal operations or other solid waste handling activities, to ensure that all such facilities are closed in conformance with applicable regulations at the time of such closures and to prepare the site for the post-closure period.

"Closure plan" means a written plan developed by an owner or operator of a facility detailing how a facility is to close at the end of its active life.

"Composted material" means organic solid waste that has undergone biological degradation and transformation under controlled conditions designed to promote aerobic

decomposition at a solid waste facility in compliance with the requirements of this chapter. Natural decay of organic solid waste under uncontrolled conditions does not result in composted material.

"Composting" means the biological degradation and transformation of organic solid waste under controlled conditions designed to promote aerobic decomposition. Natural decay of organic solid waste under uncontrolled conditions is not composting.

"Conditionally exempt small quantity generator (CESQG)" means a dangerous waste generator whose dangerous wastes are not subject to regulation under chapter 70.105 RCW, Hazardous waste management, solely because the waste is generated or accumulated in quantities below the threshold for regulation and meets the conditions prescribed in WAC 173-303-070 (8)(b).

"Conditionally exempt small quantity generator (CESQG) waste" means dangerous waste generated by a conditionally exempt small quantity generator.

Reason for change

This definition was inserted for clarification in response to changes in the definition of "moderate risk waste (MRW)".

~~**"Construction"** means the continuous on-site physical act of constructig solid waste handling unit(s) or when the owner or operator of a facility has entered into contractual obligations for physical construction of the facility that cannot be canceled or modified without substantial financial loss.~~

Reason for change

The proposed uncommon definition of "construction" was problematic when used in other definitions because it was primarily used to determine whether a facility was an existing facility or a solid waste handling unit was new for effective dates. The definitions of "construction" (changed to "facility construction"), "existing facility" and "new solid waste handling unit" have been modified to differentiate between normal construction activities and those that determine the status of a solid waste facility for the purposes of effective dates.

"Container" means a portable device used for the collection, storage, and/or transportation of solid waste including, but not limited to, reusable containers, disposable containers, and detachable containers.

"Contaminant" means any chemical, physical, biological, or radiological substance that does not occur naturally in the environment or that occurs at concentrations greater than natural background levels.

"Contaminate" means the release of solid waste, leachate, or gases emitted by solid waste, such that contaminants enter the environment at concentrations that pose a threat to human health or the environment, or cause a violation of any applicable environmental regulation.

~~**"Contaminated dredge spoils"** means dredge spoils resulting from the dredging of surface waters where contaminants are present at concentrations not suitable for open water disposal, or which could negatively impact the quality of air, waters of the state, soils or sediments, or pose a threat to the health of humans or other living organisms.~~

"Contaminated soils and contaminated dredged material" means soils and dredged material that contain contaminants at concentrations which could negatively impact the existing quality of air, waters of the state, soils or sediments, or pose a threat to the health of humans or other living organisms.

Reason for change

The term "dredge spoils" has not been commonly used within the industry for many years. The term was a carry over from the previous rule, Chapter 173-304 WAC, but has been replaced with "dredged material" throughout the final rule.

This definition has been amended so that any given soil or dredged material may be defined as either clean or contaminated with no overlap. This rule is intended to prevent dredged material placed on land from causing harm. Because of this, contaminated dredged material is defined in a way that addresses the upland impacts. Most dredged material disposed in open water would be exempted from this rule in Section 020, Applicability.

The definition has been amended to clarify the intent to ensure that clean soils and dredged material do not negatively impact the *existing* quality of the site where they are placed.

"Corrosion expert" means a person certified by the National Association of Corrosion Engineers (NACE) or a registered professional engineer who has certification or licensing that includes education and experience in corrosion control.

"Crop residues" means vegetative material leftover from the harvesting of crops, including leftover pieces or whole fruits or vegetables, crop leaves and stems. Crop residue does not include food processing waste.

"Dangerous wastes" means any solid waste designated as dangerous waste by the department under chapter 173-303 WAC, Dangerous waste regulations.

"Department" means the Washington state department of ecology.

"Detachable containers" means reusable containers that are mechanically loaded or handled, such as a dumpster or drop box.

"Disposable containers" means containers that are used once to handle solid waste, such as plastic bags, cardboard boxes and paper bags.

"Disposal" or **"deposition"** means the discharge, deposit, injection, dumping, leaking, or placing of any solid waste into or on any land or water.

~~**"Disposal site"** means the location where any final treatment, use, processing, or deposit of solid waste occurs.~~

Reason for change

The definition for "disposal site" was deleted and all references in the rule were changed to "disposal facility" or "landfill". No definition for "disposal facility" was added as the concept is a logical combination of defined terms.

"Domestic septage" means Class I, II or III domestic septage as defined in chapter 173-308 WAC, Biosolids management.

"Domestic wastewater facility" means all structures, equipment, or processes required to collect, carry away, treat, reclaim, or dispose of domestic wastewater together with such industrial waste as may be present.

"Drop box facility" means a facility used for the placement of a detachable container including the area adjacent for necessary entrance and exit roads, unloading and turn-around areas. Drop box facilities normally serve the general public with loose loads and receive waste from off-site.

"Energy recovery" means the recovery of energy in a useable form from mass burning or refuse-derived fuel incineration, pyrolysis or any other means of using the heat of combustion

of solid waste that involves high temperature (above twelve hundred degrees Fahrenheit) processing.

"Existing facility" means a facility which is owned or leased, and in operation, or for which facility construction has begun, on or before the effective date of this chapter and the owner or operator has obtained permits or approvals necessary under federal, state and local statutes, regulations and ordinances.

"Facility" means all contiguous land (including buffers and setbacks) and structures, other appurtenances, and improvements on the land used for solid waste handling.

"Facility construction" means the continuous on-site physical act of constructing solid waste handling unit(s) or when the owner or operator of a facility has entered into contractual obligations for physical construction of the facility that cannot be canceled or modified without substantial financial loss.

Reason for change

The proposed uncommon definition of "construction" was problematic when used in other definitions because it was primarily used to determine whether a facility was an existing facility or a solid waste handling unit was new for effective dates. The definitions of "construction" (changed to "facility construction"), "existing facility" and "new solid waste handling unit" have been modified to differentiate between normal construction activities and those that determine the status of a solid waste facility for the purposes of effective dates.

"Facility structures" means constructed infrastructure such as buildings, sheds, utility lines, and piping on the facility.

~~**"Final treatment"** means the act of processing or preparing solid waste for disposal, use, or other approved method.~~

Reason for change

The definition for "final treatment" was deleted because the term was only used in the definition of "disposal site", which has been deleted in the final rule.

~~**"Free liquids"** means any solid waste which is deemed to contain free liquids as determined by the Paint Filter Liquids Test, Method 9095, in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846.~~

Reason for change

The proposed definition of the term "free liquids" was improper as it referred to the solid waste and not the liquids in the waste. The term has been changed to "liquid waste" in the final rule to correct this.

"Garbage" means animal and vegetable waste resulting from the handling, storage, sale, preparation, cooking, and serving of foods.~~**"Garbage"** means unwanted animal and vegetable wastes and animal and vegetable wastes resulting from the handling, preparation, cooking and consumption of food, swill and carcasses of dead animals, and of such a character and proportion as to be capable of attracting or providing food for vectors, except sewage and sewage sludge.~~

Reason for change

This definition was modified to make it easier to understand and to clarify its intended use.

"Ground water" means that part of the subsurface water that is in the zone of saturation.

"Holocene fault" means a plane along which earthen material on one side has been displaced with respect to that on the other side and has occurred in the most recent epoch of the Quaternary period extending from the end of the Pleistocene to the present.

"Home composting" means composting of on-site generated wastes, and incidental materials beneficial to the composting process, by the owner or person in control of a single-family residence, or for a dwelling that houses two to five families, such as a duplex or clustered dwellings.

"Household hazardous wastes" means any waste which exhibits any of the properties of dangerous wastes that is exempt from regulation under chapter 70.105 RCW, Hazardous waste management, solely because the waste is generated by households. Household hazardous waste can also include other solid waste identified in the local hazardous waste management plan prepared pursuant to chapter 70.105 RCW, Hazardous waste management.

"Hydrostratigraphic unit" means any water-bearing geologic unit or units hydraulically connected or grouped together on the basis of similar hydraulic conductivity which can be reasonably monitored; several geologic formations or part of a geologic formation may be grouped into a single hydrostratigraphic unit; perched sand lenses may be considered a hydrostratigraphic unit or part of a hydrostratigraphic unit, for example.

Reason for change

This definition was added to clarify the meaning of a term used within this rule.

"Incineration" means reducing the volume of solid wastes by use of an enclosed device using controlled flame combustion.

"Incompatible waste" means a waste that is unsuitable for mixing with another waste or material because the mixture might produce excessive heat or pressure, fire or explosion, violent reaction, toxic dust, fumes, mists, or gases, or flammable fumes or gases.

Reason for change

This definition was modified to clarify that the term does not apply to a waste that generates small amounts of heat when mixed with another waste or material.

"Industrial solid wastes" means solid waste generated ~~by products~~ from manufacturing operations, food processing, ~~manufacturing operations~~or other industrial processes ~~such as scraps, trimmings, packing, and other discarded materials that are not dangerous wastes~~.

Reason for change

This definition was modified to clarify its intended use in the rule.

"Industrial wastewater facility" means all structures, equipment, or processes required to collect, carry away, treat, reclaim, or dispose of industrial wastewater.

"Inert waste" means solid wastes that meet the criteria for inert waste in WAC 173-350-990.

"Inert waste landfill" means a landfill that receives only inert wastes.

"Intermediate solid waste handling facility" means any intermediate use or processing site engaged in solid waste handling which is not the final site of disposal. This includes material recovery facilities, transfer stations, drop boxes, baling and compaction sites.

Reason for change

The sections of the rule applicable to material recovery facilities and recycling were modified to

clarify the difference between the act of recycling, as defined, and the collection and handling of solid wastes prior to recycling. Material recovery facilities have been placed under Section 310, Intermediate solid waste handling facilities.

"Intermodal facility" means any facility operated for the purpose of transporting closed containers of waste and the containers are not opened for further treatment, processing or consolidation of the waste.

"Jurisdictional health department" means city, county, city-county or district public health department.

"Land application site" means a contiguous area of land under the same ownership or operational control on which solid wastes are beneficially utilized for their agronomic or soil-amending capability.

"Land reclamation" means using solid waste to restore drastically disturbed lands including, but not limited to, construction sites and surface mines. Using solid waste as a component of fill is not land reclamation.

Reason for change

Land reclamation was not intended to include circumstances where solid wastes are used as a component of fill to restore drastically disturbed lands. The definition was revised to exclude solid waste used as fill.

"Landfill" means a disposal facility or part of a facility at which solid waste is permanently placed in or on land including facilities that use solid waste as a component of fill.

"Leachate" means water or other liquid within a solid waste handling unit that has been contaminated by dissolved or suspended materials due to contact with solid waste or gases.

Reason for change

This definition was modified to clarify that the term does not apply to ground or surface waters that may have been contaminated by leachate or gases.

"Limited moderate risk waste" means waste batteries, waste oil, and waste antifreeze generated from households.

"Limited moderate risk waste facility" means a facility that collects, stores, and consolidates only limited moderate risk waste.

"Limited purpose landfill" means a landfill which is not regulated or permitted by other state or federal environmental regulations that receives solid wastes limited by type or source. Limited purpose landfills include, but are not limited to, landfills that receive segregated industrial solid waste, construction, demolition and landclearing debris, wood waste, ash (other than special incinerator ash), and dredged material~~spoils~~. Limited purpose landfills do not include inert waste landfills, municipal solid waste landfills regulated under chapter 173-351 WAC, Criteria for municipal solid waste landfills, landfills disposing of special incinerator ash regulated under chapter 173-306 WAC, Special incinerator ash management standards, landfills regulated under chapter 173-303 WAC, Dangerous waste regulations, or chemical waste landfills used for the disposal of polychlorinated biphenyls (PCBs) regulated under Title 40 CFR Part 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions.

"Liquid" means a substance that flows readily and assumes the form of its container but retains its independent volume.

"Liquid waste" means any solid waste which is deemed to contain free liquids as determined by the Paint Filter Liquids Test, Method 9095, in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846.

Reason for change

The proposed definition of the term "free liquids" was improper as it referred to the solid waste and not the liquids in the waste. The term has been changed to "liquid waste" in the final rule to correct this.

"Lithified earth material" means all rock, including all naturally occurring and naturally formed aggregates or masses of minerals or small particles of older rock that formed by crystallization of magma or by induration of loose sediments. This term does not include man-made materials, such as fill, concrete or asphalt, or unconsolidated earth materials, soil or regolith lying at or near the earth's surface.

"Local fire control agency" means a public or private agency or corporation providing fire protection such as a local fire department, the department of natural resources or the United States Forest Service.

"Lower explosive limits" means the lowest percentage by volume of a mixture of explosive gases that will propagate a flame in air at twenty-five degrees centigrade and atmospheric pressure.

"Material~~s~~ recovery facility ~~facility~~" means any facility that collects, compacts, repackages, sorts, or processes for transport~~any facility that accepts~~ source separated solid waste for the purpose of recycling. ~~and disposes of an incidental and accidental residual not to exceed five percent of the total waste received, by weight per year, or ten percent by weight per load.~~

Reason for change

The definition was modified to clarify the difference between the act of recycling, as defined, and the collection and handling of solid wastes prior to recycling. Material recovery facilities have been placed under Section 310, Intermediate solid waste handling facilities, and the definition was modified to account for changes in the way the term is used.

"Mobile systems and collection events" means activities conducted at a temporary location to collect moderate risk waste.

"Moderate risk waste (MRW)" means solid waste that is limited to conditionally exempt small quantity generator (CESQG) waste and household hazardous waste (HHW) as defined in this chapter.

Reason for change

This definition was edited to refer to the waste generated by a CESQG.

"MRW facility" means a solid waste handling unit that is used to collect, treat, recycle, exchange, store, consolidate, and/or transfer moderate risk waste. This does not include mobile systems and collection events or limited MRW facilities that meet the applicable terms and conditions of WAC 173-350-360 (2) or (3).

"Municipal solid waste (MSW)" means a subset of solid waste which includes unsegregated garbage, refuse and similar solid waste material discarded from residential, commercial, institutional and industrial sources and community activities, including residue after recyclables have been separated. Solid waste that has been segregated by source and characteristic may qualify for management as a non-MSW solid waste, at a facility designed and

operated to address the waste's characteristics and potential environmental impacts. The term MSW does not include:

. Dangerous wastes other than wastes excluded from the requirements of chapter 173-303 WAC, Dangerous waste regulations, in WAC 173-303-071 such as household hazardous wastes;

. Any solid waste, including contaminated soil and debris, resulting from response action taken under section 104 or 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (42 U.S.C. 9601), chapter 70.105D RCW, Hazardous waste cleanup--Model Toxics Control Act, chapter 173-340 WAC, the Model Toxics Control Act cleanup regulation or a remedial action taken under those rules; nor

. Mixed or segregated recyclable material that has been source-separated from garbage, refuse and similar solid waste. The residual from source separated recyclables is MSW.

"Natural background" means the concentration of chemical, physical, biological, or radiological substances consistently present in the environment that has not been influenced by regional or localized human activities. Metals at concentrations naturally occurring in bedrock, sediments and soils due solely to the geologic processes that formed the materials are natural background. In addition, low concentrations of other persistent substances due solely to the global use or formation of these substances are natural background.

~~**"New facility"** means a facility that begins operation or construction after the effective date of this chapter.~~

Reason for change

The definition and the use of the term have been eliminated from the rule.

"New solid waste handling unit" means a solid waste handling unit that begins operation or facility construction, and significant modifications to existing solid waste handling units, after the effective date of this chapter.

"Nuisance odor" means any odor which is found offensive or may unreasonably interfere with any person's health, comfort, or enjoyment beyond the property boundary of a facility.~~means unlawfully doing an act, or omitting to perform a duty, which act or omission either annoys, injures, or endangers the comfort, repose, health or safety of others, offends decency, or unlawfully interferes with, obstructs or tends to obstruct, any lake or navigable river, bay, stream, canal, or basin, or any public park, square, street or highway; or in any way renders other persons insecure in life, or in the use of property.~~

Reason for change

The definition and the use of the term "nuisance" have been eliminated from the rule. A definition for "nuisance odor" has been added to clarify the meaning of a term used within this rule.

"One hundred year flood plain" means any land area that is subject to one percent or greater chance of flooding in any given year from any source.

"Open burning" means the burning of solid waste materials in an open fire or an outdoor container without providing for the control of combustion or the control of emissions from the combustion.

"Overburden" means the earth, rock, soil, and topsoil that lie above mineral deposits.

"Permeability" means the ease with which a porous material allows liquid or gaseous fluids to flow through it. For water, this is usually expressed in units of centimeters per second and termed hydraulic conductivity.

"Permit" means an authorization issued by the jurisdictional health department which allows a person to perform solid waste activities at a specific location and which includes specific conditions for such facility operations.

"Person" means an individual, firm, association, copartnership, political subdivision, government agency, municipality, industry, public or private corporation, or any other entity whatever.

"Pile" means any noncontainerized accumulation of solid waste that is used for treatment or storage.

"Plan of operation" means the written plan developed by an owner or operator of a facility detailing how a facility is to be operated during its active life.

"Point of compliance" means a point established in the ground water by the jurisdictional health department as near a possible source of release as technically, hydrogeologically and geographically feasible.

"Post-closure" means the requirements placed upon disposal ~~sites~~ facilities after closure to ensure their environmental safety for at least a twenty-year period or until the site becomes stabilized (i.e., little or no settlement, gas production, or leachate generation).

Reason for change

The definition for "disposal site" was deleted and all references in the rule were changed to "disposal facility" or "landfill". No definition for "disposal facility" was added as the concept is a logical combination of defined terms.

"Post-closure plan" means a written plan developed by an owner or operator of a facility detailing how a facility is to meet the post-closure requirements for the facility.

"Premises" means a tract or parcel of land with or without habitable buildings.

"Private facility" means a privately owned facility maintained on private property solely for the purpose of managing waste generated by the entity owning the site.~~that accepts or disposes of only its own generated solid waste.~~

Reason for change

This definition was modified for clarification and to better coincide with the language in RCW 70.95.215.

"Processing" means an operation to convert a material~~solid waste~~ into a useful product or to prepare it for reuse, recycling, or disposal.

Reason for change

The definition for "processing" was amended so that it would apply to the actions or steps taken with any material, not just solid wastes, to convert it into a useful product or to prepare it for reuse, recycling, or disposal.

"Product take-back center" means a retail outlet or distributor that accepts household hazardous waste of comparable types as the products offered for sale or distributed at that outlet.

Reason for change

The definition was added to replace "retail take-back center" used within the proposed rule.

"Public facility" means a publicly or privately owned facility that accepts solid waste generated by other persons;

"Putrescible waste" means solid waste which contains material capable of being readily decomposed by microorganisms and which is likely to produce offensive odors.

"Pyrolysis" means the process in which solid wastes are heated in an enclosed device in the absence of oxygen to vaporization, producing a hydrocarbon-rich gas capable of being burned for recovery of energy.

"Recyclable materials" means those solid wastes that are separated for recycling or reuse, including, but not limited to, papers, metals, and glass, that are identified as recyclable material pursuant to a local comprehensive solid waste plan.

"Recycling" means transforming or remanufacturing waste materials into usable or marketable materials for use other than landfill disposal or incineration. Recycling does not include collection, compacting, repackaging, and sorting for the purpose of transport.

Reason for change

The definition was modified to clarify the difference between the act of recycling and the collection and handling of solid wastes prior to recycling.

"Representative sample" means a sample that can be expected to exhibit the average properties of the sample source.

"Reserved" means a section having no requirements and which is set aside for future possible rule making as a note to the regulated community.

~~**"Retail take-back center"** means a retail outlet that accepts limited MRW of comparable types as the products offered for sale at that outlet.~~

Reason for change

The definition and use of the term have been replaced by "Product take-back center".

"Reusable containers" means containers that are used more than once to handle solid waste, such as garbage cans.

"Runoff" means any rainwater, leachate or other liquid that drains over land from any part of the facility.

"Run-on" means any rainwater or other liquid that drains over land onto any part of a facility.

"Scavenging" means the removal of materials at a disposal ~~site~~facility, or intermediate solid waste-handling ~~site~~facility, without the approval of the owner or operator and the jurisdictional health department.

Reason for change

The definition for "disposal site" was deleted and all references in the rule were changed to "disposal facility" or "landfill". No definition for "disposal facility" was added as the concept is a logical combination of defined terms.

"Seismic impact zone" means an area with a ten percent or greater probability that the maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth's gravitational pull, will exceed 0.10g in two hundred fifty years.

"Setback" means that part of a facility that lies between the active area and the property boundary.

"Sewage sludge" means solid, semisolid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater

treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated.

"Soil amendment" means any substance that is intended to improve the physical characteristics of soil, except composted material, commercial fertilizers, agricultural liming agents, unmanipulated animal manures, unmanipulated vegetable manures, food wastes, food processing wastes, and materials exempted by rule of the department, such as biosolids as defined in chapter 70.95J RCW, Municipal sewage sludge--Biosolids and wastewater, as regulated in chapter 90.48 RCW, Water pollution control.

~~**"Soil water"** means the aqueous liquid phase of the soil and its solutes.~~

Reason for change

This definition has been deleted from the rule because the term is no longer used.

"Solid waste" or **"wastes"** means all putrescible and nonputrescible solid and semisolid wastes including, but not limited to, garbage, rubbish, ashes, industrial wastes, swill, sewage sludge, demolition and construction wastes, abandoned vehicles or parts thereof, contaminated soils and contaminated dredged material~~spoils~~, and recyclable materials.

"Solid waste handling" means the management, storage, collection, transportation, treatment, use, processing or final disposal of solid wastes, including the recovery and recycling of materials from solid wastes, the recovery of energy resources from such wastes or the conversion of the energy in such wastes to more useful forms or combinations thereof.

"Solid waste handling unit" means discrete areas of land, sealed surfaces, liner systems, excavations, facility structures, or other appurtenances within a facility used for solid waste handling.

~~**"Solid waste management"** means the systematic administration of activities, which provide for the collection, separation, storage, transportation, transfer, processing, treatment, and disposal of solid waste.~~

Reason for change

This definition has been deleted from the rule because the term is not used.

"Source separation" means the separation of different kinds of solid waste at the place where the waste originates.

"Storage" means the holding of solid waste materials for a temporary period.

"Surface impoundment" means a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), and which is designed to hold an accumulation of liquids or sludges. The term includes holding, storage, settling, and aeration pits, ponds, or lagoons, but does not include injection wells.

"Surface water" means all lakes, rivers, ponds, wetlands, streams, inland waters, salt waters and all other surface water and surface water courses within the jurisdiction of the state of Washington.

Reason for change

The definition has been modified to clarify that it is intended to include all surface waters that are within the jurisdiction of the State of Washington. These include many but not all wetlands. The definition has been amended to include wetlands within the jurisdiction of the State of Washington but to exclude ground water.

"Tank" means a stationary device designed to contain an accumulation of liquid or semisolid materials meeting the definition of solid waste or leachate, and which is constructed primarily of nonearthen materials to provide structural support.

~~**"Tire derived materials"** means tires that have been shredded, baled or otherwise processed from waste tires.~~

Reason for change

This definition has been deleted from the rule because the term is no longer used.

"Transfer station" means a permanent, fixed, supplemental collection and transportation facility, used by persons and route collection vehicles to deposit collected solid waste from off-site into a larger transfer vehicle for transport to a solid waste handling facility. ~~Transfer stations do not include recycling facilities that are defined as materials recovery facilities.~~

Reason for change

This definition was modified to coincide with changes made in the rule to clarify the difference between the act of recycling, as defined, and the collection and handling of solid wastes prior to recycling.

"Treatment" means the physical, chemical, or biological processing of solid waste to make such solid wastes safer for storage or disposal, amenable for recycling or energy recovery, or reduced in volume.

"Twenty-five-year storm" means a storm of twenty-four hours duration and of such intensity that it has a four percent probability of being equaled or exceeded each year.

"Type 1 feedstocks" means source-separated yard and garden wastes, wood wastes, agricultural crop residues, wax-coated cardboard, preconsumer ~~meat-free~~ vegetative food wastes, other similar source-separated materials that the jurisdictional health department determines to have a comparable low level of risk in hazardous substances, human pathogens, and physical contaminants.

Reason for change

This modification was made to clarify what was meant as “meat-free”.

"Type 2 feedstocks" means manure and bedding from herbivorous animals that the jurisdictional health department determines to have a comparable low level of risk in hazardous substances and physical contaminants when compared to a type 1 feedstock.

Reason for change

This definition was modified to clarify its intended use in the rule.

"Type 3 feedstocks" means meat and postconsumer source-separated food wastes or other similar source-separated materials that the jurisdictional health department determines to have a comparable low level of risk in hazardous substances and physical contaminants, but are likely to have high levels of human pathogens.

"Type 4 feedstocks" means mixed municipal solid wastes, postcollection separated or processed solid wastes, industrial solid wastes, industrial biological treatment sludges, or other similar compostable materials that the jurisdictional health department determines to have a

comparable high level of risk in hazardous substances, human pathogens and physical contaminants.

"Universal wastes" means universal wastes as defined in chapter 173-303 WAC, Dangerous waste regulations. Universal wastes include, but may not be limited to, dangerous waste batteries, mercury-containing thermostats, and universal waste lamps generated by fully regulated dangerous waste generators or CESQGs.

"Unstable area" means a location that is susceptible to forces capable of impairing the integrity of the facility's liners, monitoring system or structural components. Unstable areas can include poor foundation conditions and areas susceptible to mass movements.

~~**"Use"** means consuming, expending, or exhausting by use, solid waste materials.~~

Reason for change

This definition has been deleted from the rule because it is not needed.

"Vadose zone" means that portion of a geologic formation in which soil pores contain some water, the pressure of that water is less than atmospheric pressure, and the formation occurs above the zone of saturation.

"Vector" means a living animal, including, but not limited to, insects, rodents, and birds, which is capable of transmitting an infectious disease from one organism to another.

"Vermicomposting" means the controlled and managed process by which live worms convert organic residues into dark, fertile, granular excrement.

~~**"Waste reduction"** means reducing the amount or toxicity of waste generated or reusing materials.~~

Reason for change

This definition has been deleted from the rule because it is not needed.

"Waste tires" means any tires that are no longer suitable for their original intended purpose because of wear, damage or defect. Used tires, which were originally intended for use on public highways that are considered unsafe in accordance with RCW 46.37.425, are waste tires. Waste tires also include quantities of used tires that may be suitable for their original intended purpose when mixed with tires considered unsafe per RCW 46.37.425.

"Wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

"Wood derived fuel" means wood pieces or particles used as a fuel for energy recovery, which contain paint, bonding agents, or creosote. Wood derived fuel does not include wood pieces or particles coated with paint that contains lead or mercury, or wood treated with other chemical preservatives such as pentachlorophenol, copper naphthanate, or copper-chrome-arsenate.

"Wood waste" means solid waste consisting of wood pieces or particles generated as a by-product or waste from the manufacturing of wood products, construction, demolition, handling and storage of raw materials, trees and stumps. This includes, but is not limited to, sawdust, chips, shavings, bark, pulp, hogged fuel, and log sort yard waste, but does not include wood pieces or particles containing paint, laminates, bonding agents or chemical preservatives such as creosote, pentachlorophenol, or copper-chrome-arsenate.

Reason for change

This definition was modified for clarity.

"Yard debris" means plant material commonly created in the course of maintaining yards and gardens and through horticulture, gardening, landscaping or similar activities. Yard debris includes, but is not limited to, grass clippings, leaves, branches, brush, weeds, flowers, roots, windfall fruit, and vegetable garden debris.

"Zone of saturation" means that part of a geologic formation in which soil pores are filled with water and the pressure of that water is equal to or greater than atmospheric pressure.

NEW SECTION

WAC 173-350-200 Beneficial use permit exemptions. (1) *Beneficial use permit exemption - Applicability*. Any person may apply to the department for exemption from the permitting requirements of this chapter for beneficial use of solid waste. Applications for permit exemptions shall be prepared and submitted in accordance with the requirements of subsections (3) and (4) of this section. Upon the department's approval of an application for permit exemption, all approved beneficial use of solid waste shall be conducted in accordance with the terms and conditions for approval, as well as those general terms and conditions prescribed in subsection (2) of this section.

(2) *Beneficial use permit exemption - General terms and conditions*.

(a) The following general terms and conditions apply to all permit exempt beneficial uses of solid waste. All persons beneficially using solid waste approved for permit exemption in accordance with this section shall:

(i) Conduct the beneficial use in a manner that does not present a threat to human health or the environment;

(ii) Ensure that the material is not a dangerous waste regulated under chapter 173-303 WAC, Dangerous waste regulations;

(iii) Not dilute a waste, or the residual from treatment of a waste, as a substitute for treatment or disposal;

(iv) Comply with all applicable federal, state, and local rules, regulations, requirements and codes, and local land use requirements;

(v) Immediately notify the department and the jurisdictional health department of any accidental release(s) of contaminants to the environment;

(vi) Separate wastes intended for beneficial use from wastes that are destined for disposal, prior to entering the location where the beneficial use will occur;

(vii) Manage the waste in a manner that controls vector attraction;

(viii) Ensure that solid waste being stored prior to being beneficially used is managed in accordance with the requirements of all applicable sections of this chapter;

(ix) Allow the department or the jurisdictional health department, at any reasonable time, to inspect the location where a permit exempt solid waste is stored or used to ensure compliance with applicable terms and conditions of this section; and

Reason for change

This change was made to allow the Department or the jurisdictional health department to inspect the location where an exempt material is being stored to ensure compliance with

subparagraph (viii) above.

(x) Prepare and submit a copy of an annual report to the department by April 1st on forms supplied by the department. The annual report shall detail the activities of the exemption holder during the previous calendar year and shall include the following information:

(A) The permit exemption number applicable to the beneficial use activity;

(B) The name, address, and telephone number of the exemption holder;

(C) The amount of solid waste beneficially used;

(D) A certification that the nature of the waste and the operating practices have been in compliance with the terms and conditions of this section and the beneficial use permit exemption during the calendar year; and

(E) Any additional information that may be specified by the department under the beneficial use permit exemption.

(b) In addition to the general terms and conditions established in (a) of this subsection, solid wastes applied to the land for agronomic value or soil amending capability under a beneficial use permit exemption shall:

(i) ~~Demonstrate that the waste m~~Meet~~s~~ the metals ~~quality~~ standards required by the Washington state department of agriculture (WSDA) for registered commercial fertilizers by following the procedures of WAC 16-200-7062 through 16-200-7064, Feeds, fertilizers, and livestock remedies;

Reason for change

This change was made to fit the lead-in of paragraph (b).

(ii) Be applied at an application rate and in a manner that ensures protection of ground water and surface water. At a minimum, the application rate shall take into account the concentration of available nutrients and micronutrients in the soil amendment, other solid waste applied to the land, residual nutrients at the application site(s), additional sources of nutrients, pollutant loading rates, soil and waste pH, soil type, crop type and vertical separation from ground water; and

(iii) Not be stored at an application site during periods when precipitation or wind will cause migration from the storage area, unless the site is specifically designed to accommodate storage during these periods. The quantity stored at an application site shall not exceed the maximum needed to meet the annual needs of the site based on the approved application rate. When a soil amendment is stored at an application site it shall not contain ~~free~~ liquid~~s~~ waste unless the requirements of WAC 173-350-330 are met.

Reason for change

The proposed definition of the term “free liquids” was improper as it referred to the solid waste and not the liquids in the waste. The term has been changed to “liquid waste” in the final rule to correct this.

(c) The department may require a person operating under any exemption issued under this section to meet additional or more stringent requirements for protection of human health and the environment, or to ensure compliance with other applicable regulations:

(i) At the time the department approves an application for a beneficial use permit exemption; or

(ii) When new information becomes available that warrants additional protections, but in the opinion of the department does not necessitate revocation of the beneficial use permit exemption.

(d) The department shall notify in writing the exempted party and all jurisdictional health departments of any additional or more stringent requirements.

(3) *Beneficial use permit exemption - Initial application procedure*. Any person(s) interested in obtaining a statewide exemption from solid waste permitting requirements for the beneficial use of a solid waste ~~may apply~~must demonstrate to the satisfaction of the department that the proposed use does not present a threat to human health and the environment. Applications shall be submitted to the department on a form supplied by the department. All application attachments and other submittals must be on paper no larger than 11 inch x 17 inch. The application shall at a minimum contain the following:

Reason for change

This change was made to clarify and communicate the criteria used by the Department to evaluate an application.

(a) The name(s), address(es) and phone number(s) of the waste generator(s);

(b) The name(s), address(es) and phone number(s) of the applicant. If the applicant is a broker or other third party the uniform business identifier number shall also be included;

(c) A list of all product(s) made by the waste generator(s);

(d) A list of all feedstocks used to manufacture the product(s);

(e) A description of the solid waste and the proposed beneficial use;

(f) A description of how the waste will be transported or distributed for the proposed beneficial use;

(g) A description of other materials that contribute or potentially contribute contaminants/pollutants to the waste to be beneficially used;

(h) A schematic and text summary of the waste generator(s) operations, including all points where wastes are generated, treated or stored;

(i) A description of how terms and conditions of subsection (2)(a) of this section will be met;

(j) A State Environmental Policy Act checklist;

(k) If the beneficial use is proposed as a soil amendment, or for other solid wastes beneficially applied to the land, a description of how the terms and conditions of subsection (2)(b) of this section will be met; and

(l) Any additional information deemed necessary by the department.

(4) *Beneficial use permit exemption - Secondary application procedure*. Beneficial use permit exemptions, approved by the department in accordance with the procedures of subsection (5) of this section, are granted solely to the original applicant(s). Any person, other than the original applicant(s), interested in beneficially using solid waste pursuant to the terms and conditions of an existing permit exemption shall apply to the department by following the procedures described in subsection (3) of this section.

(5) *Beneficial use permit exemption - Determination, revocation, and appeals*.

(a) The department shall review every application for completeness. Once an application is determined to be complete, the department shall:

(i) Notify the applicant that the application has been determined to be complete.

(ii) Forward a copy of the complete application and supporting documentation to all jurisdictional health departments for review and comment. Within forty-five calendar days, the

jurisdictional health departments shall forward their comments and any other information that they deem relevant to the department.

(iii) The department shall develop and maintain a register of all complete applications it receives for beneficial use exemptions. The register shall include information regarding the proposed beneficial use and process for submitting comments. The department shall maintain a list of interested parties and forward the register to those parties. The department may provide the register and application information in an electronic form upon request by an interested party.

(b) Once a determination is made by the department that an application is complete and the public review process has begun, any changes to the application or submittal of additional information by the applicant shall result in a withdrawal of the completeness determination by the department and termination of the public review process. The department shall resume review of the amended application in accordance with the procedures of (a) of this subsection.

(c) After completion of the comment period, the department shall review comments, technical information from agency and other publications, standards published in regulations, and other information deemed relevant by the department to render a decision.

(d) Every complete application shall be approved or disapproved by the department in writing within ninety days after receipt. Exemptions shall be granted by the department only to those beneficial uses of solid waste that the department determines do not ~~to~~ present a threat~~little or no risk~~ to human health or the environment.

Reason for change

The unqualified use of the term "risk" was eliminated from the rule because it represents any chance of harm. Some level of risk is present in any activity or situation.

(e) Upon approval of the application by the department, the beneficial use of the solid waste by the original applicant is exempt from solid waste handling permitting for use anywhere in the state consistent with the terms and conditions of the approval.

(f) The department may require a person operating under any exemption covered by this section to apply to the jurisdictional health department for a solid waste handling permit under the applicable section of this chapter if:

(i) The exemption holder fails to comply with the terms and conditions of this section and the approval; or

(ii) The department determines that the exemption was obtained by misrepresenting or omitting any information that potentially could have affected the issuance or terms and conditions of an exemption.

(iii) New information not previously considered or available as part of the application demonstrates to the department that management of the waste under a beneficial use permit exemption may present a threat to human health or the environment.

Reason for change

This change was made to allow the Department to respond to new information as it becomes available.

(g) The department shall provide written notification to the exempted party and all jurisdictional health departments of any requirement to apply for a permit under this chapter. A person that is required by the department to apply for permit coverage shall immediately cease beneficial use activities until all necessary solid waste handling permits are issued.

(h) The terms and conditions of subsection (2)(a)(viii) of this section shall remain in effect until the solid waste handling permit process has been completed.

(i) Any person that violates the terms and conditions of a beneficial use permit exemption issued under this section may be subject to the civil penalty provisions of RCW 70.95.315.

(j) Appeals of the department's decision to issue or deny or revoke a beneficial use permit exemption shall be made to the pollution control hearings board by filing with the hearings board a notice of appeal within thirty days of the decision of the department. The board's review of the decision shall be made in accordance with chapter 43.21B RCW, Environmental hearing office--Pollution control hearings board, and any subsequent appeal of a decision of the board shall be made in accordance with RCW 43.21B.180.

Persons that may appeal are:

(i) For waste derived soil amendments any aggrieved party may appeal.

(ii) For all other beneficial uses of solid waste any jurisdictional health department or the applicant may appeal.

(6) *Beneficial use permit exemption - Solid waste exempt from permitting by rule*. Reserved.

Note: RCW 70.95.300 contains provisions that **allow** the department to exempt from permitting certain beneficial uses of solid waste by rule. The statute also requires the department to develop an application and approval process by which a person could apply for a beneficial use permit exemption. At this time the department has chosen to limit rule making to development of the required application and approval process, and hold a section in reserve for future development of a list of approved beneficial uses.

NEW SECTION

WAC 173-350-210 ~~Material recovery and r~~Recycling ~~facilities~~. (1) ~~*Materials recovery and r*~~*Recycling* ~~*facilities*~~ - *Applicability*. These standards apply to ~~material recovery facilities and facilities engaged in~~ recycling solid waste.

Reason for change

This section of the rule was modified to clarify the difference between the act of recycling, as defined in Section 100, and the collection and handling of solid wastes prior to recycling. Material recovery facilities have been moved from this section to Section 310, Intermediate solid waste handling facilities, to further highlight the difference.

These standards do not apply to:

(a) Storage, treatment or recycling of solid waste in piles which are subject to WAC 173-350-320;

(b) Storage or recycling of solid waste in surface impoundments which are subject to WAC 173-350-330;

(c) Composting facilities subject to WAC 173-350-220;

(d) Solid waste that is beneficially used on the land that is subject to WAC 173-350-230;

(e) Storage of waste tires prior to recycling which is subject to WAC 173-350-350;

(f) Storage of moderate risk waste prior to recycling which is subject to WAC 173-350-360;

(g) Energy recovery or incineration of solid waste which is subject to WAC 173-350-240.

(h) Intermediate solid waste handling facilities subject to WAC 173-350-310.

(2) ~~*Materials recovery and r*~~*Recycling* ~~*facilities*~~ - *Permit exemption and notification*.

(a) In accordance with RCW 70.95.305, ~~material recovery and~~ recycling ~~facilities~~of solid waste is ~~are~~ subject solely to the requirements of (b) of this subsection and is~~are~~ exempt from solid waste handling permitting. ~~An owner or operator~~ Any person engaged in recycling that does not comply with the terms and conditions of (b) of this subsection is required to obtain a permit from the jurisdictional health department ~~as an intermediate solid waste handling facility and shall comply~~in accordance with the requirements of WAC 173-350-~~310~~490. In addition, violations of the terms and conditions of (b) of this subsection may be subject to the penalty provisions of RCW 70.95.315.

(b) ~~Material recovery and r~~Recycling ~~facilities~~ shall be conducted in conformance with~~managed according to~~ the following terms and conditions in order to maintain permit~~their~~ exempt status:

(i) Meet the performance standards of WAC 173-350-040;

(ii) Accept only source separated solid waste for the purpose of recycling~~ and dispose of an incidental and accidental residual not to exceed five percent of the total waste received, by weight per year, or ten percent by weight per load~~;

(iii) Allow inspections by the department or jurisdictional health department at reasonable times;

(iv) Notify the department and jurisdictional health department, thirty days prior to operation~~ for new facilities~~, or~~and~~ ninety days from the effective date of the rule for existing recycling operations~~facilities~~, of the intent to conduct~~operate a material recovery and~~ recycling ~~facility~~ in accordance with this section. Notification shall be in writing, and shall include:

Reason for change

The changes above were made in order to remove material recovery facilities from this section and in response to the elimination of the use of the term "new facility".

(A) Contact information for the person conducting the recycling activity~~facility owner or operator~~;

(B) A general description of the recycling activity~~facility~~;

(C) A description of the types of solid waste being recycled~~managed at the facility~~; and

(D) An explanation of the recycling processes and methods;

(v) Prepare and submit an annual report to the department and the jurisdictional health department by April 1st on forms supplied by the department. The annual report shall detail recycling~~facility~~ activities during the previous calendar year and shall include the following information:

(A) Name and address of the recycling operation~~facility~~;

(B) Calendar year covered by the report;

Reason for change

The changes above were made to clarify the annual reporting requirements.

(C) Annual quantities and types of waste received, recycled and disposed, in tons, for purposes of determining progress towards achieving the goals of waste reduction, waste recycling, and treatment in accordance with RCW 70.95.010(4)~~. Such facilities may request confidentiality for their reports in accordance with chapter 42.17 RCW, Disclosure--Campaign finances--Lobbying--Records, and RCW 43.21A.160~~; and

Reason for change

This sentence was deleted because it may have resulted in the false expectation that the

certification of records as confidential in accordance with chapter RCW 43.21A.160 would extend to records held by jurisdictional health departments. This does not change the applicability of chapter 42.17 RCW or RCW 43.21A.160 in any way.

(D) Any additional information required by written notification of the department.

NEW SECTION

WAC 173-350-220 Composting facilities. (1) *Composting facilities - Applicability*.

(a) This section is applicable to all facilities or sites that treat solid waste by composting. This section is not applicable to:

(i) Composting used as a treatment for dangerous wastes regulated under chapter 173-303 WAC, Dangerous waste regulation;

(ii) Composting used as a treatment for petroleum contaminated soils regulated under WAC 173-350-320;

(iii) Treatment of liquid sewage sludge or biosolids in digesters at wastewater treatment facilities regulated under chapter 90.48 RCW, Water pollution control and chapter 70.95J RCW, Municipal sewage sludge--Biosolids;

(iv) Treatment of other liquid solid wastes in digesters regulated under WAC 173-350-330; and

(v) Composting biosolids when permitted under chapter 173-308 WAC, Biosolids management.

(b) In accordance with RCW 70.95.305, the operation of the following activities in this subsection are subject solely to the requirements of (c) of this subsection and are exempt from solid waste handling permitting. An owner or operator that does not comply with the terms and conditions of (c) of this subsection is required to obtain a permit from the jurisdictional health department and shall comply with all other applicable requirements of this chapter. In addition, violations of the terms and conditions of (c) of this subsection may be subject to the penalty provisions of RCW 70.95.315.

(i) ~~On-site p~~Production of substrate used solely on-site to grow mushrooms;

Reason for change

This change was made for clarification.

(ii) Vermicomposting, when used to process Type 1, Type 2, or Type 3 feedstocks generated on-site;

(iii) Composting of Type 1 or Type 2 feedstocks with a volume limit of forty cubic yards of material on-site at any time. Material on-site includes feedstocks, partially composted feedstocks, and finished compost;

(iv) Composting of food waste generated on-site and composted in containers designed to prohibit vector attraction and prevent nuisance odor generation. Total volume of the containers shall be limited to ten cubic yards or less;

Reason for change

This section was modified to incorporate the term “nuisance odor” as defined in Section 100 of

this rule.

(v) Agricultural composting when all the agricultural wastes are generated on-site and all finished compost is used on-site;

(vi) Agricultural composting when any agricultural wastes are generated off-site, and all finished compost is used on-site, and total volume of material is limited to one thousand cubic yards on-site at any time. Material on-site includes feedstocks, partially composted feedstocks, and finished compost; and

(vii) Agricultural composting at registered dairies when the composting is a ~~treatment option under the Natural Resources Conservation Service waste management system. The composting operation shall be a~~ component of a fully certified dairy nutrient management plan as required by chapter 90.64 RCW, Dairy Nutrient Management Act.

Reason for change

This change was made to clarify the conditions for agricultural composting at registered dairies.

(viii) Composting of Type 1 or Type 2 feedstocks when more than forty cubic yards and less than two hundred fifty cubic yards of material is on-site at any one time.

(ix) Agricultural composting, when any of the finished compost is distributed off-site and when it meets the following requirements:

(A) More than forty cubic yards, but less than one thousand cubic yards of agricultural waste is on-site at any time; and

(B) Agricultural composting is managed according to a farm management plan written in conjunction with a conservation district, a qualified engineer, or other agricultural professional able to certify that the plan meets applicable conservation practice standards in the Washington Field Office Technical Guide produced by the Natural Resources Conservation Service~~applicable Natural Resource Conservation Service standards~~.

Reason for change

This modification was made to clarify the text.

(x) Vermicomposting when used to process Type 1 or Type 2 feedstocks generated off-site. Total volume of materials is limited to one thousand cubic yards on-site at any one time.

(c) Composting operations identified in subsection (b) shall be managed according to the following terms and conditions to maintain their exempt status:

(i) Comply with the performance standards of WAC 173-350-040;

(ii) Protect surface water and ground water through the use of best management practices and all known available and reasonable methods of prevention, control, and treatment as appropriate. This includes, but is not limited to, setbacks from wells, surface waters, property lines, roads, public access areas, and site-specific setbacks when appropriate;

(iii) Control nuisance odors to prevent migration beyond property boundaries;

(iv) Manage the operation to prevent attraction of flies, rodents, and other vectors;

(v) ~~Provide~~ Conduct an annual analysis, prepared in accordance with the requirements of subsection (4)(a)(viii) of this section, for composted material that is distributed off-site from categorically exempt facilities described in subsection (1)(b)(vii) through (ix) of this section.

Reason for change

This modification was made to clarify that the analysis shall be conducted annually.

(vi) Prepare and submit an annual report to the department and the jurisdictional health department by April 1st for categorically exempt facilities described in subsection (1)(b)(vii) through (ix) of this section. Annual reports are not required for facilities operating under the permit exemption provided in subsection (1)(b)(vii) of this section if the composted material is not distributed off-site. The annual report shall be on forms supplied by the department and shall detail facility activities during the previous calendar year and shall include the following information:

Reason for change

This change was made to eliminate annual reporting requirements from the facilities described in subsection (1)(b)(vii) through (ix). The Department does not intend to make use of the information.

(A) Name and address of the facility;
(B) Calendar year covered by the report;
(C) Annual quantity and type of feedstocks received and compost produced, in tons;

Reason for change

This change was made because the Department intends to include the quantity of compost produced in the annual solid waste report.

(D) Annual quantity of composted material sold or distributed, in tons; ~~and~~
(E) Results of the annual analysis of composted material required by subsection (1)(c)(v) of this section; and
(F) Any additional information required by written notification of the department.

Reason for change

This modification was made to clarify the requirement for annual reporting of analyses performed in accordance with paragraph (v) of this subsection.

(vii) Allow the department or the jurisdictional health department to inspect the site at reasonable times;
(viii) For activities under (b)(viii) through (x) of this subsection, and registered dairies where compost is distributed off-site, the department and jurisdictional health department shall be notified in writing thirty days prior to beginning any composting activity. Notification shall include name of ~~responsible person~~owner or operator, location of composting operation and identification of feedstocks.

Reason for change

This change was made to use a term consistently used throughout the rule.

(2) *Composting facilities - Location standards*. There are no specific location standards for composting facilities subject to this chapter; however, composting facilities must meet the requirements provided under WAC 173-350-040(5).
(3) *Composting facilities - Design standards*. The owner or operator of a composting facility shall prepare engineering reports/plans and specifications, including a construction quality assurance plan, to address the design standards of this subsection. Scale drawings of the facility including the location and size of feedstock and finished product storage areas, compost processing areas, fixed equipment, buildings, leachate collection devices, access roads and other appurtenant facilities; and design specifications for compost pads, storm water run-on prevention

system, and leachate collection and conveyance systems shall be provided. All composting facilities shall be designed and constructed to meet the following requirements:

(a) When necessary to provide public access, all-weather roads shall be provided from the public highway or roads to and within the compost facility and shall be designed and maintained to prevent traffic congestion, traffic hazards, dust and noise pollution;

(b) Composting facilities shall separate storm water from leachate by designing storm water run-on prevention systems, which may include covered areas (roofs), diversion swales, ditches or other designs to divert storm water from areas of feedstock preparation, active composting and curing;

(c) Composting facilities shall collect any leachate generated from areas of feedstock preparation, active composting and curing. The leachate shall be conveyed to a leachate holding pond, tank or other containment structure. The leachate holding structure shall be of adequate capacity to collect the amount of leachate generated, and the volume calculations shall be based on the facility design, monthly water balance, and precipitation data. Leachate holding ponds and tanks shall be designed according to the following:

(i) For leachate ponds at registered dairies, the design and installation shall meet Natural Resources Conservation Service standards for a waste storage facility in the Washington Field Office Technical Guide. ~~in place at the time of construction of the pond.~~

Reason for change

This modification was made to clarify the text.

(ii) For leachate ponds at composting facilities other than registered dairies, the pond shall be designed to meet the following requirements:

(A) Have a liner consisting of a minimum 30-mil thickness geomembrane overlying a structurally stable foundation to support the liners and the contents of the impoundment. High density polyethylene geomembranes used as primary liners or leak detection liners shall be at least 60-mil thick to allow for proper welding. The jurisdictional health department may approve the use of alternative designs if the owner or operator can demonstrate during the permitting process that the proposed design will prevent migration of solid waste constituents or leachate into the ground or surface waters at least as effectively as the liners described in this subsection;

(B) Have dikes and slopes designed to maintain their structural integrity under conditions of a leaking liner and capable of withstanding erosion from wave action, overfilling, or precipitation;

(C) Have freeboard equal to or greater than eighteen inches to avoid overtopping from wave action, overfilling, or precipitation. The jurisdictional health department may reduce the freeboard requirement provided that other engineering controls are in place which prevent overtopping. These engineering controls shall be specified during the permitting process;

(D) Leachate ponds that have the potential to impound more than ten-acre feet (three million two hundred fifty-nine thousand gallons) of liquid measured from the top of the dike and which would be released by a failure of the containment dike shall be reviewed and approved by the dam safety section of the department.

(iii) Tanks used to store leachate shall meet design standards in WAC 173-350-330 (3)(b).

(d) Composting facilities shall be designed with process parameters and management procedures that promote an aerobic composting process. This requirement is not intended to mandate forced aeration or any other specific composting technology. This requirement is meant to ensure that compost facility designers take into account porosity, nutrient balance, pile

oxygen, pile moisture, pile temperature, and retention time of composting when designing a facility.

(e) Incoming feedstocks, active composting, and curing materials shall be placed on compost pads that meet the following requirements:

(i) All compost pads shall be curbed or graded in a manner to prevent ponding, run-on and runoff, and direct all leachate to collection devices. Design calculations shall be based upon the volume of water resulting from a twenty-five-year storm event as defined in WAC 173-350-100;

(ii) All compost pads shall be constructed over soils that are competent to support the weight of the pad and the proposed composting materials;

(iii) The entire surface area of the compost pad shall maintain its integrity under any machinery used for composting activities at the facility; and

(iv) The compost pad shall be constructed of materials such as concrete (with sealed joints), asphaltic concrete, or soil cement to prevent subsurface soil and ground water contamination;

(v) The jurisdictional health department may approve other materials for compost pad construction if the permit applicant is able to demonstrate that the compost pad will meet the requirements of this subsection.

(4) *Composting facilities - Operating standards*. The owner or operator of a composting facility shall:

(a) Operate the facility to:

(i) Control dust, nuisance odors, and other contaminants to prevent migration of air contaminants beyond property boundaries;

(ii) Prevent the attraction of vectors;

(iii) Ensure that only feedstocks identified in the approved plan of operation are accepted at the facility;

(iv) Ensure the facility operates under the supervision and control of a properly trained individual during all hours of operation, and access to the facility is restricted when the facility is closed;

(v) Ensure facility employees are trained in appropriate facility operations, maintenance procedures, and safety and emergency procedures according to individual job duties and according to an approved plan of operation;

(vi) Implement and document pathogen reduction activities when Type 2, 3 or 4 feedstocks are composted. Documentation shall include compost pile temperature and notation of turning as appropriate, based on the composting method used. Pathogen reduction activities shall at a minimum include the following:

(A) In vessel composting - the temperature of the active compost pile shall be maintained at fifty-five degrees Celsius (one hundred thirty-one degrees Fahrenheit) or higher for three days; or

(B) Aerated static pile - the temperature of the active compost pile shall be maintained at fifty-five degrees Celsius (one hundred thirty-one degrees Fahrenheit) or higher for three days; or

(C) Windrow composting - the temperature of the active compost pile shall be maintained at fifty-five degrees Celsius (one hundred thirty-one degrees Fahrenheit) or higher for fifteen days or longer. During the period when the compost is maintained at fifty-five degrees Celsius (one hundred thirty-one degrees Fahrenheit) or higher, there shall be a minimum of five turnings of the windrow; or

(D) An alternative method that can be demonstrated by the owner or operator to achieve an equivalent reduction of human pathogens;

(vii) Monitor the composting process according to the plan of operation submitted during the permitting process. Monitoring shall include inspection of incoming loads of feedstocks and pathogen reduction requirements of (a)(vi) of this subsection; and

(viii) Analyze composted material for:

(A) Metals in Table A at the minimum frequency listed in Table C. Compost facilities composting only Type 1 and Type 2 feedstocks are not required to test for molybdenum and selenium. Testing frequency is based on the feedstock type and the volume of feedstocks processed per year;

(B) Parameters in Table B at the minimum frequency listed in Table C. Testing frequency is based on the feedstock type and the volume of feedstocks processed per year;

(C) Nitrogen content at the minimum frequency listed in Table C; and

(D) Biological stability as outlined in the United States ~~Department of Agriculture's~~Composting Council Test Methods for the Examination of Composting and Compost at the minimum frequency listed in Table C;

Reason for change

The reference to Department of Agriculture was incorrect and changed to Composting Council. The reference to Table C was inserted for clarification.

(E) The jurisdictional health department may require testing of additional metal or contaminants, and/or modify the frequency of testing based on historical data for a particular facility, to appropriately evaluate the composted material.

Table A - Metals

Metal	**Limit (mg/kg dry weight)**
Arsenic	< = 20 ppm
Cadmium	< = 10 ppm
Copper	< = 750 ppm
Lead	< = 150 ppm
Mercury	< = 8 ppm
Molybdenum[1]	< = 9 ppm
Nickel	< = 210 ppm
Selenium[1]	< = 18 ppm
Zinc	< = 1400 ppm

[1]Not required for composted material made from Type 1, Type 2 or a mixture of Type 1 and Type 2 feedstocks.

Table B - Other Testing Parameters

Parameter	Limit
Manufactured Inerts	< 1 percent
Sharps	0
pH	5 - 10 (range)
Fecal Coliform[2]	< 1,000 Most Probable Number per gram of total solids (dry weight).
Salmonella[2]	< 3 Most Probable Number per 4 grams of total solids (dry weight).

[2]~~Subsection (4)(b)(ii) of this section requires testing for either fecal coliform or salmonella, not both.~~

Reason for change

This change was a correction of a typographical error. The footnote was contained in earlier drafts of the rule and the referenced citation was deleted.

Table C - Frequency of Testing Based on Feedstocks Received

Feedstock Type	< 5,000 cubic yards	= or > 5,000 cubic yards
Type 1 or Type 2	Once per year	Every 10,000 cubic yards or every six months whichever is more frequent
Type 3	Once per quarter (four times per year)	Every 5,000 cubic yards or every other month whichever is more frequent
Type 4	Every 1,000 cubic yards	Every 1,000 cubic yards or once per month whichever is more frequent

(b) Inspect the facility to prevent malfunctions and deterioration, operator errors and discharges, which may cause or lead to the release of waste to the environment or a threat to human health. Inspections shall be conducted at least weekly, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process. For compost facilities with leachate holding ponds, conduct regular liner inspections at least once every five years, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process. The frequency of inspections shall be specified in the operations plan and shall be based on the type of liner, expected service life of the material, and the site-specific service conditions. The jurisdictional health department shall be given sufficient notice and have the opportunity to be present during liner inspections. An inspection log or summary shall be kept at the facility or other convenient location if permanent office facilities are not on-site, for at least five years from the date of inspection. Inspection records shall be available to the jurisdictional health department upon request.

(c) Maintain daily operating records of the following:

(i) Temperatures and compost pile turnings for Type 2, Type 3 and Type 4 feedstocks;

(ii) Additional process monitoring data as prescribed in the plan of operation; and

(iii) Results of laboratory analyses for composted materials as required in (a)(viii) of this subsection. Facility inspection reports shall be maintained in the operating record. Significant deviations from the plan of operation shall be noted in the operating record. Records shall be kept for a minimum of five years and shall be available upon request by the jurisdictional health department.

(d) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall detail the facility's activities during the previous calendar year and shall include the following information:

(i) Name and address of the facility;

(ii) Calendar year covered by the report;

(iii) Annual quantity and type of feedstocks received and compost produced, in tons;

Reason for change

This change was made because the Department intends to include the quantity of compost produced in the annual solid waste report.

(iv) Annual quantity of composted material sold or distributed, in tons;

(v) Annual summary of laboratory analyses of composted material; and

(vi) Any additional information required by the jurisdictional health department as a condition of the permit.

(e) Develop, keep and abide by a plan of operation approved as part of the permitting process. The plan of operation shall convey to site personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:

Reason for change

This section was modified so that a jurisdictional health department may direct an owner or operator to amend a plan of operation.

(i) List of feedstocks to be composted, including a general description of the source of feedstocks;

(ii) A description of how wastes are to be handled on-site during the facility's active life including:

(A) Acceptance criteria that will be applied to the feedstocks;

(B) Procedures for ensuring that only the waste described will be accepted;

(C) Procedures for handling unacceptable wastes;

(D) Mass balance calculations for feedstocks and amendments to determine an acceptable mix of materials for efficient decomposition;

(E) Material flow plan describing general procedures to manage all materials on-site from incoming feedstock to finished product;

(F) A description of equipment, including equipment to add water to compost as necessary;

(G) Process monitoring plan, including temperature, moisture, and porosity;

(H) Pathogen reduction plan for facilities that accept Type 2, Type 3, and Type 4 feedstocks;

(I) Sampling and analysis plan for the final product;

(J) Nuisance o~~O~~dor management plan (air quality control plan);

Reason for change

This section was modified to incorporate the term "nuisance odor" as defined in Section 100 of this rule.

(K) Leachate management plan, including monthly water balance; and

(L) Storm water management plan;

(iii) A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspections and inspection logs;

(iv) A neighbor relations plan describing how the owner or operator will manage complaints;

(v) Safety, fire and emergency plans;

(vi) Forms for recordkeeping of daily weights or volumes of incoming feedstocks by type and finished compost product, and process monitoring results; and

(xvii) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.

(5) *Composting facilities - Ground water monitoring requirements*. There are no specific ground water monitoring requirements for composting facilities subject to this chapter; however, composting facilities must meet the requirements provided under WAC 173-350-040(5).

(6) *Composting facilities - Closure requirements*. The owner or operator of a composting facility shall:

(a) Notify the jurisdictional health department sixty days in advance of closure. At closure, all solid waste, including but not limited to raw or partially composted feedstocks, and leachate from the facility shall be removed to another facility that ~~meets the requirements of chapter 70.95 RCW, Solid waste management--Reduction and recycling, to manage that type of~~conforms with the applicable regulations for handling the waste. ~~The site shall be decontaminated.~~

Reason for change

This section was modified to clarify intent and to recognize that some wastes removed or

generated during closure may not be subject to chapter 70.95 RCW but do need to be managed in accordance with applicable regulations. The use of the term "decontaminated" has been deleted because its meaning was unclear for this purpose.

(b) Develop, keep and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan shall include ~~:~~

~~(i) M~~methods of removing solid waste materials from the facility~~raw or partially composted feedstocks; and~~

~~(ii) Steps taken for decontamination.~~

Reason for change

The use of the term "decontamination" has been deleted because its meaning was unclear for this purpose.

(7) *Composting facilities - Financial assurance requirements*. There are no specific financial assurance requirements for composting facilities subject to this chapter; however, composting facilities must meet the requirements provided under WAC 173-350-040(5).

(8) *Composting facilities - Permit application contents*. The owner or operator of a composting facility shall obtain a solid waste permit from the jurisdictional health department. All applications for permits shall be submitted in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each application for a permit shall contain:

(a) Engineering reports/plans and specifications that address the design standards of subsection (3) of this section;

(b) A plan of operation meeting the requirements of subsection (4) of this section; and

(c) A closure plan meeting the requirements of subsection (6) of this section.

(9) *Composting facilities - Construction records*. The owner or operator of a composting facility shall provide copies of the construction record drawings for engineered facilities at the site and a report documenting facility construction, including the results of observations and testing carried out as part of the construction quality assurance plan, to the jurisdictional health department and the department. Facilities shall not commence operation until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report/plans and specifications and has approved the construction documentation in writing.

Reason for change

This change was made to provide jurisdictional health departments with criteria for approval of construction records.

(10) *Composting facilities - Designation of composted materials.* Composted materials meeting the limits for metals in Table A and the parameters of Table B of this section, and having a stability rating of very stable, ~~or~~ stable, or moderately unstable as determined by the analysis required in subsection (4)(a)(viii)(D) of this section, shall no longer be considered a solid waste and shall no longer be subject to this chapter. Composted materials that do not meet these limits are still considered solid waste and are subject to management under chapter 70.95 RCW, Solid waste management--Reduction and recycling.

Reason for change

Despite the term "unstable" in the label, the Department recognizes the numerical ranges of

biological activity within this additional category as appropriate for sale and distribution.

NEW SECTION

WAC 173-350-230 Land application. (1) *Land application - Applicability*. This section applies to solid waste that is beneficially used on the land for its agronomic value, or soil-amending capability, including land reclamation. This section does not apply to:

(a) The application of commercial fertilizers registered with the Washington state department of agriculture as provided in RCW 15.54.325, and which are applied in accordance with the standards established in RCW 15.54.800(3);

(b) Biosolids regulated under chapter 173-308 WAC, Biosolids management;

(c) Composted materials no longer considered solid waste under WAC 173-350-220(10);

(d) Dangerous waste regulated under chapter 173-303 WAC Dangerous waste regulations;

(e) Waste derived soil amendments exempted from permitting under WAC 173-350-200; and

(f)- Solid waste~~Materials~~ used to improve the engineering characteristics of soil.

Reason for change

This change was made for clarification.

(2) *Land application - Location standards*. There are no specific location standards for land application of solid waste subject to this chapter; however, land application sites must meet the requirements ~~except as~~ provided under WAC 173-350-040(5).

Reason for change

This change was made to correct a typographical error.

(3) *Land application - Design standards*. There are no specific design standards for land application of solid waste subject to this chapter; however, land application sites must meet the requirements provided under WAC 173-350-040(5).

(4) *Land application - Operating standards*. The owner or operator of a land application site shall operate the site in ~~a manner to prevent risks to human health and~~ compliance~~the environment and to comply~~ with the performance standards of WAC 173-350-040. The jurisdictional health department shall determine the need for environmental monitoring to ensure compliance with the performance standards. In addition the owner or operator shall:

Reason for change

This language was deleted because it duplicated language in the performance standards in Section 040.

(a) Operate the site to ensure that:

(i) For waste stored in piles on the site:

(A) Contamination of ground water, surface water, air and land during storage and in case of fire or flood is prevented;

(B) The potential for combustion within the pile and the potential for combustion from other sources is minimized;

(C) The duration of on-site waste storage is limited to one year, or less if the jurisdictional health department believes it is necessary to prevent the contamination of ground water, surface water, air and land; and

(D) The amount of material on site does not exceed the amount that could potentially be applied to the site during a one-year period in accordance with the plan of operations;

(ii) For storage of liquid waste or semisolid waste in surface impoundments or tanks, the requirements of WAC 173-350-330 are met;

(iii) Land application occurs at a predictable application rate determined as follows:

(A) For agricultural applications, solid waste shall be applied to the land at a rate that does not exceed the agronomic rate. The agronomic rate should be based on Washington State University cooperative extension service fertilizer guidelines or other appropriate guidance accepted by the jurisdictional health department;

(B) For the purposes of land reclamation or other soil amending activities, the application rate may be designed to achieve a soil organic matter content or other soil physical characteristic and promote long-term soil productivity, with consideration of the carbon-to-nitrogen ratio to control nutrient leaching; and

(C) For liquid wastes, the application rate shall also be based on soil permeability and infiltration rate.

(b) Maintain daily operating records of the amount and type of waste applied to the land, the crop and any additional nutrient inputs. Significant deviations from the plan of operation shall be noted in the operating record. Records shall be kept for a minimum of five years and shall be available upon request by the jurisdictional health department;

Reason for change

This change was made to be consistent with other sections in the rule and to clarify that records should be maintained for each day the facility is operated.

(c) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall detail the activities during the previous calendar year and shall include the following information:

(i) Site address or legal description;

(ii) Calendar year covered by the report;

(iii) Annual quantity and type of waste received from each source~~, in tons~~;

(iv) For each crop grown: The acreage used, the amount, type and source of each waste applied, the crop, and any additional nutrient inputs to the land, such as manure, biosolids, or commercial fertilizer;

(v) Quantity and type of any waste remaining in storage as of December 31st of the reporting year~~, in tons~~;

Reason for changes

This change was made to provide additional flexibility in the rule.

(vi) Any additional waste characterization information required to be obtained as a condition of the permit, and a summary report of that data;

(vii) Any environmental monitoring data required to be obtained as a condition of the permit, and a summary report of that data; and

(viii) Any additional information required by the jurisdictional health department as a condition of the permit;

(d) Develop, keep, and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:

Reason for change

This section was modified so that a jurisdictional health department may direct an owner or operator to amend a plan of operation.

(i) A description of the types of solid wastes to be handled at the site;

(ii) A description of how wastes are to be handled on-site during the life of the site including:

(A) How wastes will be delivered to the site and meet any local agency notification requirements;

(B) A description of the process, system and equipment that will be used to apply the waste to the land that explains:

(I) How the equipment and system will be calibrated to deliver waste at the agronomic rate;

(II) Whether the waste will be allowed to remain on the surface of the land, will be tilled into the soil, or will be injected into the soil at the time of application;

(III) When the waste will be applied to the land relative to crop and livestock management practices; and

(IV) Any proposed restrictions on application related to climatic factors including typical precipitation, twenty-five-year storm events as defined in WAC 173-350-100, temperature, and wind, or site conditions including frozen soils and seasonal high ground water;

(C) A description of how the waste will be managed at all points during storage and application to control attraction to disease vectors and to mitigate nuisance odor impacts;

Reason for change

This section was modified to incorporate the term “nuisance odor” as defined in Section 100 of this rule.

(iii) A spill response plan including the names and phone numbers of all contacts to be notified in the event of a spill and how the spill will be cleaned up;

(iv) If the seasonal high ground water is three feet or less below the surface, a management plan describing how ground water will be protected;

(v) A waste monitoring plan providing analytical results representative of the waste being applied to the land, over time, taking into account the rate of production of the waste, timing of delivery, and storage;

(vi) The forms used to record volumes, weights and waste application data;

(vii) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.

(5) *Land application - Ground water monitoring requirements*. There are no specific ground water monitoring requirements for land application sites subject to this chapter; however, land application sites must meet the requirements ~~except as~~ provided under WAC 173-350-040(5).

Reason for change

This change was made to correct a typographical error.

(6) *Land application - Closure requirements.* The owner or operator of all land application sites shall notify the jurisdictional health department sixty days in advance of closure. All land application sites shall be closed by applying all materials in storage in accordance with the permit, or by removing those materials to a facility that conforms with the applicable regulations for handling the~~meets the requirements of chapter 70.95 RCW, Solid waste management--Reduction and recycling, to manage that type of~~ waste.

Reason for change

This section was modified to recognize that some wastes removed or generated during closure may not be subject to chapter 70.95 RCW but do need to be managed in accordance with applicable regulations.

(7) *Land application - Financial assurance requirements.* There are no specific financial assurance requirements for land application sites subject to this chapter; however, land application sites must meet the requirements provided under WAC 173-350-040(5).

(8) *Land application - Permit application contents.*

(a) The owner or operator of land application sites subject to this section shall obtain a solid waste permit from the jurisdictional health department. All applications for permits shall be submitted in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each application for a permit shall contain:

(i) Contact information, including name, contact person, mailing address, phone, fax, e-mail for:

(A) Any person who generates waste that will be applied to the site;

(B) The person who is applying for a permit (the permit holder);

(C) The person who prepares the permit application; and

(D) The person who owns the site where the waste will be applied.

(ii) Statement of intended use. The permit application shall contain a clear explanation of the benefit to be obtained from land application of the material. Avoidance of disposal is not adequate justification for land application of solid waste.

(iii) An analysis of the waste which includes:

(A) A description of the material to be applied to the land;

(B) A description of the processes by which the material is generated and treated including all processed feedstocks;

(C) Any pseudonyms or trade names for the material;

(D) A discussion of the potential for the material to generate nuisance odors or to attract disease vectors, including any complaints regarding nuisance odors associated with this material;

Reason for change

This section was modified to incorporate the term “nuisance odor” as defined in Section 100 of this rule.

(E) An analysis of pollutant concentrations of the following reported on a dry weight basis:

(I) Total arsenic;

(II) Total barium;
(III) Total cadmium;
(IV) Total chromium;
(V) Total copper;
(VI) Total lead;
(VII) Total mercury;
(VIII) Total molybdenum;
(IX) Total nickel;
(X) Total selenium;
(XI) Total zinc.

(F) An analysis of nutrients at a minimum to include total Kjeldahl nitrogen, total nitrate-nitrogen, total ammonia- and ammonium-nitrogen, total phosphorus, and extractable potassium, reported on a dry weight basis;

Reason for change

This section was modified to clarify intent.

(G) An analysis of physical/chemical parameters to include at a minimum: Total solids, total volatile solids, pH, electrical conductivity, total organic carbon;

(H) A discussion of any pathogens known or suspected to be associated with this material, including those which can cause disease in plants, animals, or humans;

(I) The concentration of fecal coliform bacteria expressed as CFU or MPN per gram of dry solid material; and

(J) Any additional analysis required by the jurisdictional health department. The jurisdictional health department may reduce the analytical requirements of this section. Methods of analysis are to be determined by the jurisdictional health department.

(iv) A comprehensive site characterization including:

(A) A description of current practices and a brief description of past practices on the application site, including application of wastes, soil amendments, manures, biosolids, liming agents, and other fertilization practices, livestock usage, irrigation practices, and crop history. Also indicate whether any management plan has been prepared for the site such as a farm, forest, or nutrient management plan. Discuss any potential changes to management practices at the site;

(B) A description of the climate at the application site including typical precipitation, precipitation of a twenty-five-year storm, as defined in WAC 173-350-100, temperatures, and seasonal variations;

(C) A brief discussion of the potential for ~~surface water to flow onto, or off the site,~~run-on and run-off and typical depths to seasonal high ground water;

Reason for change

This change was made to use defined terms for clarification.

(D) An analysis of soil nutrients including residual nitrate in the upper two feet of soil in one foot increments;

(E) A site map showing property boundaries and ownership of adjacent properties with the application areas clearly shown, and with the latitude and longitude of the approximate center of each land application site;

(F) A topographic relief map of the site extending one quarter beyond the site boundaries at a scale of 1:24,000 or other scale if specified by the jurisdictional health department;

(G) Show the following information on either of the maps provided or on additional maps if needed:

(I) Location of the site by street address, if applicable;

(II) The zoning classification of the site;

(III) The means of access to the site;

(IV) The size of the site in acres, and if applicable, the size of individual fields, units, and application areas;

(V) The location and size of any areas which will be used to store the waste;

(VI) Adjacent properties, uses, and their zoning classifications;

(VII) Delineation of wetlands on the site;

(VIII) Any portion of the site that falls within a wellhead protection area;

(IX) Any seasonal surface water bodies located on the site or perennial surface water bodies within one-quarter mile of the site;

(X) The location of all wells within one-quarter mile of the boundary of the application area which are listed in public records or otherwise known, whether for domestic, irrigation, or other purposes;

(XI) Any setback or buffer to surface water, property boundaries, or other feature, if proposed;

(XII) The location of any critical areas or habitat identified under the Endangered Species Act, local growth management plans, habitat conservation plans, conservation reserve program, or local shoreline master program;

(XIII) A copy of the Nnatural Rresources Ceonservation Sservice soil survey map from the most recent edition of the soil survey that includes the distribution of soil types with an overlay of the site boundaries; and

(XIV) A description of the soil type(s), textural classes, and soil depths present on the site as determined by the most recent edition of the Nnatural Rresources Ceonservation Sservice soil survey or from actual field measurements.

(v) A plan of operation meeting the requirements of subsection (4) of this section.

(b) Two or more areas of land under the same ownership or operational control which are not contiguous may be considered as one site for the purposes of permitting, if in the opinion of the jurisdictional health department the areas are sufficiently proximate and management practices are sufficiently similar that viewing them as one proposal would expedite the permit process without compromising the public interest. A jurisdictional health department may also require separate permits for a contiguous area of land if it finds that the character of a proposed site or management practices across the site are sufficiently different that the permit process and public interest would be best served by a more focused approach.

Reason for change

This change was made to correct a typographical error.

NEW SECTION

WAC 173-350-240 Energy recovery and incineration facilities. (1) *Energy recovery and incineration facilities - Applicability.*

(a) These standards apply to all facilities designed to burn more than twelve tons of solid waste or refuse-derived fuel per day.

(b) These standards do not apply to facilities that burn gases recovered at a landfill or solid waste digesters.

(c) In accordance with RCW 70.95.305, the combustion of wood waste, wood derived fuel, and wastewater treatment sludge generated from the manufacturing of wood pulp or paper, for the purpose of energy recovery is subject solely to the requirements of (d)(i) through (iv) of this subsection and is exempt from solid waste handling permitting. An owner or operator that does not comply with the terms and conditions of (d)(i) through (iv) of this subsection is required to obtain a permit from the jurisdictional health department and shall comply with all other applicable requirements of this chapter. In addition, violations of the terms and conditions of (d)(i) through (iv) of this subsection may be subject to the penalty provisions of RCW 70.95.315.

Reason for change

This section was modified to include manufacturers of wood pulp as well as paper.

(d) Owners and operators of all categorically exempt energy recovery facilities shall:

(i) Comply with the performance standards of WAC 173-350-040;

(ii) Ensure that only fuels approved in writing by the agency with jurisdiction over the facility for air quality regulation are combusted;

(iii) Allow department and jurisdictional health department representatives to inspect the facility at reasonable times for the purpose of determining compliance with this chapter; and

(iv) Ensure that wastewater treatment sludge generated from the manufacturing of wood pulp or paper is combusted only in energy recovery units at the facility from which it originates.

Reason for change

This section was modified to include manufacturers of wood pulp as well as paper.

(2) *Energy recovery and incineration facilities - Location standards*. There are no specific location standards for energy recovery or incineration facilities subject to this chapter; however, energy recovery and incineration facilities must meet the requirements provided under WAC 173-350-040(5).

(3) *Energy recovery and incineration facilities - Design standards*. There are no specific design standards for energy recovery or incineration facilities subject to this chapter; however, energy recovery and incineration facilities must meet the requirements provided under WAC 173-350-040(5).

(4) *Energy recovery and incineration facilities - Operating standards*. The owner or operator of an energy recovery or incineration facility shall:

(a) Operate the facility to:

(i) Confine solid wastes prior to and after processing to specifically designed piles, surface impoundments, tanks or containers meeting the applicable standards of this chapter. Storage of wastes other than in the specifically designed storage compartments is prohibited. Equipment and space shall be provided in the storage and charging areas, and elsewhere as needed, to allow periodic cleaning as required to maintain the plant in a sanitary and clean condition;

(ii) Handle solid wastes, including combustion residues, in a manner that complies with this chapter;

(iii) Provide recyclable material collection at all facilities that accept municipal solid waste from the general public, self-haul residential, or commercial waste generators~~Provide recycling facilities~~; and

Reason for change

This section was modified to limit the requirement to provide recyclable material collection only to facilities that accept municipal solid waste from the general public, self-haul residential, or commercial waste generators.

(iv) Ensure that dangerous waste is not disposed, treated, stored or otherwise handled, unless the requirements of chapter 173-303 WAC, Dangerous waste regulations, are met.

(b) Inspect the facility to prevent malfunctions and deterioration, operator errors and discharges that may lead to the release of wastes to the environment or cause a threat to human health. The owner or operator shall conduct these inspections as needed, but at least weekly, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process.

(c) Maintain daily operating records on the weights and types of wastes received, and number of vehicles delivering waste to the facility. Facility inspection reports shall be maintained in the operating record. Significant deviations from the plan of operation shall also be noted on the operating record. Records shall be maintained for a minimum of five years and shall be available upon request by the jurisdictional health department.

(d) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st of each year on forms supplied by the department. The annual report shall detail the facility's activities during the previous calendar year and shall include the following information:

(i) Name and address of the facility;

(ii) Calendar year covered by the report;

(iii) Annual quantity of each type of solid waste received and incinerated, in tons if available;

(iv) Annual quantity, type and destination of solid waste bypassed, in tons;

(v) Annual quantity of ash disposed and disposal location, in tons; and

(vi) Any additional information required by the jurisdictional health department as a condition of the permit.

(e) Develop, keep and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:

Reason for change

This section was modified so that a jurisdictional health department may direct an owner or operator to amend a plan of operation.

(i) A description of the types of solid wastes to be handled at the facility;

(ii) How solid wastes are to be handled on-site during the facility's active life, including alternative storage, and/or disposal plans for all ~~breakdowns~~ situations that would result in overfilling of the storage facility;

Reason for change

This section was modified to expand the situations that would result in overfilling of the storage facility beyond just breakdowns.

(iii) A description of how equipment, structures and other systems, including leachate collection and gas collection equipment, are to be inspected and maintained, including the frequency of inspection and inspection logs;

(iv) Safety, fire and emergency plans including:

(A) Actions to take if there is a fire or explosion;

(B) Actions to take if leaks are detected;

(C) Remedial action programs to be implemented in case of a release of hazardous substances to the environment;

(D) Actions to take for other releases (e.g., failure of runoff containment system);

(v) Forms used to record volumes or weights;

(vi) Other such details to demonstrate that the facility will be operated in accordance with this chapter and as required by the jurisdictional health department.

(5) *Energy recovery and incineration facilities - Ground water monitoring requirements*. There are no specific ground water monitoring requirements for energy recovery and incineration facilities subject to this chapter; however, energy recovery and incineration facilities must meet the requirements provided under WAC 173-350-040(5).

(6) *Energy recovery and incineration facilities - Closure requirements*. The owner or operator of an energy recovery or incineration facility shall:

(a) Notify the jurisdictional health department one hundred eighty days in advance of closure. A~~ll waste a~~t the time of closure all solid waste shall be removed to a facility that conforms with the applicable regulations for handling ~~meets the requirements of chapter 70.95 RCW, Solid waste management - Reduction and recycling, to manage that type of~~ the waste. ~~The site shall be decontaminated.~~

Reason for change

This section was modified to recognize that some wastes removed or generated during closure may not be subject to chapter 70.95 RCW but do need to be managed in accordance with applicable regulations. The use of the terms "decontamination" and "decontaminated" have been eliminated from the rule because their meaning was unclear for this purpose.

(b) Develop, keep and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan shall include the ~~:~~

~~(i) M~~methods of removing wastes~~; and~~

~~(ii) Steps taken for decontamination~~.

Reason for change

The use of the term "decontamination" has been eliminated because its meaning was unclear for this purpose.

(7) *Energy recovery and incineration facilities - Environmental impact statement required*. In accordance with RCW 70.95.700, no solid waste energy recovery or incineration facility shall be operated prior to the completion of an environmental impact statement containing the considerations required under RCW 43.21C.030 (2)(c) and prepared pursuant to the procedures of chapter 43.21C RCW, State Environmental Policy Act.

(8) *Energy recovery and incineration facilities - Financial assurance requirements*. There are no specific financial assurance requirements for energy recovery facilities and incineration facilities subject to this chapter; however, energy recovery and incineration facilities must meet the requirements provided under WAC 173-350-040(5).

(9) *Energy recovery and incineration facilities - Permit application contents*. The owner or operator of an energy recovery or incineration facility shall obtain a solid waste permit from the jurisdictional health department. All applications for permits shall be in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each permit application shall contain:

(a) Preliminary engineering reports/plans and specifications that address:

(i) The design of the storage and handling facilities on-site for incoming waste as well as fly ash, bottom ash and any other wastes produced by air or water pollution controls; and

(ii) The design of the incinerator or thermal treater, including charging or feeding systems, combustion air systems, combustion or reaction chambers, including heat recovery systems, ash handling systems, and air pollution and water pollution control systems. Instrumentation and monitoring systems design shall also be included.

(b) A plan of operation that addresses the requirements of subsection (4) of this section; and

(c) A closure plan meeting the requirements of subsection (6) of this section.

NEW SECTION

WAC 173-350-300 On-site storage, collection and transportation standards. (1) *On-site storage, collection and transportation standards - Applicability*. This section is applicable to the temporary storage of solid waste in a container at a premises, business establishment, or industry and the collecting and transporting of the solid waste.

(2) *On-site storage*.

(a) The owner or occupant of any premises, business establishment, or industry shall be responsible for the safe and sanitary storage of all containerized solid wastes accumulated at those premises.

(b) The owner, operator, or occupant of any premises, business establishment, or industry shall store solid wastes in containers that meet the following requirements:

(i) Disposable containers shall be sufficiently strong to allow lifting without breakage and shall be thirty-two gallons in capacity or less where manual handling is practiced;

(ii) Reusable containers, except for detachable containers, shall be:

(A) Rigid and durable;

(B) Corrosion resistant;

(C) Nonabsorbent and water tight;

(D) Rodent-proof and easily cleanable;

(E) Equipped with a close-fitting cover;

(F) Suitable for handling with no sharp edges or other hazardous conditions; and

(G) Equal to or less than thirty-two gallons in volume where manual handling is practiced;

(iii) Detachable containers shall be durable, corrosion-resistant, nonabsorbent, nonleaking and have either a solid cover or screen cover to prevent littering.

(3) *Collection and transportation standards*.

(a) All persons collecting or transporting solid waste shall avoid littering~~, or the creation of other nuisances~~ at the loading point, during transport and during proper unloading of the solid waste~~ at a permitted transfer station, or other permitted solid waste handling facility~~.

Reason for change

The definition and the use of the term "nuisance" have been eliminated from the rule. The section was also modified to expand control of littering beyond the boundaries of permitted solid waste handling facilities.

(b) Vehicles or containers used for the collection and transportation of solid waste shall be tightly covered or screened where littering may occur, durable and of easily cleanable construction. Where garbage is being collected or transported, containers shall be cleaned as necessary to prevent nuisance~~s,~~ odors and insect breeding and shall be maintained in good repair.

Reason for change

This section was modified to incorporate the term "nuisance odor" as defined in Section 100 of this rule.

(c) Vehicles or containers used for the collection and transportation of any solid waste shall be loaded and moved in such manner that the containers will not fail, and the contents will not spill or leak ~~in quantities to cause a nuisance~~. Where such spillage or leakage does occur the waste shall be picked up immediately by the collector or transporter and returned to the vehicle or container and the area properly cleaned.

Reason for change

The definition and the use of the term "nuisance" have been eliminated from the rule.

(d) All persons commercially collecting or transporting solid waste shall inspect collection and transportation vehicles at least monthly. Inspection records shall be maintained at the facility normally used to park such vehicles or such other location that maintenance records are kept. Such records shall be kept for a period of at least two years, and be made available upon the request of the jurisdictional health department.

NEW SECTION

WAC 173-350-310 Intermediate solid waste handling facilities. (1) *Intermediate solid waste handling facilities - Applicability*. This section is applicable to any facility engaged in solid waste handling that provides intermediate storage and/or processing prior to transport for final disposal. This includes, but is not limited to, material recovery facilities, transfer stations, baling and compaction sites, and drop box facilities~~es~~. This section is not applicable to:

Reason for change

This section of the rule was modified to clarify the difference between the act of recycling, as defined, and the collection and handling of solid wastes prior to recycling. Material recovery facilities have been moved from Section 210, Recycling, to this section, Intermediate solid waste handling facilities, to further highlight the difference.

(a) Storage, treatment or recycling of solid waste in piles which are subject to WAC 173-350-320;

(b) Storage or recycling of solid waste in surface impoundments which are subject to WAC 173-350-330;

(c) Composting facilities subject to WAC 173-350-220;

(d) R~~Material recovery and r~~ecycling facilities which are subject to WAC 173-350-210~~, except as provided in WAC 173-350-210 (2)(a)~~;

Reason for change

This change was made to make this section applicable to material recovery facilities.

(e) Storage of waste tires ~~prior to recycling~~ which is subject to WAC 173-350-350;

(f) Storage of moderate risk waste ~~prior to recycling~~ which is subject to WAC 173-350-360;

Reason for change

These changes were made to clarify that this section does not apply to storage of waste tires or moderate risk waste regardless of the ultimate fate of the wastes.

(g) Energy recovery or incineration of solid waste which is subject to WAC 173-350-240; and~~.~~

(h) Drop boxes placed at the point of waste generation which is subject to WAC 173-350-300.

Reason for change

This change was made to clarify that this section is not applicable to on-site storage or collection.

(2) *Materials recovery facilities - Permit exemption and notification.*

(a) In accordance with RCW 70.95.305, material recovery facilities managed in accordance with the terms and conditions of (b) of this subsection are exempt from solid waste handling permitting. An owner or operator that does not comply with the terms and conditions of (b) of this subsection is required to obtain a permit from the jurisdictional health department as an intermediate solid waste handling facility and shall comply with the requirements of WAC 173-350-310. In addition, violations of the terms and conditions of (b) of this subsection may be subject to the penalty provisions of RCW 70.95.315.

(b) Material recovery facilities shall be managed according to the following terms and conditions to maintain their exempt status:

(i) Meet the performance standards of WAC 173-350-040;

(ii) Accept only source separated recyclable materials and dispose of an incidental and accidental residual not to exceed five percent of the total waste received, by weight per year, or ten percent by weight per load;

Reason for change

This change limits permit exemption to material recovery facilities that accept source separated recyclable materials (as defined) instead of any solid waste. This is more restrictive than the proposed exemption.

(iii) Allow inspections by the department or jurisdictional health department at reasonable times;

(iv) Notify the department and jurisdictional health department, thirty days prior to operation, or ninety days from the effective date of the rule for existing facilities, of the intent to

operate a material recovery facility in accordance with this section. Notification shall be in writing, and shall include:

(A) Contact information for facility owner or operator;

(B) A general description of the facility; and

(C) A description of the types of recyclable materials managed at the facility.

(v) Prepare and submit an annual report to the department and the jurisdictional health department by April 1st on forms supplied by the department. The annual report shall detail facility activities during the previous calendar year and shall include the following information:

(A) Name and address of the facility;

(B) Calendar year covered by the report;

(C) Annual quantities and types of waste received, recycled and disposed, in tons, for purposes of determining progress towards achieving the goals of waste reduction, waste recycling, and treatment in accordance with RCW 70.95.010(4); and

(D) Any additional information required by written notification of the department.

Reason for change

This insertion was made to move material recovery facilities from Section 210, Recycling, to Section 310, Intermediate solid waste handling facilities.

(~~2~~3) *Intermediate solid waste handling facilities - Location standards.* There are no specific location standards for intermediate solid waste handling facilities subject to this chapter; however, intermediate solid waste handling facilities must meet the requirements provided under WAC 173-350-040(5).

(~~3~~4) *Intermediate solid waste handling facilities - Design standards.* The owner or operator of all intermediate solid waste handling facilities shall prepare engineering reports/plans and specifications to address the following design standards:

(a) Material recovery facilities, t~~T~~ransfer stations, baling and compaction sites shall:

(i) ~~Be surrounded by a fence, trees, shrubbery, or natural features as to c~~Control public access, and prevent unauthorized vehicular traffic and illegal dumping of waste~~and be screened from the view of immediately adjacent neighbors, unless the tipping floor is fully enclosed by a building~~;

Reason for change

This change was made to eliminate prescriptive design standards and replace them with performance based criteria.

(ii) Be sturdy and constructed of easily cleanable materials;

(iii) ~~Be free of potential rat harborages, and p~~Provide effective means to control rodents, insects, birds and other vectors;

Reason for change

This change was made to eliminate prescriptive design standards and replace them with performance based criteria.

(iv) ~~Be adequately screened to prevent blowing of litter and to p~~Provide effective means to control litter;

Reason for change

This change was made to eliminate prescriptive design standards and replace them with performance based criteria.

(v) Provide protection of the tipping floor ~~of transfer stations, baling and compaction systems~~ from wind, rain or snow;

Reason for change

This change was made so that all tipping floors would be protected from wind, rain or snow.

(vi) Provide pollution control measures to protect surface and ground waters, including runoff collection and discharge designed to handle a twenty-five-year storm as defined in WAC 173-350-100, and equipment cleaning and washdown water; and

(vii) Provide pollution control measures to protect air quality.

(viii) Provide all-weather surfaces for vehicular traffic.

Reason for change

This requirement was moved from operating standards to design standards.

(b) Drop boxes shall be constructed of durable watertight materials with a lid or screen on top that prevents the loss of materials during transport and~~to prevent water infiltration,~~ access by rats and other vermin~~vectors, and control litter~~.

Reason for change

This change was made because the proposal to prevent water infiltration on all drop boxes would require significant capital expenditures for many facilities with little gain.

(45) *Intermediate solid waste handling facilities - Operating standards*. The owner or operator of an intermediate solid waste handling facility shall:

(a) Operate the facility to:

(i) For material recovery facilities, transfer stations, ba~~i~~ling and compaction sites:

(A) Be protective of human health and the environment;

(B) Prohibit the disposal of dangerous waste and other unacceptable waste~~Provide all-weather approach roads, exit roads, and all other vehicular areas~~;

Reason for change

The addition was made to prevent dangerous wastes and other prohibited or unacceptable wastes from being accepted to prevent these wastes from being delivered to landfills or causing problems during transport.

The requirement to provide all-weather approach roads was moved from operating standards to design standards.

(C) Control rodents, insects, and other vectors;

(D) Control litter;

(E) Prohibit scavenging;

(F) Prohibit open burning;

(G) Control dust;

(H) For putrescible waste, control nuisance odors;

(I) Provide attendant(s) on-site during hours of operation;

(J) Have a sign that identifies the facility and shows at least the name of the site, and, if applicable, hours during which the site is open for public use, what materials the facility does not accept and other necessary information posted at the site entrance; and

(K) Have communication capabilities to immediately summon fire, police, or emergency service personnel in the event of an emergency.

(ii) For drop box facilities:

(A) Be serviced as often as necessary to ensure adequate dumping capacity at all times. Storage of waste outside the drop boxes is prohibited;

(B) Be protective of human health and the environment;

(C) Control rodents, insects, and other vectors;

(D) Control litter;

(E) Prohibit scavenging;

(F) Control dust;

(G) For putrescible waste, control nuisance odors; and

(H) Have a sign that identifies the facility and shows at least the name of the site, and, if applicable, hours during which the site is open for public use, what materials the facility does not accept and other necessary information posted at the site entrance;

(b) Inspect and maintain the facility to prevent deterioration or the release of wastes to the environment that could pose a threat to human health. Inspection shall be as needed, but at least weekly, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process;

(c) Maintain daily operating records on the weights and types of wastes received or removed from the facility. Facility inspection reports shall be maintained in the operating record. Significant deviations from the plan of operation shall be noted in the operating record. Records shall be kept for a minimum of five years and shall be available upon request by the jurisdictional health department;

Reason for change

This change was made to be consistent with other sections in the rule and to clarify that records should be maintained for each day the facility is operated.

(d) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall detail the facility's activities during the previous calendar year and shall include the following information:

(i) Name and address of the facility;

(ii) Calendar year covered by the report;

(iii) Annual quantity of each type of solid waste handled by the facility, in tons;

(iv) Destination of waste transported from the facility for processing or disposal; and

(v) Any additional information required by the jurisdictional health department as a condition of the permit.

(e) Develop, keep and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:

Reason for change

This section was modified so that a jurisdictional health department may direct an owner or operator to amend a plan of operation.

(i) A description of the types of solid wastes to be handled at the facility;

(ii) A description of how solid wastes are to be handled on-site during the facility's life, including maximum facility capacity, methods of adding or removing waste from the facility and equipment used;

Reason for change

This modification was made to clarify what information should be included in a plan of operation.

(iii) A description of the procedures used to ensure that dangerous waste and other unacceptable waste are not accepted at the facility;

Reason for change

This subparagraph was inserted so that the plan of operation would describe how the requirements of 310(5)(a)(i)(B) will be implemented.

(~~iii~~iv) Safety and emergency plans;

(~~i~~v) A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspection and inspection logs;

(vi) For putrescible wastes, a nuisance~~n~~ odor management plan describing the actions to be taken to control nuisance odors;

Reason for change

This section was modified to incorporate the term "nuisance odor" as defined in Section 100 of this rule.

(vii) The forms used to record volumes or weights; and

(viii) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.

(~~5~~6) *Intermediate solid waste handling facilities - Ground water monitoring requirements*. There are no specific ground water monitoring requirements for intermediate solid waste handling facilities subject to this chapter; however, intermediate solid waste handling facilities must meet the requirements provided under WAC 173-350-040(5).

(~~6~~7) *Intermediate solid waste handling facilities - Closure requirements*. The owner or operator of an intermediate solid waste handling facility shall:

(a) Notify the jurisdictional health department one hundred eighty~~sixty~~ days in advance of closure. All waste shall be removed to a facility that conforms with the applicable regulations for handling the ~~meets the requirements of chapter 70.95 RCW, Solid waste management - Reduction and recycling, to manage that type of~~ waste~~. The site shall be decontaminated.~~

Reason for change

The notification was extended to one hundred eighty days to allow sufficient time for local officials to make other arrangements to serve the public prior to closure of intermediate solid waste handling facilities.

This section was also modified to recognize that some wastes removed or generated during

closure may not be subject to chapter 70.95 RCW but do need to be managed in accordance with applicable regulations. The use of the term "decontaminated" has been eliminated because its meaning was unclear for this purpose.

(b) Develop, keep and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan shall include~~:~~

~~(i) M~~methods of removing wastes~~; and~~

~~(ii) Steps taken for decontamination.~~.

Reason for change

The use of the term "decontamination" has been eliminated because its meaning was unclear for this purpose.

(~~7~~8) *Intermediate solid waste handling facilities - Financial assurance*. There are no specific financial assurance requirements for intermediate solid waste handling facilities subject to this chapter; however, intermediate solid waste handling facilities must meet the requirements provided under WAC 173-350-040(5).

(~~8~~9) *Intermediate solid waste handling facilities - Permit application contents*. The owner or operator of an intermediate solid waste handling facility shall obtain a solid waste permit from the jurisdictional health department. All applications for permits shall be submitted in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each application for a permit shall contain:

(a) For material recovery facilities, transfer stations, ba~~i~~ling and compaction sites:

(i) Engineering reports/plans and specifications that address the design standards of subsection (~~3~~4)(a) of this section;

(ii) A plan of operation meeting the applicable requirements of subsection (~~4~~5) of this section;

(iii) A closure plan meeting the requirements of subsection (~~6~~7) of this section;

(b) For drop boxes:

(i) Engineering reports/plans and specifications that address the design standards of subsection (~~3~~4)(b) of this section;

(ii) A plan of operation meeting the applicable requirements of subsection (~~4~~5) of this section; and

(iii) A closure plan meeting the requirements of subsection (~~6~~7) of this section.

NEW SECTION

WAC 173-350-320 Piles used for storage or treatment. (1) *Piles used for storage or treatment - Applicability*.

(a) This section is applicable to solid waste stored or treated in piles where putrescible waste piles that do not contain municipal solid waste are in place for more than three weeks, nonputrescible waste and contaminated soils and dredged material piles are in place for more than three months and municipal solid waste piles are in place for more than three days. This section is not applicable to:

Reason for change

This modification clarifies the intent that this section is applicable to the storage or treatment of contaminated soils and dredged material in piles.

(i) Waste piles located at composting facilities subject to WAC 173-350-220 that are an integral part of the facility's operation;

(ii) Piles of nonputrescible waste stored in enclosed buildings provided that no liquids or liquid wastesludges with free liquids are added to the pile; and

Reason for change

The proposed definition of the term "free liquids" was improper as it referred to the solid waste and not the liquids in the waste. The term has been changed to "liquid waste" in the final rule to correct this.

(iii) Piles of waste tires or used tires subject to WAC 173-350-350.

(b) In accordance with RCW 70.95.305, storage piles of wood waste used for fuel or as a raw material, wood derived fuel, and agricultural wastes on farms, are subject solely to the requirements of (c)(i) through (iii) of this subsection and are exempt from solid waste handling permitting. An owner or operator that does not comply with the terms and conditions of (c)(i) through (iii) of this subsection is required to obtain a permit from the jurisdictional health department and shall comply with all other applicable requirements of this chapter. In addition, violations of the terms and conditions of (c)(i) through (iii) of this subsection may be subject to the penalty provisions of RCW 70.95.315.

(c) Owners and operators of all storage piles that are categorically exempt from solid waste handling permitting in accordance with (b) of this subsection shall:

(i) Ensure that at least fifty percent of the material stored in the pile is used within one year and all material is used within three years;

(ii) Comply with the performance standards of WAC 173-350-040; and

(iii) Allow department and jurisdictional health department representatives to inspect the waste pile at reasonable times for the purpose of determining compliance with this chapter.

(d) In accordance with RCW 70.95.305, the storage of inert waste in piles is subject solely to the requirements of (e)(i) through (vi) of this subsection and are exempt from solid waste handling permitting. The storage of inert waste in piles at a facility with a total volume of two hundred fifty cubic yards or less is subject solely to the requirements of (e)(iv) of this subsection. An owner or operator that does not comply with the terms and conditions of (e)(i) through (vi) of this subsection is required to obtain a permit from the jurisdictional health department and shall comply with all other applicable requirements of this chapter. In addition, violations of the terms and conditions of (e)(i) through (vi) may be subject to the penalty provisions of RCW 70.95.315.

Reason for change

This modification was made to reduce the regulatory requirements for small piles of inert waste.

(e) Owners and operators of all storage piles that are categorically exempt from solid waste handling permitting in accordance with (d) of this subsection shall:

(i) Implement and abide by a procedure that is capable of detecting and preventing noninert wastes from being accepted or mixed with inert waste;

(ii) Ensure that at least fifty percent of the material stored in the pile is used within one year and all the material is used within three years;

(iii) Control public access and unauthorized vehicular traffic to prevent illegal dumping of wastes;

(iv) Comply with the performance standards of WAC 173-350-040;

(v) Allow department and jurisdictional health department representatives to inspect the waste pile at reasonable times for the purpose of determining compliance with this chapter; and

(vi) Notify the department and jurisdictional health department thirty days prior to commencing operations of the intent to store inert waste in accordance with this section. Notification shall be in writing, and shall include:

(A) Contact information for the owner or operator;

(B) A general description and location of the facility; and

(C) A description of the inert waste handled at the facility.

(2) *Piles used for storage or treatment - Location standards.* There are no specific location standards for piles subject to this chapter; however, waste piles must meet the requirements provided under WAC 173-350-040(5).

(3) *Piles used for storage or treatment - Design standards.*

(a) The owner or operator of piles used for storage or treatment shall prepare engineering reports/plans and specifications, including a construction quality assurance plan, to address the design standards of this subsection. The maximum waste capacity, elevation and boundaries of the waste pile shall be provided. Piles shall be designed and constructed to:

(i) Control public access;

(ii) Comply with the uniform fire code as implemented through the local fire control agency;

(iii) Minimize vector harborage to the extent practicable; and

(iv) Provide all-weather approach roads and exits.

(b) In addition to the requirements of (a) of this subsection, the owner or operator of piles of putrescible waste, contaminated soils or dredged material, or waste determined by the jurisdictional health department to be likely to produce leachate posing a threat to human health or the environment shall prepare engineering reports/plans and specifications of the surface on which the pile(s) will be placed including an analysis of the surface under the stresses expected during operations, and the design of the surface water management systems including run-on prevention and runoff conveyance, storage, and treatment. The piles shall be designed and constructed to:

Reason for change

This change was made to reinstate requirements proposed in earlier drafts of the rule for facilities that store or treat contaminated soils or dredged material in piles. It provides clarification that contaminated soils and dredged material are likely to produce leachate posing a threat to human health or the environment.

(i) Place waste on a sealed surface, such as concrete or asphaltic concrete, to prevent soil and ground water contamination. The surface shall be durable enough to withstand material handling practices. The jurisdictional health department may approve other types of surfaces, such as engineered soil, if the applicant can demonstrate that the proposed surface will prevent soil and ground water contamination; and

(ii) Control run-on and runoff from a twenty-five-year storm, as defined in WAC 173-350-100.

(4) *Piles used for storage or treatment - Operating standards.* The owner or operator of piles used for storage or treatment shall:

(a) Operate the facility to:

(i) Control fugitive dust;

(ii) Control access to the pile;

(iii) Ensure that nonpermitted waste is not accepted at the facility;

(iv) Control vector harborage and implement vector control as necessary;

(v) Ensure that waste piles capable of attracting birds do not pose an aircraft safety hazard; and

(vi) For piles of putrescible waste and contaminated soils or dredged material, control nuisance odors.

Reason for change

This change was made to reinstate requirements proposed in earlier drafts of the rule for facilities that store or treat contaminated soils or dredged material in piles. It provides clarification that contaminated soils and dredged material have the potential to produce nuisance odors.

(b) Inspect and maintain the facility to prevent malfunctions, deterioration, operator errors and discharges that may cause or lead to the release of wastes to the environment or a threat to human health. Inspections shall include the engineered surface on which the piles are placed, and the leachate and stormwater control systems. Inspections shall be as needed, but at least weekly, to ensure it is meeting the operational standards, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process;

(c) Maintain daily operating records on the weights and the types of waste received or removed from the facility. Facility inspection reports shall be maintained in the operating record. Significant deviations from the plan of operation shall be noted in the operating record. Records shall be kept for a minimum of five years and shall be available upon request by the jurisdictional health department;

(d) Shall prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall detail the facility's activities during the previous calendar year and shall include the following information:

(i) Name and address of the facility;

(ii) Calendar year covered by the report;

(iii) Annual quantity and type of solid waste handled by the facility, including amounts received, amounts removed and the amount of waste remaining at the facility at year's end, in tons; and

(iv) Any additional information required by the jurisdictional health department as a condition of the permit.

(e) Develop, keep and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to the site operating personnel that concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:

Reason for change

This section was modified so that a jurisdictional health department may direct an owner or operator to amend a plan of operation.

(i) A description of the types of solid waste to be handled at the facility;

(ii) A description of how solid wastes are to be handled on-site during the facility's life including:

(A) The maximum amount of waste to be stored or treated in pile(s) at the facility;

(B) Methods of adding and removing waste from the pile and equipment used;

(iii) A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspection and inspection logs;

(iv) Safety and emergency plans;

(v) Forms to record weights or volumes; and

(vi) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.

(f) Operate the facility in conformance with the following operating standards when storing or treating contaminated soils or dredged material:

(i) Ensure that all soils and dredged material are sufficiently characterized:

(A) Prior to storage or treatment so that contaminants not identified, or at concentrations greater than those provided in the approved plan of operation are not accepted or handled at the facility; and

(B) Prior to removal to an off-site location so that all soils and dredged material that are not clean soils or dredged material are delivered to a facility that meets the requirements of chapter 70.95 RCW, Solid waste management—Reduction and recycling;

(ii) In addition to the daily operating records in (c) of this subsection, a record of the source of contaminated soils and dredged material received at the facility, contaminants and concentrations contained, and any documentation used to characterize soils and dredged material. Records shall be maintained of end uses, including the location of final placement, for any soils or dredged material removed from the facility that contain residual contaminants;

(iii) In addition to the elements in (e) of this subsection, the plan of operation shall include:

(A) A description of contaminants and concentrations in soils and dredged material that will be handled at the facility;

(B) A sampling and analysis plan and other procedures used to characterize soils and dredged material; and

(C) Forms used to record the source of contaminated soils or dredged material, contaminant concentrations and other documentation used to characterize soils and dredged material, and end uses and the location of final placement for any soils or dredged material removed from the facility that contain residual contaminants;

(iv) Treatment of contaminated soils and dredged materials shall be performed using a process that reduces or eliminates contaminants and harmful characteristics. Contaminated soils and dredged materials shall not be diluted to meet treatment goals or as a substitute for disposal, except for incidental dilution of minor contaminants.

Reason for change

This change was made to reinstate requirements proposed in earlier drafts of the rule for facilities that store or treat contaminated soils or dredged material in piles. It provides clarification on provisions required to protect human health and the environment. It was intended that these provisions would be necessary for facilities storing or treating contaminated soils or dredged material to meet the performance standards and other provisions in the rule and that they would be included in a permit application. The Department concurred with commenters that requested specific requirements be provided in the rule for clarification.

Subparagraph (iv) was originally proposed as a performance standard in Section 040. The proposed performance standard was to prevent a person from merely diluting toxic or hazardous constituents in a waste that would be released to the environment instead of performing treatment to mitigate the toxicity or hazard. The primary activity that Ecology believed needed to be addressed to protect human health, and the environment, was the simple dilution of contaminated soils and dredged material, or solid wastes used to make soils, in lieu of effective treatment. In order to address the problems associated with the applying the restriction to all solid wastes, and to clarify the intent, the prohibition on dilution in lieu of treatment or disposal has been moved into this subsection.

(5) *Piles used for storage or treatment - Ground water monitoring requirements*. There are no specific ground water monitoring requirements for piles used for storage and treatment subject to this chapter; however, waste piles must meet the requirements provided under WAC 173-350-040(5).

(6) *Piles used for storage or treatment - Closure requirements*. The owner or operator of piles used for storage or treatment shall:

(a) Notify the jurisdictional health department sixty days in advance of closure. All waste shall be removed from the pile at closure to a facility that conforms with the applicable regulations for handling the~~meets the requirements of chapter 70.95 RCW, Solid waste management--Reduction and recycling, to manage that type of~~ waste.~~ The site shall be decontaminated.~~

Reason for change

This section was modified to recognize that some wastes removed or generated during closure may not be subject to chapter 70.95 RCW but do need to be managed in accordance with applicable regulations. The use of the term "decontaminated" has been eliminated because its meaning was unclear for this purpose.

(b) Develop, keep and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. As a minimum, the closure plan shall include the ~~:~~

~~(i) M~~methods of removing waste~~; and~~

~~(ii) Steps taken for decontamination~~.

Reason for change

The use of the term "decontamination" has been eliminated because its meaning was unclear for this purpose.

(7) *Piles used for storage or treatment - Financial assurance requirements*. There are no specific financial assurance requirements for piles used for storage or treatment subject to this regulation chapter; however, waste piles must meet the requirements provided under WAC 173-350-040(5).

(8) *Piles used for storage or treatment - Permit application contents*. The owner or operator of piles used for storage or treatment shall obtain a permit from the jurisdictional health department.

All applications for permits shall be submitted in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each application for a permit shall contain:

(a) The design of fire control features;

(b) Engineering reports/plans and specifications that address the design standards of subsection (3) of this section;

(c) A plan of operation meeting the requirements of subsection (4) of this section; and

(d) A closure plan meeting the requirements of subsection (6) of this section.

(9) *Piles used for storage or treatment - Construction records*. The owner or operator of piles used for storage or treatment shall provide copies of the construction record drawings for engineered facilities at the site and a report documenting facility construction, including the results of observations and testing carried out as part of the construction quality assurance plan, to the jurisdictional health department and the department. Facilities shall not commence operation until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report/plans and specifications and has approved the construction documentation in writing.

Reason for change

This change was made to provide jurisdictional health departments with criteria for approval of construction records.

NEW SECTION

WAC 173-350-330 Surface impoundments and tanks. (1) *Surface impoundments and tanks - Applicability*.

(a) These standards are applicable to:

(i) Surface impoundments holding solid waste associated with solid waste facilities including, but not limited to, leachate lagoons associated with landfills permitted under this chapter and chapter 173-351 WAC, Criteria for municipal solid waste landfills, and surface impoundments associated with recycling, and piles used for storage or treatment;

(ii) Above or below ground tanks with a capacity greater than one thousand gallons holding solid waste associated with solid waste handling facilities used to store or treat liquid or semisolid wastes or leachate associated with solid waste handling facilities.

Reason for change

This modification was made to limit the applicability so that surface impoundments and tanks holding storm water or other liquids would not be included.

(b) These standards are not applicable to:

(i) Surface impoundments or tanks whose facilities are regulated under local, state or federal water pollution control permits;

(ii) Leachate holding ponds at compost facilities regulated under WAC 173-350-220;

(iii) Septic tanks receiving only domestic sewage from facilities at the site;

(iv) Agricultural waste managed according to a farm management plan written in conjunction with the local conservation district;

(v) Underground storage tanks subject to chapter 173-360 WAC, Underground storage tanks; and

(vi) Tanks used to store moderate risk waste subject to WAC 173-350-360.

(2) *Surface impoundments and tanks - Location standards*.

(a) Surface impoundments and tanks shall not be located in unstable areas unless the owner or operator demonstrates that engineering measures have been incorporated in the facility's design to ensure that the integrity of the liners, monitoring system and structural components will not be disrupted. The owner or operator shall place the demonstration in the application for a permit.

~~(b) There are no location standards for tanks subject to this chapter, except as provided under WAC 173-350-040(5).~~

Reason for change

This section was modified so that tanks would not be located in unstable areas unless sufficient engineering measures have been incorporated to ensure integrity.

(3) *Surface impoundments and tanks - Design standards*.

(a) The owner or operator of a surface impoundment shall prepare engineering reports/plans and specifications, including a construction quality assurance plan, to address the design standards of this subsection. In determining pond capacity, volume calculations shall be based on the facility design, monthly water balance, and precipitation data. All surface impoundments shall be designed and constructed to meet the following requirements:

(i) Have a liner consisting of a minimum 30-mil thickness geomembrane overlying a structurally stable foundation to support the liners and the contents of the impoundment. (HDPE geomembranes used as primary liners or leak detection liners shall be at least 60-mil thick to allow for proper welding.) The jurisdictional health department may approve the use of alternative designs if the owner or operator can demonstrate during the permitting process that the proposed design will prevent migration of solid waste constituents or leachate into the ground or surface waters at least as effectively as the liners described in this subsection.

(ii) Have a ground water monitoring system which complies with the requirements of WAC 173-350-500 or a leak detection layer. If a leak detection layer is used, it shall consist of an appropriate drainage layer underlain by a geomembrane of at least 30-mil thickness.

(iii) Have embankments and slopes designed to maintain structural integrity under conditions of a leaking liner and capable of withstanding erosion from wave action, overfilling, or precipitation.

(iv) Have freeboard equal to or greater than eighteen inches to provide protection against wave action, overfilling, or precipitation. During the permitting process the jurisdictional health department may reduce the freeboard requirement provided that other specified engineering controls are in place which prevent overtopping.

(v) When constructed with a single geomembrane liner, the liner shall be tested using an electrical leak location evaluation capable of detecting a hole 3 millimeters in its longest dimension or other equivalent postconstruction test method prior to being placed in service. Results of the test shall be submitted with the construction record drawings.

(vi) Surface impoundments that have the potential to impound more than ten-acre feet (three million two hundred fifty-nine thousand gallons) of liquid measured from the top of the embankment and which would be released by a failure of the containment embankment shall be reviewed and approved by the dam safety section of the department.

(vii) No surface impoundment liner shall be constructed such that the bottom of the lowest component is less than five feet (one and one half meters) above the seasonal high level of ground water unless the owner or operator can demonstrate during the permitting procedure that the proposed design will not be effected by contact with ground water. All surface impoundment liners shall be constructed such that the bottom of the lowest component is above

the seasonal high level of ground water. For the purpose of this section, ground water includes any water-bearing unit which is horizontally and vertically extensive, hydraulically recharged, and volumetrically significant.

Reason for change

This section was modified to protect surface impoundment liner components from damage by contact with or pressure from ground water.

(b) The owner or operator of a tank used to store or treat liquid or semisolid wastes meeting the definition of solid waste or leachate, shall prepare engineering reports/plans and specifications, including a construction quality assurance plan, to address the following design standards:

(i) Tanks and ancillary equipment shall be tested for tightness using a method acceptable to the jurisdictional health department prior to being covered, enclosed or placed in use. If a tank is found not to be tight, all repairs necessary to remedy the leak(s) in the system shall be performed and verified to the satisfaction of the jurisdictional health department prior to the tank being covered or placed in use.

(ii) Below ground tanks and other tanks where all or portions of the tank are not readily visible shall be designed to resist buoyant forces in areas of high ground water and shall either be:

Reason for change

This section was modified so that any tank where portions are not readily visible will be tested for tightness or be equipped with a leak detection system.

(A) Retested for tightness at a minimum of once every two years; or

(B) Equipped with a leak detection system capable of detecting a release from the tank;

(iii) For tanks or components in which the external shell of a metal tank or any metal component will be in contact with the soil or water, a determination shall be made by a corrosion expert of the type and degree of external corrosion protection that is needed to ensure the integrity of the tank during its operating life. This determination shall be included with design information submitted with the permit application;

(iv) Above ground tanks shall be equipped with secondary containment constructed of, or lined with, materials compatible with the waste being stored and capable of containing the volume of the largest tank within its boundary plus the precipitation from the twenty-five-year storm event as defined in WAC 173-350-100;

(v) Areas used to load or unload tanks shall be designed to contain spills, drippage and accidental releases during loading and unloading of vessels;

(vi) Tanks and piping shall be protected from impact by vehicles or equipment through use of curbing, grade separation, bollards or other appropriate means;

(vii) Tanks shall be structurally suited for the proposed use; and

(viii) Tanks, valves, fittings and ancillary piping shall be protected from failure caused by freezing.

(4) *Surface impoundments and tanks - Operating standards*. The owner or operator of a surface impoundment or tank shall:

(a) Operate the facility to:

(i) Prevent overfilling of surface impoundments or tanks and maintain required freeboard;

(ii) Control access to the site;

(iii) Control nuisance odors for wastes or liquids with the potential to create nuisance odors; and

Reason for change

This section was modified to incorporate the term "nuisance odor" as defined in Section 100 of this rule.

(iv) Control birds at impoundments storing wastes capable of attracting birds.

(b) Inspect surface impoundments, tanks and associated piping, pumps and hoses as needed, but at least weekly, to ensure they are meeting the operational standards, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process. In addition, surface impoundments shall have regular liner inspections. Their frequency and methods of inspection shall be specified in the plan of operation and shall be based on the type of liner, expected service life of the material, and the site-specific service conditions. The inspections shall be conducted at least once every five years, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process. The jurisdictional health department shall be given sufficient notice and have the opportunity to be present during liner inspections.

(c) Maintain daily operating records on the ~~weights~~ quantity and the types of waste ~~received or~~ removed from the ~~facility~~surface impoundment or tank. Facility inspection reports shall be maintained in the operating record. Significant deviations from the plan of operation shall be noted in the operating record. Records shall be kept for a minimum of five years and shall be available ~~for inspection at the~~upon request ~~of~~ by the jurisdictional health department.

Reason for change

The insertion of "daily" was made to be consistent with other sections in the rule and to clarify that records should be maintained for each day the facility is operated.

This section was simplified so that only waste removed from a surface impoundment or tank needs to be recorded.

(d) Shall prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st ~~on forms supplied by the department~~. The annual report shall detail the facility's activities during the previous calendar year and shall include the following information:

(i) Name and address of the facility;

(ii) Calendar year covered by the report;

~~(iii) Annual quantity and type of solid waste received and removed, in tons;~~

Reason for change

The requirements of this section have been reduced so that the quantity of waste received or removed from a surface impoundment or tank do not need to be reported. Ecology does not believe that the information provided sufficient value for the purposes of annual reporting.

(iii~~v~~) Results of ground water monitoring in accordance with WAC 173-350-500;

(iv) Results of leak detection system monitoring, if applicable; and

(v~~i~~) Any additional information required by the jurisdictional health department as a condition of the permit.

(e) Develop, keep and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to site operating

personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:

Reason for change

This section was modified so that a jurisdictional health department may direct an owner or operator to amend a plan of operation.

(i) A description of the types of solid waste to be handled at the facility;

(ii) A description of how wastes are handled on-site during the facility's active life;

(iii) A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspection and inspection logs. This description shall include:

(A) The ground water monitoring system, if required;

(B) The overfilling prevention equipment, including details of filling and emptying techniques;

(C) The liners and embankments, tank piping and secondary containment;

(D) Safety and emergency plans;

(E) The forms used to record weights and volumes; and

(F) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.

(5) *Surface impoundments and tanks - Ground water monitoring requirements*.

(a) Surface impoundments not equipped with a leak detection layer are subject to the ground water monitoring requirements of WAC 173-350-500.

(b) Surface impoundments equipped with a leak detection layer and tanks are not subject to the ground water monitoring requirements of this chapter; however, surface impoundments must meet the requirements~~, except as~~ provided under WAC 173-350-040(5).

Reason for change

This section was modified to clarify the intent.

(6) *Surface impoundments and tanks - Closure requirements*. The owner or operator of a surface impoundment or tank shall:

(a) Notify the jurisdictional health department sixty days in advance of closure. All waste from the surface impoundment or tank shall be removed to a facility that conforms with the applicable regulations for handling the~~meets the requirements of chapter 70.95 RCW, Solid waste management--Reduction and recycling, to manage that type of~~ waste~~. The site shall be decontaminated.~~

Reason for change

This section was modified to recognize that some wastes removed or generated during closure may not be subject to chapter 70.95 RCW but do need to be managed in accordance with applicable regulations. The use of the term "decontaminated" has been eliminated because its meaning was unclear for this purpose.

(b) Develop, keep and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan shall include :

~~(i)~~ M~~m~~ethods of removing waste~~; and~~

~~(ii) Steps taken for decontamination~~.

Reason for change

The use of the term "decontamination" has been eliminated because its meaning was unclear for this purpose.

(7) *Surface impoundments and tanks - Financial assurance requirements*. There are no specific financial assurance requirements for surface impoundments or tanks subject to this chapter; however, surface impoundments and tanks must meet the requirements provided under WAC 173-350-040(5).

(8) *Surface impoundments and tanks - Permit application contents*.

(a) The owner or operator of a surface impoundment or tank shall obtain a solid waste permit from the jurisdictional health department. All applications for permits shall be submitted in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each application for a permit shall contain:

(i) Engineering reports/plans and specifications that address the design standards of subsection (3) of this section;

(ii) A plan of operation meeting the requirements of subsection (4) of this section;

(iii) For surface impoundments not equipped with a leak detection layer, hydrogeologic reports and plans that address the requirements of subsection (5) of this section;

(iv) A closure plan meeting the requirements of subsection (6) of this section.

(9) *Surface impoundments and tanks - Construction records*. The owner or operator of a surface impoundment or tank shall provide copies of the construction record drawings for engineered facilities at the site and a report documenting facility construction, including the results of observations and testing carried out as part of the construction quality assurance plan, to the jurisdictional health department and the department. Facilities shall not commence operation until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report/plans and specifications and has approved the construction documentation in writing.

Reason for change

This change was made to provide jurisdictional health departments with criteria for approval of construction records.

NEW SECTION

WAC 173-350-350 Waste tire storage and transportation. (1) *Waste tire storage and transportation - Applicability*. This section is applicable to all:

(a) Facilities that store waste tires in quantities of greater than eight hundred automobile tires or the combined weight equivalent of sixteen thousand pounds of all types of waste tires. This section is not applicable to the storage of waste tires in an enclosed building or in mobile containers used to transport waste tires.

(b) Persons engaged in the business of transporting waste tires except for:

(i) Any person transporting five tires or less;

(ii) Any person transporting used tires back to a retail outlet for repair or exchange;

(iii) Any waste hauler regulated by chapter 81.77 RCW, Solid waste collection companies;

(iv) The United States, the state of Washington or any local government, or contractors hired by these entities, when involved in the cleanup of illegal waste tire piles; and

(v) Tire retailers associated with retreading facilities who use company-owned vehicles to transport waste tires for the purposes of retreading or recycling.

(2) *Waste tire storage and transportation - Transportation prohibitions and enforcement*.

(a) No person shall enter into a contract for transportation of waste tires with an unlicensed waste tire transporter.

(b) ~~All w~~Waste tires ~~that are being transported~~ shall only be delivered to a facility that has obtained the required permits or licenses for storage, processing, or disposal of waste tires ~~meets WAC 173-350-040(5)~~.

Reason for change

This section has been modified to account for delivery to out of state facilities or others not subject to WAC 173-350-040(5).

(c) Any person subject to this section who transports or stores waste tires without a valid waste tire carrier license or waste tire storage license issued by the Washington state department of licensing shall be subject to the penalty provisions of RCW 70.95.560.

(3) *Waste tire storage and transportation - Carrier license requirements*.

(a) All persons subject to this section engaged in the business of transporting waste tires are required to obtain a waste tire carrier license from the Washington state department of licensing.

(b) Application forms for a waste tire carrier license will be available at unified business identifier service centers located throughout the state. Unified business identifier service locations include:

(i) The field offices of the department of revenue and the department of labor and industries;

(ii) The tax offices of employment security;

(iii) The Olympia office of the secretary of state; and

(iv) The business license service office of the Washington state department of licensing.

(c) An application for a waste tire carrier license and a cab card for one vehicle shall include a two hundred fifty dollar application fee, fifty dollars of which shall be nonrefundable. Each additional vehicle cab card to be used by the licensee requires an additional fifty dollar fee. The application shall include:

(i) A performance bond in the sum of ten thousand dollars in favor of the state of Washington; or

(ii) In lieu of the bond, an applicant may submit other financial assurance acceptable to the department.

(d) The refundable portion of application fees may be returned to the applicant if the application is withdrawn before the department has approved or denied the application.

(e) A waste tire carrier license shall be valid for one year from the date of approval.

(4) *Waste tire storage and transportation - Location standards*. There are no specific location standards for waste tire storage sites subject to this chapter; however, waste tire storage sites must meet the requirements provided under WAC 173-350-040(5).

(5) *Waste tire storage and transportation - Design standards*. The owner or operator of a waste tire storage area shall prepare engineering reports/plans and specifications to address the design standards of this subsection. The maximum number of tires to be stored on site and the individual pile locations and sized shall be provided. The facility shall be designed so that:

(a) The size of any individual pile of waste tires shall be limited to:

(i) A maximum area of five thousand square feet;

(ii) A maximum volume of fifty thousand cubic feet; and

(iii) A maximum height of ten feet;

(b) A clear space of at least forty feet between each pile of waste tires shall be provided. The clear space shall not contain flammable or combustible material or vegetation;

(c) Tire storage shall not be located within ten feet of any property line or building and shall not exceed six feet in height within twenty feet of any property line or building; and

(d) Public access shall be limited.

(6) *Waste tire storage and transportation - Operating standards*. The owner or operator of a waste tire storage facility shall:

(a) Operate the facility to:

(i) Have communication capabilities to immediately summon fire, police, or other emergency service personnel in the event of an emergency;

(ii) Control public access in a manner sufficient to prevent arson, unauthorized vehicular traffic and illegal dumping of wastes;

(iii) Manage waste tires in such a way that it is protected from any material or conditions which may cause them to ignite;

(iv) Limit the total quantity of waste tires stored on-site at any time to the amount permitted by the jurisdictional health department;

(v) Provide on-site fire control equipment sufficient to extinguish any fire reasonably possible from one individual pile of waste tires. Fire control equipment may include, but is not limited to:

(A) Automatic sprinkler protection;

(B) Fire hydrants, hoses and ancillary equipment;

(C) Portable fire extinguishers; and

(D) Material-handling equipment capable of moving tires during fire fighting operations;

(vi) Provide vector control; and

(vii) Issue written receipts upon receiving loads of waste tires;

(b) Inspect and maintain the facility to prevent malfunctions, deterioration, operator errors and discharges that may lead to the release of wastes to the environment or cause a threat to human health. Inspections shall be as needed, but at least weekly, to ensure it is meeting the operational standards, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process;

(c) Maintain daily operating records including:

(i) The numbers of tires received and removed from the site. Quantities may be measured by:

(A) Actual number of tires; or

(B) Weight, provided the operator documents the approximate number of tires included in each load; or

(C) Volume in cubic yards, provided the operator documents the approximate number of tires included in each load;

(ii) Facility inspection reports;

(iii) Significant deviations from the plan of operation;

(iv) Records shall be kept for a minimum of five years and shall be available upon request by the jurisdictional health department;

(d) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall detail the facility activities during the previous calendar year and shall include the following information:

(i) Name and address of the facility;

(ii) Calendar year covered by the report;

(iii) Annual quantity of tires, in tons;

(iv) Annual quantity of tires removed from the facility and end use, in tons;

(v) Total tons of tires remaining at the facility at year's end;

(vi) Applicable financial assurance reviews and audit findings in accordance with WAC 173-350-600; and

(vii) Any additional information required by the jurisdictional health department as a condition of the permit;

(e) Develop, keep and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:

Reason for change

This section was modified so that a jurisdictional health department may direct an owner or operator to amend a plan of operation.

(i) A description of how waste tires are to be handled on-site during the active life including:

(A) Transportation and routine storage; and

(B) Procedures for ensuring that all waste tires received by the facility have been transported in accordance with this section;

(ii) A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspection and inspection logs;

(iii) Safety, fire and emergency plans addressing the following:

(A) Procedures for the use of communications equipment to immediately report emergencies to the fire department, police, or emergency service personnel;

(B) A list of all emergency equipment at the facility including the location and a brief description of its capabilities;

(C) Procedures for fire fighting and the operation of fire control equipment;

(D) Employee training and emergency duty assignments;

(E) Procedures for and frequency of fire drills;

(iv) The forms used to record weights and volumes; and

(v) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.

(7) *Waste tire storage and transportation - Ground water monitoring requirements*. There are no specific ground water monitoring requirements for waste tire storage sites; however, waste tire storage sites must meet the requirements provided under WAC 173-350-040(5).

(8) *Waste tire storage and transportation - Closure requirements*. The owner or operator of a facility that stores waste tires shall:

(a) Notify the jurisdictional health department, and where applicable the financial assurance instrument provider, one hundred eighty days in advance of closure;

(b) Commence implementation of the closure plan, in part or whole, within thirty days after receipt of the final waste tires;

(c) Provide certification that the site has been closed in accordance with the approved closure plan to the jurisdictional health department; and

(d) Develop, keep and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum the closure plan shall include:

(i) Projected time intervals that identify when partial closure is to be implemented, and identify closure cost estimates and projected fund withdrawal intervals for the associated closure costs, from the approved financial assurance instrument; and

(ii) Methods of waste tire removal~~; and~~

~~(iii) Steps taken for decontamination~~.

Reason for change

The use of the term "decontamination" has been eliminated because its meaning was unclear for this purpose.

(e) The jurisdictional health department shall notify the owner or operator, the department and the financial assurance instrument provider, of the date when the jurisdictional health department has verified that the facility has been closed in accordance with the specifications of the approved closure plan.

(9) *Waste tire storage and transportation - Financial assurance requirements*.

(a) The owner or operator shall establish a financial assurance mechanism in accordance with WAC 173-350-600 for closure in accordance with the approved closure plan. The funds shall be sufficient for hiring a third party to remove the maximum number of tires permitted to be stored at the facility and deliver the tires to a facility permitted to accept the tires.

(b) Nothing in this section shall prohibit the application of funds from an existing bond as required under RCW 70.95.555, to the total amount required for financial assurance, provided the bond can be used for the activities described in (a) of this subsection.

(c) No owner or operator shall commence or continue operations at the site until a financial assurance instrument has been provided for closure activities in conformance with WAC 173-350-600.

(10) *Waste tire storage and transportation - Solid waste permit requirements*. The owner or operator shall obtain a solid waste permit from the jurisdictional health department. All applications for permits shall be in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each application for a permit shall contain:

(a) Engineering reports/plans and specifications that address the design standards of subsection (5) of this section;

(b) A plan of operation addressing the requirements of subsection (6) of this section;

(c) A closure plan meeting the requirements of subsection (8) of this section;

(d) Documentation as needed to meet the financial assurance requirements of subsection (9) of this section; and

~~(e) Evidence that the owner or operator has obtained a waste tire storage site license for the facility in accordance with the requirements of subsection (11) of this section.~~

Reason for change

This deletion was needed because the proposed rule required an owner or operator to obtain a solid waste handling permit prior to obtaining a storage site license *and* provide evidence that they have obtained a storage site license prior to submitting a permit application.

(11) *Waste tire storage and transportation - Storage site license requirements*.

(a) In order to obtain a waste tire storage license, the facility owner or operator shall first obtain a solid waste handling permit for the storage of waste tires from the jurisdictional health department.

(b) Application forms for a waste tire storage site owner license are available at unified business identifier service locations located throughout the state. Unified business identifier service locations include:

(i) The field offices of the department of revenue and the department of labor and industries;

(ii) The tax offices of employment security;

(iii) The Olympia office of the secretary of state; and

(iv) The business license service office of the Washington state department of licensing.

(c) An application for a waste tire storage site owner license shall include a two hundred fifty dollar application fee for each facility, fifty dollars of which shall be nonrefundable. The refundable portion of application fees may be returned to the applicant under the following conditions:

(i) The department determines that a solid waste permit would meet the substantive requirements of RCW 70.95.555 and determines that a license is not required; or

(ii) The applicant withdraws the application before the department has approved or denied the application.

(d) A waste tire storage site license shall be valid for one year from the date of approval.

NEW SECTION

WAC 173-350-360 Moderate risk waste handling. (1) *Moderate risk waste handling - Applicability*.

(a) This section is applicable to:

(i) Any facility that accepts segregated solid waste categorized as moderate risk waste (MRW), as defined in WAC 173-350-100;

(ii) Persons transporting MRW using only a bill of lading (MRW that is not shipped using a uniform hazardous waste manifest) who store MRW for more than ten days at a single location; and

Reason for change

This section was modified to use the proper terminology.

(iii) Mobile systems and collection events.

(b) This section is not applicable to:

(i) Persons transporting MRW managed in accordance with the requirements for shipments of manifested ~~hazardous~~ dangerous waste under WAC 173-303-240; ~~and~~

Reason for change

This section was modified to use the proper terminology.

(ii) Universal waste regulated under chapter 173-303 WAC; and

(iii) Conditionally Exempt Small Quantity Generators managing their own wastes in compliance with the performance standards of WAC 173-350-040 and WAC 173-303-070(8)(b).

Reason for change

This change allows a conditionally exempt small quantity generator to manage their own waste without needing to meet the requirements of this section.

(2) *Mobile systems and collection events*. In accordance with RCW 70.95.305, the operation of mobile systems and collection events are subject solely to the requirements of (a) through (n) of this subsection and are exempt from solid waste handling permitting. An owner or operator that does not comply with the terms and conditions of this subsection is required to obtain a permit from the jurisdictional health department and shall comply with the applicable requirements for a moderate risk waste handling facility. In addition, violations of the terms and conditions of this subsection may be subject to the penalty provisions of RCW 70.95.315. Owners and operators of mobile systems and collection events shall:

(a) Notify the department and the jurisdictional health department of the intent to operate a mobile system or collection event at least thirty days prior to commencing operations. The notification shall include a description of the types and quantities of MRW to be handled;

(b) Manage mobile systems or collection events in compliance with the performance standards of WAC 173-350-040;

(c) Record the weights or gallons of each type of MRW collected, number of households and conditionally exempt small quantity generators served, and type of final disposition (e.g., reuse, recycled, treatment, energy recovery, or disposal). Records shall be maintained for a period of five years and will be made available to the department or jurisdictional health department on request;

(d) Ensure that the MRW at a mobile system or collection event is handled in a manner that:

(i) Prevents a spill or release of hazardous substances to the environment;

(ii) Prevents exposure of the public to hazardous substances; and

(iii) Results in delivery to a facility that meets the performance standards of WAC 173-350-040;

(e) Ensure that incompatible wastes are not allowed to come into contact with each other;

(f) Ensure that containers holding MRW remain closed except when adding or removing waste in order to prevent a release of MRW through evaporation or spillage if overturned;

(g) Ensure that containers holding MRW have legible labels and markings that identify the waste type;

(h) Ensure that containers holding MRW are maintained in good condition (e.g., no severe rusting or apparent structural defects);

(i) Ensure that personnel are familiar with the chemical nature of the materials and the appropriate mitigating action necessary in the event of fire, leak or spill;

(j) Control public access and prevent unauthorized entry;

(k) Prepare and submit a copy of an annual report to the department and the jurisdictional health department by April 1st on forms supplied by the department. The annual report shall

detail the collection activities during the previous calendar year and shall include the following information:

(i) Name of owner or operator, and locations of all collection sites;

(ii) Calendar year covered by the report;

(iii) Annual quantity and type of MRW, in pounds or gallons by waste type;

(iv) Number of households and CESQGs served;

(v) Type of final disposition (e.g., reuse, recycled, treatment, energy recovery, or disposal); and

(vi) Any additional information required by written notification of the department;

(l) Allow inspections by the department or the jurisdictional health department at reasonable times;

(m) Notify the department and the jurisdictional health department of any failure to comply with the terms and conditions of this subsection within twenty-four hours; and

(n) Mobile collection systems using truck or trailers with concealed construction, permanently attached to a chassis may require a commercial coach insignia if subject to chapter 296-150C WAC, administered by the department of labor and industries.

(3) *Limited MRW facilities* *and product take-back centers*. In accordance with RCW 70.95.305, the operation of limited MRW facilities is subject solely to the requirements of (a) through (i) of this subsection and is exempt from solid waste handling permitting. ~~Retail~~ Product take-back centers are only subject to (b), (e) and (f) of this subsection. An owner or operator that does not comply with the terms and conditions of this subsection is required to obtain a permit from the jurisdictional health department and shall comply with the applicable requirements for an MRW facility. In addition, violations of the terms and conditions of this subsection may be subject to the penalty provisions of RCW 70.95.315. Owners and operators of limited MRW facilities shall:

Reason for change

The definition and use of the term "retail take-back centers" have been replaced by "product take-back center".

(a) Notify the department and the jurisdictional health department within thirty days prior to operation of the intent to operate a limited MRW facility with a description of the type and quantity of MRW to be handled;

(b) Ensure waste at a limited MRW facility or product take-back center is handled in a manner that:

(i) Prevents a spill or release of hazardous substances to the environment;

(ii) Prevents exposure of the public to hazardous substances; and

(iii) Results in delivery to a facility that meets the performance standards of WAC 173-350-040;

(c) Ensure that containers and tanks holding MRW are maintained in good condition (e.g., no severe rusting or apparent structural defects);

(d) Provide secondary containment for containers and tanks capable of storing fifty-five gallons or more of liquid MRW;

(e) Ensure the facility meets the performance standards of WAC 173-350-040;

(f) Notify the department and the jurisdictional health department of any failure to comply with the terms and conditions of this subsection within twenty-four hours of knowledge of an incident;

(g) Allow inspections by the department and jurisdictional health department at reasonable times;

(h) Maintain records of the amount and type of MRW received, and the final disposition of the MRW by amount and type; and

(i) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall cover the facility's activities during the previous calendar year and shall include the following information:

(A) Name and address of the facility;

(B) Calendar year covered by the report;

(C) Annual quantity and type of MRW, in pounds or gallons by waste type;

(D) Number of households and CESQG's served;

Reason for change

This modification was needed because the Department maintains records of this information.

(E) Type of final disposition (e.g., reuse, recycled, treatment, energy recovery, or disposal); and

(~~E~~F) Any additional information required by written notification of the department.

(4) *Moderate risk waste facilities - Location standards*. There are no specific location standards for moderate risk waste facilities subject to this chapter; however, moderate risk waste facilities must meet the requirements provided under WAC 173-350-040(5).

(5) *Moderate risk waste facilities - Design standards*.

(a) The owner or operator of a moderate risk waste facility shall prepare engineering reports/plans and specifications, including a construction quality assurance plan, to address the following design standards. Each MRW facility shall:

(i) Be surrounded by a fence, walls, or natural features and provided with a lockable door or gate to control public and animal access;

(ii) Be constructed of materials that are chemically compatible with the MRW handled;

(iii) Provide secondary containment to capture and contain releases and spills, and facilitate timely cleanup in areas where MRW is handled. All secondary containment shall:

(A) Have sufficient capacity to:

(I) Contain ten percent of volume of all containers or tanks holding liquid or the total volume of the largest container holding liquids in the area, whichever is greater;

(II) Provide additional capacity to hold the precipitation from a twenty-five-year storm as defined in WAC 173-350-100, in uncovered areas; and

(III) Provide additional capacity to hold twenty minutes of flow from an automatic fire suppression system, where such a suppression system exists;

(B) Be segregated for incompatible wastes; and

(C) Have a base underlying the containers which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, accumulated precipitation, or fire suppression ~~water~~ materials until the collected material is detected and removed. The base shall be sloped or the containment system shall otherwise be designed and operated to drain and remove liquids resulting from leaks, spills, precipitation, or fire suppression unless the containers are elevated or are otherwise protected from contact with accumulated liquids;

Reason for change

This section was modified to account for fire suppression materials other than water that are

commonly used at MRW facilities.

(iv) Be accessible by all-weather roads;

(v) Prevent run-on and control runoff from a twenty-five-year storm, as defined in WAC 173-350-100;

(vi) Provide a sign at the site entrance that identifies the facility and shows at least the name of the site, and if applicable, hours during which the site is open for public use, and acceptable materials;

(vii) Provide sufficient ventilation to remove toxic vapors and dust from the breathing zone of workers and prevent the accumulation of flammable or combustible gases or fumes that could present a ~~risk~~ threat of fire or explosion;

Reason for change

The unqualified use of the term "risk" was eliminated because it represents any chance of fire or explosion. Some level of risk is present in any activity or situation.

(viii) Be constructed with explosion-proof electrical wiring, fixtures, lights, motors, switches and other electrical components as required by local fire code or the department of labor and industries;

(ix) Provide electrical grounding in areas where flammable and combustible liquids are consolidated to allow for bonding to consolidation equipment; and

(x) Provide protection of the MRW handling areas from wind, rain or snow.

(b) The owner or operator of a tank used to store or treat MRW shall prepare engineering reports/plans and specifications, including a construction quality assurance plan, to address the following design standards:

(i) Tanks and ancillary equipment shall be tested for tightness using a method acceptable to the jurisdictional health department prior to being covered, enclosed or placed in use. If a tank is found not to be tight, all repairs necessary to remedy the leak(s) in the system shall be performed and verified to the satisfaction of the jurisdictional health department prior to the tank being covered or placed in use;

(ii) Below ground tanks shall be designed to resist buoyant forces in areas of high ground water and shall either be:

(A) Retested for tightness at a minimum of once every two years; or

(B) Equipped with a leak detection system capable of detecting a release from the tank;

(iii) For tanks or components in which the external shell of a metal tank or any metal component will be in contact with the soil or water, a determination shall be made by a corrosion expert of the type and degree of external corrosion protection that is needed to ensure the integrity of the tank during its operating life. This determination shall be included with design information submitted with the permit application;

(iv) Areas used to load or unload tanks shall be designed to contain spills, drippage and accidental releases during loading and unloading of vessels;

(v) Tanks and piping shall be protected from impact by vehicles or equipment through use of curbing, grade separation, bollards or other appropriate means;

(vi) Tanks shall be structurally suited for the proposed use; and

(vii) Tanks, valves, fittings and ancillary piping shall be protected from failure caused by freezing.

(c) Prefabricated structures with concealed construction shall meet the requirements of chapter 296-150F WAC, Factory-built housing and commercial structures, administered by the department of labor and industries.

(6) *Moderate risk waste facilities - Operating standards*. The owner or operator of a MRW facility shall:

(a) Manage MRW handling activities and facilities so that:

(i) Each storage area is marked with signs to clearly show the type of MRW to be stored in that area;

(ii) Incompatible MRW and materials shall not be mixed together or allowed to come into contact with each other;

(iii) MRW shall be compatible with the containment system;

(iv) Containers or tanks are closed except when adding or removing MRW in order to prevent a release of MRW through evaporation or spillage if overturned;

(v) All containers or tanks have visible and legible labels or markings that identify the MRW type and are visible for inspection;

(vi) Containers of MRW shall be stored in a manner that allows for easy access and inspection. Drums containing MRW shall have at least one side with a minimum of thirty inches clear aisle space;

(vii) Containers holding MRW are maintained in good condition including, but not limited to, no severe rusting or apparent structural defects;

(viii) Uniform hazardous waste manifests are prepared and used at the point where possession of the MRW is given to a commercial registered ~~hazardous~~ dangerous waste transporter for shipments of MRW destined for out-of-state locations. This shall be completed in accordance with WAC 173-303-180;

Reason for change

This section was modified to use the proper terminology.

(ix) Public access is restricted to areas identified in the plan of operation and unauthorized entry is prevented;

(x) Communication capabilities are provided to summon fire, police, or emergency service personnel;

(xi) Flammable or explosive gases do not exceed ten percent of the lower explosive limit in the area where MRW is handled. An explosive gas monitoring program shall be implemented to ensure that this standard is achieved;

(xii) MRW is delivered to a facility that meets the performance standards of WAC 173-350-040;

(xiii) Personnel responsible for routine inspections and operations are familiar with the chemical nature of the materials and the appropriate mitigating action necessary in the event of fire, leak or spill; and

(xiv) The jurisdictional health department and the department are notified of any spills or discharges of MRW to the environment.

(b) Ensure that routine and ~~,~~ annual~~, and five-year~~ inspections are conducted as follows:

(i) Routine inspections shall be conducted at least weekly or once each operating day, whichever is more frequent, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process. Routine inspections shall be performed for:

(A) Operating hazards;

(B) Presence of operable safety equipment;

(C) Container integrity; and

(D) General facility condition;

(ii) Annual inspections shall be conducted to determine the condition of: ~~secondary containment systems including all readily accessible below floor spaces, sumps, and tanks for deterioration and evidence of containment failure; and~~

~~(iii) Five-year inspections shall be conducted by either a professional engineer licensed in the state of Washington, or other qualified individual that has credentials that demonstrate skills or knowledge necessary to perform the inspection. Five-year inspections shall be conducted to determine the condition of:~~

Reason for change

The requirement for five-year inspections was eliminated to simplify the inspection requirements because the Department did not believe that the benefits justified the added burden. Also, potential failures of secondary containment systems and ventilation and monitoring systems need to be identified and corrected more frequently than every five years.

(A) Secondary containment systems including all readily accessible below floor space, sumps, and tanks for deterioration and evidence of containment failure; and

(B) All ventilation and flammable vapor monitoring systems.

(c) Maintain daily operating records of the weights or gallons of each type of MRW collected and the number of households and CESQGs served. Facility inspection reports shall be maintained in the operating record, including at least the date and time of the inspection, the name and signature of the inspector, a notation of observations made, and the date and nature of any needed repairs or remedial action. Significant deviations from the plan of operation shall be noted in the operating record. Records shall be kept for a minimum of five years and shall be available for inspection at the request of the jurisdictional health department.

Reason for change

This change was made to be consistent with other sections in the rule and to clarify that records should be maintained for each day the facility is operated.

(d) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall detail the facility's activities during the previous calendar year and must include the following information:

(i) Name and address of the facility and locations of all collection sites;

(ii) Calendar year covered by the report;

(iii) Annual quantity and type of MRW, in pounds or gallons;

(iv) Number of households and CESQG's served;

Reason for change

This modification was needed because the Department maintains records of this information.

(v) Type of final disposition (e.g., reuse, recycled, treatment, energy recovery, or disposal) by type of MRW;

(vi) Applicable financial assurance reviews and audit findings in accordance with WAC 173-350-600; and

(vii) Any additional information required by the jurisdictional health department as a condition of the permit.

(e) Develop, keep and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to site operating

personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:

Reason for change

This section was modified so that a jurisdictional health department may direct an owner or operator to amend a plan of operation.

(i) A description of the types of solid wastes to be handled at the facility;

(ii) A description of how MRW will be handled on-site during the active life of the facility including:

(A) Methods for managing and/or identifying unknown wastes;

(B) Procedures for managing wastes that arrive in corroded or leaking containers or when MRW is left at the gate when the facility is unattended;

(C) Protocol for sorting, processing and packaging MRW;

(D) Procedures to protect containers of MRW susceptible to damage from weather and temperature extremes;

(E) Maximum quantities of MRW to be safely stored in each area at any time;

(F) Waste acceptance protocol to preclude and redirect fully regulated dangerous waste and any unacceptable waste types, such as explosives and/or radioactives; and

(G) For facilities that offer material exchanges, a procedure for determining what MRW is suitable for exchange and how the materials exchange will be operated;

(iii) A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspection and inspection logs;

(iv) Safety and emergency plans including:

(A) A list of all on-site emergency equipment with its capability, purpose, and training requirements;

(B) A description of actions to take if leaks in containers, tanks, or containment structures are suspected or detected and for other releases (e.g., failure of runoff containment system, gases generated due to chemical reactions or rapid volatilization);

(v) The forms used to record weights and volumes; and

(vi) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.

(7) *Moderate risk waste facilities - Ground water monitoring requirements*. There are no specific ground water monitoring requirements for MRW facilities subject to this chapter; however, moderate risk waste facilities must meet the requirements provided under WAC 173-350-040(5).

(8) *Moderate risk waste facilities - Closure requirements*. The owner or operator of a moderate risk waste facility shall:

(a) Notify the jurisdictional health department, and where applicable, the financial assurance instrument provider, no later than one hundred eighty days prior to the projected date of the final receipt of MRW, of the intent to implement the closure plan in part or whole. The facility shall close in a manner that:

(i) Minimizes the need for further maintenance;

(ii) Removes all MRW and ensures delivery of the MRW to a facility that conforms with the applicable regulations for handling the waste~~meets the performance standards of WAC 173-350-040~~;

Reason for change

This section was modified to recognize that some wastes removed or generated during closure may not be subject to chapter 70.95 RCW or other requirements in Section 040, performance standards, but do need to be managed in accordance with applicable regulations.

(iii) Decontaminates all areas where MRW has been handled, including, but not limited to, secondary containment, buildings, tanks, equipment, and property; and

(iv) Prepares the facility for remedial measures after closure, if required.

(b) Commence closure activities in part or whole within thirty days following the receipt of the final volume of MRW. Waste shall not be accepted for disposal or for use in closure.

(c) At facility closure completion, in part or whole, submit the following to the jurisdictional health department:

(i) Certification by the owner or operator, and a professional engineer licensed in the state of Washington that the site has been closed in accordance with the approved closure plan; and

(ii) A closure report signed by the facility owner or operator and the certifying engineer that describes:

(A) Actions taken to determine if there has been a release to the environment; and

(B) The results of all inspections conducted as part of the closure procedure.

(d) Keep and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan shall include:

(i) A description of the activities and procedures that will be used to ensure compliance with this subsection;

(ii) An estimate of the maximum volume of MRW on-site at any time during the active life of the facility; and

(iii) Closure cost estimates and projected fund withdrawal intervals from the financial assurance instrument, if such an instrument is required by subsection (9) of this section.

(e) The jurisdictional health department shall notify the owner or operator, the department and the financial assurance instrument provider, of the date when the jurisdictional health department has verified that the facility has been closed in accordance with the specifications of the approved closure plan.

(9) *Moderate risk waste facilities - Financial assurance requirements*.

(a) The owner or operator of any fixed moderate risk waste facility that stores more than ~~five hundred fifty~~nine thousand gallons of MRW on-site, excluding used oil, is required to establish financial assurance in accordance with WAC 173-350-600.

Reason for change

The quantity threshold for financial assurance was raised to better balance the cost to owners and operators for providing financial assurance and the potential threats to human health and the environment, and financial burden to the public, from abandoned facilities. Used oil is not included in the quantity threshold for the purposes of determining if financial assurance is required because of the relatively low cost of proper handling of used oil at closure.

(b) Proof of financial assurance shall be provided to the jurisdictional health department prior to the acceptance of any MRW. The financial assurance instrument shall provide sufficient funds to guarantee that all closure requirements are met. In the event that hazardous substances are released to the environment and site remediation is necessary, additional financial assurance shall be provided in order that site remediation can be accomplished.

(c) Nothing in this section shall prevent an owner or operator from including the cost of MRW facility financial assurance in an instrument established for a colocated permitted solid waste facility so long as there are adequate funds available for both closure activities and the instrument identifies the commitment of funds for both activities.

(10) *Moderate risk waste facilities - Permit application contents*. The owner or operator of a MRW facility shall obtain a solid waste permit from the jurisdictional health department. All applications for permits shall be submitted in accordance with the requirements established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each application for a permit shall contain:

(a) Engineering reports/plans and specifications that address the design standards of subsection (5) of this section;

(b) A plan of operation meeting the requirements of subsection (6) of this section;

(c) A closure plan meeting the requirements of subsection (8) of this section; and

(d) Documentation as needed to meet the financial assurance requirements of subsection (9) of this section.

(11) *Moderate risk waste facilities - Construction records*. The owner or operator of a moderate risk waste facility shall provide copies of the construction record drawings for engineered facilities at the site and a report documenting facility construction, including the results of observations and testing carried out as part of the construction quality assurance plan, to the jurisdictional health department and the department. Facilities shall not commence operation until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report/plans and specifications and has approved the construction documentation in writing.

Reason for change

This change was made to provide jurisdictional health departments with criteria for approval of construction records.

NEW SECTION

WAC 173-350-400 Limited purpose landfills. (1) *Limited purpose landfills - Applicability*. These standards apply to all landfills except:

(a) Municipal solid waste landfills regulated under chapter 173-351 WAC, Criteria for municipal solid waste landfills;

(b) Inert waste landfills regulated under WAC 173-350-410;

(c) Special incinerator ash landfills regulated under chapter 173-306 WAC, Special incinerator ash management standards;

(d) Dangerous waste landfills regulated under chapter 173-303 WAC, Dangerous waste regulations; and

(e) Chemical waste landfills used for the disposal of polychlorinated biphenyls (PCBs) regulated under Title 40 CFR Part 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions.

(2) *Limited purpose landfills - Location standards*. All limited purpose landfills shall be located to meet the following requirements:

(a) No landfill shall be located over a Holocene fault, in subsidence areas, or on or adjacent to an unstable slope or other geologic features which could compromise the structural integrity of the facility.

(b) No landfill's active area shall be located closer than one thousand feet to a down-gradient drinking water supply well, unless the owner or operator can demonstrate that a minimum of ninety days will occur between the time that a contaminant is detected and the time the contaminant can reach the nearest down-gradient drinking water supply well. Such demonstrations shall be prepared by a licensed professional in accordance with the requirements of chapter 18.220 RCW and shall be included in the permit application. The demonstration shall be based on the details of the sampling and analysis plan and the hydrogeologic properties of the hydrostratigraphic unit. ~~aquifer and included in the permit application.~~

Reason for change

This modification was made for clarification. The definition and the use of the term "aquifer" have been eliminated from the rule for clarity and replaced with hydrostratigraphic unit where appropriate.

(c) No landfill's active area shall be located in a channel migration zone as defined in WAC 173-350-100 or within two hundred feet measured horizontally, of a stream, lake, pond, river, or saltwater body, nor in any wetland nor any public land that is being used by a public water system for watershed control for municipal drinking water purposes in accordance with WAC 248-54-660(4). All facilities shall conform to location restrictions established in local shoreline management plans adopted pursuant to chapter 90.58 RCW.

(d) No landfill shall be located within ten thousand feet of any airport runway currently used by turbojet aircraft or five thousand feet of any airport runway currently used by only piston-type aircraft unless the federal aviation administration grants a waiver. This requirement is only applicable where such landfill is used for disposing of wastes where a bird hazard to aircraft would be created.

(e) All landfills shall comply with the location standards specified in RCW 70.95.060.

(3) *Limited purpose landfills - Design standards*.

(a) This section applies to landfills with considerable variations in waste types, site conditions, and operational controls. All landfills shall be designed and constructed to meet the design standards of this subsection, the performance standards of WAC 173-350-040, and shall be appropriate for and compatible with the waste, the site, and the operation. The owner or operator of a limited purpose landfill shall prepare engineering reports/plans and specifications, including a construction quality assurance plan, to address the design standards of this subsection. An owner or operator shall be able to demonstrate during the permitting process that the design of a proposed landfill will mitigate ~~risks~~ threats to human health and the environment. When evaluating a landfill design, the jurisdictional health department shall consider the following factors:

Reason for change

The first part of this subsection has been modified for clarity. Also, the unqualified use of the term "risk" was eliminated from the rule because it represents any chance of harm. Some level of risk is present in any activity or situation.

(i) Waste characterization;

(ii) Soil conditions;

(iii) Hydrogeologic conditions;

(iv) Hydraulic conditions;
(v) Contaminant fate and transport;
(vi) Topography;
(vii) Climate;
(viii) Seismic conditions;
(ix) The total capacity of the facility and each landfill unit;
(x) Anticipated leachate characteristics and quantity;
(xi) Operational controls; and
(xii) Environmental monitoring systems.
(b) Liner system design.
(i) Liner system performance standard. Limited purpose landfills shall be constructed in accordance with a design that:
(A) Will prevent the contamination of the hydrostratigraphic units identified in the hydrogeologic assessment of the facility at the relevant point of compliance as specified during the permitting process; and
(B) ~~Prevent the migration of methane and other gases.~~ Controls methane and other explosive gases generated by the facility to ensure they do not exceed:
(I) Twenty-five percent of the lower explosive limit for the gases in facility structures (excluding the gas control or recovery system components);
(II) The lower explosive limit in soil gases or in ambient air for the gases at the property boundary or beyond; and
(III) One hundred parts per million by volume of hydrocarbons (expressed as methane) in off-site structures.

Reason for change

This section of the rule was modified in order to provide a performance standard for landfill gas control in the design of a liner system.

(ii) The jurisdictional health department may allow a limited purpose landfill to be designed and constructed without a liner system if the owner or operator can demonstrate during the permitting process that:
(A) The contaminant levels in the waste and leachate are unlikely to pose an adverse impact to the environment; ~~and~~

(B) The ability of natural soils to provide a barrier or reduce the concentration of contaminants provides sufficient protection to meet the performance standards of WAC 173-350-040~~.~~; and
(C) Explosive gases generated by the facility will not exceed:
(I) Twenty-five percent of the lower explosive limit for the gases in facility structures (excluding the gas control or recovery system components);
(II) The lower explosive limit in soil gases or in ambient air for the gases at the property boundary or beyond; and
(III) One hundred parts per million by volume of hydrocarbons (expressed as methane) in off-site structures.

Reason for change

This section of the rule was modified in order to provide a performance standard for landfill gas control for landfills designed without a liner system.

(iii) Liner separation from ground water. No landfill liner system shall be constructed such that the bottom of the lowest component is less than ten feet (three meters) above the seasonal high level of ground water, unless a hydraulic gradient control system has been installed which prevents ground water from contacting the liner. For the purpose of this section, ground water includes any water-bearing unit which is horizontally and vertically extensive, hydraulically recharged, and volumetrically significant as to harm or endanger the integrity of the liner at any time.

(iv) Hydraulic gradient control system performance standard. When a hydraulic gradient control system is to be incorporated into a landfill design, a demonstration shall be made during the permit process that the hydraulic gradient control system can be installed to control ground water fluctuations and maintain separation between the controlled seasonal high level of ground water in the identified water-bearing unit and the bottom of the lowest liner system component. The hydraulic gradient control system shall not have negative impacts on waters of the state or impede the capability to collect samples representative of the quality of ground water at the relevant point of compliance. The demonstration shall include:

(A) A discussion in the geologic and hydrogeologic site characterization showing the effects from subsoil settlement, changes in surrounding land uses, climatic trends or other impacts affecting ground water levels during the active life, closure and post-closure periods of the landfill;

(B) A discussion showing potential impacts of the gradient control operation to existing quality and quantity of ground water or surface waters. This discussion shall include potential impacts to water users and instream flow and levels of surface waters in direct hydrologic contact or continuity with the hydraulic gradient control system. Any currently available ground or surface water quality data for ~~aquifers~~hydrostratigraphic units, springs, or surface waters in direct hydrologic contact or continuity with the hydraulic gradient control system shall be included;

Reason for change

The definition and the use of the term "aquifer" have been eliminated from the rule for clarity and replaced with hydrostratigraphic unit where appropriate.

(C) Conceptual engineering drawings of the proposed landfill and a discussion as to how the hydraulic gradient control system will protect or impact the structural integrity and performance of the liner system;

(D) Preliminary engineering drawings of the hydraulic gradient control system;

(E) Design specifications for the proposed ground and surface water monitoring systems; and

(F) A discussion of the potential impacts from the gradient control system on the capability of collecting ground water samples that will represent the quality of ground water passing the relevant point of compliance.

(v) Presumptive liner design. Limited purpose landfills designed and constructed with the following composite liner are presumed to meet the performance standard of (b)(i) of this subsection. An alternative liner system design shall be used when the nature of the waste, the disposal ~~site~~facility, or other factors are incompatible with the presumptive liner. The presumptive liner design consists of the following two components:

Reason for change

The definition for "disposal site" was deleted and all references in the rule were changed to

"disposal facility" or "landfill". No definition for "disposal facility" was added as the concept is a logical combination of defined terms.

(A) A lower component consisting of at least a two-foot layer of compacted soil with a hydraulic conductivity of no more than 1 x 10^{-7} cm/sec.

(B) An upper component consisting of a high-density polyethylene (HDPE) geomembrane with a minimum of 60-mil thickness. The geomembrane shall be installed in direct and uniform contact with the lower component.

(c) Leachate collection and control system design. Except as provided in (b)(ii) of this section, limited purpose landfills shall be constructed in accordance with a design that:

(i) Provides for collection and removal of leachate generated in the landfill;

(ii) Is capable of maintaining less than a one-foot head of leachate over the liner system and less than a two-foot head in leachate sump areas;

(iii) Includes a monitoring system capable of collecting representative samples of leachate generated in the landfill; and

(iv) Provides for leachate storage, treatment, or pretreatment to meet the requirements for permitted discharge under chapter 90.48 RCW, Water pollution control, and the Federal Clean Water Act.

(d) Run-on/runoff control system design. Limited purpose landfills shall be constructed in accordance with a design that:

(i) Will prevent flow onto the active portion of the landfill during the peak discharge from a twenty-five-year storm, as defined in WAC 173-350-100;

(ii) Will prevent unpermitted discharges from the active portion of the landfill resulting from a twenty-five-year storm, as defined in WAC 173-350-100; and

(iii) When located in a one hundred-year floodplain, the entrance and exit roads, and landfill practices do not restrict the flow of the base flood, reduce the temporary water storage capacity of the floodplain or result in washout of solid waste, to pose a hazard to human life, wildlife, land or water resources.

(e) Final closure system design.

(i) Final closure performance standard. Limited purpose landfills shall be closed in accordance with a design that:

(A) Prevents exposure of waste;

(B) Minimizes infiltration (at a minimum, the design will prevent the generation of significant quantities of leachate to eliminate the need for leachate removal by the end of the post-closure period);

(C) Prevents erosion from wind and water;

(D) Is capable of sustaining native vegetation;

(E) Addresses anticipated settlement, with a goal of achieving no less than two to five percent slope after settlement;

(F) Provides sufficient stability and mechanical strength and addresses potential freeze-thaw and desiccation;

(G) Provides for the management of run-on and runoff, preventing erosion or otherwise damaging the closure cover;

(H) Minimizes the need for post-closure maintenance;

(I) Provides for collection and removal of methane and other gases generated in the landfill. Landfill gas shall be purified for sale, used for its energy value, or flared when the quantity and quality of landfill gases will support combustion. Landfill gases may be vented when they will not support combustion. The collection and removal system shall include a

monitoring system capable of collecting representative samples of gases generated in the landfill; and

(J) Meets the requirements of regulations, permits and policies administered by the jurisdictional air pollution control authority or the department under chapter 70.94 RCW, Washington Clean Air Act and Section 110 of the Federal Clean Air Act.

(ii) Presumptive final closure cover. Limited purpose landfills designed and constructed with the following closure cover are presumed to meet the performance standards in (e)(i)(A) through (D) of this subsection. An alternative final closure cover shall be used when the nature of the waste, the disposal ~~site~~ facility or other factors are incompatible with the presumptive final closure cover system. The presumptive final closure cover consists of the following components:

Reason for change

The definition for "disposal site" was deleted and all references in the rule were changed to "disposal facility" or "landfill". No definition for "disposal facility" was added as the concept is a logical combination of defined terms.

(A) An antierosion layer consisting of a minimum of two feet (60 cm) of earthen material of which at least twelve inches (30 cm) of the uppermost layer is capable of sustaining native vegetation, seeded with grass or other shallow rooted vegetation; and

(B) A geomembrane with a minimum of 30-mil (.76 mm) thickness, or a greater thickness that is commensurate with the ability to join the geomembrane material and site characteristics such as slope, overlaying a competent foundation.

(f) Water balance and ground water contaminant fate and transport modeling. Any modeling performed for evaluating a landfill design shall meet the following performance standards:

(i) All water balance analysis shall be performed using:

(A) The Hydrologic Evaluation of Landfill Performance (HELP) Model; or

(B) Alternate methods approved by the jurisdictional health department. Alternate methods shall have supporting documentation establishing its ability to accurately represent the water balance within the landfill unit.

(ii) Any ground water and contaminant fate and transport modeling shall be conducted by a licensed professional in accordance with the requirements of chapter 18.220 RCW and meet the following performance standards:

(A) The model shall have supporting documentation that establishes the ability of those methods to represent ground water flow and contaminant transport under the conditions at the site;

(B) The model shall be calibrated against site-specific field data;

(C) A sensitivity analysis shall be conducted to measure the model's response to changes in the values assigned to major parameters, specific tolerances, and numerically assigned space and time discretizations;

(D) The value of the model's parameters requiring site-specific data shall be based upon actual field or laboratory measurements; and

(E) The values of the model's parameters that do not require site-specific data shall be supported by laboratory test results or equivalent methods documenting the validity of the chosen parameter values.

(g) Seismic impact zones. Limited purpose landfills located in seismic impact zones shall be designed and constructed so that all containment structures, including liners, leachate

collection systems, surface water control systems, gas management, and closure cover systems are able to resist the maximum horizontal acceleration in lithified earth materials for the site.

Reason for change

This section was modified for clarification.

(h) The owner or operator of limited purpose landfills located in an unstable area shall demonstrate that engineering measures have been incorporated into the landfill's design to ensure that the integrity of the structural components of the landfill will not be disrupted. The owner or operator shall place the demonstration in the application for a permit. The owner or operator shall consider the following factors, at a minimum, when determining whether an area is unstable:

(i) On-site or local soil conditions that may result in significant differential settling;

(ii) On-site or local geologic or geomorphologic features; and

(iii) On-site or local human-made features or events (both surface and subsurface).

(i) Limited purpose landfills shall be designed to provide a setback of at least one hundred feet between the active area and the property boundary. The setback shall be increased if necessary to:

(i) Control nuisance odors, dust, and litter;

Reason for change

This section was modified to incorporate the term "nuisance odor" as defined in Section 100 of this rule.

(ii) Provide a space for the placement of monitoring wells, gas probes, run-on/runoff controls, and other design elements; or

(iii) Provide sufficient area to allow proper operation of the landfill and access to environmental monitoring systems and facility structures.

(4) *Limited purpose landfills - Operating standards*. The owner or operator of a limited purpose landfill shall:

(a) Operate the facility to:

(i) Control public access and prevent unauthorized vehicular traffic, illegal dumping of wastes, and keep animals out by using artificial barriers, natural barriers, or both, as appropriate to protect human health and the environment. A lockable gate shall be required at each entry to the landfill;

(ii) Provide approach and exit roads of all-weather construction, with traffic separation and traffic control on-site, and at the site entrance;

(iii) Ensure that no liquid waste or ~~any free~~ liquids are placed in disposal facilities;

Reason for change

The proposed definition of the term "free liquids" was improper as it referred to the solid waste and not the liquids in the waste. The term has been changed to "liquid waste" in the final rule to correct this.

~~(iv) Weigh all incoming waste on scales or provide an equivalent method of measuring waste tonnage capable of estimating total annual solid waste tonnage to within plus or minus five percent for landfills having a permitted capacity of greater than ten thousand cubic yards per year;~~

Reason for change

This change was made to lessen the burden on owners or operators of limited purpose landfills. Ecology deemed that the expense associated with requiring scales was not justified.

(iv) Provide on-site fire protection as determined by the local and state fire control jurisdiction. Landfills disposing of wastes that can support combustion shall have a method to control subsurface fires;

(v~~i~~) Ensure that at least two landfill personnel are on-site with one person at the active face when the site is open to the public for disposal facilities with a permitted capacity of greater than fifty thousand cubic yards per year;

(vi~~i~~) Provide communication between employees working at the landfill and management offices, on-site and off-site, sufficient to handle emergencies;

(vii~~i~~) Control fugitive dust;

(viii~~x~~) Perform no open burning unless permitted by the jurisdictional air pollution control agency or the department under chapter 70.94 RCW, Washington Clean Air Act;

(ix) Collect scattered litter as necessary to prevent vector harborage, a fire hazard, ~~an~~ aesthetic impacts~~or other nuisance~~, or adversely affect wildlife or its habitat;

Reason for change

The definition and the use of the term "nuisance" have been eliminated from the rule.

(x~~i~~) Prohibit scavenging;

(x~~i~~i) Ensure that reserve operational equipment shall be available to maintain and meet these standards; and

(x~~i~~ii) Ensure that operations do not endanger any containment or monitoring structures such as liners, leachate collection systems, surface water control systems, gas management, cover systems and monitoring wells.

(b) Operate the facility in compliance with the following operating standards unless a demonstration can be made during the permitting process that due to the nature, source of the waste, or quality of the leachate generated, these standards are not necessary for the protection of human health or the environment:

(i) Implement a program at the facility for detecting and preventing the disposal of dangerous waste fully regulated under chapter 173-303 WAC, municipal solid waste and other prohibited ~~–~~wastes~~ including polychlorinated biphenyls (PCB) waste~~. This program shall include, at a minimum:

Reason for change

The Federal rule regulating PCB, 40 CFR Part 761, allows disposal of limited types of PCB wastes in non-hazardous, non-MSW solid waste landfills. This revision was made to allow them to be disposed in a limited purpose landfill as provided in 40 CFR Part 761.

(A) Random inspections of incoming loads unless the owner or operator takes other steps (for example, instituting source controls restricting the type of waste received) to ensure that incoming loads do not contain prohibited wastes. Random inspections shall include:

(I) Discharging a random waste load onto a suitable surface, or portion of the tipping area. A suitable surface shall be chosen to avoid interference with operations, so that sorted waste can be distinguished from other loads of uninspected waste, to avoid litter, and to contain runoff;

(II) The contents of the load shall be visually inspected prior to actual disposal of the waste. The facility owner or operator shall return prohibited waste to the hauler, arrange for disposal of prohibited wastes at a facility permitted to manage those wastes, or take other measures to prevent disposal of the prohibited waste at the facility;

(B) Maintaining records of inspections, or the results of other procedures if appropriate;

(C) Training facility personnel to recognize regulated dangerous waste, prohibited polychlorinated biphenyls (PCB) wastes and other prohibited wastes; and

(D) Immediate notification of the department and the jurisdictional health department if a regulated dangerous waste or prohibited PCB waste is discovered at the facility.

Reason for change

The Federal rule regulating PCB, 40 CFR Part 761, allows disposal of limited types of PCB wastes in non-hazardous, non-MSW solid waste landfills. This revision was made to allow them to be disposed in a limited purpose landfill as provided in 40 CFR Part 761.

(ii) Thoroughly compact the solid waste before succeeding layers are added except for the first lift over a liner.

(iii) Cover disposed waste to control disease vectors, fires, nuisance odors, blowing litter, and scavenging. Putrescible waste shall be covered at the end of each operating day, or at more frequent intervals if necessary. The jurisdictional health department may grant a temporary waiver, not to exceed three months, from the requirement of this subsection if the owner or operator demonstrates that there are extreme seasonal climatic conditions that make meeting such requirements impractical. Materials used for cover shall be:

Reason for change

This section was modified to incorporate the term "nuisance odor" as defined in Section 100 of this rule.

(A) At least six inches (15 cm) of earthen material, such as soils; or

(B) Alternative materials or an alternative thickness other than at least six inches (15 cm) of earthen material as approved by the jurisdictional health department when the owner or operator demonstrates ~~during the permit process~~ that the alternative material or thickness will control vectors, fires, nuisance odors, blowing litter, scavenging, provide adequate access for heavy vehicles, and will not adversely affect gas or leachate composition and controls.

Reason for change

This modification was made so that owners or operators are allowed to propose alternative material or thickness of cover at any time. This section was also modified to incorporate the term "nuisance odor" as defined in Section 100 of this rule.

(iv) Prevent or control on-site populations of disease vectors using techniques appropriate for the protection of human health and the environment; and

(v) Implement a program at the facility to ~~control and~~ monitor explosive gases and to respond to the detection of explosive gases in a manner that ensures protection of human health. This program shall include, at a minimum:

(A) ~~Controls to e~~Ensure that explosive gases generated by the facility do not exceed:

Reason for change

These modifications were made to recognize that control of explosive gasses is a design

element, not an operating function.

(I) Twenty-five percent of the lower explosive limit for the gases in facility structures (excluding the gas control or recovery system components);

(II) The lower explosive limit in soil gases or in ambient air for the gases at the property boundary or beyond; and

(III) One hundred parts per million by volume of hydrocarbons (expressed as methane) in off-site structures;

(B) A routine explosive gas-monitoring program to ensure that all standards are met. The minimum frequency for monitoring is quarterly. The type and frequency of monitoring shall be determined based on the following factors:

(I) Soil conditions;

(II) The hydrogeologic conditions surrounding the facility;

(III) The hydraulic conditions surrounding the facility; and

(IV) The location of facility structures and property boundaries;

(C) If explosive gas levels exceed those of this subsection take all necessary steps to ensure protection of human health including:

(I) Notifying the jurisdictional health department;

(II) Monitoring off-site structures;

(III) Monitoring explosive gas levels daily, unless otherwise authorized by the jurisdictional health department;

(IV) Evacuation of buildings affected by landfill gas until determined to be safe for occupancy;

(V) Within seven calendar days of the explosive gas levels detection, placing in the operating record the explosive gas levels detected and a description of the steps taken to protect human health and provide written notification to the jurisdictional health department; and

(VI) Within sixty days of the explosive gas levels detection, implementing a remediation plan for the explosive gas releases, describing the nature and extent of the problem and the remedy. This shall be sent to the jurisdictional health department for approval as an amendment to the plan of operation. A copy of the remediation plan shall be placed in the operating record;

(D) Construction and decommissioning of all gas monitoring and extraction wells in a manner that protects ground water and meets the requirements of chapter 173-160 WAC, Minimum standards for construction and maintenance of wells;

(c) Inspect and maintain the facility to prevent malfunctions and deterioration, operator errors, and discharges that may cause or lead to the release of wastes to the environment or cause a threat to human health. The inspections shall be at least weekly, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process. The owner or operator shall keep an inspection report or summary including at least the date and time of inspection, the printed name and the signature of the inspector, a notation of observations made, and the date and nature of any repairs or corrective actions~~process~~;

Reason for change

This modification was made to clarify the information to be recorded for inspections.

(d) Maintain daily operating records on the weights (or volumes), number of vehicles entering and the types of wastes received. Facility inspection reports shall be maintained in the operating record. Significant deviations from the plan of operation shall be noted on the operating record. Records shall be maintained for a minimum of five years and shall be available upon request by the jurisdictional health department;

(e) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st of each year. The annual report shall cover landfill activities during the previous calendar year and shall include the following information:

(i) Name and address of the facility;

(ii) Calendar year covered by the report;

(iii) Annual quantity and type of waste accepted in tons or cubic yards with an estimate of density in pounds per cubic yards~~:~~

~~(A) For landfills that dispose of more than ten thousand cubic yards of waste per year, report annual type and quantities in tons.~~

~~(B) For landfills that dispose of less than ten thousand cubic yards of waste per year, annual type and quantities may be reported in cubic yards. Include an estimate of in-place density in pounds per cubic yard~~;

Reason for change

This modification was made to lessen the annual reporting requirements for owners and operators of limited purpose landfills and to simplify the rule.

(iv) Results of ground water monitoring in accordance with WAC 173-350-500;

(v) Applicable financial assurance reviews and audit findings in accordance with WAC 173-350-600; and

(vi) Any additional information required by the jurisdictional health department as a condition of the permit;

(f) Develop, keep, and abide by a plan of operation approved as part of the permitting process. The plan shall describe the operation of the facility and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall contain:

Reason for change

This section was modified so that a jurisdictional health department may direct an owner or operator to amend a plan of operation.

(i) A description of the types of solid waste to be handled at the facility;

(ii) A description of how solid wastes are to be handled on-site during its active life including:

(A) The acceptance criteria that will be applied to the waste;

(B) Procedures for ensuring only the waste described will be accepted;

(C) Procedures for handling unacceptable wastes; and

(D) Unloading and staging areas, transportation, routine filling, compaction, grading, cover or other vector controls, and housekeeping;

(iii) A description of how equipment, structures and other systems, including leachate collection, gas collection, run-on/runoff controls, and hydraulic gradient control systems, are to be inspected and maintained, including the frequency of inspection and inspection logs;

(iv) Safety and emergency plans including;

(A) Procedures for fire (including subsurface fires) prevention, a description of fire protection equipment available on-site and actions to take if there is a fire or explosion;

(B) Actions to take if leaks are detected or for other releases, such as failure of runoff containment system, if such systems are required;

(v) The forms for recording weights and volumes; and

(vi) Other such details to demonstrate that the landfill will be operated in accordance with this subsection and as required by the jurisdictional health department.

(5) *Limited purpose landfills - Ground water monitoring requirements*. Limited purpose landfills are subject to the ground water monitoring requirements of WAC 173-350-500.

(6) *Limited purpose landfills - Closure requirements*. The following closure requirements apply in full to facilities with limited purpose landfills:

(a) The owner or operator shall notify the jurisdictional health department, and where applicable, the financial assurance instrument provider, one hundred eighty days in advance of closure of the facility, or any portion thereof. The facility, or any portion thereof, shall close in a manner that:

(i) Minimizes the need for further maintenance;

(ii) Controls, minimizes, or eliminates threats to human health and the environment from post-closure escape of solid waste constituents, leachate, landfill gases, contaminated runoff, or waste decomposition products to the ground, ground water, surface water, and the atmosphere; and

(iii) Prepares the facility, or any portion thereof, for the post-closure period.

(b) The owner or operator shall commence implementation of the closure plan in part or whole within thirty days after receipt of the final volume of waste and/or attaining the final landfill elevation at part of or at the entire landfill as identified in the approved facility closure plan unless otherwise specified in the closure plan.

(c) The owner or operator shall not accept waste, including inert wastes, for disposal or for use in closure except as identified in the closure plan approved by the jurisdictional health department.

(d) The owner or operator shall develop, keep, and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan shall include the following information:

(i) A description of the final closure cover, designed in accordance with subsection (3)(e) of this section, the methods and procedures to be used to install the closure cover, sources of borrow materials for the closure cover, and a schedule or description of the time required for completing closure activities;

(ii) Projected time intervals at which sequential partial closure and final closure are to be implemented;

(iii) A description of the activities and procedures that will be used to ensure compliance with (a) through (g) of this subsection; and

(iv) Identify closure cost estimates and projected fund withdrawal intervals for the associated closure costs, from the approved financial assurance instrument.

(e) The owner or operator shall submit final engineering closure plans, in accordance with the approved closure plan and all approved amendments, for review, comment, and approval by the jurisdictional health department.

(f) When landfill closure is completed in part or whole, the owner or operator shall submit the following to the jurisdictional health department:

(i) Landfill closure plan sheets signed by a professional engineer registered in the state of Washington and modified as necessary to represent as-built changes to final closure construction for the landfill, or a portion thereof, as approved in the closure plan; and

(ii) Certification by the owner or operator, and a professional engineer registered in the state of Washington, that the landfill, or a portion thereof has been closed in accordance with the approved closure plan.

(g) The owner or operator shall record maps and a statement of fact concerning the location of the ~~disposal site~~ landfill as part of the deed with the county auditor not later than three months after closure.

Reason for change

The definition for "disposal site" was deleted and all references in the rule were changed to "disposal facility" or "landfill".

(h) The jurisdictional health department shall notify the owner or operator, the department, and the financial assurance instrument provider, of the date when the jurisdictional health department has verified that the facility, or a portion thereof, has been closed in accordance with the specifications of the approved closure plan and the closure requirements of this section, at which time the post-closure period shall commence.

(7) *Limited purpose landfills - Post-closure requirements*. The following post-closure requirements apply in full to facilities with limited purpose landfills:

(a) The owner or operator shall provide post-closure activities to allow for continued facility maintenance and monitoring of air, land, and water for a period of twenty years, or as long as necessary for the landfill to stabilize and to protect human health and the environment. For disposal facilities, post-closure care includes at least the following:

(i) Maintaining the integrity and effectiveness of any final closure cover, including making repairs to the closure cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, maintaining the vegetative cover, and preventing run-on and runoff from eroding or otherwise damaging the final closure cover;

(ii) General maintenance of the facility and facility structures for their intended use;

(iii) Monitoring ground water, surface water, leachate, or other waters in accordance with the requirements of WAC 173-350-500 and the approved monitoring plan, including remedial measures if applicable, and maintaining all monitoring systems;

(iv) Monitoring landfill gas and maintaining and operating the gas collection and control systems;

(v) Maintaining, operating, and monitoring hydraulic gradient controls systems if applicable;

(vi) Monitoring settlement; and

(vii) Any other activities deemed appropriate by the jurisdictional health department.

(b) The owner or operator shall commence post-closure activities for the facility, or portion thereof, after completion of closure activities outlined in subsection (6) of this section. The jurisdictional health department may direct that post-closure activities cease until the owner or operator receives a notice to proceed with post-closure activities.

(c) The owner or operator shall develop, keep, and abide by a post-closure plan approved by the jurisdictional health department as a part of the permitting process. The post-closure plan shall:

(i) Address facility maintenance and monitoring activities for at least a twenty-year period or until the landfill becomes stabilized (i.e., little or no settlement, gas production or leachate generation), and monitoring of ground water, surface water, gases and settlement can be safely discontinued; and

(ii) Project time intervals at which post-closure activities are to be implemented, and identify post-closure cost estimates and projected fund withdrawal intervals from the selected financial assurance instrument, where applicable, for the associated post-closure costs.

(d) The owner or operator shall complete post-closure activities for the facility, or portion thereof, in accordance with the approved post-closure plan and schedule, or the plan shall be so amended with the approval of the jurisdictional health department. The jurisdictional health department may direct facility post-closure activities, in part or completely, to cease until the post-closure plan has been amended and has received written approval by the health department.

(e) When post-closure activities are complete, the owner or operator shall submit a certification to the jurisdictional health department, signed by the owner or operator, and a professional engineer registered in the state of Washington stating why post-closure activities are no longer necessary.

(f) If the jurisdictional health department finds that post-closure monitoring has established that the landfill is stabilized, the health department may authorize the owner or operator to discontinue post-closure maintenance and monitoring activities.

(g) The jurisdictional health department shall notify the owner or operator, the department, and the financial assurance instrument provider, of the date when the jurisdictional health department has verified that the facility has completed post-closure activities in accordance with the specifications of the approved post-closure plan.

(8) *Limited purpose landfills - Financial assurance requirements*.

(a) Financial assurance is required for all limited purpose landfills.

(b) Each owner or operator shall establish a financial assurance mechanism in accordance with WAC 173-350-600 that will accumulate funds equal to the closure and post-closure cost estimates over the life of the landfill, or over the life of each landfill unit if closed discretely.

(c) No owner or operator shall commence or continue disposal operations in any part of a facility subject to this section until a financial assurance instrument has been provided for closure and post-closure activities in conformance with WAC 173-350-600.

(9) *Limited purpose landfills - Permit application contents*. The owner or operator shall obtain a solid waste permit from the jurisdictional health department. All applications for permits shall be in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each application for a permit shall contain:

(a) Demonstrations that the facility meets the location standards of subsection (2) of this section;

(b) Documentation that all owners of property located within one thousand feet of the facility property boundary have been notified that the proposed facility may impact their ability to construct water supply wells, in accordance with chapter 173-160 WAC, Minimum standards for construction and maintenance of wells;

(c) Engineering reports/plans and specifications that address the design standards of subsection (3) of this section;

(d) A plan of operation meeting the requirements of subsection (4) of this section;

(e) Hydrogeologic reports and plans that address the requirements of subsection (5) of this section;

(f) A closure plan meeting the requirements of subsection (6) of this section;

(g) A post-closure plan meeting the requirements of subsection (7) of this section; and

(h) Documentation as needed to meet the financial assurance requirements of subsection (8) of this section.

(10) *Limited purpose landfills - Construction records*. The owner or operator of a limited purpose landfill shall provide copies of the construction record drawings for engineered facilities at the site and a report documenting facility construction, including the results of observations and testing carried out as part of the construction quality assurance plan, to the jurisdictional

health department and the department. Facilities shall not commence operation until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report/plans and specifications and has approved the construction documentation in writing.

Reason for change

This change was made to provide jurisdictional health departments with criteria for approval of construction records.

NEW SECTION

WAC 173-350-410 Inert waste landfills. (1) *Inert waste landfills - Applicability*. These standards apply to landfills that receive only inert wastes, as identified pursuant to WAC 173-350-990, including facilities that use inert wastes as a component of fill. In accordance with RCW 70.95.305, facilities with a total capacity of two hundred fifty cubic yards or less of inert wastes are categorically exempt from solid waste handling permitting and other requirements of this section, provided that the inert waste landfill is operated in compliance with the performance standards of WAC 173-350-040. An owner or operator that does not comply with the performance standards of WAC 173-350-040 is required to obtain a permit from the jurisdictional health department, and may be subject to the penalty provisions of RCW 70.95.315.

(2) *Inert waste landfills - Location standards*. All inert waste landfills shall be located to meet the following requirements. No inert waste landfill's active area shall be located:

(a) On an unstable slope;

(b) Closer than ten feet from the facility property line;

(c) Closer than ~~fifty~~ one hundred feet to a drinking water supply well; or

Reason for change

This modification was made to better protect drinking water supply wells from larger inert waste landfills. If an owner or operator believes that this distance is not needed to protect a drinking water supply well, they may request a variance from this requirement in accordance with Section 710.

(d) In a channel migration zone as defined in WAC 173-350-100, or within one hundred feet measured horizontally, of a stream, lake, pond, river, or saltwater body, nor in any wetland nor any public land that is being used by a public water system for watershed control for municipal drinking water purposes in accordance with WAC 248-54-660(4).

(3) *Inert waste landfills - Design standards*. The owner or operator of an inert waste landfill shall prepare engineering reports/plans and specifications to address the design standards of this subsection. The existing site topography, including the location and approximate thickness and nature of any existing waste, the vertical and horizontal limits of excavation and waste placement, final closure elevation and grades, and the design capacity of each landfill unit, total design capacity, and future use of the facility after closure, shall be included. Inert waste landfills shall be designed and constructed to:

(a) Ensure that all waste is above the seasonal high level of ground water. For the purpose of this section, ground water includes any water-bearing unit which is horizontally and vertically extensive, hydraulically recharged, and volumetrically significant;

(b) Maintain a stable site; and

(c) Manage surface water, including run-on prevention and runoff conveyance, storage, and treatment, to protect the waters of the state;

(4) *Inert waste landfills - Operating standards*. The owner or operator of an inert waste landfill shall:

(a) Operate the facility to:

(i) Control public access and prevent unauthorized vehicular traffic and illegal dumping of wastes;

(ii) Implement a program at the facility capable of detecting and preventing noninert wastes from being accepted or mixed with inert waste;

(iii) Handle all inert waste in a manner that is in compliance with the performance standards of WAC 173-350-040;

(iv) Handle all inert waste in a manner that controls fugitive dust and is protective of waters of the state; and

(v) Prevent unstable conditions resulting from their activities;

(b) Inspect and maintain the facility to prevent malfunctions and deterioration, operator errors and discharges that may cause a threat to human health. Inspections shall be as needed, but at least weekly, to ensure meeting operational standards, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process;

(c) Maintain daily operating records of the ~~weights~~ quantity of inert waste disposed. ~~Methods for measuring waste shall be capable of estimating total annual weight to within plus or minus twenty percent.~~ In addition, record and retain information that documents that all wastes landfilled meet the criteria for inert waste. Facility inspection reports shall be maintained in the operating record. Significant deviations from the plan of operation shall be noted in the operating record. Records shall be maintained for minimum of five years and shall be available upon request by the jurisdictional health department;

Reason for change

This modification was made to lessen the recordkeeping requirements for owners and operators of inert waste landfills and to simplify the rule.

(d) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall detail the facility's activities during the previous calendar year and shall include the following information:

(i) Name and address of the facility;

(ii) Calendar year covered by the report;

(iii) Annual quantity and type of waste disposed in tons or cubic yards with an estimate of density in pounds per cubic yard; and

Reason for change

This modification was made to allow more flexibility for annual reporting.

(iv) Any additional information required by the jurisdictional health department as a condition of the permit;

(e) Develop, keep, and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include:

Reason for change

This section was modified so that a jurisdictional health department may direct an owner or operator to amend a plan of operation.

(i) A description of the types of solid waste to be handled at the facility;

(ii) A description of how solid wastes are to be handled on-site during its active life including:

(A) Acceptance criteria that will be applied to the waste;

(B) Procedures for ensuring only the waste described will be accepted;

(C) Procedures for handling unacceptable wastes; and

(D) Procedures for transporting and routine filling and grading;

(iii) A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspection and inspection logs;

(iv) Safety and emergency plans;

(v) The forms used to record weights and volumes; and

(vi) Other such details to demonstrate that the facility will meet the requirements of this subsection and as required by the jurisdictional health department.

(5) *Inert waste landfills - Ground water monitoring standards*. There are no specific ground water monitoring requirements for inert waste landfills subject to this chapter; however, inert waste landfills must meet the requirements provided under WAC 173-350-040(5).

(6) *Inert waste landfills - Closure requirements*. The owner or operator of an inert waste landfill shall:

(a) Notify the jurisdictional health department sixty days in advance of closure of the facility;

(b) Close the inert waste landfill unit by leveling the wastes to the extent practicable, or as appropriate for the proposed future use, and fill all voids which could pose a physical threat for persons, or which provide disease vector harborages. The inert waste landfills shall be closed in a manner to control fugitive dust and protect the waters of the state; and

(c) Record maps and a statement of fact concerning the location of the ~~disposal site~~landfill as part of the deed with the county auditor not later than three months after closure.

Reason for change

The definition for “disposal site” was deleted and all references in the rule were changed to “disposal facility” or “landfill”.

(7) *Inert waste landfills - Financial assurance requirements*. There are no specific financial assurance requirements for inert waste landfills subject to this chapter; however, inert waste landfills must meet the requirements provided under WAC 173-350-040(5).

(8) *Inert waste landfills - Permit application contents*. The owner or operator shall obtain a solid waste permit from the jurisdictional health department. All applications for permits shall be submitted in accordance with the procedures established in WAC 173-350-710. In addition to

the requirements of WAC 173-350-710 and 173-350-715, each application for a permit shall contain:

(a) Engineering reports/plans and specifications that address the design standards of subsection (3) of this section;

(b) A plan of operation that meets the requirements of subsection (4) of this section; and

(c) Documentation that all owners of property located within one thousand feet of the facility property boundary have been notified that the proposed facility may impact their ability to construct water supply wells, in accordance with chapter 173-160 WAC, Minimum standards for construction and maintenance of wells.

NEW SECTION

WAC 173-350-490 Other methods of solid waste handling. (1) *Other methods of solid waste handling - Applicability*. This section applies to other methods of solid waste handling not specifically identified elsewhere in this regulation, nor excluded from this regulation.

(2) *Other methods of solid waste handling - Requirements*. Owners and operators of solid waste handling facilities subject to this section shall:

(a) Comply with the requirements in WAC 173-350-040; and

(b) Obtain a permit in accordance with the provisions of WAC 173-350-700 from the jurisdictional health department. Permit applications shall be submitted in accordance with the provisions of WAC 173-350-710 and shall include information required in WAC 173-350-715, and any other information as may be required by the jurisdictional health department.

NEW SECTION

WAC 173-350-500 Ground water monitoring. (1) *Ground water monitoring - Professional qualifications*. All reports, plans, procedures, and design specifications required by this section shall be prepared by a licensed professional in accordance with the requirements of chapter 18.220 RCW.

(2) *Ground water monitoring - Site characterization*. A site proposed for solid waste activities shall be characterized for its geologic and hydrogeologic properties and suitability for constructing, operating, and monitoring a solid waste facility in accordance with all applicable requirements of this chapter. The site characterization report shall be submitted with the permit application and shall include at a minimum the following:

(a) A summary of local and regional geology and hydrology, including:

(i) Faults;

(ii) Zones of joint concentrations;

(iii) Unstable slopes and subsidence areas on-site;

(iv) Areas of ground water recharge and discharge;

(v) Stratigraphy; and

(vi) Erosional and depositional environments and facies interpretation(s);

(b) A site-specific borehole program including description of lithology, soil/bedrock types and properties, preferential ground water flow paths or zones of higher hydraulic conductivity, the presence of confining unit(s) and geologic features such as fault zones, cross-cutting structures, etc., and the target hydrostratigraphic unit(s) to be monitored. Requirements of the borehole program include:

(i) Each boring will be of sufficient depth below the proposed grade of the bottom liner to identify soil, bedrock, and hydrostratigraphic unit(s);

(ii) Boring samples shall be collected from five-foot intervals at a minimum and at changes in lithology. Representative s~~S~~amples shall be described using the unified soil classification system following ASTM D2487-85 and tested for the following if appropriate:

Reason for change

The first change was made to make use of a defined term. The second change was made because some of the methods shown may not be appropriate for all types of earthen materials.

(A) Particle size distribution by sieve and hydrometer analyses in accordance with approved ASTM methods (D422 and D1120); and

(B) Atterburg limits following approved ASTM method D4318;

(iii) Each lithologic unit on-site will be analyzed for:

(A) Moisture content sufficient to characterize the unit using ASTM method D2216; and

(B) Hydraulic conductivity by an in situ field method or laboratory method. All samples collected for the determination of permeability shall be collected by standard ASTM procedures;

(iv) All boring logs shall be submitted with the following information:

(A) Soil and rock descriptions and classifications;

(B) Method of sampling;

(C) Sample depth, interval and recovery;

(D) Date of boring;

(E) Water level measurements;

(F) Standard penetration number following approved ASTM method D1586-67;

(G) Boring location; and

(H) Soil test data;

(v) All borings not converted to monitoring wells or piezometers shall be carefully backfilled, plugged, and recorded in accordance with WAC 173-160-420;

(vi) During the borehole drilling program, any on-site drilling and lithologic unit identification shall be performed under the direction of~~by~~ a licensed professional in accordance with the requirements of chapter 18.220 RCW who is trained to sample and identify soils and bedrock lithology;

Reason for change

This change was made to better coordinate with the provisions in chapter 18.220 RCW.

(vii) An on-site horizontal and vertical reference datum shall be established during the site characterization. The standards for land boundary surveys and geodetic control surveys and guidelines for the preparation of land descriptions shall be used to establish borehole and monitoring well coordinates and casing elevations from the reference datum;

(viii) Other methods, including geophysical techniques, may be used to supplement the borehole program to ensure that a sufficient hydrogeologic site characterization is accomplished;

(c) A site-specific flow path analysis that includes:

(i) The depths to ground water and hydrostratigraphic unit(s) including transmissive and confining units; and

(ii) Potentiometric surface elevations and contour maps, direction and rate of horizontal and vertical ground water flow;

(d) Identification of the quantity, location, and construction (where available) of private and public wells within a two thousand-foot radius, measured from the site boundaries;

(e) Tabulation of all water rights for ground water and surface water within a two thousand-foot (610 m) radius, measured from site boundaries;

(f) Identification and description of all surface waters within a one-mile (1.6 km) radius, measured from site boundaries;

(g) A summary of all previously collected site ground water and surface water analytical data, and for expanded facilities, identification of impacts of the existing facility upon ground and surface waters from landfill leachate discharges to date;

(h) Calculation of a site water balance;

(i) Conceptual design of ground water and surface water monitoring systems, and where applicable a vadose zone monitoring system, including proposed construction and installation methods for these systems;

Reason for change

This change was made to make use of a defined term.

(j) Description of land use in the area, including nearby residences;

(k) A topographic map of the site and drainage patterns, including an outline of the waste management area, property boundary, the proposed location of ground water monitoring wells, and township and range designations; and

(l) Geologic cross sections.

(3) *Ground water monitoring - System design*.

(a) The ground water monitoring system design and report shall be submitted with the permit application and shall meet the following criteria:

(i) A sufficient number of monitoring wells shall be installed at appropriate locations and depths to yield representative ground water samples from those hydrostratigraphic units which have been identified in the site characterization as the earliest potential contaminant flowpaths;

(ii) Represent the quality of ground water at the point of compliance, and include at a minimum:

(A) A ground water flow path analysis which supports why the chosen hydrostratigraphic unit is capable of providing an early warning detection of any ground water contamination.

(B) Documentation and calculations of all of the following information:

(I) Hydrostratigraphic unit thickness including confining units and transmissive units;

(II) Vertical and horizontal ground water flow directions including seasonal, man-made, or other short-term fluctuations in ground water flow;

(III) Stratigraphy and lithology;

(IV) Hydraulic conductivity; and

(V) Porosity and effective porosity.

(b) Upgradient monitoring wells (background wells) shall meet the following performance criteria:

(i) Shall be installed in ground water that has not been affected by leakage from a landfill unit; or

(ii) If hydrogeologic conditions do not allow for the determination of an upgradient monitoring well, then sampling at other monitoring wells which provide representative background ground water quality may be allowed.

(c) Downgradient monitoring wells (compliance wells) shall meet the following performance criteria:

(i) Represent the quality of ground water at the point of compliance;

(ii) Be installed as close as practical to the point of compliance;

(iii) When physical obstacles preclude installation of ground water monitoring wells at the relevant point of compliance at the landfill unit or solid waste facility, the downgradient monitoring system may be installed at the closest practical distance hydraulically downgradient from the relevant point of compliance that ensures detection of ground water contamination in the chosen hydrostratigraphic unit.

(d) All monitoring wells shall be constructed in accordance with chapter 173-160 WAC, Minimum standards for construction and maintenance of wells, and chapter 173-162 WAC, Regulation and licensing of well contractors and operators.

(e) The owner or operator shall notify the jurisdictional health department and the department of any proposed changes to the design, installation, development, and decommission of any monitoring wells, piezometers, and other measurement, sampling, and analytical devices. Proposed changes shall not be implemented prior to the jurisdictional health department's written approval. Upon completing changes, all documentation, including date of change, new monitoring well location maps, boring logs, and monitoring well diagrams, shall be submitted to the jurisdictional health department and shall be placed in the operating record.

(f) All monitoring wells, piezometers, and other measurement, sampling, and analytical devices shall be operated and maintained so that they perform to design specifications throughout the life of the monitoring program.

(4) *Ground water monitoring - Sampling and analysis plan*.

(a) The ground water monitoring program shall include consistent sampling and analysis procedures that are designed to provide monitoring results that are representative of ground water quality at the upgradient and downgradient monitoring wells. In addition to monitoring wells, facilities with hydraulic gradient control and/or leak detection systems will provide representative ground water samples from those systems. The owner or operator shall submit a compliance sampling and analysis plan as part of the permit application. The plan shall include procedures and techniques for:

(i) Sample collection and handling;

(ii) Sample preservation and shipment;

(iii) Analytical procedures;

(iv) Chain-of-custody control;

(v) Quality assurance and quality control;

(vi) Decontamination of drilling and sampling equipment;

(vii) Procedures to ensure employee health and safety during well installation and monitoring; and

(viii) Well operation and maintenance procedures.

(b) Facilities collecting leachate shall include leachate sampling and analysis as part of compliance monitoring.

(c) The ground water monitoring program shall include sampling and analytical methods that are appropriate for ground water samples. The sampling and analytical methods shall provide sufficient sensitivity, precision, selectivity and limited bias such that changes in ground water quality can be detected and quantified. All samples shall be sent to an accredited

laboratory for analyses in accordance with chapter 173-50 WAC, Accreditation of environmental laboratories.

(d) Ground water elevations shall be measured in each monitoring well immediately prior to purging, each time ground water is sampled. The owner or operator shall determine the rate and direction of ground water flow each time ground water is sampled. All ground water elevations shall be determined by a method that ensures measurement to the one hundredth of a foot (3 mm) relative to the top of the well casing.

(e) Ground water elevations in wells that monitor the same landfill unit shall be measured within a period of time short enough to avoid any ground water fluctuations which could preclude the accurate determination of ground water flow rate and direction.

(f) The owner or operator shall establish background ground water quality in each upgradient and downgradient monitoring well. Background ground water quality shall be based upon a minimum of eight independent samples. Samples shall be collected for each monitoring well and shall be analyzed for parameters required in the permit for the first year of ground water monitoring. Each independent sampling event shall be no less than one month after the previous sampling event.

(g) Ground water quality shall be determined at each monitoring well at least quarterly during the active life of the solid waste facility, including closure and the post-closure period. More frequent monitoring may be required to protect downgradient water supply wells. Ground water monitoring shall begin after background ground water quality has been established. The owner or operator may propose an alternate ground water monitoring frequency. Ground water monitoring frequency must be no less than semiannually. The owner or operator must apply for a permit modification or must apply during the renewal process for changes in ground water monitoring frequency making a demonstration based on the following information:

(i) A characterization of the hydrostratigraphic unit(s) including the unsaturated zone, transmissive and confining units and include the following:

(A) Hydraulic conductivity; and

(B) Ground water flow rates;

(ii) Minimum distance between upgradient edge of the solid waste handling unit and downgradient monitoring wells (minimum distance of travel); and

(iii) Contaminant fate and transport characteristics.

(h) All facilities shall test for the following parameters:

(i) Field parameters:

(A) pH;

(B) Specific conductance;

(C) Temperature;

(D) Static water level;

(ii) Geochemical indicator parameters:

(A) Alkalinity (as Ca CO_3);

(B) Bicarbonate (HCO_3);

(C) Calcium (Ca);

(D) Chloride (Cl);

(E) Iron (Fe);

(F) Magnesium (Mg);

(G) Manganese (Mn);

(H) Nitrate(NO_3);

(I) Sodium (Na);

(J) Sulfate (SO_4);

(iii) Leachate indicators:

(A) Ammonia (NH_3-N);

(B) Total organic carbon (TOC);

(C) Total dissolved solids (TDS).

(i) Based upon the site specific waste profile and also the leachate characteristics for lined facilities, the owner or operator shall propose additional constituents to include in the monitoring program. The jurisdictional health department shall specify the additional constituents in the solid waste permit.

(j) Testing shall be performed in accordance with "*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*," U.S. EPA Publication SW-846, or other testing methods approved by the jurisdictional health department.

(k) Maximum contaminant levels (MCL) for ground water are those specified in chapter 173-200 WAC, Water quality standards for ground waters of the state of Washington.

(5) *Ground water monitoring - Data analysis, notification and reporting*.

(a) The results of monitoring well sample analyses as required by subsection (4)(h) and (i) of this section shall be evaluated using an appropriate statistical procedure(s), as approved by the jurisdictional health department during the permitting process, to determine if a significant increase over background has occurred. The statistical procedure(s) used shall be proposed in the sampling and analysis plan and be designed specifically for the intended site, or prescriptive statistical procedures from appropriate state and federal guidance may be used.

(b) If statistical analyses determine a significant increase over background:

(i) The owner or operator shall:

(A) Notify the jurisdictional health department and the department of this finding within thirty days of receipt of the sampling data. The notification shall indicate what parameters or constituents have shown statistically significant increases;

(B) Immediately resample the ground water for the parameter(s) showing statistically significant increase in the monitoring well(s) where the statistically significant increase has occurred;

Reason for change

This change clarifies the intent that ground water be resampled for parameters showing a statistically significant increase and not for all parameters.

(C) Establish a ground water protection standard using the ground water quality criteria of chapter 173-200 WAC, Water quality standards for ground waters of the state of Washington. Constituents for which the background concentration level is higher than the protection standard, the owner or operator shall use background concentration for constituents established in the facility's monitoring record.

(ii) The owner or operator may demonstrate that a source other than a landfill unit or solid waste facility caused the contamination, or the statistically significant increase resulted from error in sampling, analyses, statistical evaluation, or natural variation in ground water quality. If such a demonstration cannot be made and the concentrations or levels of the constituents:

(A) Meet the criteria established by chapter 173-200 WAC, Water quality standards for ground waters of the state of Washington, the owner or operator shall:

(I) Assess and evaluate sources of contamination; and

(II) Implement remedial measures in consultation with the jurisdictional health department and the department.

(B) Exceed the criteria established by chapter 173-200 WAC, Water quality standards for ground waters of the state of Washington, the owner or operator shall:

(I) Characterize the chemical composition of the release and the contaminant fate and transport characteristics by installing additional monitoring wells;

(II) Assess and, if necessary, implement appropriate intermediate measures to remedy the release. The measures shall be approved by the jurisdictional health department and the department; and

(III) Evaluate, select, and implement remedial measures as required by chapter 173-340 WAC, the Model Toxics Control Act cleanup regulation, where applicable. The roles of the jurisdictional health department and the department in remedial action are further defined by WAC 173-350-900.

(c) The owner or operator shall submit a copy of an annual report to the jurisdictional health department and the department by April 1st of each year. The jurisdictional health department may require more frequent reporting based on the results of ground water monitoring. The annual report shall summarize and interpret the following information:

(i) All ground water monitoring data, including laboratory and field data for the sampling periods;

(ii) Statistical results and/or any statistical trends including any findings of any statistical increases for the year and time/concentration series plots;

(iii) A summary of concentrations above the maximum contaminant levels of chapter 173-200 WAC;

(iv) Static water level readings for each monitoring well for each sampling event;

(v) Potentiometric surface elevation maps depicting ground water flow rate and direction for each sampling event, noting any trends or changes during the year;

(vi) Geochemical evaluation including cation-anion balancing and trilinear and/or stiff diagraming for each sampling event noting any changes or trends in water chemistry for each well during the year; and

(vii) Leachate analyses where appropriate for each sampling event.

NEW SECTION

WAC 173-350-600 Financial assurance requirements. (1) *Financial assurance requirements - Applicability*. This section is applicable to:

(a) Waste tires storage facilities regulated under WAC 173-350-350;

(b) Moderate risk waste facilities regulated under WAC 173-350-360; and

(c) Limited purpose landfills regulated under WAC 173-350-400.

(2) *Financial assurance requirements - Definitions*. For the purposes of this section, the following definitions apply:

(a) Public facility means a publicly or privately owned facility that accepts solid waste generated by other persons.

(b) Private facility means a privately owned facility maintained on private property solely for the purpose of managing waste generated by the entity owning the site.~~Private facility means a privately owned facility that accepts or disposes of only its own generated solid waste.~~

Reason for change

This definition was modified for clarification and to better coincide with the language in RCW 70.95.215.

(3) *Financial assurance requirements - Instrument options*. Financial assurance options are available, based on facility type as defined in WAC 173-350-600(2), ownership and permittee. Contents of all instruments must be acceptable to the jurisdictional health department. The following instrument options exist:

(a) Reserve accounts that are managed as either:

(i) Cash and investments accumulated and restricted for activities identified in the closure or post-closure plans, with the equivalent amount of fund balance reserved in the fund; or

(ii) Cash and investments held in a nonexpendable trust fund.

(b) Trust funds to receive, manage and disburse funds for activities identified in the approved closure and post-closure plans. Trust funds shall be established with an entity that has authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency.

(c) Surety bond(s) issued by a surety company listed as acceptable in Circular 570 of the United States Treasury Department. A standby trust fund for closure or post-closure shall also be established by the owner or operator to receive any funds that may be paid by the operator or surety company. The surety shall become liable for the bond obligation if the owner or operator fails to perform as guaranteed by the bond. The surety may not cancel the bond until at least one hundred twenty days after the owner or operator, the jurisdictional health department and the department have received notice of cancellation. If the owner or operator has not provided alternate financial assurance acceptable under this section within ninety days of the cancellation notice, the surety shall pay the amount of the bond into the standby closure or post-closure trust account. The following types of surety bonds are options:

(i) Surety bond; or

(ii) Surety bond guaranteeing that the owner or operator will perform final closure or post-closure activities.

(d) Irrevocable letter of credit issued by an entity which has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by a federal or state agency. Standby trust funds for closure and post-closure shall also be established by the owner or operator to receive any funds deposited by the issuing institution resulting from a draw on the letter of credit. The letter of credit shall be irrevocable and issued for a period of at least one year, and renewed annually, unless the issuing institution notifies the owner or operator, the jurisdictional health department and the department at least one hundred twenty days before the current expiration date. If the owner or operator fails to perform activities according to the closure or post-closure plan and permit requirements, or if the owner or operator fails to provide alternate financial assurance acceptable to the jurisdictional health department within ninety days after notification that the letter of credit will not be extended, the jurisdictional health department may require that the financial institution provide the funds from the letter of credit to the jurisdictional health department to be used to complete the required closure and post-closure activities;

(e) Insurance policies issued by an insurer who is licensed to transact the business of insurance or is eligible as an excess or surplus line insurer in one or more states, the content of which:

(i) Guarantees that the funds will be available to complete those activities identified in the approved closure or post-closure plans;

(ii) Guarantees that the insurer will be responsible for paying out funds for those activities;

(iii) Provides that the insurance is automatically renewable and that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium;

(iv) Provides that if there is a failure to pay the premium, the insurer may not terminate the policy until at least one hundred twenty days after the notice of cancellation has been received by the owner or operator, the jurisdictional health department and the department;

(v) Provides that termination of the policy may not occur and the policy shall remain in full force and effect if:

(A) The jurisdictional health department determines the facility has been abandoned;

(B) Closure has been ordered by the jurisdictional health department or a court of competent jurisdiction;

(C) The owner or operator has been named as debtor in a voluntary or involuntary proceeding under Title 11 U.S.C., Bankruptcy; or

(D) The premium due is paid;

(vi) The owner or operator is required to maintain the policy in full force and until an alternative financial assurance guarantee is provided or when the jurisdictional health department has verified that closure, and/or post-closure, as appropriate, have been completed in accordance with the approved closure or post-closure plan;

(vii) For purposes of this rule, "captive" insurance companies as defined in WAC 173-350-100, are not an acceptable insurance company.

(f) Financial Test/corporate guarantee allows for a private corporation meeting the financial test to provide a corporate guarantee those activities identified in the closure and post-closure plans will be completed.

(i) To qualify, a private corporation owner or operator shall meet the criteria of either option A or B:

(A) Option A - to pass the financial test under this option the private corporation shall have:

(I) Two of the following three ratios: A ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; or a ratio of current assets to current liabilities greater than 1.5;

(II) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates;

(III) Tangible net worth of at least ten million dollars; and

(IV) Assets in the United States amounting to at least ninety percent of its total assets or at least six times the sum of the current closure and post-closure cost estimates.

(B) Option B - to pass this alternative financial test, the private corporation shall have:

(I) A current rating of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's;

(II) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates;

(III) Tangible net worth of at least ten million dollars; and

(IV) Assets in the United States amounting to at least ninety percent of its total assets or at least six times the sum of the current closure and post-closure cost estimates.

(ii) The owner or operator's chief financial officer shall provide a corporate guarantee that the corporation passes the financial test at the time the closure plan is filed. This corporate guarantee shall be reconfirmed annually ninety days after the end of the corporation's fiscal year

by submitting to the jurisdictional health department a letter signed by the chief financial officer that:

(A) Provides the information necessary to document that the owner or operator passes the financial test;

(B) Guarantees that the funds to finance closure and post-closure activities according to the closure or post-closure plan and permit requirements are available;

(C) Guarantees that closure and post-closure activities will be completed according to the closure or post-closure plan and permit requirements;

(D) Guarantees that within thirty days if written notification is received from the jurisdictional health department that the owner or operator no longer meets the criteria of the financial test, the owner or operator shall provide an alternative form of financial assurance consistent with the requirements of this section;

(E) Guarantees that the owner or operator's chief financial officer will notify in writing the jurisdictional health department and the department within fifteen days any time that the owner or operator no longer meets the criteria of the financial test or is named as debtor in a voluntary or involuntary proceeding under Title 11 U.S.C., Bankruptcy;

(F) Acknowledges that the corporate guarantee is a binding obligation on the corporation and that the chief financial officer has the authority to bind the corporation to the guarantee;

(G) Attaches a copy of the independent certified public accountant's report on examination of the owner or operator's financial statements for the latest completed fiscal year; and

(H) Attaches a special report from the owner or operator's independent certified public accountant (CPA) stating that the CPA has reviewed the information in the letter from the owner or operator's chief financial officer and has determined that the information is true and accurate.

(iii) The jurisdictional health department may, based on a reasonable belief that the owner or operator no longer meets the criteria of the financial test, require reports of the financial condition at any time in addition to the annual report. The jurisdictional health department will specify the information required in the report. If the jurisdictional health department finds, on the basis of such reports or other information, that the owner or operator no longer meets the criteria of the financial test, the owner or operator shall provide an alternative form of financial assurance consistent with the requirements of this section, within thirty days after notification by the jurisdictional health department.

(iv) If the owner or operator fails to perform final closure and, where required, provide post-closure care of a facility covered by the guarantee in accordance with the approved closure and post-closure plans, the guarantor will be required to complete the appropriate activities.

(v) The guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator, the jurisdictional health department and the department. Cancellation may not occur, however, during the one hundred twenty days beginning on the date of receipt of the notice of cancellation by the owner or operator, the jurisdictional health department and the department.

(vi) If the owner or operator fails to provide alternate financial assurance as specified in this section and obtain the written approval of such alternate assurance from the jurisdictional health department within ninety days after receipt of a notice of cancellation of the guarantee from the guarantor, the guarantor will provide such alternative financial assurance in the name of the owner or operator.

(4) *Financial assurance requirements - Eligible financial assurance instruments.* The financial assurance instruments identified in subsection (3) of this section are available for use based on facility category and whether the permittee is a public or private entity as follows:

(a) For a public facility, as defined in subsection (2) of this section, when the permittee is a public entity, the following options are available:

(i) Reserve account;

(ii) Trust account;

(iii) Surety bond (payment or performance); or

(iv) Insurance;

(b) For a public facility as defined in subsection (2) of this section, where the permittee is a private entity, the following options are available:

(i) Trust account;

(ii) Surety bond (payment or performance);

(iii) Letter of credit; or

(iv) Insurance;

(c) For private facilities as defined in subsection (2) of this section, the following options are available:

(i) Trust account;

(ii) Surety bond (payment or performance);

(iii) Letter of credit;

(iv) Insurance; or

(v) Financial test/corporate guarantee.

(5) *Financial assurance requirements - Cost estimate for closure*. The owner or operator shall:

(a) Prepare a written closure cost estimate as part of the facility closure plan. The closure cost estimate shall:

(i) Be in current dollars and represent the cost of closing the facility;

(ii) Provide a detailed written estimate, in current dollars, of the cost of hiring a third party to close the facility at any time during the active life when the extent and manner of its operation would make closure the most expensive in accordance with the approved closure plan;

(iii) Project intervals for withdrawal of closure funds from the closure financial assurance instrument to complete the activities identified in the approved closure plan;

(iv) Not reduce by allowance for salvage value of equipment, solid waste, or the resale value of property or land;

(b) Prepare a new closure cost estimate in accordance with (a) of this subsection whenever:

(i) Changes in operating plans or facility design affect the closure plan; or

(ii) There is a change in the expected year of closure that affects the closure plan;

(c) Review the closure cost estimate by March 1st of each calendar year. The review shall be submitted to the jurisdictional health department, with a copy to the department, by April 1st of each calendar year stating that the review was completed and the findings of the review. The review will examine all factors, including inflation, involved in estimating the closure cost. Any cost changes shall be factored into a revised closure cost estimate and submit the revised cost estimate to the jurisdictional health department for review and approval. The jurisdictional health department shall evaluate each cost estimate for completeness, and may accept, or require a revision of the cost estimate in accordance with its evaluation.

(6) *Financial assurance requirements - Cost estimate for post-closure*. The owner or operator shall:

(a) Prepare a written post-closure cost estimate as part of the facility post-closure plan. The post-closure cost estimate shall:

(i) Be in current dollars and represent the total cost of completing post-closure activities for the facility for a twenty-year post-closure period or a time frame determined by the jurisdictional health department;

(ii) Provide a detailed written estimate, in current dollars, of the cost of hiring a third party to conduct post-closure care for the facility in compliance with the post-closure plan;

(iii) Project intervals for withdrawal of post-closure funds from the post-closure financial assurance instrument to complete the activities identified in the approved post-closure plan; and

(iv) Not reduce by allowance for salvage, value of equipment, or resale value of property or land.

(b) Prepare a new post-closure cost estimate for the remainder of the post-closure care period in accordance with (a) of this subsection, whenever a change in the post-closure plan increases or decreases the cost of post-closure care.

(c) During the operating life of the facility, the owner or operator must review the post-closure cost estimate by March 1st of each calendar year. The review will be submitted to the jurisdictional health department, with a copy to the department by April 1st of each calendar year stating that the review was completed and the finding of the review. The review shall examine all factors, including inflation, involved in estimating the post-closure cost estimate. Any changes in costs shall be factored into a revised post-closure cost estimate. The new estimate shall be submitted to the jurisdictional health department for approval. The jurisdictional health department shall evaluate each cost estimate for completeness, and may accept, or require a revision of the cost estimate in accordance with its evaluation.

(7) *Financial assurance requirements - Closure/post-closure financial assurance account establishment and reporting*.

(a) Closure and post-closure financial assurance funds generated shall be provided to the selected financial assurance instrument at the schedule specified in the closure and post-closure plans, such that adequate closure and post-closure funds will be generated to ensure full implementation of the approved closure and post-closure plans.

(b) The facility owner or operator with systematic deposits shall establish a procedure with the financial assurance instruments trustee for notification of nonpayment of funds to be sent to the jurisdictional health department and the department.

(c) The owner or operator shall file with the jurisdictional health department, no later than April 1st of each year, an annual audit of the financial assurance accounts established for closure and post-closure activities, and a statement of the percentage of user fees, as applicable, diverted to the financial assurance instruments, for the previous calendar year:

(i) For facilities owned and operated by municipal corporations, the financial assurance accounts shall be audited according to the audit schedule of the office of state auditor. A certification of audit completion and summary findings shall be filed with the jurisdictional health department and the department, including during each of the post-closure care years.

(ii) For facilities not owned or operated by municipal corporations:

(A) Annual audits shall be conducted by a certified public accountant licensed in the state of Washington. A certification of audit completion and summary findings shall be filed with the jurisdictional health department and the department, including during each of the post-closure care years.

(B) The audit shall also include, as applicable, calculations demonstrating the proportion of closure or post-closure, completed during the preceding year as specified in the closure and post-closure plans.

(d) Established financial assurance accounts shall not constitute an asset of the facility owner or operator.

(e) Any income accruing to the established financial assurance account(s) will be used at the owner's discretion upon approval of the jurisdictional health department.

(8) *Financial assurance requirements - Fund withdrawal for closure and post-closure activities*.

(a) The owner or operator will withdraw funds from the closure and/or post-closure financial assurance instrument as specified in the approved closure/post-closure plans;

(b) If the withdrawal of funds from the financial assurance instrument exceeds by more than five percent the withdrawal schedule stated in the approved closure and/or post-closure plan over the life of the permit, the closure and/or post-closure plan shall be amended.

(c) After verification by the jurisdictional health department of facility closure, excess funds remaining for closure in a financial assurance account shall be released to the facility owner or operator.

(d) After verification by the jurisdictional health department of facility post-closure, excess funds remaining for post-closure in a financial assurance account shall be released to the facility owner or operator.

NEW SECTION

WAC 173-350-700 Permits and local ordinances. (1) *Permit required*.

(a) No solid waste storage, treatment, processing, handling or disposal ~~site~~ facility shall be maintained, established, substantially altered, expanded or improved until the person operating or owning such site has obtained a permit or permit deferral from the jurisdictional health department or a beneficial use exemption from the department pursuant to the provisions of this chapter. Facilities operating under categorical exemptions established by this chapter shall meet all the conditions of such exemptions or will be required to obtain a permit under this chapter. Persons dumping or depositing solid waste without a permit in violation of this chapter shall be subject to the penalty provisions of RCW 70.95.240.

Reason for change

The definition for "disposal site" was deleted and all references in the rule were changed to "disposal facility" or "landfill". No definition for "disposal facility" was added as the concept is a logical combination of defined terms.

The last sentence was inserted to provide notification that persons may be subject to penalty provisions for dumping or depositing solid waste without a permit in violation of this rule.

(b) Permits issued under this chapter are not required for remedial actions performed by the state and/or in conjunction with the United States Environmental Protection Agency to implement the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA), or remedial actions taken by others to comply with a state and/or federal cleanup order or consent decree ~~provided that:~~

~~(i) The action results in an overall improvement of the environmental impact of the site;~~

~~(ii) The action does not require or result in additional waste being delivered to the site or increase the amount of waste or contamination present at the site; and~~

~~(iii) The jurisdictional health department is informed of the actions to be taken and is given the opportunity to review and comment upon the proposed remedial action plans~~.

Reason for change

This deletion was made so that the rule would better conform to statutory language in the Model Toxics Control Act, RCW 70.105D.090.

(c) Any jurisdictional health department and the department may enter into an agreement providing for the exercise by the department of any power that is specified in the contract and that is granted to the jurisdictional health department under chapter 70.95 RCW, Solid waste management--Reduction and recycling. However, the jurisdictional health department shall have the approval of the legislative authority or authorities it serves before entering into any such agreement with the department.

(2) *Local ordinances*. Each jurisdictional health department shall adopt local ordinances implementing this chapter not later than one year after the effective date of this chapter, and shall file the ordinances with the department within ninety days following local adoption. Local ordinances shall not be less stringent than this chapter, but may include additional requirements.

NEW SECTION

WAC 173-350-710 Permit application and issuance. (1) *Permit application process*.

(a) Any owner or operator required to obtain a permit shall apply for a permit from the jurisdictional health department. All permit application filings shall include two copies of the application. An application shall not be considered complete by the jurisdictional health department until the information required under WAC 173-350-715 has been submitted.

(b) The jurisdictional health department may establish reasonable fees for permits, permit modifications, and renewal of permits. All permit fees collected by the health department shall be deposited in the account from which the health department's operating expenses are paid.

(c) Once the jurisdictional health department determines that an application for a permit is complete, it shall:

(i) Refer one copy to the appropriate regional office of the department for review and comment;

(ii) Investigate every application to determine whether the facilities meet all applicable laws and regulations, conform to the approved comprehensive solid waste management plan and/or the approved hazardous waste management plan, and comply with all zoning requirements; and

(d) Once the department has received a complete application for review, it shall:

(i) Ensure that the proposed site or facility conforms with all applicable laws and regulations including the minimum functional standards for solid waste handling;

(ii) Ensure that the proposed site or facility conforms to the approved comprehensive solid waste management plan and/or the approved hazardous waste management plan; and

(iii) Recommend for or against the issuance of each permit by the jurisdictional health department within forty-five days of receipt of a complete application.

(e) Application procedures for statewide beneficial use exemptions and permit deferrals are contained in WAC 173-350-200 and 173-350-710(8), respectively.

(2) *Permit issuance*.

(a) When the jurisdictional health department has evaluated all pertinent information, it may issue or deny a permit. Every ~~completed~~ solid waste permit application shall be approved or disapproved within ninety days after its receipt by the jurisdictional health department. Every permit issued by a jurisdictional health department shall contain specific requirements necessary for the proper operation of the permitted site or facility.

Reason for change

This deletion was made so that the rule would better conform to statutory language in RCW 70.95.180.

(b) Every permit issued shall be valid for a period not to exceed five years at the discretion of the jurisdictional health department.

(c) Jurisdictional health departments shall file all issued permits with the appropriate regional office of the department no more than seven days after the date of issuance.

(d) The department shall review the permit in accordance with RCW 70.95.185 and report its findings to the jurisdictional health department in writing within thirty days of permit issuance.

(e) The jurisdictional health department is authorized to issue one permit for a location where multiple solid waste handling activities occur, provided all activities meet the applicable requirements of this chapter.

(3) *Permit renewals*.

(a) Prior to renewing a permit, the health department shall conduct a review as it deems necessary to ensure that the solid waste handling facility or facilities located on the site continue to:

(i) Meet ~~minimum functional~~the solid waste handling standards of the department;

Reason for change

This modification was made to coincide with the title of this chapter.

(ii) Comply with applicable local regulations; and

(iii) Conform to the approved solid waste management plan and/or the approved hazardous waste management plan.

(b) A jurisdictional health department shall approve or deny a permit renewal within forty-five days of conducting its review.

(c) Every permit renewal shall be valid for a period not to exceed five years at the discretion of the jurisdictional health department.

(d) The department shall review the renewal in accordance with RCW 70.95.190 and report its findings to the jurisdictional health department in writing.

(e) The jurisdictional board of health may establish reasonable fees for permits reviewed under this section. All permit fees collected by the health department shall be deposited in the treasury and to the account from which the health department's operating expenses are paid.

(4) *Permit modifications*. Any significant change to the operation, design, capacity, performance or monitoring of a permitted facility may require a modification to the permit. The following procedures shall be followed by an owner or operator prior to making any change in facility operation, design, performance or monitoring:

(a) The facility owner or operator shall consult with the jurisdictional health department regarding the need for a permit modification;

(b) The jurisdictional health department shall determine whether the proposed modification is significant. Upon such a determination, the owner or operator shall make

application for a permit modification, using the process outlined in subsections (1) through (3) of this section; and

(c) If a proposed change is determined to not be significant and not require a modification to the permit, the department shall be notified.

(5) *Inspections*.

(a) At a minimum, annual inspections of all permitted solid waste facilities shall be performed by the jurisdictional health department, unless otherwise specified in this chapter.

(b) All facilities and sites shall be physically inspected prior to issuing a permit, permit renewal or permit modification.

(c) Any duly authorized representative of the jurisdictional health department may enter and inspect any property, premises or place at any reasonable time for the purpose of determining compliance with this chapter, and relevant laws and regulations. Findings shall be noted and kept on file. A copy of the inspection report or annual summary shall be furnished to the site operator.

(6) *Permit suspension and appeals*.

(a) Any permit for a solid waste handling facility shall be subject to suspension at any time the jurisdictional health department determines that the site or the solid waste handling facility is being operated in violation of this chapter.

(b) Whenever the jurisdictional health department denies a permit or suspends a permit for a solid waste handling facility, it shall:

(i) Upon request of the applicant or holder of the permit, grant a hearing on such denial or suspension within thirty days after the request;

(ii) Provide notice of the hearing to all interested parties including the county or city having jurisdiction over the site and the department; and

(iii) Within thirty days after the hearing, notify the applicant or the holder of the permit in writing of the determination and the reasons therefore. Any party aggrieved by such determination may appeal to the pollution control hearings board by filing with the board a notice of appeal within thirty days after receipt of notice of the determination of the health officer.

(c) If the jurisdictional health department denies a permit renewal or suspends a permit for an operating waste recycling facility that receives waste from more than one city or county, and the applicant or holder of the permit requests a hearing or files an appeal under this section, the permit denial or suspension shall not be effective until the completion of the appeal process under this section, unless the jurisdictional health department declares that continued operation of the waste recycling facility poses a very probable threat to human health and the environment.

(d) Procedures for appealing beneficial use exemption determinations are contained in WAC 173-350-200 (5)(g).

(7) *Variances*.

(a) Any person who owns or operates a solid waste handling facility subject to a solid waste permit under WAC 173-350-700, may apply to the jurisdictional health department for a variance from any section of this chapter. No variance shall be granted for requirements specific to chapter 70.95 RCW, Solid waste management--Reduction and recycling. The application shall be accompanied by such information as the jurisdictional health department may require. The jurisdictional health department may grant such variance, but only after due notice or a public hearing if requested, if it finds that:

(i) The solid waste handling practices or location do not endanger public health, safety or the environment; and

(ii) Compliance with the section from which variance is sought would produce hardship without equal or greater benefits to the public.

(b) No variance shall be granted pursuant to this section until the jurisdictional health department has considered the relative interests of the applicant, other owners of property likely to be affected by the handling practices and the general public.

(c) Any variance or renewal shall be granted within the requirements of subsections (1) through (3) of this section and for time period and conditions consistent with the reasons therefore, and within the following limitations:

(i) If the variance is granted on the grounds that there is no practicable means known or available for the adequate prevention, abatement, or control of pollution involved, it shall be only until the necessary means for prevention, abatement or control become known and available and subject to the taking of any substitute or alternative measures that the jurisdictional health department may prescribe;

(ii) The jurisdictional health department may grant a variance conditioned by a timetable if:

(A) Compliance with this chapter will require spreading of costs over a considerable time period; and

(B) The timetable is for a period that is needed to comply with the chapter.

(d) An application for a variance, or for the renewal thereof, submitted to the jurisdictional health department shall be approved or disapproved by the jurisdictional health department within ninety days of receipt unless the applicant and the jurisdictional health department agree to a continuance.

(e) No variance shall be granted by a jurisdictional health department except with the approval and written concurrence of the department prior to action on the variance by the jurisdictional health department.

(8) *Permit deferral*.

(a) A jurisdictional health department may, at its discretion and with the concurrence of the department, waive the requirement that a solid waste permit be issued for a facility under this chapter by deferring to other air, water or environmental permits issued for the facility which provide an equivalent or superior level of environmental protection.

(b) The requirement to obtain a solid waste permit from the jurisdictional health department shall not be waived for any transfer station, landfill, or incinerator that receives municipal solid waste destined for final disposal.

(c) Any deferral of permitting or regulation of a solid waste facility granted by the department or a jurisdictional health department prior to June 11, 1998, shall remain valid and shall not be affected by this subsection.

(d) Any person who owns or operates an applicable solid waste handling facility subject to obtaining a solid waste permit may apply to the jurisdictional health department for permit deferral. Two copies of an application for permit deferral shall be signed by the owner or operator and submitted to the jurisdictional health department. Each application for permit deferral shall include:

(i) A description of the solid waste handling units for which the facility is requesting deferral;

(ii) A list of the other environmental permits issued for the facility;

(iii) A demonstration that identifies each requirement of this chapter and a detailed description of how the other environmental permits will provide an equivalent or superior level of environmental protection;

(iv) Evidence that the facility is in conformance with the approved comprehensive solid waste management plan and/or the approved hazardous waste management plan;

(v) Evidence of compliance with chapter 197-11 WAC, SEPA rules; and

(vi) Other information that the jurisdictional health department or the department may require.

(e) The jurisdictional health department shall notify the applicant if it elects not to waive the requirement that a solid waste permit be issued for a facility under this chapter. If the jurisdictional health department elects to proceed with permit deferral, it shall:

(i) Forward one copy of the complete application to the department for review;

(ii) Notify the permit issuing authority for the other environmental permits described in (d)(ii) of this subsection and allow an opportunity for comment; and

(iii) Determine if the proposed permit deferral provides an equivalent or superior level of environmental protection.

(f) The department shall provide a written report of its findings to the jurisdictional health department and recommend for or against the permit deferral. The department shall provide its findings within forty-five days of receipt of a complete permit deferral application or inform the jurisdictional health department as to the status with a schedule for its determination.

(g) No solid waste permit deferral shall be effective unless the department has provided written concurrence. All requirements for solid waste permitting shall remain in effect until the department has provided written concurrence.

(h) When the jurisdictional health department has evaluated all information, it shall provide written notification to the applicant and the department whether or not it elects to waive the requirement that a solid waste permit be issued for a facility under this chapter by deferring to other environmental permits issued for the facility. Every complete permit deferral application shall be approved or denied within ninety days after its receipt by the jurisdictional health department or the owner or operator shall be informed as to the status of the application with a schedule for final determination.

(i) The jurisdictional health department shall revoke any permit deferral if it or the department determines that the other environmental permits are providing a lower level of environmental protection than a solid waste permit. Jurisdictional health departments shall notify the facility's owner or operator of intent to revoke the permit deferral and direct the owner or operator to take measures necessary to protect human health and the environment and to comply with the permit requirements of this chapter.

(j) Facilities which are operating under the deferral of solid waste permitting to other environmental permits shall:

(i) Allow the jurisdictional health department, at any reasonable time, to inspect the solid waste handling units which have been granted a permit deferral;

(ii) Notify the jurisdictional health department and the department whenever changes are made to the other environmental permits identified in (d)(ii) of this subsection. This notification shall include a detailed description of how the changes will affect the facility's operation and a demonstration, as described in (d)(iii) of this subsection, that the amended permits continue to provide an equivalent or superior level of environmental protection to the deferred solid waste permits. If the amended permits no longer provide an equivalent or superior level of environmental protection, the facility owner or operator shall close the solid waste handling unit or apply for a permit from the jurisdictional health department;

(iii) Notify the jurisdictional health department and the department within seven days of discovery of any violation of, or failure to comply with, the conditions of the other environmental permits identified in (d)(ii) of this subsection;

(iv) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st as required under the appropriate annual reporting section of this chapter;

(v) Operate in accordance with any other written conditions that the jurisdictional health department deems appropriate; and

(vi) Shall take any measures deemed necessary by the jurisdictional health department when the permit deferral has been revoked.

NEW SECTION

WAC 173-350-715 General permit application requirements. (1) Every permit application shall be on a format supplied by the department and shall contain the following information:

(a) Contact information for the facility owner, and the facility operator and property owner if different, including contact name, company name, mailing address, phone fax, and e-mail;

(b) Identification of the type of facility that is to be permitted;

(c) Identification of any other permit (local, state or federal) in effect at the site;

(d) A vicinity plan or map (having a minimum scale of 1:24,000) that shall show the area within one mile (1.6 km) of the property boundaries of the facility in terms of the existing and proposed zoning and land uses within that area, residences, and access roads, and other existing and proposed man-made or natural features that may impact the operation of the facility;

(e) Evidence of compliance with chapter 197-11 WAC, SEPA rules;

(f) Information as required under the appropriate facility permit application subsection of this chapter; and

(g) Any additional information as requested by the jurisdictional health department or the department.

(2) Engineering plans, reports, specifications, programs, and manuals submitted to the jurisdictional health department or the department shall be prepared and certified by an individual licensed to practice engineering in the state of Washington, in an engineering discipline appropriate for the solid waste facility type or activity.

(3) Signature and verification of applicants:

(a) All applications for permits shall be accompanied by evidence of authority to sign the application and shall be signed by the owner or operator as follows:

(i) In the case of corporations, by a duly authorized principal executive officer of at least the level of vice-president; in the case of a partnership or limited partnership, by:

(A) A general partner;

(B) Proprietor; or

(C) In case of sole proprietorship, by the proprietor;

(ii) In the case of a municipal, state, or other government entity, by a duly authorized principal executive officer or elected official.

(b) Applications shall be signed or attested to by, or on behalf of, the owner or operator, in respect to the veracity of all statements therein; or shall bear an executed statement by, or on behalf of, the owner or operator to the effect that false statements made therein are made under penalty of perjury.

(c) The signature of the applicant shall be notarized on the permit application form.

NEW SECTION

WAC 173-350-900 Remedial action. When the owner or operator of a solid waste facility is subject to remedial measures in compliance with chapter 173-340 WAC, the Model Toxics Control Act, the roles of the jurisdictional health department and the department shall be as follows:

(1) The jurisdictional health department:

(a) May participate in all negotiations, meetings, and correspondence between the owner and operator and the department in implementing the model toxics control action;

(b) May comment upon and participate in all decisions made by the department in assessing, choosing, and implementing a remedial action program;

(c) Shall require the owner or operator to continue closure and post-closure activities as appropriate under this chapter, after remedial action measures are completed; and

(d) Shall continue to regulate all solid waste facilities during construction, operation, closure and post-closure, that are not directly impacted by chapter 173-340 WAC.

(2) The department shall carry out all the responsibilities assigned to it by chapter 70.105D RCW, Hazardous waste cleanup--Model Toxics Control Act.

NEW SECTION

WAC 173-350-990 Criteria for inert waste. (1) *Criteria for inert waste - Applicability*. This section provides the criteria for determining if a solid waste is an inert waste. Dangerous wastes regulated under chapter 173-303 WAC, Dangerous waste regulation, PCB wastes regulated under 40 CFR Part 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions, and asbestos-containing waste regulated under federal 40 CFR Part 61 rules are not inert waste. For the purposes of determining if a solid waste meets the criteria for an inert waste a person shall:

(a) Apply knowledge of the waste in light of the materials or process used and potential chemical, physical, biological, or radiological substances that may be present; or

(b) Test the waste for those potential substances that may exceed the applicable criteria. A jurisdictional health department may require a person to test a waste to determine if it meets the applicable criteria. Such testing may be required if the jurisdictional health department has reason to believe that a waste does not meet the applicable criteria or has not been adequately characterized. Testing shall be performed in accordance with:

(i) "*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*," U.S. EPA Publication SW-846; or

(ii) Other testing methods approved by the jurisdictional health department.

(2) *Criteria for inert waste - Listed inert wastes*. For the purpose of this chapter, the following solid wastes are inert wastes, provided that the waste has not been tainted, through

exposure from chemical, physical, biological, or radiological substances, such that it presents a threat to human health or the environment greater than that inherent to the material:

(a) Cured concrete that has been used for structural and construction purposes, including ~~imbedded~~ embedded steel reinforcing and wood, that was produced from mixtures of Portland cement and sand, gravel or other similar materials;

Reason for change

This section was modified so that small quantities of wood embedded in cured concrete would not preclude the material from being an inert waste.

(b) Asphaltic materials that have been used for structural and construction purposes (e.g., roads, dikes, paving) that were produced from mixtures of petroleum asphalt and sand, gravel or other similar materials. Waste roofing materials are not presumed to be inert;

(c) Brick and masonry that have been used for structural and construction purposes;

(d) Ceramic materials produced from fired clay or porcelain; ~~and~~

(e) Glass, composed primarily of sodium, calcium, silica, boric oxide, magnesium oxide, lithium oxide or aluminum oxide. Glass presumed to be inert includes, but is not limited to, window glass, glass containers, glass fiber, glasses resistant to thermal shock, and glass-ceramics. Glass containing significant concentrations of lead, mercury, or other toxic substance is not presumed to be inert; and

(f) Stainless steel and aluminum.

Reason for change

This section was modified to include two other materials as listed inert wastes.

(3) *Criteria for inert waste - Inert waste characteristics.* This subsection provides the criteria for determining if a solid waste not listed in subsection (2) of this section is an inert waste. Solid wastes meeting the criteria below shall have comparable physical characteristics and comparable or lower level of risk to human health and the environment as those listed in subsection (2) of this section.

Reason for change

This text was added to clarify the intent that the characteristics of inert wastes listed in subsection (2) should be used as benchmarks for interpreting the language in this subsection when evaluating other wastes.

(a) Inert waste shall have physical characteristics that meet the following criteria. Inert waste shall:

(i) Not be capable of catching fire and burning from contact with flames;

(ii) Maintain its physical and chemical structure under expected conditions of storage or disposal including resistance to biological and chemical degradation; and

(iii) Have sufficient structural integrity and strength to prevent settling and unstable situations under expected conditions of storage or disposal.

(b) Inert waste shall not contain chemical, physical, biological, or radiological substances at concentrations that exceed the following criteria. Inert waste shall not:

(i) Be capable of producing leachate or emissions that have the potential to negatively impact soil, ground water, surface water, or air quality;

(ii) Pose a health threat to humans or other living organisms through direct or indirect exposure; or

(iii) Result in applicable air quality standards to be exceeded, or pose a ~~risk~~ threat to human health or the environment under potential conditions during handling, storage, or disposal.

Reason for change

The unqualified use of the term "risk" was eliminated from the rule because it represents any chance of harm. Some level of risk is present in any activity or situation.

III. Summarize Comments

This section contains the comments received and the Department's responses to those comments. The comments have been quoted from the letters, emails, and oral testimony submitted by the public. The comments are presented alphabetically by commenter's last name. Each comment lists the commenters last name, the section of the rule they are commenting on, and the assigned comment number.

Commenter **Bailey** ***Section*** **220** ***Comment #*** 19

Comment Presently we are still a registered dairy, however we plan to change our operation to raising dairy replacement heifers which would take us out of the dairy registration program. Under the present draft on page 25 (c)(i)(ii) our farm would lose it's exemption for pond liner materials by not being a registered dairy. We feel the NRCS designed lagoon would function equally well for dairy heifers therefore we are requesting the exemption to include other types of livestock operations. We support WORC's and Snohomish County Solid Waste Management Division's comments on January 18, 2001 on 173 - 350-220 (3)(A)(iii) which would exempt farm ponds that are designed to NRCS standards and are operating under an approved farm plan.

Ecology's Response Commenter is concerned about the language in subsection 220(3)(c)(i) regarding designs standards for leachate lagoons at registered dairies. This provision is intended to integrate existing standards under the Natural Resources Conservation Service system of manure management with design standards for composting facility leachate ponds. The term "registered" is used to indicate that the farm is actually engaged in the raising of dairy animals under the Dairy Nutrient Management Act, and the leachate pond is constructed according to NRCS standards.

Commenter **Bartlett** ***Section*** **220** ***Comment #*** 348

Comment There are multiple test within each of these categories under the cited test methods. It is Ecology's position that as long as any one of the approved test are selected that this complies with this section? In addition testing for nitrogen content seems to be out of line with the other requirements. The other testing parameters are primarily contaminate driven rather than compost quality. The nitrogen content has no numerical standard to achieve an is normally seen in product quality testing. Having low or high nitrogen is not really an issue, it depends on usage. We believe nitrogen parameter should be deleted from the rule unless a reason for inclusion can be justified in relationship to the other testing requirements.

Ecology's Response Stability Testing -The commenter is correct that there are multiple test methods for stability. Any of the test methods described in the stability index in the US Composting Council's Test Methods for the Examination of Composting and Compost (TMECC) are appropriate and may be used. Only one method is required per analysis.
Nitrogen Analysis - Although plant nutrients are usually considered market-driven parameters, Ecology views nitrogen testing as a component of the testing parameters for human health and the environment. The concentration of ammonium and nitrate in a final sample of compost provides important information about the degree of biological stability. This information can be used in conjunction with the stability test to verify that the compost has met the requirements to be considered "composted material". "Nitrogen content" as required in the proposed rule includes organic nitrogen, ammonium, and nitrate analyses. The most important of these is the ammonium and nitrate analyses.

Commenter **Bartlett** ***Section*** **360** ***Comment #*** 349

Comment Moderate risk waste that is handled in permitted Dangerous Waste Units should be exempt from further permitting. Under 360(b) i. Persons transporting MRW managed in accordance with requirements for shipments of manifested hazardous waste should be expanded to include management of MRW in Dangerous Waste permitted units.

Ecology's Response Moderate risk waste that is mixed with fully-regulated dangerous waste typically looses its exemption and becomes fully regulated.

MRW transported under a uniform hazardous waste manifest is subject to the hazardous waste transporter rules under the dangerous waste rules, not solid waste rules. The proposed rule language clarifies the authority under which MRW is transported based on the shipping documents chosen by the generator and transporter.

Commenter **Bartlett** ***Section*** **360** ***Comment #*** 350

Comment Uniform hazardous waste manifest may not be allowed by other states. If the intent is to track the waste a non-hazardous waste manifest could be used and will provide all the same information. Another option would be to require a tracking mechanism that complies with the intent of a uniform hazardous waste manifest.

Ecology's Response The uniform hazardous waste manifest is a national tracking standard used for hazardous wastes although it does vary slightly in a few states. It provides a higher level of legally-mandated and well-recognized tracking and feedback to the generator, in this case often local governments, not available with non-hazardous waste shipping papers. Ecology feels it is prudent to require the use of these uniform hazardous waste manifests for MRW destined for out-of-state management by licensed commercial transporters.

Commenter **Beery** ***Section*** ***Comment #*** 15

Comment Ecology currently has a process in progress to address the recommendations of the Washington Competitiveness Council which was appointed by the Governor to look at ways Washington could remain competitive with other states and nations. By adopting more stringent standards for demolition waste and including additional reporting requirements plus other provisions of the new rule, Ecology would be putting an increased economic burden on businesses thus making them less competitive which seems contrary to the Washington Competitiveness Council goals.

Ecology's Response Ecology does not concur with the commenter's assessment that the standards for demolition waste, as well as other provisions of the new rule, places an increased economic burden on businesses thus making them less competitive. Ecology has adopted standards that require an analysis of potential environmental impacts from the disposal of demolition wastes because of evidence that the standards in WAC 173-304-461 are not adequate in many circumstances. A landfill that disposes of demolition wastes must be designed, constructed, operated, and closed in a manner that does not pose a threat to human health or the environment. For some landfills, the design may not require any engineered components. The rule only requires that the design is adequate to protect ground water and prevent the migration of landfill gas. The stringency of standards are based solely on the risks posed by a facility.

The potential economic burden on a facility and other effected businesses can come from both the costs associated with the stringency of design and operational standards as well as the potential costs associated with remediation of contaminated sites. Ecology has attempted to minimize the economic burden on businesses by applying standards based upon the risk posed by the specific characteristics of a facility and reducing the potential economic risks posed by the release of contaminants.

Commenter **Beery** ***Section*** ***Comment #*** 17

Comment The proposal does not allow the flexibility as provided by the Federal Rules. For instance, under 40 CFR 761.62(b), certain regulated PCB wastes can be disposed of in State-permitted non- hazardous waste landfills. The proposed rule appears to prohibit the disposal of any waste regulated by 40 CFR 761 in either limited purpose or moderate risk waste landfills, despite the allowance of the Federal regulations.

Ecology's Response Section WAC 173-350-030(15) states that the rule does not apply to "PCB wastes regulated under 40 CFR Part 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions." This is meant to ensure that the rule would not be applied to PCB waste facilities, such as chemical waste landfills, in addition to the requirements of 40 CFR Part 761. This does not preclude the handling and disposal of certain types of PCB wastes under this rule so long as 40 CFR Part 761 makes the allowance.

The Federal rule prohibits disposal of PCB wastes in non-hazardous solid waste facilities under most circumstances. As the commenters point out, 40 CFR Part 761 does allow disposal of limited types of PCB wastes in non-hazardous, non-MSW solid waste landfills However, except in two cases, 40 CFR Part 761 requires that the non-hazardous, non-MSW solid waste landfills be subject to 40 CFR Part 257.5 through 257.30, Disposal Standards for the Receipt of Conditionally Exempt Small Quantity Generator (CESQG) Wastes at Non-Municipal Non-Hazardous Waste Disposal Units. The landfill provisions in this rule do not meet this requirement. The two exceptions to the 40 CFR Part 257.5 through 257.30 requirement are certain types of PCB bulk product wastes and PCB household wastes.

To modify the rule to meet 40 CFR Part 257.5 through 257.30 would require significant changes to WAC 173-350-500, Ground Water Monitoring Requirements, that would greatly reduce flexibility and increase complexity for all facilities performing ground water monitoring. The benefits from allowing the disposal of a small percentage of PCB wastes do not outweigh the difficulties for limited purpose landfills. PCB wastes, prohibited from disposal in limited purpose landfills as a result of this decision, are allowed to be disposed of in landfills permitted in accordance with Chapter 173-351 WAC, Criteria for Municipal Solid Waste Landfills, as the ground water monitoring sections of that rule meet the requirements of 40 CFR Part 257.5 through 257.30.

Commenters suggested that PCB bulk product waste be added to the definition of solid waste or the rule specifically state that appropriate PCB bulk product wastes are allowed to be disposed of in limited purpose landfills to avoid confusion. Ecology believes that the proposed rule should be modified to include applicability to PCB household wastes and the PCB bulk product wastes identified in 40 CFR Part 761.62(b)(1). Section 020(15) and 400(4) have been so modified from the proposed rule.

Commenter **Beery** ***Section*** **400** ***Comment #*** 16

Comment The proposal would eliminate flexibility allowed under the current rule by eliminating standardized provisions in favor of case-by- case approvals. For example, the current rule at WAC 173-304- 460(3)(c) includes provisions for landfill liners in arid climates. The arid landfill design is not included in the proposed rule, although the concept could apparently be used as an alternative design. This approach places a much higher burden on the landfill owner/operator and eliminates the straightforward flexibility present in the existing rule.

Ecology's Response Two commenters (Beery, Hebdon) stated that by adopting a performance standard based design requirement, instead of multi-tiered standardized provisions, the rule provides a lower level of flexibility for limited purpose landfill design than Chapter WAC 173-304. One commenter (McNeill) supported the flexibility allowed in Subsection (3) for liner design features. This commenter predicted that there will be a tendency by owners or operators to default to the presumptive liner design.

The limited purpose landfill provisions were developed around two primary objectives. These were to simplify the provisions in Chapter 173-304 WAC regarding landfill standards and to provide an appropriate relationship between the risk posed by any landfill and the standards that would apply.

Chapter 173-304 WAC provides four distinct landfill types (limited purpose, inert and demolition, wood waste, and problem waste) with eleven different design standards (limited purpose - standard, alternative, equivalent, arid, small, and other; inert and demolition; wood waste - ≤10,000 cubic yards, and two for >10,000 cubic yards; and problem waste – reserved.) Ecology has determined that the minimum standards in the current rule for arid design, demolition waste, and wood waste landfills have not been sufficiently protective of the environment and did not consider bringing these forward into this rule.

In order to simplify the landfill standards, Chapter 173-350 WAC provides two landfill types, limited purpose and inert waste. Limited purpose landfills were given a design criteria based upon a performance standard because of the wide variety of waste types and circumstances. This approach was actually chosen to provide greater flexibility than that provided by either a single or series of standard designs. Ecology did not want to limit a landfill owner or operator to specific types of materials or design techniques as materials, such as low permeability soils, are not always readily available and because materials technology continue to evolve.

In order to lessen the potential design burden from demonstrating liner system performance, a "presumptive liner design" is provided. This landfill liner design has been used extensively and Ecology believes it would be protective of the environment for all probable circumstances. The limited purpose landfill design standards were created to allow designers maximum flexibility when developing designs and choosing materials. Any design is allowed so long as it meets the performance standard provided in the rule. Inert waste landfills were given a simple standard design because of the limited and well understood risks associated with the waste type.

Commenter **Bigham** ***Section*** ***Comment #*** 290

Comment On behalf of TPS Technologies Inc. (TPST), thank you for the opportunity to provide comments to the proposed changes to Chapter 173-350 WAC (Solid Waste Handling Standards). These proposed changes will improve the manner in which solid waste is disposed and will have positive benefits to the quality of Washington's environment.

TPST believes that several additional changes would add to the overall effectiveness of the regulations, particularly as they relate to petroleum contaminated soil (PCS). TPST provides treatment and recycling services for PCS throughout the Pacific Northwest and the Nation and has experience in regulatory programs designed to prevent misuse of PCS and cross media contamination.

TPST was disappointed that a specific Sub section for PCS facilities that had appeared in earlier drafts was removed. The inclusion of regulations restricting uncontrolled aeration of VOC-contaminated soil (VOC being an ground level ozone precursor) such as what occurs when used as daily cover at MSW landfills would have been welcomed by clean air advocates. We would be interested in knowing Ecology's rationale for removing the PCS section and whether Ecology intends to re visit the issue at a later date.

Without a specific contaminated soil Sub section to serve as an over riding regulatory authority, several Sections remaining in the proposal need to be modified. PCS presents a unique problem in solid waste management. It is generated by excavation because it presents an environmental or public health threat in it's original location. It was either too contaminated to remain since it presented a risk to groundwater, was too volatile to remain and was creating emission problems, or was a toxic threat due to the potential for direct human contact. In any of these scenarios the current regulations along with the proposed changes fail to anticipate some of the likely ways PCs can negatively impact Washington's environment. We've identified several of them below. (See Bigham, comment #"s 291 - 296).

Ecology's Response Several commenter's suggested that a section specific to contaminated soils treatment facilities, such as was found in previous drafts of the rule, is warranted and would like to have the section reinstated.

A stand-alone section applicable to all contaminated soil treatment facilities found in early drafts of the proposed rule was removed for several reasons. The primary reason was that most of the requirements found in the contaminated soils treatment facilities were identical to those found in the section applicable to piles used for storage or treatment. The additional requirements were operating standards addressing recordkeeping to ensure that soils were sufficiently characterized prior to being received and after treatment.

It was expected that these requirements would not need to be specifically identified and that they would be incorporated in the plan of operation for any facility that accepted contaminated soils for storage or treatment. For example, owners or operators of piles used for treatment must provide a description of the types of solid waste to be handled at the facility [WAC 173-350-320(4)(e)(i)] and ensure that nonpermitted waste is not accepted at the facility [WAC 173-350-320(4)(a)(iii)]. It was anticipated that the potential range of contaminants and concentrations in soils would need to be specified during permitting in order to evaluate the design and operation of a facility to ensure conformance with performance standards and that full characterization of soils received would be required to ensure that nonpermitted waste are not accepted. Furthermore, all solid waste generated at any site must be

managed in accordance with all applicable rules. Therefore, Ecology presumed that any treated soil would be characterized to ensure that any soils that were not clean would be handled appropriately.

However, many commenter's have requested that the section applicable to storage and treatment of contaminated soils be reinstated into the rule. Ecology does not believe that this step is necessary but understands that the requirements that were originally proposed in that section can be added back into the rule to clarify the expectations on soil characterization and facility design and operation. Section WAC 173-350-320, Piles used for storage and treatment, has been revised to incorporate these requirements. The revisions include soil characterization, recordkeeping, design and operation standards that would be specifically applicable to facilities that treat or store contaminated soil.

Commenter **Bigham** ***Section*** **200** ***Comment #*** 291

Comment The Beneficial Use exemption must be re written as to prevent the potential mis-use of PCS as a clean soil substitute. A specific prohibition is needed in WAC 173 350 200 reading;

"Solid Waste considered for Beneficial Use shall not be capable of producing leachate nor be able to come into direct contact with humans. "

In the absence of a modification along these lines we would like to know Ecology's position on whether PCS could gain a "Beneficial Use" exemption. Representatives of Ecology informed us that this concern is unwarranted and that PCS was not likely to be considered for such an exemption. Is this Ecology policy as well?

Ecology's Response The concerns of the commenter are addressed in proposed WAC 173-350-200 (2), General Terms and Conditions. These require that the waste not be dangerous, not be diluted as a substitute for treatment or disposal, and not be used in a manner that threatens human health or the environment. PCS would not meet the regulatory definition of "clean soils" and therefore could not be used as substitute fill for clean soils.

Commenter **Bigham** ***Section*** **310** ***Comment #*** 293

Comment We believe it disingenuous for Ecology to require contaminated soil to be excavated from one location due to it's threat to groundwater, only to allow it to be stored at some other location which is without groundwater monitoring. The exemption at WAC 170 350 310 (5) must not be allowed to apply to facilities that store PCS specifically, and for all leachable wastes in general.

Ecology's Response Ecology has intended to provide design and operating requirements in the rule for all facility types so as to prevent threats to ground water quality. The potential threat to ground water will be addressed by requiring that the storage and treatment of contaminated soils be performed on sealed surfaces.

Changes: Section 320(3)(b) will be amended to ensure that piles of contaminated soils will be stored and treated on sealed surfaces. Ground water requirements will not change.

Commenter **Bigham** ***Section*** **310** ***Comment #*** 295

Comment As with Transfer Stations (See 3) above) we believe that Ecology must require that facilities receiving contaminated soil excavated from elsewhere due to it's threat to groundwater, should store the PCS only at locations that have groundwater monitoring. The exemption at WAC 170 350 310 (5) must not be allowed to apply to facilities that store PCS specifically, and for all leachable wastes in general.

Ecology's Response Ecology has intended to provide design and operating requirements in the rule for all facility types so as to prevent threats to ground water quality. The potential threat to ground water will be addressed by requiring that the storage and treatment of contaminated soils be performed on sealed surfaces.

Commenter **Bigham** ***Section*** **310** ***Comment #*** 292

Comment PCS contaminated soil can produce significant quantities of VOC and toxic emissions. Solid Waste regulations and permits generally do not address these issues. We would suggest expanding WAC 170 350 310 (3) (a) (vii) to read;

Provide pollution control measures to protect air quality. This shall include demonstration of compliance and permitting from the appropriate Air Agency.

Ecology's Response Air quality is addressed in regulations specific to that medium and implemented by the appropriate air pollution control authority. Ecology does not believe there is a need to provide additional requirements in this rule. All solid waste handling facilities must comply with Chapter 70.94 RCW, Washington Clean Air Act, and all other applicable local, state, and federal laws and regulations.

Commenter **Bigham** ***Section*** **320** ***Comment #*** 294

Comment Under WAC 173 350 320 (Piles used for Storage or Treatment) there is language for a sealed (though not an impermeable) base to protect groundwater. Because of PCS's demonstrated potential for impacting groundwater, we suggest the following change to (3) (b) (i);

Place waste on a sealed surface, such as concrete or asphaltic concrete, with a permeability coefficient of 10 ~ to

prevent soil and groundwater contamination.

Ecology's Response Ecology believes that the performance standard for sealed surfaces adequately addresses threats to ground water that may be posed by a waste. Sealed surfaces must be designed to prevent soils and ground water contamination.

Commenter **Bigham** ***Section*** **990** ***Comment #*** 296

Comment Lastly the criteria for "inert waste" (WAC 173 350 990) should have a new (c) added that reads as follows;

Inert waste shall not exhibit the presence of leachable contaminants.

Ecology's Response The criteria regarding leachate from inert waste is provided in subparagraph 990(3)(b)(i).

Commenter **Brucklier** ***Section*** ***Comment #*** 179

Comment Thank you for accepting an additional comment on the proposed rule making on Solid Waste Handling Standards, chapter 173-350 WAC. It is our hope that the relationship between the Department of Ecology, the jurisdictional health department, and the applicant be clearly defined, and all decisions made are based on the same ideals and philosophy proclaimed as the vision for the future of solid waste handling. We are willing and eager to pursue all avenues to discover beneficial uses for our by-products. The knowledge that the lines of communication between the parties of interest are open and unrestricted would assure us that our time, energy, and expense would be directed appropriately. The key for future development and approval of beneficial uses is for open dialogue, co-operation, and clearly defined guidelines for industrial ecology. We ask that decisions made by the jurisdictional health department adhere to the same principles set forth by the Department of Ecology and embraced by industries such as Vaagen Bros. Lumber. Thank you very much for your time and consideration.

Ecology's Response Comment noted.

Commenter **Brucklier** ***Section*** ***Comment #*** 104

Comment Thank you very much for the opportunity to comment on the proposed rule changes for solid waste handling practices. As Vaagen Bros. Lumber prides itself on its commitment and utmost concern for the protection of human health and the environment, involvement in the movement to develop a more nature-friendly industrial ethic is welcomed. An industrial ecology based on sustainability can, and will be, accomplished through co-operation and communication between industry, government, and local communities.
We appreciate the department providing permit exemption opportunities that encourage the use, reuse, and recycling of solid waste. The planning requires a mind set that encompasses the entire universe of solid waste, one that realizes what is considered waste today has the potential to be valuable resource tomorrow. The possibility for materials to be of value rather than considered a problem needs to be thoroughly researched and evaluated. This shift from waste to product carries major regulatory and economic ramifications, which should be carefully considered and addressed. Ample time and resources are needed to conduct research on new processing methods and technology for organic materials, along with an organic waste characterization study. For a saw mill company such as Vaagen Bros. that produces large volumes of wood by-products, this would be of tremendous help in developing strategies and implement changes that not only minimize environmental impacts but that enhance product efficiency and profitability. It is imperative that agencies not react to a perception of threat to drinking water or air quality regardless of the actual level of threat. Materials stockpiled for future beneficial use, for instance, should be given consideration based on factors unique to the particular character, circumstances and environment of that pile, not a generic judgment. In order for beneficial use to contribute to a more sustainable system, it must be economically feasible. Application of a rule by the regulating agency needs to be sensitive to the entire spectrum of natural systems thinking. Industry must fully understand and accept responsibility for the handling of materials. In this way, an approach waste management that is sustainable environmentally and economically can be achieved.

Ecology's Response Comment noted.

Commenter **Chesson** ***Section*** **220** ***Comment #*** 280

Comment -220 Composting Facilities
(b)(i) on-site production of substrate use to grow mushrooms

If it is the intent of this exemption to require a permit for any substrate producer who makes product for off-site use, a revision to the above language would close a potential loop hole for substrate producers who are looking to get around obtaining a permit. In order to make it clear that only those growers who make and use all the substrate produced on-site are exempt from permitting, I propose that (b)(i) read as follows:

(b)(i) production of substrate used solely on-site to grow mushrooms;

This will prevent the potential for substrate producers who are currently not growing on-site but selling their product off-site from adding an ancillary growing operation to be considered for an exemption, and still be shipping substrate to growers off-site.

(10) define very stable or stable in definition section or refer to Code where these terms are defined.

Ecology's Response Ecology concurs with the recommendation for clarification of the permit exemption for mushroom substrate production and has incorporated the suggested revision.

Regarding the commenter's request for definitions of "stable" and "very stable" or a reference where they are defined, both terms are defined in the Test Methods for the Examination of Composting and Compost (TMECC), published by the US Composting Council. This is a peer-reviewed document detailing laboratory methods for compost testing. Ecology has clarified the requirement to test stability by referencing the TMECC document.

Commenter **Chesson** ***Section*** **330** ***Comment #*** 281

Comment -330 (5) (b) "…leak detection…are not required to meet the groundwater monitoring requirements…"

Ecology's Response The commenter suggested the applicability of ground water monitoring for surface impoundments equipped with a leak detection layer be reworded. Ecology believes that the proposed language better conveyed the intent.

Commenter **Chesson** ***Section*** **500** ***Comment #*** 283

Comment - 500 (4) (g) (ii) define MSWLF

Ecology's Response The comment asks for a definition of "MSWLF". While this is commonly understood to represent "municipal solid waste landfill", MSWLF is not used in the passage cited in the comment, nor in the revised regulation at all. Instead the working concept throughout the revised regulation is "solid waste handling unit". This is defined in WAC 173-350-100.

Commenter **Chesson** ***Section*** **500** ***Comment #*** 282

Comment -500 (4) (a) SAP should include re-sampling to reduce or eliminate false positives

Ecology's Response WAC 173-350-500(5) specifically addresses the data analysis requirements including statistical evaluations. Using such evaluation, a statistically significant increase over background requires immediate resampling (WAC 173-350-500(5)(a)(i)(B)). One of the objectives is to reduce or eliminate false positives.

Commenter **Chesson** ***Section*** **500** ***Comment #*** 284

Comment - 500 (4) (k), (5)(b)(i)(C), (C)(ii)(A) and (B) if ground water beneath the landfill is being used as a drinking water source by residents in the area, shouldn't MCL's be those specified in WAC 246-290?

Ecology's Response Chapter 173-200 WAC, "Water Quality Standards for Ground Waters of the State of Washington", is the identified ground water quality standard for solid waste facilities. Therein, WAC 173-200-040 sets protection criteria for state ground waters. Drinking water is identified as the first protection criterion and the highest beneficial use. For many parameters, the ground water quality standards of Chapter 173-200 WAC are, in fact, more stringent than the drinking water maximum contaminant levels of Chapter 246-290 WAC to further protect the resource.

Commenter **Chesson** ***Section*** **710** ***Comment #*** 285

Comment -710 (d) (i) Will Ecology will be responsible for assuring a proposed site or facility conforms to the approved local comprehensive solid waste plan?

Ecology's Response Ecology and the jurisdictional health department are both statutorily responsible for ensuring conformance with the approved comprehensive solid waste management plan as part of the permit application review. (See RCW 70.95.180 and RCW 70.95.185)

Commenter **Clarke** ***Section*** **100** ***Comment #*** 99

Comment Facilities meeting the definition for "Material Recovery Facility" will he exempt from solid waste permitting requirements. The definition given for MFS, however, is vague. MRF are defined as "any facility that accepts source separated solid waste for the purpose of recycling and disposes of an incidental and accidental residual not to exceed 5% of the total waste received, by weight per year, or 10% by weight per load". Would a facility accepting source separated putrescible waste such as yard trimmings, food scraps or commingled yard trimmings/food scraps qualify as a MRF? The definition should clarify if "source separated solid waste" only applies to nonputrescible material or if it includes some forms of putrescible materials that are source separated.
Under the composting section of the new rule, operations exempt from solid waste permitting are processing only small amounts of incoming source separated yard debris or pre-consumer meat free food scraps in an environmentally sound manner. If the (definition of a MRF is to include source separated putrescible solid waste then this argues for the inclusion of a limit on the types and amounts of incoming material in order for this type of facility to be exempt from solid waste permitting requirements.

Ecology's Response Ecology concurs that the definition of "material recovery facility" (MRF) is vague and has revised it for clarity. We have also determined that an alternate approach to permit exemptions for MRF's will be much clearer to users of the rule. The essence of the alternate approach is to regulate all material recovery facilities (MRF) as intermediate solid waste handling facilities (section -310), with categorical exemptions from permitting available only to those facilities that accept solely "recyclable material", meet the disposal threshold criteria, and other standard terms and conditions. Section -210 would then be applied only to recycling facilities that did not classify as a MRF per the definitions. These "recycling" facilities would be those operations that were truly recycling, actually processing the waste into a new product or usable material, rather than just collecting and processing waste materials for transport.

Commenter **Clarke** ***Section*** **100** ***Comment #*** 100

Comment Construction, Demolition and Land Clearing Debris — Lack of Definition Under 173-350-100
There is no definition in the Rule for the CDL category of solid waste.

Ecology's Response The term "construction, demolition, and land clearing debris" was only used in the definition of "limited purpose landfill" as an example of the kinds of wastes that are typically accepted. Portions of the term are used again under the definition of wood waste. The term is common and is not used differently in the rule. Therefore, a definition for "construction, demolition, and land clearing debris" is not justified. However, the very limited proposed definition of "construction" is problematic when used in other definitions as it is used to determine whether a facility or solid waste handling unit is a new facility or an existing facility for effective dates. The definitions of "construction" (changed to "facility construction"), "existing facility", "new facility", and "new solid waste handling unit" have been modified to differentiate between typical construction activities and those that determine if a solid waste facility or unit is existing or new.

Commenter **Clarke** ***Section*** **210** ***Comment #*** 101

Comment SPU has long sought to have a penalty provision in place for recycling facilities which do not report quantities of materials processed and recycled for the State's annual recycling survey. The proposed Rule includes reporting requirements to the Jurisdictional Health Department as a provision for both facilities which need to obtain a solid waste permit (as transfer stations and large-scale composting facilities) and those which are exempt (as material recovery facilities) . However, there is still no penalty mechanism in place for facilities that fail to report. DOE should consider tying permit renewal or review of exemption status as a mechanism for getting facilities to report to the annual recycling survey.

Ecology's Response Ecology agrees with the commenter that non-reporting by recyclers has been a problem. However, Ecology cannot impose penalties for violations of the regulations that are not authorized by statute. Currently, RCW 70.95.315 authorizes Ecology to impose civil penalties up to $1000 per day, per violation for facilities operating under a permit exemption. Facilities required to obtain permits are not subject to this civil penalty. In the case of a permitted facility that fails to report, the jurisdictional health department could revoke the permit.

Commenter **Clarke** ***Section*** **220** ***Comment #*** 102

Comment On page 33 it is mentioned that "composted materials meeting the limits for metals in Table A and the parameters of Table B of this section, and having a stability rating of very stable or stable, shall no longer he considered a solid waste and shall no longer be subject to this chapter". Table B on page 30 does not list "stability" as one of the parameters to be tested for in a compost product. Table B should include stability as a testing parameter with the accepted rating as "stable or very stable". A footnote could clarify the accepted methodologies to be used for stability testing.
It should also be clarified that composted materials not meeting the limits for metals in Table A and the parameters of Table B (including the stability testing requirement) may be able to qualify for beneficial use under the Land Application section of the Rule instead of having to be disposed in a landfill.

Ecology's Response The commenter correctly notes that biological stability is not listed in Table B. The stability testing requirement is listed in the text of WAC 173-350-220(4)(a)(viii)(D).

The commenter suggests clarifying that land application under section -230 is a possible end use of composted material not meeting the criteria in -220(4)(a)(viii). The proposed rule states that such material is still considered solid waste and is still subject to management under Chapter 70.95 RCW. This would include application to the land under WAC 173-350-230, Land Application, or through a beneficial use exemption issued under WAC 173-350-200.

Commenter **Clarke** ***Section*** **230** ***Comment #*** 103

Comment There are no pollutant concentration thresholds given for the list of metals and pathogens that solid waste is to be tested for before being land applied on a case by case basis. Local Health Departments should be given guidance in this section on testing methodologies, interpretation of testing results (as for volatile solids) and pollutant concentration thresholds. The threshold set for mercury in a land applied material, for example, should coincide with DOE's own short and long-term goals for reducing this PBT (persistent bioaccumlative toxin) in the environment.

Ecology's Response Commenter notes that there are no pollutant thresholds given for metals or pathogens. It is not practical to place in rule a single set of criteria due to the likely variability of wastes potentially applied to the land. All aspects of a land application operation must be addressed during the permitting process. Application practices may not negatively impact surface and groundwater, air or land, per Section 230 (4)(a)(i)(A). A number of standards currently exist in Washington State that may be appropriate as references, such as biosolids, compost, fertilizers, etc. but no one standard will likely be appropriate in all circumstances.

Commenter **Coleman** ***Section*** ***Comment #*** 122

Comment We have reviewed the Department's proposed standards for design and operation of solid waste handling facilities and offer comments below. Several of our comments were provided previously following a review of the draft version (see referenced letter). They are repeated here because we feel they merit consideration in the final regulations.

Proposed WAC 173 350 is intended to be a phased in replacement for WAC 173 304. The rulemaking is incomplete inasmuch as it does not include complementary changes to other regulations that reference WAC 173 304 as the state's solid waste management standards.

We are specifically interested in what the Department intends with respect to operator certification requirements in WAC 173 300. The level of certification should be commensurate with the risks to the environment and the complexity of facility design and operation. Unfortunately, the Department's current program does not make those distinctions. While state law (RCW 70.95D.030) provides for a classification based certification program, WAC 173 300 requires all landfill operators to be certified to standards applicable to municipal solid waste landfills (MSWLFs). That the Department's expectations are unclear is suggested by the lack of any reference to operator certification in the proposed rule, whereas the MSWLF rules specifically include certification (WAC 173 351 220(4)(b)). It is our opinion that, with the narrowed definition of inert wastes, operation of an inert waste landfill should not require operator certification. In any event, the current rulemaking should include appropriate changes to the certification requirements.

Ecology's Response Ecology recognizes that other rules will be somewhat affected by adoption of the proposed rule. However, we are not changing any other rules at this time due to the phased approach for implementation of the new rule at existing facilities. All of the necessary changes to other rules will be accomplished at a later date. Ecology will consider the need for continued operator certification under chapter 173-300 WAC for inert waste landfills through a separate rule process.

Commenter **Coleman** ***Section*** **040** ***Comment #*** 124

Comment The general performance standard in proposed §040(5) imposes "all other applicable local, state, and federal laws and regulations" on solid waste facility owners/operators. This "umbrella" regulation is fairly common in Department rules (see, for example, WAC 173 303 395(2)), but the application here is more curious. A reference to §040(5) has been inserted in the proposed regulations wherever a facility has been exempted from location standards, design standards, groundwater monitoring, or financial assurance requirements. The cross reference usually appears in the form of: "There are no specific [_____] requirements for [____] facilities subject to this chapter; however, [____] facilities must meet the requirements provided under WAC 173 350 040(5)." Contrary to what is implied, §040(5) does not provide requirements. Perhaps the Department believes facility owners will assert unwarranted liberties without the twenty five or more poorly crafted references to all other laws and regulations. We believe the regulation would be enhanced if each exemption was allowed to stand on its own.

Ecology's Response Ecology believes that it is necessary to maintain the references that are scattered throughout the rule to -040 (5). Although Ecology may determine that financial assurance or ground water monitoring is unnecessary for a particular facility type, there may be other rules, including local regulations that would require these types of activities occur. The purpose of the reference is to convey that Ecology's exemption from a particular requirement does not relieve the facility from complying with other rules.

Commenter **Coleman** ***Section*** **100** ***Comment #*** 125

Comment The proposed definition of "contaminate" differs from the definitions in WAC 173 304 100 and WAC 173 351 100. The definition proposed for WAC 173 350 100 strikes us as more subjective than the existing definitions which incorporate references to numerical standards. For consistency with its other solid waste regulations, the Department should use the exiting definition or at least explain the reason for the departure.

Ecology's Response Consistency and continuity with other solid waste and other rules administered by Ecology was one of the guiding principles followed while developing this rule. The definition does differ from that in Chapter 173-351 WAC, Criteria for Municipal Solid Waste Landfills. However, the definitions of "contaminant" and "contaminate" in the rule were developed to be more consistent with Chapter 173-200 WAC, Water Quality Standards for Ground Waters of the State of Washington. The definition is meant to implement the antidegradation policy in WAC 173-200-030 in regards to solid waste handling facilities. The antidegradation policy does not allow ground water to be contaminated up to a specified numerical limit. It requires that existing water quality be protected. This prevents the use of numerical standards to define "contaminate". The definition was also created to recognize that mishandling solid wastes can impact environmental media, other than ground water, such as soil, sediment, surface waters, and air.

One of the primary reasons for the language in the definition was the decision to provide design and operation standards that correlate with the degree of risk posed by a facility, instead of prescriptive requirements. The design standards for limited purpose landfills, which must be designed in a manner that will not contaminate ground water [WAC 173-351-400(3)(b)(i)(A)], is one example of this approach.

The use of the term "contaminate" in this rule is intended to be preventative in nature. It is meant to ensure that solid waste handling facilities will be designed and operated so they do not contaminate the environment. This is different than Chapter 173-351 WAC, which generally uses the term in relation to situations where ground water have exceeded the ground water quality criteria.

Commenter **Coleman** ***Section*** **100** ***Comment #*** 126

Comment The Department needs to incorporate a definition of "decontaminate" to minimize future misunderstandings regarding facility decommissioning. The simple phrase "[the site shall be decontaminated" is included in several places as a standard closure requirement. A "contaminant" is any non natural occurrence of a chemical, physical, biological, or radiological substance (proposed definition in § 100). Facility owners/operators might believe they have to remove all

contaminants at closure, when, in fact, they must remove contaminants to the extent that the site is not contaminated (which implies application of the numerical standards or the "threat to human health and the environment" standard).

Ecology's Response Ecology agrees with the commenter that the broad use of the term decontaminate can be confusing. Ecology does not agree with the proposed solution. Ecology's primary goal for the facilities that are required to "decontaminate" at closure was to ensure that all solid waste are removed to an appropriate facility. The major exception to this occurs in the Moderate Risk Waste Handling section. The requirement for decontamination at closure stems from the likelihood that some of the chemical waste that have been handled over time will have been spilled or otherwise been released within the facility structures and containment areas. It is our expectation that these areas will need to be decontaminated to some extent. However, we also believe that the jurisdictional health department will be instrumental in determining the need for decontamination. Ecology has determined that the best way to resolve this issue is to delete the requirement for decontamination at all facilities except MRW facilities.

Commenter **Coleman** ***Section*** **220** ***Comment #*** 123

Comment In comments on the draft version, we noted that the regulation made no mention of problem wastes (defined in WAC 173 304 100) and that, more specifically, management of petroleum contaminated soil (PCS) waste seemed to be outside the scope of the solid waste handling standards. An exclusion inserted in the applicability statement for the composting standard (proposed §220(I)(a)(ii)), now infers that land treatment of PCS is regulated under the solid waste pile standard (proposed §320). It appears that if such treatment took longer than three months, the activity would require a permit. Whereas onsite treatment and reuse of this waste is to be encouraged, and since these cleanups will often be one time events related to a remedial action, we do not believe full permitting should be required.

Ecology's Response The commenter proposed that solid waste permits should not be required for contaminated soil handling because it could discourage on-site treatment. Contaminated soils are a waste and, therefore, a solid waste as defined in statute. The Minimum Functional Standards for Solid Waste Handling, Chapter 173-304 WAC, recognizes this under the term "problem wastes" but did not provide standards applicable to problem wastes. This rule, the Solid Waste Handling Standards, is intended to apply to contaminated soils as it does to any other solid waste. The section applicable to piles used for storage or treatment of solid waste has been modified to clarify its applicability to contaminated soils.

Commenter **Coleman** ***Section*** **310** ***Comment #*** 127

Comment The Department's proposal specifies frequencies for inspections and recordkeeping in most of the operating standards. This appears to have been done somewhat inconsistently (compare proposed §310(4)(c) and §320(4)(c)). We recommend these types of operating details be omitted from the regulation. They can be incorporated in the plan of operations that, presumably, would be reviewed and finalized in the permit development process. It would include specifications (for such things as recordkeeping frequency) that are appropriate to the facility being permitted.

Ecology's Response Ecology does not concur with the commenter's suggestion that inspection and recordkeeping requirements not be specified in the rule and that requirements could be determined in the permit process. The specific inspection requirements incorporated into the rule include basic requirements that would be appropriate for most facilities, such as to prevent deterioration or the release of waste, and requirements appropriate for specific facilities, such as waste pile sealed surface inspections. Maintaining consistent requirements across various methods of solid waste handling has been incorporated as much as possible. Providing requirements appropriate to the level of risk posed by a solid waste handling
method was deemed to be more important than consistency. The details of implementing these requirements, such as the inspection procedures used to assure the integrity of a waste pile sealed surface, are determined in the permit process.

Commenter **Coleman** ***Section*** **320** ***Comment #*** 351

Comment The Department's proposal specifies frequencies for inspections and recordkeeping in most of the operating standards. This appears to have been done somewhat inconsistently (compare proposed §310(4)(c) and §320(4)(c)). We recommend these types of operating details be omitted frown the regulation. They can be incorporated in the plan of operations that, presumably, would be reviewed and finalized in the permit development process. It would include specifications (for such things as recordkeeping frequency) that are appropriate to the facility being permitted.

Ecology's Response Ecology does not concur with the commenter's suggestion that inspection and recordkeeping requirements not be specified in the rule and that requirements could be determined in the permit process. The specific inspection requirements incorporated into the rule include basic requirements that would be appropriate for most facilities, such as to prevent deterioration or the release of waste, and requirements appropriate for specific facilities, such as waste pile sealed surface inspections. Maintaining consistent requirements across various methods of solid waste handling has been incorporated as much as possible. Providing requirements appropriate to the level of risk posed by a solid waste handling method was deemed to be more important than consistency. The details of implementing these requirements, such as the inspection procedures used to assure the integrity of a waste pile sealed surface, are determined in the permit process.

Commenter **Coleman** ***Section*** **350** ***Comment #*** 128

Comment Proposed §350(2)(b) requires that "all waste tires that are being transported shall be delivered to a facility that meets WAC 173 350 040(5)." The effect is to require the tire transporter to know the compliance status of the receiving facility with

respect to each of the numerous local, state, and federal laws and regulations that may be applicable a business engaged in solid waste management. This is an unreasonable expectation. It should be sufficient to verify that the facility conforms to any applicable permit and license requirements (§§350(10) and 350(11)).

Ecology's Response Ecology concurs with the commenter and had revised this paragraph to require that tires only be transported to a facility that has obtained the necessary permits and licenses for tire storage, processing, or disposal.

Commenter **Coleman** ***Section*** **400** ***Comment #*** 129

Comment The proposed rule includes some very prescriptive requirements for limited purpose landfills (§400). The limited purpose landfill definition (proposed § 100) says it is a landfill "that receives solid wastes limited by type or source." The same definition goes on to list some types of wastes intended for these landfills: segregated industrial solid waste, construction and demolition debris, land clearing debris, wood waste, ash (other than special incinerator ash), and dredge spoils. One might reasonably conclude that these types of facilities will pose less environmental risk than municipal solid waste landfills, and yet, it appears the Department has drafted standards that are as demanding as those in WAC 173 351. Proposed §400(3)(a) implies that the jurisdictional health department will consider the nature of the waste material and the site characteristics when reviewing the design. However, the proposed regulation seems to impose such features as liners, impermeable caps, gas removal systems, and groundwater monitoring without regard to these factors. Since limited purpose landfills are intended to receive specific types of wastes, it would make more sense to leave most of the design and operational details to be determined in the permit process. The specification of a minimum set of groundwater parameters to be monitored (through §400(5) and §500(4)(h)) is an example of the standards being overly prescriptive.

Ecology's Response The limited purpose landfill provisions were developed to provide as much flexibility as possible, while protecting human health and the environment. The design standards were developed around a performance standard concept that attempts to avoid prescriptive requirements as much as possible. The operating standards are divided into two paragraphs, 400(4)(a) and (b). Paragraph (a) does provide prescriptive standards, such as controlling access, controlling dust, and prohibiting non-permitted open burning, that Ecology believes should be applicable to all limited purpose landfills. The operating standards in paragraph (b) are meant to be flexible so that they will not be required when not needed. These include waste inspections, compaction, daily cover, and explosive gas monitoring that are not expected to be required in many cases.

Ecology reviewed and incorporated some components from both Chapter 173-351 WAC and Chapter 173-304 WAC because of the demonstrated success of these operational standards. However, many operating standards that apply to all landfills in the other rules are either not included, such as employee facilities or marking active areas, or made optional when not necessary.

It has been suggested during the development of this rule that the waste types disposed of in limited purpose landfills will present a lower level of risk than municipal solid waste. Ecology agrees that this will often be the case. However, the scope of applicable waste types is very broad. Waste can range from near inert to near dangerous waste and include highly putrescible wastes. Limited purpose landfills with highly contaminated leachate and high gas generation are certainly possible.

The parameters required to be analyzed for in ground water monitoring at limited purpose landfills are the minimum required to characterize the hydrology and geochemistry of a water bearing unit, and to detect potential influences from leachate. A ground water monitoring plan with less than these minimum parameters would not be likely to detect impacts from a limited purpose landfill.

The rule attempts to provide a flexible approach that only requires limited purpose landfills to protect human health and the environment without prescribing specific designs. The rule allows for landfills to be designed and constructed without liner systems or specific final cover materials where appropriate. It also provides presumptive liner and cover system designs that are deemed to be protective in all conceived circumstances. As suggested by the commenter, the design performance evaluation and operational details are evaluated and determined during the permit process.

Commenter **Coleman** ***Section*** **400** ***Comment #*** 130

Comment One requirement for final closure for limited purpose landfills is that the design must account for anticipated settling "with a goal of achieving no less than two to five percent slope after settlement" (§400(3)(e)(i)(E)). This is confusing. We do not know if the Department is specifying an upper slope limit (five percent) or if it is saying that the final cover configuration must be sloped in the range of two to five percent. If it is consistent with the Department's intent, we recommend that this section be reworded to specify a slope no greater than five percent.

Ecology's Response The goal of achieving no less than two to five percent slope on a closure cover system is intended to ensure that precipitation will run off the cover and reduce infiltration. The requirement is a minimum slope goal, not a specific slope that covers must achieve or a maximum slope.

Commenter **Coleman** ***Section*** **410** ***Comment #*** 131

Comment Proposed §410(8)(c) requires applicants for inert waste landfill permits to document notification to adjoining landowners that the facility may affect their ability to construct water supply wells. This suggests another area for the Department to consider amending related rules. The water well construction standards establish a minimum one thousand foot setback from all solid waste landfills (WAC 173 160 171(3)(b)). We recommend that the Department revisit this requirement given

that inert waste landfills and some limited purpose landfills will not pose risks for groundwater contamination.

Ecology's Response Ecology understands that the setback requirement does not recognize the various levels of risks posed by different types of landfills and intends to evaluate this when chapter 173-160 is open for revisions.

Commenter **Coleman** ***Section*** **600** ***Comment #*** 132

Comment Definitions for public and private facilities are provided in §600(2). These duplicate the definitions in §100. Furthermore, it appears that the only place the term "private facility" is used is in the two definitions. The categorization of facility types should consider publicly owned facilities that receive only wastes generated onsite. Given that substantial land is in the public domain and that land management activities could require the development of a limited purpose landfill (for wood ash and other land clearing debris), the proposed breakdown into two types of owners may be inadequate.

Ecology's Response Chapter 70.95.215 RCW requires each applicant for a solid waste facility permit to have an appropriate level of financial assurance. The definition of private, in this proposed rule, is to differentiate the financial assurance options available between publicly and privately utilized facilities.

Commenter **Coleman** ***Section*** **710 & 715** ***Comment #*** 133

Comment Proposed §§710 and 715 cover the same subject area (permit applications and processing) and offer opportunities for consolidation. We note that, once a permit application is received, the facility is assessed by both the local health department (§710(1)(c)(ii)) and the Department of Ecology (§710(1)(d)(i)) for conformance to "all applicable laws and regulations." That sounds like a broad scope, duplicative review. In fact, the departments will probably look at the site and proposed facility from the perspective of zoning conformance and solid waste handling standards. The proposed language includes those aspects and would be enhanced if the unspecified requirements were deleted.

Ecology's Response The permit application review criteria are specified in RCW 70.95.180 and RCW 70.95.185. Although it is a very broad scope review it is statutorily required.

Commenter **Coleman** ***Section*** **715** ***Comment #*** 352

Comment We also note that §§710(8)(d)(v) and 715(1)(e) require the applicant to demonstrate compliance with WAC 197 1 1, SEPA rules. This is inappropriate since SEPA compliance is the responsibility of the lead agency. The agencies themselves, and particularly, the Department of Ecology, are best positioned to assess compliance with SEPA. On this subject, we request that the Department consider appropriate amendments to WAC 197-11- 855 to exempt some of these solid waste permit activities from the SEPA process (as has been done for wastewater permits).

Ecology's Response The jurisdictional health department (JHD) and Ecology are not always the lead agency for State Environmental Policy Act (SEPA) compliance at solid waste handling facilities. This may be particularly true for a facility that is requesting the JHD consider permit deferral to another environmental permit. Most often it is the agency with jurisdiction for land use, such as the county planning department, but may be the agency that issued the "other environmental permit". Demonstrating SEPA compliance is the responsibility of the applicant, and should be as simple as providing copies of SEPA documents such as the Environmental Checklist, Determination of Non-Significance, or Environmental Impact Statement that was prepared as part of a previous permit action.

Commenter **Coleman** ***Section*** **999** ***Comment #*** 353

Comment The criteria for inert waste should include an allowance for incidental wood embedded in concrete (§990(2)(a)). As proposed, a wood fence post foundation would not be allowed in an inert waste landfill.

Ecology's Response Several materials were suggested to be included under subsection 990(2), listed inert wastes. These included certain metals, such as stainless and carbon steel, plastics, and railroad ballast. Ecology did not include metals as inert waste because many ferrous and non-ferrous metals corrode, produce leachate that can contaminate soil or ground water, and may present a threat from toxicity. However, aluminum and stainless steel meet Ecology's criteria for inert waste and have been added to subsection 990(2).

Plastics are not inert waste because they are often combustible (e.g. polystyrene) and may produce highly toxic fumes when exposed to heat or flame (e.g. polyvinylchloride.) Railroad ballast was not considered appropriate to be listed as an inert waste because of the wide variability in the material and the probability of contamination. Ballast is subject to spills from fuels, battery fluids, and the wide variety of materials transported by rail. Ecology has also had experiences when wastes such as tailings from toxic metal smelters have been used for railroad ballast.

It was suggested that allowances be made for incidental wood embedded in cured concrete in WAC 173-350-990(2)(a). Ecology agrees that small amounts of wood embedded in concrete would not significantly effect its characteristics and has added language to reflect this.

Commenter **Comstock** ***Section*** ***Comment #*** 163

Comment Financial Assurance: There is room for a greater application of financial assurance to other types of solid waste facilities, more than just to landfills. Have had various recycling facilities who have been burned in the past by owners and operators walking away from their sites, leaving great piles of waste in place that have been quite a burden for the health department. Some type of financial assurance mechanism in place for those facilities, under a permit, would add value.

Ecology's Response In the proposed rule Ecology limited the requirement for financial assurance to three facility types. The

reason for this limitation was based on statutory requirement (limited purpose landfills, waste tire storage and transportation) and demonstrated need (waste tire storage, large-scale moderate risk waste facilities). An additional factor that Ecology considered is the cost of maintaining financial assurance instruments. In some cases these costs can be equal to, or even exceed the value of the instrument.

Commenter **Comstock** ***Section*** ***Comment #*** 161

Comment Permitting Exemptions for some material recovery facilities: Health Dept. has had problems in the past with some types of recycling facilities and anticipate that we will be putting forth some sort of proposal to our board of health for consideration to have a more structured permit system for those types of facilities.

Ecology's Response Revisions that Ecology has made to the approach for exempting a material recovery facility (MRF) may alleviate the concerns expressed by the commenter (see response to Hansen, comment #30). Only a MRF that accepts solely "recyclable material" as defined and meets several other terms and conditions may operate under the permit exemption. One of the key components of the definition of "recyclable materials" as defined in statute and rule is that the recyclable material must be designated as such in the local comprehensive solid waste management plan. This requirement places much of the control for MRF permit exemptions at the local level.

Commenter **Comstock** ***Section*** **100** ***Comment #*** 162

Comment Definition of inert waste: more refined than in the past but still leaves a lot of room for interpretation, both for the jurisdictional health department staff as well as the regulated community. Still difficult to comprehend and understand.

Ecology's Response One commenter (Comstock) stated that the definition of inert waste had been improved from WAC 173-304-100(40) but leaves a lot of room for interpretation and is still difficult to understand. Two commenter's (Marek, Hebdon) suggested that the criteria provided in WAC 173-350-990(3)(b) are too nebulous, will be difficult to implement, and need more definition.

Several options were explored for defining inert wastes during the rule development process. One option was to limit inert waste to a list, such as found in WAC 173-350-990(2). Another option was to set physical/chemical criteria for inert waste. The first option was simple but would prevent other inert wastes from being considered. Using only a criteria was deemed to be too complicated when there are several wastes that are generally regulated as inert. Ultimately, it was decided to include both a list and criteria.

While the criteria in WAC 173-351-990(3) do provide room for interpretation and judgment, it is expected to be fairly easy to apply in practice. The concentration based criteria in paragraph 990(3)(b) will be the most difficult to establish firm limits for determining if a waste is an inert waste and Ecology recognizes the need to provide more clarification in the rule.

One commenter (Marek) was told during rule development that the criteria in subsection 990(3) is intended to set the standard so high (stringent) that essentially nothing will be considered 'inert' except for the listed wastes. Earlier drafts of the proposed rule provided specific leaching test methods and criteria, and toxicity criteria that set specific constituent concentration limits for inert wastes. Because the criteria did not provide any room for judgment, they were set at a level that would be protective in any circumstance. The situation described by the commenter was the result. The approach of providing firm specific inert criteria was abandoned because of this.

In subsection 990(3), Ecology intends that persons using the criteria will use the inert materials listed in subsection 990(2) as a reference point. For example, other inert wastes should have similar structural integrity, toxicity, and not produce leachate with chemical concentrations significantly greater than that from cured concrete, asphalt, or the other wastes listed as inert. Language will be added to the inert criteria to reflect this intent.

One commenter (Marek) suggested that due to the high costs of disposal at municipal solid waste landfills, many waste generators are looking to classify their wastes as 'inert wastes'. Concern was expressed that generators will deem their wastes as inert and put local health departments in the position to prove otherwise. In essence, that local government will have to challenge the designation as "inert" and prove otherwise. This was considered an undue burden to jurisdiction health departments. An alternative approach was suggested to require generators demonstrate to the jurisdictional health department that the waste in question is in fact "inert" prior to actually managing it as such. This commenter considered the approach Ecology has taken to list certain wastes as 'inert waste' (concrete, asphaltic concrete, brick, glass, et cetera) an effective method that is enforceable by local health departments.

The requirements in the rule applicable to inert wastes are the same as other solid wastes with two exceptions. These are the storage of inert waste in piles and inert waste landfills. Except for these two cases, a person would have no motivation to classify their waste as inert.

Inert waste landfills greater than 250 cubic yards are required to obtain a permit from the jurisdictional health department. The owner or operator of an inert waste landfill is required to develop, keep, and abide by a plan of operation approved as part of the permitting process. Each plan of operation is required to include a description of the types of solid waste to be handled on-site. The plan of operation is also required to include acceptance criteria, procedures for waste screening, and

procedures for handling unacceptable wastes received at the facility. It is intended that issues relating to which wastes may be inert will be dealt with during the permitting process.

Inert waste in piles may be categorically exempt from solid waste handling permitting, provided the owner and operator complies with the terms and conditions in WAC 173-350-320(1)(e). These terms and conditions ensure that at least fifty percent of the material is used within one year and all the material is used within three years, Ecology and jurisdictional health department representatives be allowed to inspect the facility, the facility conforms to the performance standards of WAC 173-350-040. Ecology believes that these terms and conditions are sufficient to prevent threats to human health and the environment or undue burden to jurisdiction health departments from generators classifying a waste as inert improperly.

Commenter **Comstock** ***Section*** **320** ***Comment #*** 164

Comment Contaminated soils treatment facilities: looking for separate facility standards in this rule. It got tied in with the pile standards. Our view is that we lost some of the strength or value of the rule with those being tied in together. Would like to see them separate.

Ecology's Response Several commenter's suggested that a section specific to contaminated soils treatment facilities, such as was found in previous drafts of the rule, is warranted and would like to have the section reinstated.

A stand-alone section applicable to all contaminated soil treatment facilities found in early drafts of the proposed rule was removed for several reasons. The primary reason was that most of the requirements found in the contaminated soils treatment facilities were identical to those found in the section applicable to piles used for storage or treatment. The additional requirements were operating standards addressing recordkeeping to ensure that soils were sufficiently characterized prior to being received and after treatment.

It was expected that these requirements would not need to be specifically identified and that they would be incorporated in the plan of operation for any facility that accepted contaminated soils for storage or treatment. For example, owners or operators of piles used for treatment must provide a description of the types of solid waste to be handled at the facility [WAC 173-350-320(4)(e)(i)] and ensure that nonpermitted waste is not accepted at the facility [WAC 173-350-320(4)(a)(iii)]. It was anticipated that the potential range of contaminants and concentrations in soils would need to be specified during permitting in order to evaluate the design and operation of a facility to ensure conformance with performance standards and that full characterization of soils received would be required to ensure that nonpermitted waste are not accepted. Furthermore, all solid waste generated at any site must be managed in accordance with all applicable rules. Therefore, Ecology presumed that any treated soil would be characterized to ensure that any soils that were not clean would be handled appropriately.

However, many commenter's have requested that the section applicable to storage and treatment of contaminated soils be reinstated into the rule. Ecology does not believe that this step is necessary but understands that the requirements that were originally proposed in that section can be added back into the rule to clarify the expectations on soil characterization and facility design and operation. Section WAC 173-350-320, Piles used for storage and treatment, has been revised to incorporate these requirements. The revisions include soil characterization, recordkeeping, design and operation standards that would be specifically applicable to facilities that treat or store contaminated soil.

Commenter **Dawson** ***Section*** ***Comment #*** 177

Comment Enforcement: An enforcement section needs to be added to this regulation without specific reference to actions that may be taken against anyone violating this rule this standard will be virtually unenforceable against those that do not willingly comply.
Anyone violating the provisions of this rule will be subject to criminal and civil prosecution as authorized in RCW 70.95.

Ecology's Response There are two main enforcement provisions in chapter 70.95 RCW: civil penalties for violations of terms and conditions for permit exemptions (RCW70.95.315and, civil or criminal enforcement for dumping or depositing solid waste without a permit RCW 70.95 240). The proposed rule contains sufficient references to the civil penalty provisions of RCW 70.95.315. Ecology has added language to WAC 173-350-700 (1)(a) that addresses the applicability of the penalty provisions RCW 70.95.240 for operating without a permit.

Commenter **Dawson** ***Section*** ***Comment #*** 176

Comment Petroleum Contaminated Soils: WDOE was required by the legislature to incorporate policy and guidelines into the revised rule. WDOE has used "Guidance for Remediation of Releases from Underground Storage Tanks" published in July 1991, as a guidance for the treatment of petroleum contaminated soils. Therefore, this must be incorporated into the revised rule.

Ecology's Response The comment is incorrect. There is no legislative requirement to incorporate guidance documents into rule. Also, this guidance document is undergoing extensive revisions at this time, making it in impractical to incorporate it into the proposed rule.

Commenter **Dawson** ***Section*** **020** ***Comment #*** 165

Comment Applicability

(2)(a)(i) requires facilities to meet all operational standards within 12 months. Subsection (2)(b) states modifications to existing permits shall be initiated within 12 months. These two sections are contradictory and need to be reconciled.

Ecology's Response Ecology agrees that it is reasonable for the permit modification process to follow the local ordinance. This is also true for compliance with operating criteria. In light of this we have modified the schedule to extend initiation of the permit modification process to 18 months after the effective date of the rule, and implementation of operating standards to 24 months.

Commenter **Dawson** ***Section*** **040** ***Comment #*** 167

Comment WAC 173-350-040 Performance Standards

It appears that Ecology is set on using this section as a catch all; and as such, these items need to be added and all facilities would then be required to comply with the provisions of 173-350-040:

(7) Establish an appropriate financial assurance device as deemed necessary by the JHD.

(8) No solid waste facility active area may be located within 100 feet of any potable or non potable water source nor within a flood plain.

(9) No solid waste facility shall be located at a site where the bottom of the lowest liner is any less than ten feet above the seasonal high level of ground water in the uppermost aquifer, except waste materials applied at an agronomic rates which shall be a minimum three feet above a maximum seasonal high level of ground water.

(10) No solid waste facility shall be located over a Holocene fault, in subsidence areas, or on or adjacent to geologic features which could compromise the structural integrity of the facility.

Please keep in mind that much of this information has been extracted from the existing Minimum Functional Standards and no evidence has been provided by Ecology supporting the elimination of these statutes.

Ecology's Response Ecology cannot endorse these suggested changes to section -040 for the following reasons: Proposed new subsection (7) would not promote a fair and consistent application of financial assurance to various facilities. Ecology has determined which facility types needed to provide financial assurance based on the direction of the legislature (see RCW 70.95.215) and demonstrated need. Local health departments have the ability to require financial assurance for other facility types through the local regulation development process.

Proposed new subsection (8), (9) and (10) are location standards that are applicable to limited purpose landfills in the current regulation. They continue to be applicable to limited purpose landfills in the proposed new rule. However, they are not appropriate for application to other facility types.

Commenter **Dawson** ***Section*** **100** ***Comment #*** 166

Comment 173-350-100 - Definitions

Composted Material: definition should be changed to "decomposition at a registered solid waste facility". This would prevent false advertising to promote sales of aged manure or other materials as compost. Registered would be any site, which had fulfilled the notification requirements and was in compliance with the farm plan or any permitted solid waste facility.

Industrial solid wastes: definition should be changed from "manufacturing operations such as" to "manufacturing and processing operations such as but not limited to". Repeatedly we have encountered difficulties with food processors claiming that their waste is a crop residue as they are a processor not a manufacturer.

Inert Waste: add to the definition of Inert Waste - "means noncombustible, non-dangerous solid wastes that meets the criteria for inert wastes in WAC 173-350-990." Including these two words will help to quickly determine that a waste is not inert.

Land Reclamation: definition should be changed from "disturbed lands including" to "disturbed lands or lands void of vegetation including". This would allow the inclusion of land areas containing sterile soils or large rocky areas.

Liner: There needs to be a definition for a liner with parameters of permeability included. For example, soils and synthetic liners with a permeability for water of 1 x 10-5 or 10-7 cm/sec shall be considered of an acceptable permeability to be utilized as a liner.

Biohazard Wastes: There are no regulations addressing biohazard wastes? Commercial or residential. At the very least a definition of biohazardous waste should be included.

Use: You have used the word use to define the word use.

Ecology's Response The commenter suggests changes to various definitions. Ecology's response to each suggestion

follows:

Composted material - The definition of composted material includes the qualifying statement "at a solid waste facility in compliance with the requirements of this chapter." Aged manure is not "composted material." It falls into the category of "natural decay of organic solid waste." Ecology does not agree that including the term "registered" in the definition will alleviate false advertising on the part of people trying to sell manure as "compost."

Industrial solid wastes - Ecology agrees that this definition is problematic, particularly in the case of the food processing industry. The commenter is correct that food processing waste is not intended to be managed as agricultural waste. We will modify the definition to clarify this point.

Inert waste - The suggestion to add “noncombustible, nondangerous” to the definition of inert waste has not been incorporated into the final rule because it is judged to add emphasis to certain aspects of the criteria for inert waste but does not help convey the intended methodology for determining if a solid waste is an inert waste.

Land reclamation - The intent of land reclamation is to reclaim land that has been drastically disturbed. We are not sure what is intended by the commenter with regards to the term "sterile soils". If these soils are unproductive due to low organic content there is still a potential to land apply solid waste, but it must be done at an agronomic rate, and should probably include tillage. The issue of rocky ground is somewhat different. Ground that is inherently rocky does not lend itself well to tillage. Our experience with spreading solid waste in these areas has shown that it is typically disposal oriented and not a true beneficial use.

Liner - The commenter suggests adding a definition for “liner” that would include permeability criteria in the definition. During the rule development process, incorporating regulatory standards into definitions was systematically avoided. Definitions are intended to only define a term used in the rule. Regulatory standards associated with a term are placed in the appropriate section of the rule where standards are presented.

Biohazard wastes - Ecology does not believe a definition of biohazard waste is needed. These wastes are not regulated as a special category, nor is the term used in the proposed rule.

Use - Ecology agrees that this definition is not well crafted, and has determined that it is unnecessary to keep this definition.

Commenter **Dawson** ***Section*** **200** ***Comment #*** 168

Comment WAC 173-350-200 - BENEFICIAL USE PERMIT EXEMPTION

Neither the Department of Ecology nor JHD’s have the resources to inspect exempt facilities without additional funding. Enforcement grants currently directed to JHD’s require some matching funds that are usually generated from permit fees, without these fees to provide matching dollars for the grants no inspections will likely be performed. This will lead to exemptions being issued and the only way compliance will be evaluated is through response to complaints. Some form of annual inspection should be required for each of these facilities at their own expense to be performed by Ecology, a JHD, or a qualified engineering firm.

Add this language: All exempted beneficial use facilities must be inspected annually by the department, the JHD or qualified engineering firm at the operator’s expense.

Subsection (5)(a)(new) Beneficial use exemption process: Allowing local JHD comment without the authority to justifiably deny a practice within their jurisdiction does not deal with local issues that may preclude the use of an exempt solid waste.

Add language: The department shall not exempt a solid waste from application within any health jurisdiction where all conditions and comments regarding said exemption have not been addressed to the satisfaction of the JHD.

The WSDOE should not approve any facility within the jurisdiction of a local health department that the JHD has a valid concern or objection. Because you don’t give said consideration to the JHD ---JHD’s can only appeal a decision the department has made (subsection 5(j)(ii). Thus, putting the two departments at odds with each other instead of maintaining and improving on our working relationship. Both departments have one ultimate goal reuse of solid wastes while protecting the public health and safety.

In addition, state wide permit exemptions will require all JHD’s to review and comment on every proposed exemption proposal as these will be applicable anywhere in the state. Thus, significantly tapping available resources for solid waste enforcement locally.

Ecology's Response The statute does not contain fee provisions for the Beneficial Use Exemption program. Ecology cannot require fees without legislative authorization. RCW 70.95.300 (3) clearly states that Beneficial Use Exemptions are applicable statewide. If, during the comment period, Ecology receives compelling information that demonstrates a statewide exemption is not appropriate, the department can deny the application.

Commenter **Dawson** ***Section*** **220** ***Comment #*** 169

Comment

WAC 173-350-220 - COMPOSTING FACILITIES

WAC 173-350-220, Subsection (1)(b)(v) should be combined with Subsection (1)(b)(vi).
Agricultural composting "means composting of agricultural waste as an agricultural operation conducted on lands employed for farm use."

Ecology is expected to categorically exempt certain types of composting facilities. However, the legislature intended the exemption to be based on an evaluation of the environmental risk posed by the facility. The resulting law did not address exemptions based on where the compost would be utilized.

RCW 70.95.305, Solid waste handling permit -- Exemption from requirements -states: (1) Notwithstanding any other provision of this chapter, the department may by rule exempt from the requirements to obtain a solid waste handling permit any category of solid waste handling facility that it determines to: (a) Present little or no environmental risk; and (b) Meet the environmental protection and performance requirements required for other similar solid waste facilities.

Volume limits must be placed on all exempt facilities based on risk.

WAC 173-350-220, Subsection (1)(b)(iii) and WAC 173-350-220, Subsection (1)(b)(viii) directly conflict each other.

Operation Standards must clarify that distribution of leachate back into composting material may be allowed. For instance, when an outdoor facility directs leachate and stormwater to a containment area. and the collected liquids are immediately (or within a short period, such as, 24 hours) applied to the piles in a manner which controls further generation of runoff (drip irrigation), then an NPDES permit would not be necessary. Is this a correct interpretation? Now that you have captured leachate what are the options for getting rid of it?

173-350-220, Subsection (1)(c)(ii) These setbacks need to be specified or a statement that setbacks may be determined by the local JHD should be added.

173-350-220, Subsection (2) states there are no locational standards yet Section (1)(c)(ii) implies there are or should be. We agree there should be setbacks, the public needs locational standards as does the regulator, not a conflict between regulations.

173-350-220, Subsection (3)(c)(ii)(A) Allows for the JHD to approve other types of liners, but does not offer a permeability standard to meet (i.e., 1 X 10-5 cm/sec). A minimum permeability is needed to review other proposals.

173-350-220, Subsection (3)(e)(v) States "The jurisdictional health department may approve other materials for compost pad construction if the permit applicant is able to demonstrate that the compost pad will meet the requirements of the subsection." Yet, Section (3)(e)(iv), which is one of the requirements, states you shall use concrete, etc.... We need a specified minimum parameter for comparison to the examples (i.e., permeability of 1 X 10-5 cm/sec).

Any compost produced under an exemption must meet all testing requirements in subsection 220(4)(a)viii). In discussions with the conservation district we were informed that it is quite common for sharps to be located in animal wastes. This compost is often distributed to a local nursery for residential use. Compost applied in bulk to agricultural lands could still be exempt from testing. All material manufactured for retail needs to be tested.

What do you do with composted material that does not meet the testing standards in subsection 220(4)(a)(viii)? This is a material being manipulated so that does not become a waste. Does it become huge accumulations of solid wastes?
Can it be mixed with other composted materials to bring it into compliance?
Subsection 220(4)(a)(viii)(B), references Table B which has a footnote to Subsection (4)(b)(ii). There is no subsection with that heading [(4)(b)(ii)].

Ecology's Response

The commenter would like to see subsection (1)(b)(v) and subsection (1)(b)(vi) combined together. Ecology deliberately separated the two activities to clarify specific activities that would fall under the definition of agricultural composting. During development of the rule, Ecology received requests from technical advisory committee members to make this clarification. Ecology views both activities as integral components of soil fertility management on the farm. Subsection (1)(b)(v) refers to composting crop residues and manure that are generated on site and used on site. In subsection (1)(b)(vi), farmers can compost agricultural wastes from other farms as long as the volume on site doesn't exceed 1000 cubic yards. This exemption was created to allow importing agricultural wastes from other farms, which can help farmers balance carbon to nitrogen ratios of the feedstocks. The finished compost must be used on-site.

The commenter suggests that 70.95.305 only refers to exemptions based on risk posed by the facility itself. Ecology disagrees. The extent to which finished compost is distributed into the public arena has risks associated with it. Ecology included distribution when developing the exemption categories because the final destination and use of the composted material needs to be considered in the overall evaluation of risk.

The commenter suggests conflict between subsections (1)(b)(iii) and (1)(b)(viii). Ecology is working on an easy-to-read explanation of the exemption categories so that the differences between categories will be clear.

The commenter asked whether an NPDES permit would be required to apply leachate to active compost piles as "make-up" water. The answer is no. The design requirements in subsection 3 (WAC 173-350-220(3)) lead to "zero discharge" of leachate. Using leachate as makeup water can be a valuable tool for managing moisture requirements in a compost pile. The leachate is not "discharged" and would not require a discharge permit under the NPDES program.

The commenter requests specific language indicating local health departments can determine setbacks under subsection (1)(c)(ii). All exempt composting operations must meet the performance standards under -040. This includes all local ordinances.

The commenter requests a specific hydraulic conductivity (e.g. 1X 10-5 cm/sec) to evaluate permeability of alternative compost pad designs. Ecology did not use a specific number because of the variation in rainfall and soil types statewide. A permeability of 1X10-5 cm/sec might be appropriate for an area with 10 inches of rainfall, but may not be protective enough for areas where the rainfall patterns saturate soils over several months of the year. Alternative pads need to be evaluated on a site-specific basis.

The commenter states all composted material distributed to the public needs to be tested. The terms and conditions in -220 (1)(c) require testing for the exempt facilities according to the same criteria that permitted facilities must use.

The commenter asks about what to do with composted material that doesn't meet the criteria to be considered a product and no longer subject to solid waste requirements. There are a number of different scenarios depending on which criteria were not met. Composted material not meeting the requirement to be released from solid waste regulation may still have value. For materials exceeding metals limits, Ecology recommends careful evaluation of feedstocks to determine the source of metals coming into the facility. Such material may be land applied under the land application section of this proposed rule (section 230).

Commenter **Dawson** ***Section*** **230** ***Comment #*** 356

Comment Subsection (4)(d) States: "If necessary, the plan shall be modified with the approval of the JHD. Include the words "approval or at the direction of the JHD"

Ecology's Response Ecology concurs with this recommendation and has revised each section of the rule as appropriate.

Commenter **Dawson** ***Section*** **230** ***Comment #*** 357

Comment Ground Water Monitoring Requirements Section (5) There are currently no ground water monitoring requirements for land application including sites with shallow ground water. The following language should be added: Ground water monitoring requirements may be implemented for any site with extremely porous soils over an unconfined aquifer or on any site where seasonal groundwater table exists less than at 10 feet. The nature and extent of the monitoring shall be determined by the JHD.

Ecology's Response Appropriate application rates that are protective of groundwater should be arrived at by analysis of site conditions and the characteristics of the waste to be land applied. Ecology intended that an application rate ensure no leaching of contaminants or nutrients to groundwater when the land application section was developed. Section (4)(d)(iv) requires a management plan describing how groundwater will be protected if the seasonal high groundwater is less than three feet from the surface and Section 230 (8) (a) (iv) (C) requires discussion of depth to seasonal groundwater as part of the solid waste application. This information, regardless of the actual depth must be considered along with contaminant and nutrient analysis when establishing an appropriate application rate. Because an application rates must be protective of groundwater regardless of the actual depth, monitoring requirements are not warranted.

Commenter **Dawson** ***Section*** **230** ***Comment #*** 355

Comment Operating Standards, Subsection (4)(d)(iv): Insert this language: Land application is expressly prohibited in areas where the seasonal ground water table is less than three feet. Requests for permits to land apply materials at sites with less than three feet of separation to ground water may be allowed provided conclusive documentation can be supplied to demonstrate that no potential for ground water degradation exists from the application of said material.

Ecology's Response Appropriate application rates that are protective of groundwater should be arrived at by analysis of site conditions and the characteristics of the waste to be land applied. Ecology intended that an application rate ensure no leaching of contaminants or nutrients to groundwater when the land application section was developed. Subsection (4)(d)(iv) requires a management plan describing how groundwater will be protected if the seasonal high groundwater is less than three feet from the surface and subsection (8) (a) (iv) (C) requires discussion of depth to seasonal groundwater as part of the solid waste application. This information, regardless of the actual depth must be considered along with contaminant and nutrient analysis when establishing an appropriate application rate. Because an application rates must be protective of groundwater regardless of the actual depth, monitoring requirements are not warranted.

Commenter **Dawson** ***Section*** **230** ***Comment #*** 170

Comment 173-350-230 LAND APPLICATION

Operating Standards, Section (4)(a)(i)(C) should be changed to "Storage must comply with the requirements of section - 320; and" This requirement should clearly indicate the storage piles must meet specific criteria in 320. Current language implies there are locations where storage would not be subject to 320.

Ecology's Response All aspects of a land application operation must be addressed during the permitting process, including storage prior to land application. Storage practices may not negatively impact surface and groundwater, air or land, per Section 230 (4)(a)(i)(A). Meeting these standards for storage of material for limited periods of time could be met in a variety of ways.

Commenter **Dawson** ***Section*** **320** ***Comment #*** 172

Comment 173-350-350 Waste Tire Storage

General Comment: this section needs to specify a length of time that tire can be stored at a site by percentage. Suggested language is: At least fifty percent of the tires must be shown to have been recycled or processed for disposal in the past three years and all tires should be processed within five years; failure to complete these tasks may allow the JHD to request the facility to be closed in accordance with the approved closure plan including implementation of the financial assurance instrument.

Locational Standards: There needs to locational standards for waste tire piles. The fact that they need a permit implies that something in the pile is not good.

Ecology's Response Facilities required to obtain a state waste tire storage license are required to obtain a local solid waste permit before applying for the state license. (Text in the draft regulation was confusing on this issue but has been corrected for clarity.) Part of the solid waste permitting process includes providing financial assurance adequate for removal of tires by a third party, sets a maximum number of tires that can be stored at the site, and requires annual reporting. These measures should be adequate to ensure a site is not abandoned or that a site can be remediated in the event of default or non-compliance.

Locational standards are not appropriate for this section. Local zoning and other land use mechanisms are more appropriate tools to address sitting considerations and concerns.

Commenter **Dawson** ***Section*** **320** ***Comment #*** 171

Comment 173-350-320 Piles for Storage or Treatment

Section 3(b)(i): The liner requirements should specify an acceptable permeability and allow the applicant to demonstrate the effectiveness of an alternate design based on waste characteristics, operating practices and site specific conditions. The current choices allow for a wide range of permeability (i.e.. asphalt to geosynthetic liners) without specifying a scientific basis for design (i.e.. 10-5). As in previous section there is no minimum permeability standard.

Section 3(b)(i): The rule should allow for the applicant to demonstrate the effectiveness of an alternate design allowing for innovation and site specific conditions.

Section 3(b)(i): Clay liners should be added back into the currently approved list of pads.

Ecology's Response The commenter suggested that a specific permeability performance standard be provided for sealed surfaces in section 320(3)(b)(i). Based upon the comment, however, it appears that the commenter did not fully understand the intent of the section. Piles of putrescible waste, contaminated soils and dredged material, and other waste determined by the jurisdictional health department to be likely to produce leachate posing a threat to human health or the environment must be placed on a sealed surface. The sealed surface must prevent soil and ground water contamination. Two examples are provided of typical surfaces; concrete and asphaltic concrete. Because of the wide variety of wastes that may be stored or treated in piles Ecology did not provide a permeability performance standard in this section. Instead, the sealed surface must meet a design performance standard of protecting ground water and soil beneath the pile regardless of the material used. This is similar to the approach to limited purpose landfill design standards except that no presumptive design is provided. More permeable surfaces, such as engineered soil, can be used if the applicant can demonstrate that it will prevent soil and ground water contamination.

Commenter **Dawson** ***Section*** **400** ***Comment #*** 173

Comment 173-350-400 Limited Purpose Landfills

Subsection (3)(f)(i)(A): The rule should state that the HELP model must be supported by additional data and modeling. Appropriate language may be found in 173-351-300(2)(a)(ii) (A-F) and 173-351-480(1-8); and could be used to describe the requirements of the demonstration.

Use of the HELP model is found in the operating standards of Subsection (4), but needed up front in the design phase.

Ecology's Response The design standards provide performance standards for any modeling performed for evaluating a limited purpose landfill. However, it is not intended that modeling is required in all situations. An owner or operator must submit engineering reports/plans and specifications in the permit application that demonstrate conformance with the design requirements. The demonstration may or may not

incorporate water balance and fate and transport modeling. It is anticipated that conformance with the design standards can often be demonstrated either without modeling, or with limited modeling.

In most situations, modeling used to evaluate landfill designs is done in two phases. The first is water balance modeling, which is used to estimate the quantity of leachate generated and the quantity that will pass through the liner system. HELP is the accepted model as it is available at no cost, is relatively easy to use, and has been demonstrated to either be accurate or over predict leachate quantities. Other water balance models are available and may be used provided they meet the performance standard in WAC 173-350-400(3)(f)(i)(B).

Once a water balance model provides a value for the quantity of leachate passing through the liner system, other models can be used to predict contaminant fate and transport in ground water. There is no model similar to the HELP model for this purpose, therefore, only performance standards are provided.

The language in the Criteria for Municipal Solid Waste Landfills at WAC 173-351-300(2)(a)(iii)(A)-(F) is to be used during a demonstration that an equivalent liner design is equivalent to the composite liner design in WAC 173-351-300(2)(a)(i). An equivalent design procedure is not needed in this rule because no single design is specified as a requirement.

Commenter **Dawson** ***Section*** **410** ***Comment #*** 174

Comment 173-350-410 Inert Waste Landfill

Section (2): A locational requirement must be added requiring the inert landfill to be placed 10ft above the seasonal high groundwater water table. Ecology has stated concrete and asphalt (listed inert wastes) will fail the criteria specified in the inert definition based primarily on leaching. This would ensure siting criteria of inert landfills is protective of the groundwater quality.

Section (2): To be consistent and in compliance with WAC 173-160. A locational requirement must be added requiring the inert landfill to be placed 100ft from any domestic well or surface water. Ecology has stated concrete and asphalt (listed inert wastes) will fail the criteria specified in the inert definition based primarily on leaching. This would ensure siting criteria of inert landfills is protective of the drinking and surface water quality.

Inert Waste in WAC 173-350-990, Sections (1, 2,): Keep these sections and incorporate them directly into the inert landfill section.

Section (4): Add new language that "all wastes accepted must be characterized to ensure disposal at an inert landfill will not create a contaminated site under Chapter 173-340 WAC." This would allow JHD's to utilize all the tools available including: Table 740-1, Method A residential cleanup levels; Table 745-1, Method A industrial cleanup levels if appropriately sited; Method B diagnostic formulas; TPH spreadsheets analyzing the mobility of TPH in soil based on chain length and evaluating impacts to health, surface water and groundwater; as well as others which may be developed in the future. It is important to remember these sites are permitted facilities operated in a manner which restricts access, controls storm water run-on and runoff, wind erosion and other impacts to health and the environment.

Ecology's Response

Two commenter's suggested that a distance be specified to separate inert wastes from the seasonal high level of ground water. Ten feet was suggested in one case. Ecology believes that the proposed requirement, all waste above the seasonal high level of ground water, will be protective of ground water. This judgment is based upon the limitations placed on the types of waste materials meeting the inert criteria and that many of these materials (such as concrete) are used in below ground water applications.

The commenter remarked that Ecology has stated that two of the listed inert wastes would fail the criteria shown in WAC 173-350-990(3), inert waste characteristics. This was indeed true in previous drafts of the rule. This is one of the primary reasons that the characteristics were amended for the final draft. Ecology believes that the characteristics are now consistent with the listed inert wastes.

The commenter suggested that the distance between the active area of an inert waste landfill and a drinking water supply well be increased to one hundred feet in order to protect drinking water. Ecology agrees that this is appropriate, as many inert waste landfills may be very large. If an owner or operator believes that this distance is not required to protect a drinking water supply well, they may request a variance from this requirement.

The commenter suggested to duplicate the inert waste criteria in section 990 in the inert waste landfill section. Ecology believes that this is not needed and could actually make the inert waste landfill section more difficult to use by making it substantially longer without adding anything that is not already in the rule. This would be more appropriate if landfilling was the only method of handling inert waste.

The commenter suggested to add text so that all wastes accepted in inert waste landfills would not create a contaminated site under Chapter 173-340 WAC, the Model Toxics Control Act Regulation. It was suggested that this would allow jurisdictional health districts to use tools associated with Chapter 173-340 WAC, such as cleanup levels, formulas, modeling tools. This is not appropriate to include in the rule because Chapter 173-340 WAC does not apply unless there is a release of a hazardous substance to the environment. Wastes placed in a landfill cell would not be deemed a release unless

the hazardous substances were to mobilize beyond the landfill. The criteria for inert waste were developed with preventing releases of hazardous substances that pose a threat to human health or the environment. Because inert waste landfills apply to both disposal and fill activities, it is understood that the landfill may be disturbed at some point in the future for construction or development. The criteria for inert waste are intended to prevent threats to humans or other organisms whether or not the landfill is disturbed.

Commenter **Dawson** ***Section*** **710** ***Comment #*** 175

Comment 173-350-710 Permit Application and Issuance

Section (1)(c)(iv)(new): Notify all owners of property located within one thousand feet of any new or expanded landfill that the proposed facility may impact their ability to construct water supply wells, in accordance with chapter 173-160 WAC, Minimum Standards for Construction and Maintenance of Wells.

Ecology's Response The requirement for notification of property owners within 1000 feet of a new or expanded landfill property boundary is included in sections -400 and -410.

Commenter **Dawson** ***Section*** **710** ***Comment #*** 358

Comment Section (6)(b)(i): This section allows for administrative appeals by an applicant/operator of a facility that is denied a permit or has their permit suspended. Included in this section are timelines for holding hearings by the JHD but not for actually the filing of an appeal. Language should be changed to: Upon request of the applicant or holder of the permit, grant a hearing on such denial or suspension, requests must be submitted within thirty (30) days following completion of such action, decision or policy adoption. All requests shall be in writing and submitted to the Health Officer, and shall be heard with thirty days of the request.

Ecology's Response Ecology has chosen not to accept the suggested change. The appeal procedure comes from RCW 70.95.210. The statute does not specify a time limit within which aggrieved parties may appeal a decision by the jurisdictional health department. Ecology does not believe that this is an oversight, especially in light of the statutory time limits placed on Ecology for appealing permits.

Commenter **Dawson** ***Section*** **710** ***Comment #*** 359

Comment Section (2)(a), The language should be changed back to the original 304 language as follows: "When the jurisdictional health department has evaluated all pertinent information, it may issue a permit. Every completed solid waste permit application shall be approved or disapproved within ninety days after its receipt by the jurisdictional health department or the applicant shall be informed as to the status of the application."

Ecology's Response Ecology does not believe that it is appropriate to set a different time limit for the jurisdictional health Department's (JHD) review of an application for completeness than the 90 day limit specified by RCW 70.95.180. As a practical matter the JHD will need to make a completeness determination in less than 45 days because Ecology is granted a 45 day review period within the 90 day JHD review. Although not specifically noted the comment does bring to light a problem with section -710 (2)(a) which states that every "completed" application shall be approved or disapproved within 90 days by the JHD. This is in conflict with RCW 70.95.180 which requires all permits be approved or denied within 90 days of receipt of an application. Ecology will rectify this problem by deleting the word completed from -710 (2)(a).

Commenter **Fredrikson** ***Section*** **360** ***Comment #*** 372

Comment In general we are concerned that some of the proposed requirements may be unnecessary, not founded in sound science or so expensive that the costs may outweigh the benefits. These standards are being adopted after the construction of the Whatcom County MRWF, and some of the requirements are greater than those existing at the time of construction. Bringing our existing facility into compliance with these new requirements would be costly for the county and represent an unfunded mandate. We would like to see a clause that would grandfather in existing facilities.

Ecology's Response Ecology recognizes that there are several existing moderate risk waste (MRW) facilities that will not meet some requirement of the proposed rule. Ecology intentionally did not include a "grandfather" clause for any existing facility except for from location standards. The reasoning behind this decision was that the proposed rule is intended to provide minimum standards for design and operation of solid waste handling facilities that are protective of human health and the environment. However, Ecology has maintained a variance provision (see WAC 173-350-710 [7]) for special circumstances that warrant a different approach than that required by the regulation.

Commenter **Fredrikson** ***Section*** **360** ***Comment #*** 376

Comment 173-350-360-(5)biv This section requires areas used to load and unload vessels be designed to contain spills, drips, and accidental releases. If this is interpreted to mean that containment sumps be installed in these areas, this could represent a significant expense to our program, and an unfunded mandate.

Ecology's Response There is no specific requirement in the referenced section for "containment sumps", only that the area where tanks are loaded and unloaded be designed to contain spills, drippage, and accidental releases.

Commenter **Fredrikson** ***Section*** **360** ***Comment #*** 375

Comment 173-350-360-(5)b-iii requires a determination to be made by a corrosion expert of the degree and type of corrosion protection required for tanks. What exactly is a corrosion expert? Does it include a tank manufacturer? Alternatively, could we rely on a visual inspection and concurrence with the jurisdictional health department to determine when a tank needs to be painted?

Ecology's Response "Corrosion expert" as defined in WAC 173-350-100 "means a person certified by the National Association of Corrosion Engineers (NACE) or a registered professional engineer who has certification or licensing that includes education and experience in corrosion control."

Commenter **Fredrikson** ***Section*** **360** ***Comment #*** 377

Comment 173-350-360-(5)b-v We currently use traffic cones to protect our oil tank from impact by vehicles. It is unclear whether this section would require us to install bollards. That would be an additional expense and an unfunded mandate.

Ecology's Response The referenced section clearly states that "Tanks and piping shall be protected from impact by vehicles or equipment through use of curbing, grade separation, bollards or other appropriate means" (emphasis added). The jurisdictional health department will need to determine if traffic cones are an appropriate means of protecting tanks and piping during the permitting process.

Commenter **Fredrikson** ***Section*** **360** ***Comment #*** 378

Comment 173-350-360-(6)b-iii The requirement for five year inspections by a licensed engineer represents an additional cost for our program and is an unfunded mandate. It is unclear that this inspection would be able to reveal any deficiencies not found in the annual inspection.

Ecology's Response Ecology concurs with the commenter and has deleted the requirement for five-year inspections. However, the requirement for inspecting ventilation systems and flammable vapor monitoring equipment has been included in the annual inspection.

Commenter **Fredrikson** ***Section*** **360** ***Comment #*** 373

Comment 173-350-360-(5)a(A)III Requiring secondary containment that can hold 20 minutes of flow from a fire suppression system implies that the fire suppression system uses liquid. Our MRWF uses a dry chemical system that would float on top of the liquid in the containment system and would not displace liquid from it. The capacity of our containment system should not have to be increased for this reason.

Ecology's Response Ecology's intent is that the facility provide sufficient secondary containment to manage a reasonable volume from spills and leaks, stormwater, and fire suppression equipment. Verification that this standard has been met will need to be accomplished during the permitting process with the jurisdictional health department.

Commenter **Fredrikson** ***Section*** **360** ***Comment #*** 374

Comment 173-350-360-(5)a(C) makes reference to fire suppression water. Water should not be used as a fire extinguishing material in the event of a chemical fire.

Ecology's Response Ecology concurs with the commenter and has replaced the term "water" with "material".

Commenter **Gage** ***Section*** **040** ***Comment #*** 190

Comment WAC 173-350-040 Performance standards. … all owners and operators of solid waste facilities shall:
(1) Design, construct, operate, and close all facilities in a manner that does not present risks to human health or the environment;
The concept of not presenting risks is untenable and places an undue legal burden on any facility falling under this regulation. There is risk in almost any endeavor especially in solid waste management. Determining and setting a level of acceptable risk has been the main tenet and biggest point of debate in the environmental rules put forth by the Federal Government and by most other rules concerning waste handling in Washington State. This proposed wording could be interpreted by anyone that the risk level is set at zero. This could be viewed as a distinct burden of liability on an operator, architect, engineer, or facility owner to assure that no risk is presented to employees during operations, no runoff or air quality risks, no construction crew risks during development of a facility, no risks to users of products generated by recycling facilities, and no risks left after closure. This wording must be changed to reflect a reasonable standard of acceptable risk or removed entirely and restated to come closer to the intended meaning. In most other sections the word "threaten" is used instead of "present risk" and should be considered in this performance standard.

Ecology's Response Ecology concurs with the comment and has replaced "risk" with "threat" throughout the rule where appropriate.

Commenter **Gage** ***Section*** **100** ***Comment #*** 191

Comment WAC 173-350-100 Definitions.
"Incompatible waste" means a waste that is unsuitable for mixing with another waste or material because the mixture might produce heat or pressure, fire or explosion, violent reaction, toxic dust, fumes, mists, or gases, or flammable fumes or gases.
Please consider inserting the word "excessive" between the words "produce" and "heat". Other wise this definition could easily be applied to the moderate level of heat that is produced when wastewater and organic wastes are mixed during composting as being incompatible wastes when indeed they are beneficial to the process. This would also be problematic for those applying lime stabilization techniques to organic wastes for treatment.
"Soil amendment" means any substance that is intended to improve the physical characteristics of soil, except composted material, commercial fertilizers, agricultural liming agents, unmanipulated animal manures, unmanipulated vegetable manures, food wastes, food processing wastes, and materials exempted by rule of the department, such as biosolids as defined in chapter 70.95J RCW, Municipal sewage sludge--Biosolids and wastewater, as regulated in

chapter 90.48 RCW, Water pollution control.

Please consider that all of the exceptions listed above are commonly referred to as soil amendments. It is difficult to so limit the concept in solid waste rules for these items as many producers of these products generated form solid waste claim them as soil amendments and indeed do amend a soil's physical characteristics beneficially. There should be a good regulatory reason to exclude these materials, and not just a convenience for the ease of wording for this regulation.

There seems to be some discrepancies in two definitions, that of "Wood derived fuel" and "Wood waste" in regards to Creosote and paint. I applaud the Wood derived fuel definition as it reflects the low risk involved in binders, unleaded paint, and creosote and it's general usefulness or degradability in recycling reuse and composting systems. Could the Wood waste definition be adjusted in the same way and not effect the intent of the pertinent portions of the regulation?

Ecology's Response

The commenter had concerns regarding three definitions.

1. Incompatible waste - It was not Ecology's intent to capture composting of wastewater and garden debris as the mixing of incompatible waste. We agree that the suggested change is an appropriate means of clarifying our intent.

2. Soil amendment - Ecology understands the potential confusion between legal definitions based on statutory language and common use of terms. However, the terms listed in the definitions section apply "when used in this chapter," and don't impact common use of terms in other contexts. "Soil amendment" is a term that has specific meaning under RCW 70.95.030. Composted material was exempt from the definition of soil amendment during the 1998 legislative session because of the regulatory construction of the exemption process under RCW 70.95.205 Exemption from solid waste permit requirements -- Waste derived soil amendments.

3. Woodwaste - Ecology created the definition of wood derived fuels to provide a management method for creosote treated woods and painted woods. The addition of these types of wood to the definition of woodwaste would make several of the current exemptions (e.g., mulch, bedding) for woodwaste inappropriate.

Commenter **Gage** ***Section*** **220** ***Comment #*** 192

Comment

WAC 173-350-220 (b)(iv) Composting of food waste generated on-site and composted in containers designed to prohibit vector attraction and prevent odor generation. Total volume of the containers shall be limited to ten cubic yards or less;

It is unclear whether this means 10 cubic yards per container or 10 cubic yards maximum for the total of all containers on site. If the latter, this exemption of composting of food waste generated on-site is limited to those generators of food waste of less volume than 34 gallons of food waste per day. This is based the ten cubic yard limit, and a calculation of 30 days detention in the compost container and bulking of 50% of the volume with other materials to allow for airflow. This only describes very small generators and may not meet the intent of the regulators. For instance the Evergreen State College has developed an on-site composting system for food waste that would meet the above standard for everything but the volume restriction. It was clear to the Health Department that this operation, which is three times the size listed above, was not large enough to warrant the need for a permit if the above conditions were met. Please consider the need for bulking agents in a food waste composting system and reconsider the size issue and determine if you mean per container or per site for the maximum allowed amount.

Ecology's Response

The exemption for food waste composting (WAC 173-350-220(b)(1)(iv)) is intended as a waste reduction activity for sites such as resorts, restaurants, schools, camps and other "institutions." The volume limit is a total volume of all containers used. For example, the site could use one container with a volume of ten cubic yards, or three containers of three "plus" cubic yards each. Ecology is more concerned about preventing odors and vectors, and destroying pathogens than the exact volume of the containers. Ecology chose 10 cubic yards as a manageable volume that corresponds to existing technologies. Food waste composting requires a significant increase in attention to the process over composting yard debris. As such, the volume is limited for those institutions wanting to reduce waste under an exemption while gaining experience working with this more difficult feedstock. Regarding the specific reference to The Evergreen State College, the exemption categories in WAC 173-350-220(1) were not structured to accommodate individual projects. Rather they were created to allow composting activities that, in Ecology's view, do not pose a threat to human health or the environment.

Commenter **Gage** ***Section*** **220** ***Comment #*** 194

Comment

WAC 173-350-220 4(a)(viii) (A,B,C,E,) all;

These sections all refer to testing of varying parameters that require defining reasonable testing methods for composted organic wastes. Most all of these parameters are described in the U.S. Composting Council's Test Methods for the Examination of Composting and Compost. This document and its updates should be referred to for identifying the appropriate laboratory and field-testing methods. These methods have been peer reviewed and are adaptations from soil and water testing methods to more appropriately apply to organic materials and their constituents.

Ecology's Response

The commenter suggests referring composters and laboratory personnel to the US Composting Council's Test Methods for the Examination of Composting and Compost (TMECC) for required analyses of composted material under this rule. Ecology will direct people to the TMECC during implementation.

Commenter **Gage** ***Section*** **220** ***Comment #*** 197

Comment

WAC 173-350-220 4 (a) viii Table B – There is no unit of measure listed for Sharps to indicate the testing method. Is there a laboratory method for this? Furthermore sharps themselves are not defined. What is intended by this test? Wood slivers, glass, nails, and hard plastic pieces should not be included in sharps. Usually sharps are considered to be needles and pins that do not lose their ability to easily pierce the skin under casual contact.

Ecology's Response

Sharps are hypodermic needles, steel sewing needles, and straight pins that can pose a human and

animal puncture hazard on exposure. Wood slivers, glass, and nails are not considered sharps. Nails, glass, and plastics are manufactured inerts and are limited to less than one percent by weight of composted material.
At the present time, there is no standard laboratory method for detecting sharps in a sample of compost.

Ecology recommends that laboratories use careful visual inspection of dried compost samples to detect the presence of sharps.

Commenter **Gage** ***Section*** **220** ***Comment #*** 196

Comment WAC 173-350-220 4 (a) viii Table A – These heavy metal limits as stated in this proposed regulation provide a significant public confidence problem for those processors who will make a compost using biosolids and biosolids blended with the wastes covered by this rule. Biosolids derived composts are subject to more lenient or in other words more contaminated standards than Table A in the WAC 173-350-220. This is likely to, and rightly so, call into question the validity of the heavy metal limits set for biosolids compost listed in 173-308. Arguments have been made in the past by WDOE biosolids staff that the Zinc and Iron levels inherent in most biosolids is the mechanism that binds and reduces the availability of heavy metals such as cadmium. The research in plant uptake for cadmium for composts created from mixed municipal solid waste and yard wastes have shown no elevated risks to the most highly exposed individual scenarios than for biosolids. There has been no research provided that has shown likelihood for higher risk for equivalent levels in other feedstock composts done in the past 10 years since this became an issue brought forth to WDOE during the development of the Compost Use Guidelines to validate a lowering of these standards for other feedstocks. At that time, the WDOE made commitments to review any such research prior to implementing into rule a lower standard for non-biosolids composts. To my knowledge WDOE has not done so. The WDOE has not put forth any evidence that substantiates the necessity for lowering of these metal limits for composts made from feedstocks other than biosolids. Unless and until such reasonable evidence is provided, these 173-350 regulation's metal levels should be set at the same levels listed for those products made with biosolids in WAC 173-308.

Ecology's Response Ecology received two comments about the threshold level of metals in composted material. One commenter (Miller) suggested using the same metals numbers contained in the Model Toxics Control Act (MTCA). Metals levels under MTCA are standards used to evaluate whether or not a contaminated site has been cleaned up to an appropriate level. This type of cleanup standard is very different from a standard used to evaluate product quality. Using MTCA metals standards for evaluating composted material would be an inappropriate use of those standards.
Another commenter (Gage) questioned why Ecology chose metal levels equal to the "Grade AA" levels in the current guidance "Interim Guidelines for Compost Quality" publication # 94-38. Commenter notes the result of this decision will be different metals levels for biosolids compost regulated under Chapter 173-308 WAC, Biosolids Management, and other types of composted material regulated under this rule. Ecology's rational for continuing to use the more stringent Grade AA metals levels for composted material is the same as it was when the Guidelines were published. A complete explanation of the rational can be found in Appendix II of the Interim Guidelines for Compost Quality.

Commenter **Gage** ***Section*** **220** ***Comment #*** 195

Comment WAC 173-350-220 4(b) Inspect the facility to prevent malfunctions and deterioration, operator errors and discharges, which may cause or lead to the release of waste to the environment or a threat to human health. Inspections shall be conducted at least weekly, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process. For compost facilities with leachate holding ponds, conduct regular liner inspections at least once every five years, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process. The frequency of inspections shall be specified in the operations plan and shall be based on the type of liner, expected service life of the material, and the site-specific service conditions. The jurisdictional health department shall be given sufficient notice and have the opportunity to be present during liner inspections. An inspection log or summary shall be kept at the facility or other convenient location if permanent office facilities are not on-site, for at least five years from the date of inspection. Inspection records shall be available to the jurisdictional health department upon request.

This section should be adjusted to more reasonably reflect the usefulness of the inspections. Deterioration of facilities is not generally something that occurs quickly but rather over time stretching over a period of years. Such inspections of facility features would normally include buildings, tanks, pipes and catch basins, air collection devices, and odor filtration systems. Usually quarterly inspections would be adequate to identify any progressive deterioration of these facility features before they cause any release of waste to the environment or a threat to human health. These inspections are extremely time consuming to do well, and to be useful should be done with diligence. I agree that weekly inspections for preventing malfunctions in machinery, recording instruments, pumps and the like are appropriate prevent problems with such moving parts and operational features.

Ecology's Response Regarding regular inspections at composting facilities, the language in WAC 173-350-220(4)(b) is performance-based language intended to be consistent with inspection requirements at other types of solid waste handling facilities. Depending on the technology in use at any facility, inspection schedules will vary according to equipment and maintenance requirements. The weekly inspections required in this section are intended to ensure overall vigilance is part of any composting operation. The details of inspections need to be included in the operations plan during permitting of the facility.

Commenter **Gage** ***Section*** **220** ***Comment #*** 198

Comment WAC 173-350-220 10 Composting facilities - Designation of composted materials. Composted materials meeting the limits for metals in Table A and the parameters of Table B of this section, and having a stability rating of very stable or stable, shall no longer be considered a solid waste and shall no longer be subject to this chapter. Composted materials that do not meet these limits are still considered solid waste and are subject to management under chapter 70.95 RCW,

Solid waste management-- Reduction and recycling. -
The U.S. Composting Council Test Methods for the Examination of Composting and Compost, Published in 2002 has three ratings for products that are considered stable. This section should be consistent with this publication in determining the acceptable levels of a compost material's stability to no longer be subject to this chapter.

Ecology's Response

The composting facility standards include testing requirements for stability of composted material. Since composting is a biological process, Ecology needed a measurement that would indicate whether or not feedstocks had composted enough to distribute to the public safely. The US Composting Council developed a stability index as part of the Test Methods for the Examination of Composting and Compost (TMECC) which indicate a stage in the process at which incoming feedstocks have composted enough to be distributed to the public. The TMECC stability index describes several test methods that may be used to determine a stability rating. The stability ratings represent a range of biological activity in the compost from very stable to raw feedstocks. When Ecology prepared Chapter 173-350 WAC for formal public review, the TMECC stability index contained two categories of stability that Ecology viewed as appropriate for meeting stability requirements under the rule, namely "very stable" and "stable." The TMECC version offered for sale in Summer 2002 included an additional category. This additional category is also appropriate for determining when composted material is stable enough for distribution. The category is labeled, "moderately unstable, curing compost." Despite the term "unstable" in the label, Ecology recognizes the numerical ranges within this additional category as appropriate levels of biological activity for sale and distribution. For example, the Solvita test method numerical result of 5 - 6 places the composted material in the category of "moderately unstable, curing compost." This range, 5-6, has been used for a number of years by the Washington State Department of Transportation in their compost specifications.
Composted material is a dynamic medium that requires evaluation from a biological perspective. Unlike many chemical processes, composting proceeds along a continuum and stability is the best indicator we can use to determine when the process is complete enough for regulatory evaluation.
Ecology will provide assistance to composters, health departments, laboratories, and other interested parties regarding the stability index and ratings.

Commenter **Gage** ***Section*** **220** ***Comment #*** 193

Comment

WAC 173-350-220 4(a)(viii)(D) Biological stability as outlined in United States Department of Agriculture's Test Methods for the Examination of Composting and Compost;
There is no such document that I am aware of. I would imagine that this intended to refer to the U.S. Composting Council's Test Methods for the Examination of Composting and Compost Published in 2002. This document and its updated methods as adapted for compost should be referenced for biological stability testing.

Ecology's Response

The composting facility standards include testing requirements for stability of composted material. Since composting is a biological process, Ecology needed a measurement that would indicate whether or not feedstocks had composted enough to distribute to the public safely. The US Composting Council developed a stability index as part of the Test Methods for the Examination of Composting and Compost (TMECC) which indicate a stage in the process at which incoming feedstocks have composted enough to be distributed to the public. The TMECC stability index describes several test methods that may be used to determine a stability rating. The stability ratings represent a range of biological activity in the compost from very stable to raw feedstocks. When Ecology prepared Chapter 173-350 WAC for formal public review, the TMECC stability index contained two categories of stability that Ecology viewed as appropriate for meeting stability requirements under the rule, namely "very stable" and "stable." The TMECC version offered for sale in Summer 2002 included an additional category. This additional category is also appropriate for determining when composted material is stable enough for distribution. The category is labeled, "moderately unstable, curing compost." Despite the term "unstable" in the label, Ecology recognizes the numerical ranges within this additional category as appropriate levels of biological activity for sale and distribution. For example, the Solvita test method numerical result of 5 - 6 places the composted material in the category of "moderately unstable, curing compost." This range, 5-6, has been used for a number of years by the Washington State Department of Transportation in their compost specifications.
Composted material is a dynamic medium that requires evaluation from a biological perspective. Unlike many chemical processes, composting proceeds along a continuum and stability is the best indicator we can use to determine when the process is complete enough for regulatory evaluation.
Ecology will provide assistance to composters, health departments, laboratories, and other interested parties regarding the stability index and ratings.

Commenter **George** ***Section*** ***Comment #*** 12

Comment

I was present in Yakima for the public hearing held on August 6 concerning the solid waste handling standards. Our organization has had ongoing dialog and supplied input to Dept. of Ecology over the past year regarding these proposed regulations concerning agricultural activities. While it appears the regulations have gone a long way in clearing up confusion in the more traditional solid waste and composting arenas, we are concerned that non-composted agricultural commodities would become regulated as well, when there is no demonstrated need for this regulation.
I was still not clear on this aspect after the hearing, so I inquired about it with your two staff that were present in Yakima. First, it does not appear this regulation is written in the clear rule writing format that agencies, including Dept. of Ecology, currently use. It is very difficult to determine what is regulated and what is not, and there was no index provided with the draft so finding specific sections without going through the whole document could not be done.

Ecology's Response

The commenter's understanding of the proposed rule regarding land application of agricultural waste at agronomic rates is correct. Ecology included an exemption for piles of agricultural wastes on farms under the pile standards in WAC 173-350-320. The intent of this exemption is to allow and encourage

farmers to engage in practices that will improve soil health by returning organic matter to the land.

Commenter **George** ***Section*** **100** ***Comment #*** 13

Comment Your definition of composting states, "Natural decay of organic solid waste under uncontrolled conditions is not composting." Therefore, it appears that the regulation does not regulate those who are NOT composting, or intending to compost their agricultural plant materials which are the remnants of harvesting operations such as hop debris (vines and leaves) and mint slugs (leftover plant material after the oil is extracted).

Ecology's Response Commenter notes that the definition of composting does not include natural decay of organic solid waste under uncontrolled conditions. This is correct. Piling hop vines or mint slugs next to fields to be returned to the soil as crop residues does not fall under the definition of composting. These activities would not be subject to the regulatory requirements of section 220, composting facility standards, but would be required to comply with section 320.

Commenter **Girard** ***Section*** **100** ***Comment #*** 87

Comment Regarding the utilization of clean dimensional lumber residuals. Wood residuals, which are free of paint, binders, chemicals and non-wood constituents have a higher value when used for road building or mulch. Currently this residual is regulated by some Jurisdictional health departments and use of this materiel is restricted. We feel it would be beneficial and encourage source separation to specifically define and mention clean dimensional lumber residuals as a wood waste and allowing use similar to other materials defined as a wood waste.

Ecology's Response Ecology believes that the definition of woodwaste clearly includes clean dimensional lumber residuals.

Commenter **Girard** ***Section*** **240** ***Comment #*** 78

Comment Pacific Topsoils Inc. is a topsoil manufacturer and anticipates a great deal of additional expense to continue composting according to proposed standards in WAC 173-350. These comments though are not about composting but about the recycle of building construction residuals into "wood derived fuels". This category of material is not harmful to the environment when stored, transported, processed or when incinerated. It provides an environmentally safe and beneficial source of fuel. Several sections of the regulations conditionally exempt this material but other sections are vague. It appears unclear to the reader whether or not to require a permit and impose conditions. This leads to excessive interpretation, confusion, and inconsistency, Statewide, in solid waste handling practices.

The end use of the waste derived fuels for energy production is specifically mentioned in WAC 173-350-240 (1)(c). Incineration of this material does not require a permit given that several general conditions are met.

In the section "Piles used for storage or treatment", WAC 173-350-320(1)(b) wood derived fuels are regulated by general guidelines and exempt from permitting by the jurisdictional health department.

In each of these sections the waste derived fuels, because of the low environmental impact, is specifically removed from the permitting process given general conditions are met. We believe this promotes recycling and is helpful to waste recycling efforts.

Under other sections of WAC 173-350 the inclusion of waste derived fuels is vague and according to how the regulation is interpreted could be regulated similar to municipal waste. This degree of regulation is not necessary and would be a hindrance to utilization.

We suggest that the following sections require modification as indicated:

WAC 173-350-210 Material recovery and recycling facilities.
Add to paragraph (1) a list of examples and include waste derived fuel processing as one of the examples. This will remove some of the ambiguity for the jurisdictional health department.

WAC 173-350-300 On-site storage collection and transportation standard.
Add a section similar to WAC 173-350-320 (1)(b)&(c)

WAC 173-350-310 intermediate solid waste handling facilities.
Add a section similar to WAC 173-350-320 (1)(b)&(c)

If processing of waste derived fuels is specifically stated and covered under section 210 then suggested changes for sections 300 and 310 may not be necessary.

In summary we suggest that the collection and processing of waste derived fuels not be regulated as strictly as municipal or putrescible solid waste and that the regulation be written to avoid misinterpretation arid unnecessary regulation by jurisdictional health departments.

Ecology's Response The commenter uses the terms "wood derived fuel" and "waste derived fuel" interchangeably. As a point of clarification it should be noted that there are no categorical permit exemptions in the proposed rule for "waste" derived fuel. Categorical permit exemptions relative to "wood derived fuel" and "wood waste" are all subject to compliance with section specific terms and conditions and are proposed as follows:

"Wood derived fuel", "wood waste", and waste water treatment sludges from the manufacturing of wood pulp or paper products are exempt from permitting when combusted for energy recovery purposes under WAC 173-350-240. Please note that this exemption does not extend to simple incineration for the purpose of volume reduction or disposal.

Storage piles of wood waste and wood derived fuel are exempt from permitting under WAC 173-350-320.

Recycling of waste wood products into "wood derived fuel" is exempt from permitting under WAC 173-350-210.

The recovery of waste wood for the purpose of recycling may be exempt from permitting under WAC 173-350-310.

The last two exemptions reflect revisions to the proposed rule made in response to other comments (see Hansen, comment #30). The most notable change is that material recovery facilities (MRF's) are now regulated under WAC 173-350-310, and only MRF's that solely handle "recyclable materials" as defined qualify for permit exempt status.

With regard to the commenter's suggested changes Ecology does not believe that it is necessary or desirable to single out wood derived fuel processing as a recycling activity, as it is only one of many recycling activities. In regards to the material recovery facility permit exemption it would be inappropriate to do so, since recyclable materials must be designated in the local county comprehensive solid waste management plan. Finally, it is unnecessary to discuss this activity in WAC 173-350-300, as that section is specific only to on-site storage of solid waste in containers and has no permit provisions associated with it.

Commenter **Gordon** ***Section*** ***Comment #*** 158

Comment Soil Amendment Definition: Also under the definition for "Soil amendment" means any substance that is intended to improve the physical characteristics of soil, except composted material, commercial fertilizers, agricultural liming agents, unmanipulated animal manures, unmanipulated vegetable manures, food wastes, food processing wastes, and materials exempted by rule of the department ... Why are these even listed if they are going to be exempted? This would seem to make it more confusing than it needs to be. It would be clearer to the average lay reader to not have any of this listed at all.

Most dairy farms, if not all, have farm plans, which describe an agronomic rate for land application manure may be applied to the land. Why would this need to be listed in this WAC for solid waste? Dairy farms are covered under the Dairy Nutrient Act RCW 90.64.
Any and all references that deal with agriculture, especially dairy farming should not be listed in this WAC at all. Anything to do with agricultural composting should not be listed. The Department of Ecology is outside its scope of direction mandated by the Legislature in including any of this in a proposed WAC. Listing exemptions and then putting provisions on them is not in the best interest of agriculture or the Department of Ecology. By putting overbearing requirements and regulations on farmers you will not be encouraging recycling or composting.

Ecology's Response

The definition of soil amendment was developed by the legislature and is contained in RCW 70.95.030. Not all soil amendments are exempt from regulation.
Ecology acknowledges the comments from agricultural interests, particularly the dairy industry regarding composting requirements in the new rule. Ecology constructed the exemption categories in the rule in order to encourage farming practices that include composting and distinguish them from those practices involving commercial production of composted material.
Ecology views composting as a very important part of maintaining soil health on the farm. The definitions for agricultural composting and agricultural waste are an integral part of the exemption framework and need to be included in the rule.
The inspection provision in the terms and conditions is NOT meant to imply that composting on farms must be inspected by Ecology or the health department. It is meant to allow either organization access to the composting operation on a farm in the event of complaints about environmental problems at the site.
Ecology constructed the agricultural exemptions for composting in an effort to answer questions and clarify the differences between farming practices and commercial composting. In light of increased opportunities and acceptance of waste handling systems that cross urban and rural boundaries, several stakeholder groups have requested this clarification for many years leading up to the proposed rule.

Commenter **Gordon** ***Section*** ***Comment #*** 155

Comment The proposed WAC 173-350 is extensively outside the scope and intent of what the Washington State Legislature intended for the Department of Ecology to oversee solid waste handling. The dairy industry has made numerous requests to be exempt from solid waste handling, all to no avail. The Department of Ecology's exemptions are as burdensome as permit coverage. The intent of RGW 70.95 states as priorities in descending order as applicable:
(a) Waste reduction;
(b) Recycling, with source separation of recyclable materials as the preferred method;
(c) Energy recovery, incineration, or landfill of separated waste;
(d) Energy recovery, incineration, or land filling of mixed wastes.

The Department of Ecology's purpose in WAC 173-350 was to consolidate two previous WACs (173-304 and 173-314) into one comprehensive one. Unfortunately, the Department of Ecology extensively expanded on the previous two WACs instead of simplifying them. No one from agriculture was on the advisory panel for this WAC. No economic impact statement is included on composting facilities. The Department implies that these new regulations will not create a hardship or expense for farms that are already certified with farm plans approved by their local conservation district using NRGS standards. The dairy industry does not agree with the Department.

Ecology's Response Ecology disagrees with the commenter's interpretation of legislative intent. The citation the commenter references is not the stated purpose of the statute. The purpose is contained in RCW 70.95.020, which states, in part, " The purpose of this chapter is to establish a comprehensive state-wide program for solid waste handling, and solid waste recovery and/or recycling which will prevent land, air, and water pollution and conserve the natural, economic, and energy resources of this state."

It is also important to consider that "solid waste" by definition in RCW 70.95.100 includes "all putrescible and nonputrescible solid and semisolid wastes…". There is no specific exclusion for agricultural wastes. Furthermore it should be noted that the current rule , chapter 173-304 WAC, applies management of agricultural waste. The proposed rule is actually less stringent in this regard than the current rule.

With regards to the concern of agriculture intersets not being represented during rule development, a member of the agricultural community participated on the formal External Advisory Committee. Ecology also had extensive input from farmers and agricultural consultants on the Composting Technical Advisory Group that met several times to review draft language in the composting facility section. One of the farmers is a dairy farmer operating a successful composting operation under a solid waste permit. In addition, Ecology convened a special meeting in Yakima specifically devoted to agricultural interests in which the Washington State Dairy Federation was represented.

Commenter **Gordon** ***Section*** **010** ***Comment #*** 156

Comment Purpose: On page 1 of DOE's proposed WAC 173-350-010 Purpose under (1) DOE states that setting minimum functional performance standards for the proper handling and disposal of solid waste originating from residences, commercial, agricultural and industrial operations and other sources. These standards will cost time and money to implement, track and for businesses to administer.

Ecology's Response Ecology recognizes that implementation of the proposed rule will not be without cost. However, the standards are minimum requirements for the protection of human health and the environment.

Commenter **Gordon** ***Section*** **020** ***Comment #*** 157

Comment Applicability: On page 2 under WAC 173-350-020 Applicability it says "this chapter does not apply to the following (2) Wood waste used for ornamental, animal bedding etc. further stating in Section (4) land application of manures and crop residues at agronomic rates. However, under WAC 173-350-100 Definitions it lists "Agricultural composting," "Agricultural wastes" and "Agronomic rates" "Composting," and "Crop residues." All of these definitions can be interpreted as agricultural, which the Legislature did not list in its intent of regulations for solid waste.

Ecology's Response Please see response to Gordon, comment #155.

Commenter **Gordon** ***Section*** **100** ***Comment #*** 354

Comment However, under WAC 173-350-100 Definitions it lists "Agricultural composting," "Agricultural wastes" and "Agronomic rates" "Composting," and "Crop residues." All of these definitions can be interpreted as agricultural, which the Legislature did not list in its intent of regulations for solid waste.

Ecology's Response Please see response to Gordon, comment #155.

Commenter **Gordon** ***Section*** **200** ***Comment #*** 159

Comment Beneficial Use: Under WAC 173-350-200 Beneficial use permit exemptions - this section says that if you are exempt you have to apply for a permit, then DOE will decide if you get to have one, adding to the regulatory burden on DOE and farmers. Again DOE starts talking about agronomic rates land application etc. All of these specifications are covered under farm plans prepared by the local conservation district and NRCS. The Department of Ecology is duplicating a regulation that is already in place and which is covered by RCW 90.64 the Dairy Nutrient Management Act. Again, agriculture is not listed in RCW 70.95.300 so the Department of Ecology has strayed outside the Legislature's intent for this WAC.

Ecology's Response The commenter has misunderstood the section being commented on. Proposed WAC 173-350-200 creates by rule, an application process to apply for a beneficial use determination explicitly authorized by the Legislature as stated in RCW 70.95.300 (2). If an activity is otherwise exempted by a different section of the rule, section -200 is not applicable.

Commenter **Gordon** ***Section*** **220** ***Comment #*** 160

Comment Composting: New Section WAC 173-350 220 Composting facilities. This section states it is not applicable to those exempt from a handling permit, but lists agricultural composting throughout this section stating that registered dairies will need to be inspected by the local health department or DOE. Registered dairies with farm plans are following NRCS standards on their farms and should not be subject to these inspections. Dairy farms are already inspected under RCW 90.64 the Dairy Nutrient Management Act and should not be listed under solid waste handling at all!

References to regulation of agriculture, specifically dairy farms under this WAC are far outreaching the Department of Ecology's jurisdiction. Again, dairy farms are regulated under RCW 90.64 the Dairy Nutrient Act and should not be listed under your new WAC for solid waste handling WAC 173-350.
The end result of this regulation will be a reduction in composting, an increase in the regulatory burden on our farms and businesses all to provide a solution to a problem that doesn't exist. In the end this regulation fails in both goals. It does not simplify anything and it will not encourage composting.

Ecology's Response

Ecology established the exemptions for agricultural composting based on repeated requests for clarification by health departments and farmers alike. With increasing links between farms and urban/suburban areas, Ecology received increasing pressure to address composting as an industry and composting as an agricultural practice used to maintain soil fertility.
Ecology agrees that a table or graphic explanation of the exemption categories would be helpful. However, Ecology maintains that the categories themselves represent a good balance between farmers engaged in activities solely for the purpose of improving soil health, and farmers who want to move into the commercial composting arena. The regulation simplifies composting regulations by sorting out which kinds of composting activities require solid waste handling permits and which don't.

The definition of soil amendment was developed by the legislature and is contained in RCW 70.95.030. Not all soil amendments are exempt from regulation. One of the exemptions, the land application of crop residues and manures at agronomic rates, is directly applicable to this comment. However, Ecology does not agree that agriculture should be exempt from all aspects of this regulation (see response to Gordon, comment #155.

Commenter **Gries** ***Section*** **100** ***Comment #*** 180

Comment

Section 020 (7). Exclusion of clean dredged spoils material or clean sediment from regulation under his Chapter may or may not be appropriate. Please see comments below on the proposed definition.

Section 020 (8). Exclusion of dredged spoils material "regulated under section 404 of the Federal Clean Water Act" may or may not be appropriate, depending on what is meant by the quoted phrase. Material determined by the DMMP to be unsuitable for open water disposal remains subject to a section 404 permit (and section 401 water quality certification).

Would such unsuitable dredged material be excluded from the proposed regulations? It is currently common practice in this region for such material to be taken to a solid waste facility for disposal, e.g., the Allied/Rabanco regional landfill, which may or may not have required a section 404 permit itself. Thus, it may not be appropriate for unsuitable dredged material that is regulated under section 404 to be excluded from regulation under this Chapter.

Section 100.
Please reconsider defining clean dredged material or clean sediment to include language such as "sediment determined by the DMMP agencies to be suitable for unconfined, open water disposal" and/or "sediment that meets the chemical and biological standards established in Chapter 173-204 WAC".

Please reconsider defining contaminated dredged material or contaminated sediment as those "where contaminants are present at concentrations or biological effects are such that the DMMP agencies determine them not suitable for …" and/or as "sediment that exceeds the chemical and biological standards established in Chapter 173-204 WAC".

FYI: It is my experience, and probably that of the entire Sediment Management Unit, that exceedingly little (even clean) dredged material/sediment meets the criteria for being an "Inert Waste" (Section 990).

It is appropriate for this chapter to recognize "limited purpose landfills" as a reasonable method of managing contaminated dredged material/sediment.

It is also probably appropriate for this chapter to segregate most contaminated dredged material/sediment, commonly a result of either CERCLA or MTCA actions, from "municipal solid waste"

Elsewhere in section. It is appropriate that such terms such as "beneficial use", "disposal", "free liquids", "piles", "recycling", "storage", "treatment", etc. apply to dredged material/sediment in addition to more "traditional" materials.

Please replace all instances of "dredge spoils" with "dredged material" or "sediment". The term "dredge spoils" has not been commonly used within the industry or by regional regulators for more than 15 years. For example, the interagency Dredged Material Management Program (DMMP), of which Ecology is a founding member and active participant, does not recognize this term.

A little background. Dredged material that is not considered suitable for open water disposal (see below) may be suitable for beneficial use in an upland setting, e.g., capping or construction fill, or it may be disposed of at an appropriate solid waste management facility. However, it has never been the intent of the DMMP to exempt such material from subsequent regulation. Rather, it has always been the DMMP's expectation that "jurisdictional health departments" would at least help to determine suitable uses or disposal locations. Similarly, sediment that meets the Sediment Management Standards (Chapter 173-204 WAC) may still pose unacceptable risk to upland receptors and, thus, should not necessarily be excluded from regulation under Chapter 173-350.

Ecology's Response

One commenter (Gries) suggested to replace the term "dredge spoils" with "dredged material" since

dredge spoils has not been commonly used within the industry for many years. The term was a carry over from the previous rule but has been replaced as suggested.

Two commenter's (Malchow, McNeill) stated the proposed definitions of "clean soils and dredge spoils", contaminated dredge spoils", and "contaminated soils" were vague and excessively subjective. The commenter's requested that contaminant concentration levels should be established to delineate clean and contaminated soils and dredged material. One commenter suggested that the concentration levels be based upon leach tests, such as the Toxicity Characteristic Leaching Procedure (TCLP). Another commenter suggested that the concentration levels be based upon cleanup levels established in Chapter 173-340 WAC, Model Toxics Control Act Cleanup Regulation (MTCA).

One of the tasks in developing this rule is to establish criteria for determining when soils and dredged materials are clean or contaminated. This is important because the rule does not apply to clean soils or dredged material. Ecology initially attempted to incorporate specific concentration-based criteria for delineating clean and contaminated soils and dredged material. The goal was to eliminate ambiguity. It was well understood that this approach would be the easiest to understand and implement, both by generators and jurisdictional health departments.

The concentration-based standards included leaching and toxicity criteria that were initially proposed as both reasonable and protective of the environment. Comments received during earlier review drafts pointed out that the proposed concentrations would not be protective, or the assumptions incorporated would not reflect reality in many circumstances. It was also pointed out that the proposed concentrations were so low that most soils and dredged material would not qualify as "clean." This would subject common fill activities to the limited purpose landfill standards. Other difficulties included the inability of leach tests to reflect actual contaminant fate and transport in the environment for many constituents and the inability to establish concentrations for materials lacking toxicity values (e.g. reference dose and carcinogenic potency factor.)

Two options were considered in order to address these concerns. The first was to modify the testing methodology and criteria to make it perform as needed and be protective of the environment in all probable circumstances. The other option was to abandon the concentration-based approach altogether.

It was often suggested that the MTCA Method A soil cleanup levels for unrestricted land uses, WAC 173-340-900 Table 740-1, should be used as the concentration threshold for determining if a soil or dredge material was "clean." This is not practicable for several reasons. The basis for the MTCA Method A cleanup levels are limited to human health effects for a limited number of constituents and exposure assumptions. These levels are not protective of terrestrial ecological receptors and cannot be used when a soil contains several hazardous substances. Many of the soil cleanup levels are based on impacts to ground water but do not implement the antidegradation policy of WAC 173-200-030. MTCA provides a process and cleanup standards to address sites that have been contaminated. The solid waste rules have a wider scope and must protect sites that are relatively contaminant free.

Ecology found that it was not practicable to pursue the concentration-based option, primarily because any contaminant concentration levels that would protect the environment in likely circumstances would be too stringent to be practicable. To provide a concentration-based standard, with sufficient flexibility to be appropriate to the wide variety of circumstances, would require an excessively complex rule. Ecology opted to abandon the concentration-based approach and develop a definition that can be applied to any situation; understanding the difficulties involved with a definition that requires judgment. The final definition for clean soils and dredged material requires knowledge of the soils or dredged material characteristics and the characteristics of the site and manner in which they are placed.

The definition of clean soils and dredged material contains two conditions. First, clean soils or dredged material must not "contain contaminants at concentrations which could negatively impact the quality of air, waters of the state, soils, or sediments…" Second, clean soils or dredged material must not "pose a threat to the health of humans or other living organisms." Commenter's suggested that it would be difficult to determine when a contaminant could "negatively impact" the environment or "pose a threat" or that some contaminants would have a negative impact or pose a threat at any concentration.

The first condition is meant to ensure that the concentration of contaminants in a "clean" soil or dredged material are not significantly higher than those at the site where they are placed. Soils or dredged material with similar or lower levels of contamination than the site where they are placed will not have negative impacts on the environment and would meet the definition of "clean". Conversely, soils or dredged material with higher levels of contamination than the site where they are placed could have negative impacts on the environment and would meet the definition of "contaminated". Clean soils or dredged material placed at a location that has not been influenced by regional or localized human activity could not contain any contaminants (as defined in the rule.) Soils or dredged material placed at a heavy industrial area could contain contaminants at levels similar to existing conditions at the site and be "clean", so long as the second condition is met.

The second condition is primarily meant to ensure that soils or dredged material with high levels of contaminants are not placed at contaminated sites that pose a threat to human health or the environment. This condition is also meant to address contaminants with characteristics that may have different impacts due to the quantity of a soil or dredged material, such as organic

matter or metallic constituents in a form that produces acid leachate.

The manner in which a soil or dredged material is used also needs to be considered when determining if it is clean or contaminated. For example, manufactured soils derived from contaminated soils, or other solid waste residuals, would need to have very low concentrations of contaminants (at or near natural background) in order to be marketed for unrestricted use as a clean soil. The marketer would need to ensure that the soil would meet the definition of clean soil for all probable uses. Many naturally occurring substances in soil, such as wood particles found in log sort yard waste fines, would not be expected to have a negative impact at most locations if placed in relatively thin layers. However, large quantity fills of the same soil would produce leachate and generate gas that could pose a threat to human health and the environment. Similarly, gravelly soils containing heavy petroleum hydrocarbons that would generally be regulated as contaminated soil may meet the definition of "clean" when used as a base material for asphalt cement pavement.

One commenter (Marek) stated that many waste generators are looking to classify their soils as 'clean soils' due to the high costs of disposal at solid waste landfills. An alternative approach suggested was to require generators to demonstrate to the jurisdictional health department that the soil in question is in fact "clean" prior to actually managing it as such as a proactive, prevention-oriented approach to enforcement rather than the approach currently described. Ecology deems such a demonstration for every soil and dredged material decision an unreasonable burden to both generators and jurisdictional health departments. However, it is expected that facilities that treat contaminated soils, or manufacture soils from solid waste residuals, include criteria and testing protocols in their plan of operation to ensure that all soils from the facility are either "clean" or handled at a permitted solid waste facility.

One commenter (McNeill) suggested that the definition for clean dredged material be related to the definition for contaminated dredged material, so that any given material may be defined as one or the other. Ecology agrees with this and has amended the definitions of clean/contaminated soils and dredged material to be opposites with no overlap. The commenter suggested that clean dredged material be defined as those that meet the conditions for open water disposal, and contaminated dredged material be defined as those that do not. While this is intuitive, it is not an appropriate approach for this rule as dredged material that meet the conditions for open water are exempted from the rule (when the open water disposal is under an appropriate permit.) This rule is also concerned with dredged material that is placed on land without a permit. Because of this, clean dredged material must be defined in a way that addresses the upland impacts. However, the definition for clean dredged material has been revised in a manner that would include most material suitable for open water disposal. They would not negatively impact the existing quality of sediments at the disposal site.

One commenter (Gries) suggested that the applicability to dredged material regulated under sections 404 of the Federal Clean Water Act was problematic and vague. Ecology agrees with this comment and has amended the rule to clarify applicability to dredged material.

Commenter **Gries** ***Section*** **200** ***Comment #*** 184

Comment Section 200. I have only briefly reviewed this section, but it appears to provide adequate permit exemptions for many potential beneficial uses of dredged material. However, without more careful review, I am concerned that some common beneficial uses of dredged material, e.g., as clean cap material or for beach nourishment, may effectively be inhibited by what appear might be somewhat cumbersome requirements specified herein. There may be the need to define a streamlined process or set of requirements for specific beneficial uses of DM/sediment.

Ecology's Response Please refer to (revised) WAC 173-350-020 (7 & 8), Applicability. This rule is not applicable to clean dredged materials, although other rules may govern use of these materials. Disposal or use of contaminated dredged material likely would require permitting.

Commenter **Gries** ***Section*** **210** ***Comment #*** 185

Comment Section 210. I am pleased to see that this section potentially applies to dredged material, as treatment of such may become more feasible in the future.

Ecology's Response Comment noted.

Commenter **Gries** ***Section*** **220** ***Comment #*** 186

Comment Section 220. Please consider excluding dredged material from that handled by composing facilities. DM contains relatively low organic matter "composting" it to dilute contaminants should not be acceptable.

Ecology's Response We agree that the composting process should NOT be used to dilute contaminants. The performance standards in the new rule contain a provision that prohibits dilution of a waste as a substitute for treatment or disposal (WAC 173-350-040(6).)

Local health departments decide which feedstock types may be accepted at a composting facility under the solid waste handling permit. Ecology does not recommend including dredged material at permitted composting facilities, unless the material has been tested and shown to be low in contaminants.

Commenter **Gries** ***Section*** **230** ***Comment #*** 187

Comment Section 230. Without careful review, it is not clear how "land application" standards would apply and/or impede such practices as beach nourishment using clean dredged material.

Ecology's Response If the dredged material meets the regulatory definition of "clean", the rule is not applicable to the material, therefore there is no impact to the practice of beach nourishment. If the dredged material does not meet the criteria to be "clean", and the material is not covered by a Corps of Engineers 404 permit, a solid waste permit may be required. If there is a discharge of decant water from the dredged material back into waters of the state, a Water Quality (WQ) permit may be required. If so, the jurisdictional health department does have the discretion, with Ecology concurrence, to defer solid waste permitting if the WQ permit has conditions that meet or exceed solid waste requirements.

Commenter **Gries** ***Section*** **320** ***Comment #*** 188

Comment Section 320. Requirements for "piles used for storage or treatment" appear to address major concerns stemming from the likely scenarios for storage of dredged material/sediment.

Ecology's Response Ecology developed the standards with the intent of providing adequate protection for contaminated soils and dredged material. The standards were developed with the understanding that dredged material, and other wastes, would contain free liquids and could produce significant quantities of hazardous leachate.

Commenter **Gries** ***Section*** **400** ***Comment #*** 189

Comment Section 400. This section appears to provide adequate protection/requirements for any dredged material/sediment likely to be placed therein.

Ecology's Response Ecology developed the limited purpose landfill standards with the wide range of potential waste types in mind and contaminated dredged material was considered as a potential waste type.

Commenter **Hanada** ***Section*** **100** ***Comment #*** 257

Comment Replace the definition "Incompatible waste" with the following "means a waste which is unsuitable for placement in a particular device or facility because it may corrode or decay the containment materials, or is unsuitable for mixing with another waste or material because the mixture might produce heat or pressure, fire, or explosion, violent reaction, toxic dust, fumes, mist, or gases, or flammable fumes or gases."

Ecology's Response Ecology does not concur with the suggested change. The term "incompatible" is used in the proposed rule in the context of wastes being mixed or allowed to come into contact. The issue of waste being placed in containment devices constructed of materials that are chemically compatible with the waste is addressed in WAC 173-350-360 (5)(a)(ii) and WAC 173-350-360 (6)(a)(iii).

Commenter **Hanada** ***Section*** **100** ***Comment #*** 278

Comment We would like to see definitions for refuse-derived fuel and solid waste digestors.

Ecology's Response The commenter asked that the terms "refuse derived fuel" and "solid waste digestor" be defined. Ecology does not propose to do so at this time because the terms are not used in this rule.

Commenter **Hanada** ***Section*** **100** ***Comment #*** 254

Comment In the definition for "conditionally exempt small quantity generator" add "means a conditionally exempt small quantity generator of less than 220 pounds of hazardous waste, or less than 2.2 pounds of extremely hazardous waste, per month per batch."

Ecology's Response After reviewing the definition Ecology has determined that the definition would not be enhanced by the addition of the suggested language.

Commenter **Hanada** ***Section*** **100** ***Comment #*** 256

Comment Add the definition "household means single or multi-family residences, hotel or motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day-use recreation areas.

Ecology's Response Ecology does not believe that this change is needed because the term "household" is primarily used in the proposed rule relative to household hazardous waste (HHW).

Commenter **Hanada** ***Section*** **100** ***Comment #*** 258

Comment In the definition for "leachate" add "a product" after the words …contact with. Some facilities contend that after their process they have a product, yet that product can still produce leachate.

Ecology's Response In accordance with the authorizing statute, ch.70.95 RCW the proposed rule applies to solid waste and is not intended to regulate products. Ecology understands the issue, but believes that the way to resolve it is through a determination that the material and activity are subject to regulation as a solid waste.

Commenter **Hanada** ***Section*** **100** ***Comment #*** 259

Comment Add the definition "Manifest means the shipping document, prepared in accordance with the requirements of WAC 173-303-180, which is used to identify the quantity, composition, origin, routing, and destination of a hazardous waste while it is being transported to a point of transfer, disposal, treatment, or storage.

Ecology's Response The uniform hazardous manifest are only mentioned when referring to wastes not covered by this rule and in one place in the MRW section 173-350-360 for waste destined for out of state transport by a commercial HW licensed hauler. In that instance the requirement contains all of the pertinent elements of the comment definition. Ecology does not feel that the limited and obvious use of this term merits a separate definition in section 100.

Commenter **Hanada** ***Section*** **100** ***Comment #*** 265

Comment In the definition for "wood waste" include laminates in the list "but does not include…".

Ecology's Response Because laminates are typically a synthetic material and not wood, and are adhered to wood surfaces with a chemical bonding agent they are inherently not wood waste. However, for clarity Ecology will incorporate the commenter's suggested change.

Commenter **Hanada** ***Section*** **100** ***Comment #*** 261

Comment Add the definition "Secondary containment means a system to contain spills from containers and tanks.

Ecology's Response The definition of the term secondary containment is implied in how it used in 173-350-360 (5)(a)(iii). The use of the term in this subsection is more explicit than the comment recommended language.

Commenter **Hanada** ***Section*** **100** ***Comment #*** 262

Comment In the definition for "source separation" replace the words "of different kinds" with "recyclables out". Separation of different kinds of solid waste does not seem to be an adequate definition.

Ecology's Response In order to maintain consistency Ecology has chosen to use statutory definitions verbatim in this rule.

Commenter **Hanada** ***Section*** **100** ***Comment #*** 255

Comment Add the definition "hazardous waste means those wastes designated by WAC 173-303-090 and/or WAC 173-303-100, and regulated as hazardous waste by the department.

Ecology's Response The term hazardous waste has a specific meaning in Washington State. Hazardous waste refers to wastes identified by 40 CFR Part 261, Identification and Listing of Hazardous Waste, which is a subset of dangerous waste. The term is not defined in this rule because there are no provisions specific to hazardous waste. However, there were places in the proposed rule where the term was used. The rule has been revised to eliminate references to hazardous waste, except where used in a title.

Commenter **Hanada** ***Section*** **100** ***Comment #*** 263

Comment In the definition for "type 1 feedstocks" replace the words "meat free food" with "produce (meaning vegetative waste)". "Meat free food" includes other foods like eggs, dairy, and cheeses, that might not be appropriate type 1 feedstocks.

Ecology's Response Ecology agrees with the comment to include the term "vegetative food waste" in the definition of type 1 feedstocks.

Commenter **Hanada** ***Section*** **100** ***Comment #*** 264

Comment In the definition for "wood derived fuel" include laminates in the list "wood derived fuel does not include…".

Ecology's Response Because the commenter does not provide any rationale for the proposed change it is difficult for Ecology to understand the proposed change. The purpose of creating the wood derived fuel definition was to provide a means by which urban wood could be used as fuel. To exclude laminates would be counter-productive to the intent of the definition.

Commenter **Hanada** ***Section*** **100** ***Comment #*** 260

Comment In the definition for "putrescible waste" add the words "leachate or" after the words …likely to produce.

Ecology's Response Ecology does not agree with this suggested change. The likelihood that leachate will be produced has more to do with the manner in which the waste is handled than by the characteristics of the waste. Putrescible waste may be managed in such a way that there will be no leachate generation, yet it would still be capable of decomposition and odors.

Commenter **Hanada** ***Section*** **210** ***Comment #*** 267

Comment section 2.b.iv. Add a sentence (E. Documentation that provides evidence of compliance with (ii) of this section).

Ecology's Response The suggested change is not feasible. It is not possible to provide evidence of compliance with the disposal threshold as part of notification. Notification occurs prior to operation.

Commenter **Hanada** ***Section*** **210** ***Comment #*** 266

Comment section 2.b.ii. Change the sentence to "Accept source separate solid waste for the purpose of energy recovery and/or recycling. Dispose of an…"

Ecology's Response Ecology does not agree with the suggested change. Energy recovery is dealt with in section -230.

Commenter **Hanada** ***Section*** **220** ***Comment #*** 268

Comment chart. Add under Table B PCBs (1 ppm), TPH other (200 ppm), and Carcinogenic PAHs (1 ppm or .1 ppm).

Ecology's Response Ecology has included some flexibility in the rule for health departments to require additional testing if warranted at a particular facility based on historical data (WAC 173-350-220 [4][a][viii]).

Commenter **Hanada** ***Section*** **230** ***Comment #*** 269

Comment Page 34, section 1.a.f. What is the definition of materials? Does materials exclude all solid waste or does it include some regulated waste?

Ecology's Response The term "material" has been replaced with "solid waste".

Commenter **Hanada** ***Section*** **230** ***Comment #*** 270

Comment Page 34, section 2. Eliminate word “except” in the last sentence.

Ecology's Response Ecology concurs with the commenter’s recommendation and has made the suggested change.

Commenter **Hanada** ***Section*** **360** ***Comment #*** 272

Comment Page 65, section 2.d. Add the following language:
“provide secondary containment to capture and contain releases and spills;”
“require all storm drains in the vicinity of the collection event to be covered with plastic sheeting or otherwise blocked off in order to prevent any release from entering storm drain systems.”

Ecology's Response Ecology’s approach has been to provide performance standards where appropriate, rather than prescriptive requirements. Ecology does not concur with the commenter’s suggested change as it is not in keeping with this approach. Furthermore, a well designed secondary containment system that has been approved by the jurisdictional health department during the permitting process should ensure that releases and spills would not migrate to an open storm drain.

Commenter **Hanada** ***Section*** **360** ***Comment #*** 271

Comment Page 65, section 1.b. Add (iii) Persons managing SQG waste at a business that is generated by the business as long as the performance standards are met.

Ecology's Response Ecology concurs with the commenter’s suggested exemption for CESQG’s managing their waste on-site. Ecology has chosen to predicate the exemption on both compliance with the performance standards of WAC 173-350-040 and the small quantity generator exemption requirements of WAC 173-303-070 (8)(b). This approach will help to clarify the enforcement interface between the solid waste and hazardous waste rules.

Commenter **Hanada** ***Section*** **410** ***Comment #*** 273

Comment Page 90, section 1. Change the volume to categorically exempt inert waste landfills from solid waste handling permitting to 1,000 cubic yards or less.

Ecology's Response The commenter suggests that the capacity threshold for categorical exemption from solid waste handling permitting be raised from two hundred fifty cubic yards to one thousand cubic yards, without providing any justification for the suggested volume increase. The threshold of two hundred fifty cubic yards was chosen as the threshold based upon comments received during early development of the rule and from earlier drafts of the rule.

It is anticipated that inert waste landfills operating under a solid waste handling permit will generally be monitored more closely and screen non-inert wastes more effectively than non-permitted facilities. The proposed threshold was set at a level intended to balance potential threats from poorly controlled facilities with the potential burden from permitting too many small fills. Other factors considered during development of the threshold were the ability to estimate volumes and to observe the waste in place. Local fill and grade permits are often required at quantities as low as fifty cubic yards. While these permits provide the opportunity for notification of a planned project, they do not provide environmental protection. Two hundred fifty cubic yards is equal to approximately twenty to thirty dump truck loads. The suggested one thousand cubic yard threshold is equal to approximately eighty to one hundred twenty dump truck loads.

Commenter **Hanada** ***Section*** **500** ***Comment #*** 277

Comment Page 100, section 5.b.i.c. Add the language; …the established background concentration must meet the requirements of Enforcement Limits as stated in WAC 173-200-050.

Ecology's Response Jurisdictional local authorities may establish enforcement limits using Chapter 173-200 WAC through the permitting process beyond the statistical procedures required under WAC 173-350-500(5)(a).

Commenter **Hanada** ***Section*** **500** ***Comment #*** 276

Comment Page 100, section 5.b.i.C. The sentence concerning background concentrations higher than protection should include the demonstration requirements for Enforcement Limits already in WAC 173-200-050 (3) (b) (ii).

Ecology's Response Jurisdictional local authorities may establish enforcement limits using Chapter 173-200 WAC through the permitting process beyond the statistical procedures required under WAC 173-350-500(5)(a).

Commenter **Hanada** ***Section*** **500** ***Comment #*** 275

Comment Page 100, section 5.b.i.B. Replace current language with: Resample the ground water in the monitoring well (s) where the statistically significant increase has occurred. The additional data shall be used in statistical tests to check for outliers.

Ecology's Response The purpose of a resample would be to confirm or deny the actual presence of a contaminant (as

opposed to, say, a sampling or laboratory error). Dealing with statistical "outliers" should be presented as part of a statistical approach from WAC 173-350-500(5)(a).

Commenter **Hanada** ***Section*** **710** ***Comment #*** 274

Comment Page 113, section 7.b. What is the definition of relative interests? Please add a definition with criteria like public notification and hearing, or eliminate the section completely.

Ecology's Response The term "relative interest" is used in a manner consistent with standard dictionaries and does not require further definition.

Commenter **Hansen** ***Section*** **100** ***Comment #*** 27

Comment Definition of "Free Liquids" is incorrect. Free liquids are the liquid products of the paint filter test.

Ecology's Response Ecology concurs with the commenter that the definition of the term "free liquids" was improper as it referred to the solid waste and not the liquids in the waste. The definition has been amended to correct this.

Another commenter (McNeill) suggested that the liquids restriction in WAC 173-350-400(4)(a)(iii) may create an impossible standards, due to wet weather conditions when saturated materials are delivered for disposal. The restriction on liquid wastes is specifically intended to preclude acceptance of saturated wastes. An owner or operator that desires to add liquids or liquid waste to a limited purpose landfill would need to apply for a variance in accordance with WAC 173-350-710(7).

Commenter **Hansen** ***Section*** **100** ***Comment #*** 34

Comment "Treatment" is used elsewhere in the rule to mean a process which converts a solid waste into a product which does not need to be handled as a solid waste.

Ecology's Response The commenter notes that the definition for "treatment" was used in the rule in a manner that did not coincide with the definition. Ecology found that related terms were also used in ways that did not match the definition. These terms were "processing", "final treatment", and "disposal site." The definition for "treatment" was not changed and is intended to apply only to processing of solid waste for the purposes shown. The definition for "processing" was amended so that it would apply to the actions or steps taken with any material for the purposes shown. The definition for "disposal site" was deleted and all references in the rule were changed to "disposal facility" or "landfill". No definitions for these terms were added as they are logical combinations of defined terms. The definition for "final treatment" was also deleted since it was only used in the disposal site definition.

Commenter **Hansen** ***Section*** **100** ***Comment #*** 33

Comment "Soil Amendment" — composted material is excepted from this definition. This is potentially confusing. In many of King County and our partners' educational outreach materials, residents are encouraged to improve their soils with a soil amendment such as compost. It is not clear why compost is not a substance covered as a soil amendment used to improve the physical characteristics of soil.

Ecology's Response Ecology understands the potential confusion between legal definitions based on statutory language and common use of terms. However, the terms listed in the definitions section apply "when used in this chapter," and don't impact common use of terms in other contexts.

"Soil amendment" is a term that has specific meaning under RCW 70.95.030. Composted material was exempt from the definition of soil amendment during the 1998 legislative session because of the regulatory construction of the exemption process under RCW 70.95.205 Exemption from solid waste permit requirements -- Waste derived soil amendments.

In public outreach and education materials it is appropriate to refer to compost as a "valuable soil amendment."

Commenter **Hansen** ***Section*** **100** ***Comment #*** 32

Comment Need a definition for "Responsible Person". This term is used in the rule.

Ecology's Response For clarity Ecology has deleted "responsible party" and replaced it with "owner or operator".

Commenter **Hansen** ***Section*** **100** ***Comment #*** 29

Comment The definition of "Land Reclamation" is a problem. The definition could be construed to apply to either structural fill or improving the organic content of severely altered sites for the purpose of revegetation. Land Reclamation for the latter purpose should be regulated under Land Application. Land Reclamation for the former purpose should be regulated under either the Limited Purpose Landfill Section or the Inert Waste Landfill Section.

Ecology's Response Ecology concurs with the commenter that the proposed definition for land reclamation would include circumstances where solid wastes are used as a component of fill to restore drastically disturbed lands. Land reclamation was not intended to include this activity. The definition has been revised to exclude solid waste used as fill.

Commenter **Hansen** ***Section*** **100** ***Comment #*** 30

Comment The definition of "Materials Recovery Facility" needs to be changed to say: "means any facility that accepts source separated recyclable materials.. ." This is a significant point. As presented, the definition doesn't make sense and is inconsistent with common usage. The definition of "solid waste" lists a number of different things that make up solid waste. These things include "...garbage, rubbish, ashes, ... and recyclable materials." A materials recovery facility processes commingled recyclable materials that have been separated out of the solid waste stream at the source. As defined, it seems one could be processing sludge, or swill, or garbage, or other things that have been separated out of the mixed waste stream. Section 210 exempts material recovery facilities from solid waste handling permitting. All of the discussion in development of this regulation has focused on recyclable materials, not on these other things.

Ecology's Response Ecology agrees with the commenter that the suggested change is an important point. The use of the term "source separated solid waste" currently used in the definition provides greater flexibility for material recovery facilities to react to changing market conditions than the proposed change to "recyclable materials". The proposed change could limit this flexibility because a solid waste is not a "recyclable material" unless the local comprehensive solid waste management plan (CSWMP) designates it as such. However, Ecology recognizes and supports the legislature intent that local government play the lead role in developing local solid waste plans and programs in order to ensure a systematic approach to solid waste management. Ecology also believes that this issue is illustrative of the difficulty in maintaining a balance among various interests. In this case we believe that the public good is best served by taking a somewhat more conservative approach than originally proposed and limit categorical exemptions from permitting for material recovery to "recyclable materials". It should be noted that with this more conservative approach comes added responsibility for some local governments to maintain their CSWMP in a current condition, with attention to balancing local system needs while providing sufficient flexibility to promote recycling opportunities.

Ecology has chosen not to accept the change as proposed by the commenter. We have determined that an alternate approach will be much clearer to users of the rule. The essence of the alternate approach is to regulate all material recovery facilities (MRF) as intermediate solid waste handling facilities (section -310), with categorical exemptions from permitting available only to those facilities that accept only "recyclable material", meet the disposal threshold criteria, and other standard terms and conditions. Section -210 would then be applied only to recycling operations that did not classify as a MRF per the revised definitions. These recyclers would be those operations that were truly recycling, actually processing the waste into a new product or usable material, rather than just collecting and processing waste materials for transport. Terms and conditions for recycling facilities have been modified to delete the disposal threshold as it would not be a factor at the non-MRF recyclers.

Commenter **Hansen** ***Section*** **100** ***Comment #*** 28

Comment There is an opportunity here to clean up the definition of Garbage. It is a run-on sentence with significant potential to be misunderstood.

Ecology's Response Ecology agrees with the commenter and has revised the definition.

Commenter **Hansen** ***Section*** **100** ***Comment #*** 25

Comment The definition of "Dredge Spoils" has been deleted from the rule.

Ecology's Response This comment is difficult to interpret because a definition for dredge spoils was not included in any proposed draft of this rule nor is it defined in Chapter 173-304 WAC, the rule which is being replaced by this rule. Ecology has not defined what is now called dredged material except in WAC 173-350-020, Applicability, because dredged material is regulated in a manner identical to soil once it is no longer subject to water disposal permits.

Commenter **Hansen** ***Section*** **100** ***Comment #*** 24

Comment Domestic Wastewater" is not defined

Ecology's Response The commenter correctly points out that the term "domestic wastewater" is undefined. Ecology does not believe that it is necessary to define this term.

Commenter **Hansen** ***Section*** **100** ***Comment #*** 31

Comment Need a definition for "Natural Resource Conservation Service Standards" used in the rule.

Ecology's Response Ecology agrees that the three references to "Natural Resources Conservation Service standards" in the composting facility section need clarification. However, instead of including a definition in WAC 173-350-100, Ecology has revised the references themselves as a more direct way to address the commenter's concerns.

Commenter **Hansen** ***Section*** **100** ***Comment #*** 23

Comment "Composted Material" definition is problematic. It defines the material as a solid waste yet the rule seeks to later define what composted materials are solid wastes and which are not. It would be better to define "Composted Material" as the product of the controlled aerobic degradation of primarily organic material.

Ecology's Response "Composted material" is solid waste that has "undergone biological degradation and transformation under controlled conditions. . ." In order to be free from the solid waste regulatory system, composted

material must meet certain quality criteria listed in the section on composting facility standards. It can then be distributed and used as a product.
The commenter's proposed definition change does not address the fact that composted material must meet certain quality criteria before it can be removed from the regulatory arena.

Commenter **Hansen** ***Section*** **100** ***Comment #*** 22

Comment The definition of "buffer zone" has been deleted from the rule.

Ecology's Response The commenter correctly notes that the definition of "buffer zone" has been deleted. The term is no longer used in the rule.

Commenter **Hansen** ***Section*** **100** ***Comment #*** 21

Comment It would be cleaner to remove carcasses from the definition of "agricultural waste" and separately deal with the handling of carcasses

Ecology's Response Handling carcasses of dead animals is an integral part of animal management operations.

Commenter **Hansen** ***Section*** **100** ***Comment #*** 26

Comment Need a definition for "Feedstock" It is used generically in Section 200.

Ecology's Response Ecology has tried to limit definitions to those terms that are either statutorily defined or have special meaning beyond definitions found in a standard dictionary. In this case we do not believe the term meets either of these criteria.

Commenter **Hansen** ***Section*** **210** ***Comment #*** 35

Comment The first paragraph needs to be modified to say: "These standards apply to material recovery facilities and facilities engaged in recycling of Source Separated Recyclable Materials, In addition, with a correct definition for the term "Material's recovery facility," the last clause of this sentence is redundant.
As written, this section exempts all recycling facilities from solid waste handling permitting so long as the residuals do not exceed the amounts specified in — 210(2)(6)(ii). This includes mixed waste processing facilities, given the definition discussed above, the use of the term "source separated solid waste," and the application of this section to any facility" . . . 'engaged in recycling solid waste." I do not believe this is an intended outcome here, and it was not reflected in any of the discussions leading to the proposed regulation.

Ecology's Response Please see response to Hansen, comment #30.

Commenter **Hansen** ***Section*** **220** ***Comment #*** 36

Comment 220 (1) (b) (i) — (x): Interpretation of the exempted activities is cumbersome and difficult to understand. It would be helpful to include a visual table or spreadsheet to aid this interpretation. An example of such a table is enclosed and would greatly facilitate an understanding of who's exempted and who is required to obtain permits. This is particularly important to agricultural interests who have an interest in composting yet are unfamiliar with Solid Waste rule interpretation.

Ecology's Response Ecology agrees that a clear explanation of the exempt categories for composting is needed. Ecology will prepare such an explanation in graphic or table form during implementation.

Commenter **Hansen** ***Section*** **220** ***Comment #*** 37

Comment The practice of "manure share" exists in several regions around the state where those who produce/have manure are linked up with small-scale garden users. Where is this practice covered in the revised WAC?

Ecology's Response Ecology recognizes that manure share programs are a net benefit to the environment. Manure sitting in a pile can be an environmental liability, particularly in those areas where non-point source pollution creates problems for creeks and other surface waters. Ecology supports programs designed to put manure to good use.
Regarding the regulatory structure of the new rule, land applications of manures are exempt from requirements in the rule when they are applied at agronomic rates. When a person buys or receives manure from someone raising animals, there is an inherent understanding that the material they get has not been processed and that it needs to be handled carefully.

Commenter **Hansen** ***Section*** **230** ***Comment #*** 38

Comment The term land reclamation is never properly defined. Nothing in this rule prohibits land application of mixed municipal solid waste as long as it is applied at agronomic rates. And, as soil amendment is defined to specifically exclude composted materials, this section prohibits land application of composted materials.

Ecology's Response Land application of MSW would be land spreading disposal, a waste management method no longer supported under the revised regulation. Such a practice would not be capable of meeting the performance standards of WAC 173-350-040 and could not be permitted by the JHD.

Land reclamation is defined in WAC 173-350-100, Land Reclamation.

The statement regarding applicability to compost reflects misunderstanding of why the section is not applicable. Certain compost that meets standards in WAC 173-350-220 (10) is no longer solid waste

and is therefore not subject to solid waste permitting. If composted materials cannot meet these standards, application of the material on the land is still subject to solid waste permitting, potentially under section 230.

By stating a section is not applicable to an activity or material, the rule does not prohibit the activity or use of the material. In most cases, management of materials listed is already covered in a different section of the rule or by a different rule.

Commenter **Hansen** ***Section*** **320** ***Comment #*** 40

Comment You need to include a criterion that tanks should not be located in unstable areas.

Ecology's Response Ecology concurs with this suggestion and has modified the section to treat tanks and surface impoundments in the same manner.

Commenter **Hansen** ***Section*** **320** ***Comment #*** 39

Comment Reorder this section so that the second subsection is permit application arid contents.
What would be the procedure for evaluating whether the pile was likely to produce leachate or not?

Ecology's Response The commenter suggests that this section be reordered so that permit application contents be placed following applicability. The order of the subsections has been kept consistent throughout the rule to the extent practicable. Permit application contents was placed near the end of each section so that a reader would have an understanding of the requirements for each manner of handling solid wastes prior to assembling a permit application.

The commenter also requests clarification regarding when a waste would be likely to produce leachate, and therefore, subject the additional design requirements of WAC 173-350-320(3)(b). The additional design requirements are not required whenever a waste would be likely to produce leachate. They apply when the leachate poses a threat to human health or the environment.

Wastes would be likely to produce leachate when the waste contains free liquids or when the water absorbing capacity of the waste is less than the possible precipitation to other moisture added. The leachate would pose a threat to human health or the environment when it contains contaminants at concentrations that could negatively impact the quality of ground water or soils at the site.

Commenter **Hansen** ***Section*** **330** ***Comment #*** 41

Comment We are concerned about how this standard can be applied retroactively to existing facilities. There needs to be a grandfather clause for existing facilities in conformance with existing requirements.

Ecology's Response When developing the requirements for this rule, Ecology considered whether or not the design standards should be applicable to existing solid waste handling units, or if a "grandfather" clause was warranted. It was decided that the design standards in the rule are the minimum required to protect human health and the environment. Therefore, any solid waste handling unit that did not meet the design requirements could pose an unacceptable threat. The effective dates applicable to exiting facilities allow thirty six months for an owner or operator to plan for meeting these requirements. An owner or operator may apply from a variance from design requirements for an existing facility in accordance with WAC 173-350-710 (7).

Commenter **Hansen** ***Section*** **400** ***Comment #*** 43

Comment Section: 400 — Limited Purpose Landfills
There is the need to include numerous definitions from WAC 173 3 51 in order to bring clarify to this section of the rule.

Ecology's Response Although the commenter suggests including numerous definitions from the Criteria for Municipal Solid Waste Landfills, Chapter 173-351 WAC, in this rule to clarify the limited purpose landfill section,, no specific terms were suggested. Ecology reviewed the definitions in WAC 173-351-100 and did not identify any terms to include.

Commenter **Hebdon** ***Section*** ***Comment #*** 242

Comment General Comment
Competitiveness: The Governor has expressed concern over competitiveness issues for the past several months, noting that action must be taken now to ensure that Washington has the basic tools to compete economically with other states and nations. For the Governor's initiative to be successful, it is important that any new rulemaking be considered in the context of:

•Will this action result in increased costs to business within the State?
•If so, is the increased cost justified for the benefits received?
•Are there less costly measures that would achieve the intended goals?

This proposed rule contains several provisions where the Washington State Department of Ecology (Ecology) has opted for more costly, less competitive regulatory provisions, with no clear benefit in terms of protecting human health or the environment. Examples include:

•More stringent standards for demolition wastes: A major component of the proposed rule is to eliminate the disposal of demolition waste (including demolition waste with a wood component) in inert/demolition waste landfills. Instead, demolition waste would require disposal (at a minimum) in accordance with the more stringent standards for limited waste landfills. This is apparently being done in order to prevent disposal of inappropriate waste forms (i.e., waste forms that represent an increased threat to the environment) in less-protective landfills. Exclusion of such waste streams is understandable; however, the proposed rule may have gone beyond what is necessary by totally eliminating the inert/demolition landfill option rather than on identifying and restricting the specific demolition waste components that are problematic. It is recommended that Ecology reconsider the regulation with the notion of targeting and restricting the most significant and problematic waste streams.

•Additional reporting requirements with little inherent benefit: The proposed rule would require preparation and submittal of an annual report for inert waste landfills. Given the very restrictive nature of inert waste landfills in the proposed rule, and considering that both the existing regulation at WAC 173-304-461 and the proposed rule require the operator of an inert/demolition landfill to keep records of waste disposal types and volumes, the imposition of an annual report seems unnecessary. If the landfill authority wants to know the pertinent information they can, at any time, simply review the landfill operating record. This seems much more appropriate than imposing a requirement to submit an annual report that may be of little interest to the jurisdictional health department.

•Elimination of flexibility allowed under current rules: The proposal would eliminate standardized provisions of the current rule in favor of more onerous "case-by-case" approvals. For example, the current rule at WAC 173-304-460(3)(c) includes provisions for landfill liners in arid climates. The arid landfill design is not included in the proposed rule, although the concept could apparently be used as an alternative design. This approach places a much higher burden on the landfill owner/operator, and eliminates the straightforward flexibility present in the existing rule.

•Failure to allow flexibility allowed under Federal rules: Under Federal rules at 40 CFR 761.62(b), certain regulated PCB wastes can be disposed of in State-permitted non-hazardous waste landfills. The proposed rule appears to prohibit the disposal of any waste regulated by 40 CFR 761 in either limited purpose or moderate risk waste landfills, despite the allowance of the Federal regulations.

Whether the environmental benefit achieved from many of the proposed standards justifies the cost is questionable. In many instances it would seem that a less costly approach could be implemented that would attain essentially the same degree of environmental protection. Clearly the cost of doing business in the State of Washington will go up if the proposed rule is adopted, and the competitiveness gap will increase.

Ecology's Response

Ecology does not concur with the commenter's assessment that the provisions of the new rule places an increased economic burden on businesses thus making them less competitive. The potential economic burden on a facility and other effected businesses can come from both the costs associated with the stringency of design and operational standards as well as the potential costs associated with remediation of contaminated sites. Ecology has attempted to minimize the economic burden on businesses by applying standards based upon the risk posed by the specific characteristics of a facility and reducing the potential economic risks posed by the release of contaminants.

Our responses to the specific examples the commenter provides are as follows:

More stringent standards for demolition wastes: Two comments were received regarding separating inert wastes and demolition wastes in the landfill standards. One commenter (Hebdon) stated "This is apparently being done in order to prevent disposal of inappropriate waste forms (i.e., waste forms that represent an increased threat to the environment) in less protective landfills. Exclusion of such waste streams is understandable; however, the proposed rule may have gone beyond what is necessary by totally eliminating the inert/demolition landfill option rather than on identifying and restricting the specific demolition waste components that are problematic. It is recommended that Ecology reconsider the regulation with the notion of targeting and restricting the most significant and problematic waste streams."

The other commenter (Lang) stated "We agree with the concept of separating inert wastes from demolition materials, and requiring liners for the limited purpose landfills. A comment received at the public hearing indicated that demolition waste regulations would increase costs to businesses. That may be true in some areas, because unlined "holes in the ground" are very cheap, but inappropriate waste management methods should not be allowed to continue just because they are less costly. Future public costs for environmental damage and cleanup need to be accounted for."

Inert wastes were segregated from other types of waste in the rule, for the purposes of landfill standards, for several reasons. The primary reason for this decision was that materials commonly found in demolition wastes, as defined in WAC 173-304-100(19), present a threat to ground water and air quality in many circumstances given the design and operational standards in WAC 173-350-410. Problems associated with demolition wastes include leachate, gas generation, and landfill fires. Excluding waste streams associated with these problems eliminates essentially all demolition wastes that do not meet the criteria for inert waste.

Another reason that demolition wastes are no longer included is that the initial reason for providing inert and demolition landfills has not proven to be a workable solution. Demolition wastes were originally

included as a waste type in WAC 173-304-461 because of the generally inert materials in demolition waste and the difficulty in segregating materials when razing a structure. The design and operation standards were developed around the average characteristics of wastes generated from demolishing whole structures. Single-type wastes, such as those generated by roofing contractors, were not intended to be included as demolition waste. The definition of demolition waste also excluded construction and land clearing debris. All of these materials have found their way into inert and demolition landfills, and have resulted in landfills with average waste characteristics that do not match those for which the standards were originally developed.

Additional reporting requirements with little inherent benefit: Please see response to Hebdon, comment #247.

Elimination of flexibility allowed under current rules: Please see response to Hebdon, comment #245.

Failure to allow flexibility allowed under Federal rules: Please see response to Hebdon, comment #244.

Commenter **Hebdon** ***Section*** ***Comment #*** 243

Comment General Comment: The proposed rule is adopted under the authority of RCW 70.95, which states that a person may, without a permit, dump or deposit waste "resulting from his or her own activities onto or under the surface of ground owned or leased by him or her when such action does not violate statutes or ordinances, or create nuisance." (see RCW 70.95.240(1)(a)) This has previously been interpreted by both Ecology and the jurisdictional health department as applying to inert/demolition waste landfills on the Hanford Site that receive only waste generated on the Hanford Site. Therefore, existing Hanford Site facilities would be grand-fathered under this previous written exemption and not require permitting. However, it is unclear from reading the new proposed rule whether this exemption would be allowed for any new activities regulated under this chapter. Suggest that this exemption from permitting be clarified under section 173-350-700.

Ecology's Response Current regulations only exempt from permitting those disposal activities conducted by single family residences and single family farms. We have discussed this issue with both the jurisdictional health department and Ecology's Nuclear Waste Program and have learned that they do not have any record of agreeing to an exemption for demolition waste landfills at the Hanford Site. Ecology does not agree that these facilities should be exempt from permitting.

Commenter **Hebdon** ***Section*** **020** ***Comment #*** 244

Comment 1. WAC 173-350-020(15): This item indicates that WAC 173-350 does not apply to PCB wastes regulated under 40 CFR Part 761. This provision would appear to preclude disposal of PCB waste in solid waste landfills regulated under WAC 173-350, despite the fact that disposal of certain regulated PCB wastes in a permitted state non-hazardous waste landfill is allowed under 40 CFR 761: 40 CFR 761.62(b) lists several items that could be disposed of in such a landfill. Is there a basis for rejecting this provision, which the EPA has determined to be adequately protective? If Ecology did not intend to vitiate the Federal regulation, then item (15) should be revised along the following lines, "PCB wastes regulated under 40 CFR Part 761 . . . except for those PCB wastes for which disposal in a permitted state non-hazardous waste landfill is allowed pursuant to 40 CFR 761."

2. WAC 173-350-400(4)(b)(i): In order not to preclude PCB disposal deemed environmentally protective and allowed under Federal regulations, revise the 1st sentence in this item to read as follows: ". . . and other prohibited wastes including polychlorinated biphenyls (PCBs), except for PCBs authorized for disposal in permitted state non-hazardous waste landfills pursuant to 40 CFR 761."

Ecology's Response Several commenter's expressed concern that the rule prohibits the handling of certain types of PCB wastes that are allowed to be handled at non-hazardous solid waste facilities under 40 CFR Part 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions. They further state that a prohibition in the proposed rule for the handling and disposal of wastes containing polychlorinated biphenyls (PCB) results in more costly, less competitive regulatory provisions, and is less flexible than Federal requirements with no clear benefit in terms of protecting human health and the environment. One commenter suggested that rule specifically state that appropriate PC

Section WAC 173-350-030(15) states that the rule does not apply to "PCB wastes regulated under 40 CFR Part 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions." This is meant to ensure that the rule would not be applied to PCB waste facilities, such as chemical waste landfills, in addition to the requirements of 40 CFR Part 761. This does preclude the handling and disposal of certain types of PCB wastes under this rule so long as 40 CFR Part 761 makes the allowance.

The Federal rule prohibits disposal of PCB wastes in non-hazardous solid waste facilities under most circumstances. As the commenter's point out, 40 CFR Part 761 does allow disposal of limited types of PCB wastes in non-hazardous, non-MSW solid waste landfills However, except in two cases, 40 CFR Part 761 requires that the non-hazardous, non-MSW solid waste landfills be subject to 40 CFR Part 257.5 through 257.30, Disposal Standards for the Receipt of Conditionally Exempt Small Quantity Generator (CESQG) Wastes at Non-Municipal Non-Hazardous Waste Disposal Units. The landfill provisions in this rule do not meet this requirement. The two exceptions to the 40 CFR Part 257.5 through 257.30 requirement are certain types of PCB bulk product wastes and PCB household wastes.

To modify the rule to meet 40 CFR Part 257.5 through 257.30 would require significant changes to WAC 173-350-500, Ground Water Monitoring Requirements, that would greatly reduce flexibility and increase complexity for all facilities performing ground water monitoring. The benefits from allowing the disposal of a small percentage of PCB wastes do not outweigh the difficulties for limited purpose landfills. PCB wastes, prohibited from disposal in limited purpose landfills as a result of this decision, are allowed to be disposed of in landfills permitted in accordance with Chapter 173-351 WAC, Criteria for Municipal Solid Waste Landfills, as the ground water monitoring sections of that rule meet the requirements of 40 CFR Part 257.5 through 257.30.
Commenters suggested that PCB bulk product waste be added to the definition of solid waste or the rule specifically state that appropriate PCB bulk product wastes are allowed to be disposed of in limited purpose landfills to avoid confusion. Ecology believes that the proposed rule should be modified to include applicability to PCB household wastes and the PCB bulk product wastes identified in 40 CFR Part 761.62(b)(1). Section 020(15) and 400(4) have been so modified from the proposed rule.

Commenter **Hebdon** ***Section*** **400** ***Comment #*** 245

Comment WAC 173-350-400(3)(b): The arid landfill design criteria currently in WAC 173-340-460(3)(c)(iv) have been eliminated in WAC 173-350. The proposed rule would apparently require that an arid landfill design be approved, on a case-by-case basis, as an alternative liner system under WAC 173-350-400(3)(b). This case-by-case approach increases the likelihood of inconsistent implementation around the State and places an unnecessary burden on the landfill owner/operator given the straightforward, protective arid landfill design established in the current regulation. RL recommends that Ecology include the existing arid landfill design in WAC 173-350 as a reasonable and protective option for sites that receive less than 12 inches of precipitation annually.

Ecology's Response Two commenter's (Hebdon, Beery) expressed a desire for presumptive design standards specific to arid climates, similar to those in WAC 173-304-460(3)(c)(iv). There was concern that the case-by-case design approach for limited purpose landfills, based upon site and operational considerations, places a much higher and unnecessary burden on the landfill owner/operator.

Ecology does not believe that landfill design can be based solely upon the annual precipitation rates and, therefore, does not include a specific arid design in the rule. Precipitation and landfill infiltration rates are especially variable throughout the year in arid areas of Washington State. Localized, high precipitation storm events and rapid snow melt can result in high infiltration rates relative to the total annual precipitation. The arid design in WAC 173-304-460(3)(c)(iv) presumes that no liner system is needed for landfills located in areas having less than twelve inches of precipitation annually. Ecology has found that many landfills located in arid areas constructed without liners systems have resulted in significant ground water contamination and problems associated with landfill gas migration.

Given that an arid design with no liner requirement would not protect ground water, it is inappropriate to include a single design specification. It would be very difficult to determine a specification for liner system permeability that could be presumed to be protective for all limited purpose landfills in all arid locations without considering hydrogeologic, soil, and waste characteristics, or landfill size.

Commenter # 30 recommends that Ecology include the existing arid landfill design in WAC 173-350 as a reasonable and protective option for sites that receive less than 12 inches of precipitation annually. Presuming that the citation provided was not the one intended, this is interpreted in two ways, Chapter 173-304 WAC or 173-351 WAC. An arid design with no liner requirement, as in Chapter 173-304 WAC, has been demonstrated to not protect ground water. The approach taken in WAC 173-351-300(2)(b) for arid landfills does not provide a specific design. It provides a ground water protection performance standard and factors to consider when evaluating a design, such as hydrogeologic characteristics and leachate characteristics. This approach is very similar to that in this rule.

Commenter **Hebdon** ***Section*** **410** ***Comment #*** 247

Comment WAC 173-350-410(3)(c): The proposed rule would require owners/operators of inert waste landfills to keep a record of the weight of inert waste disposed of. The current rule in WAC 173-304-461 gives owners/operators the option of recording either weight or volume. Limiting owner/operators to recording weight will only add cost to the operation of inert waste landfills, with no demonstrated value. Those landfills not already equipped with weight scales will either have to install scales, or come up with a system for estimating weight that is accurate to plus or minus 20% (this is difficult to do when you are dealing with waste of varying densities). Either way, the cost of operating the landfill goes up. Unless the landfill has a tipping fee that is based on a cost per unit of mass, knowing the actual weight of the inert waste provides little value. Volume is a much more valuable indicator in terms of determining landfill capacity.

WAC 173-350-410(4)(d): As mentioned in the general comment, the requirement to submit an annual report for inert waste landfills is unnecessary. Landfill operators are already required to maintain daily operating records with the pertinent information. These records are available to jurisdictional health department personnel whenever they wish to review landfill operations. The requirement to submit an annual report that seems likely to be ignored by the receiving agency is an unwarranted burden.

Ecology's Response WAC 173-350-410(3)(c) - Ecology agrees that the goal of determining the quantity of inert wastes placed in landfills can be achieved in a less burdensome manner. The operating record requirement has been amended to allow an owner or operator to use any appropriate method to record the quantity of waste

disposed.

WAC 173-350-410(4)(d) - The information gathered by annual reporting is used to generate the Solid Waste in Washington State Annual Status Report. Solid waste handling activities are compiled from reported information. While annual reporting is necessary, the requirement has been amended to allow reporting by either weight or volume so long as an appropriate conversion is supplied to allow Ecology to compile disposal in tons.

Commenter **Hebdon** ***Section*** **600** ***Comment #*** 249

Comment 1. WAC 173-350-600: This section should be revised to include a statement acknowledging that the federal (and probably state) government is not subject to the financial assurance requirements, similar to the provision in the Dangerous Waste Regulations at WAC 173-303-620(1)(c).

Ecology's Response Washington law, chapter 70.95.215 RCW addresses state requirements for financial assurance. There is no specific exemption for federal or state facilities provided in the section. The statute does provide publicly owned facilities the possibility of options for providing an appropriate level of financial assurance. The options available to publicly and privately owned facilities are stated in this proposed rule.

Commenter **Hebdon** ***Section*** **990** ***Comment #*** 250

Comment 1. WAC 173-350-990(2): The list of inert wastes in this section raises questions about other wastes that are not currently identified on the list, but which arguably should be considered inert. Certain metal wastes may fit in this category, such as stainless steel and perhaps carbon steel. Polymerized plastics (e.g., PVC) should also be included. PVC is, of course, routinely used as underground water piping with no deleterious effect on the environment. RL recommends that the inert waste list be expanded to include these minimal threat waste streams.

Ecology's Response Several materials were suggested to be included under subsection 990(2), listed inert wastes. These included certain metals, such as stainless and carbon steel, plastics, and railroad ballast. Ecology did not include metals as inert waste because many ferrous and non-ferrous metals corrode, produce leachate that can contaminate soil or ground water, and may present a threat from toxicity. However, aluminum and stainless steel meet Ecology's criteria for inert waste and have been added to subsection 990(2).

Plastics are not inert waste because they are often combustible (e.g. polystyrene) and may produce highly toxic fumes when exposed to heat or flame (e.g. polyvinylchloride.) Railroad ballast was not considered appropriate to be listed as an inert waste because of the wide variability in the material and the probability of contamination. Ballast is subject to spills from fuels, battery fluids, and the wide variety of materials transported by rail. Ecology has also had experiences when wastes such as tailings from toxic metal smelters have been used for railroad ballast.

It was suggested that allowances be made for incidental wood embedded in cured concrete in WAC 173-350-990(2)(a). Ecology agrees that small amounts of wood embedded in concrete would not significantly effect its characteristics and has added language to reflect this.

Commenter **Hebdon** ***Section*** **990** ***Comment #*** 251

Comment WAC 173-350-990(3)(b): The inert waste "criteria" shown in this section needs more definition. What exactly is meant by "negatively impact" soil, ground water; or "pose a health threat"? What are the actual standards that must be met? Alternatively, what models will be used to evaluate whether the generic criteria have been met? As written, the criteria are nebulous. This approach increases the likelihood for inconsistent implementation across the state. It is highly likely that some jurisdictional health departments will simply opt to reject any waste (other than waste listed in –990(2)) as inert simply due to the lack of clear criteria. Issuance of guidance to clarify this issue is unsatisfactory as it represents de facto rulemaking without formal public comment. The inert criteria are important. RL recommends that Ecology reevaluate this issue and present clear criteria for public comment rather than promulgating uncertain criteria which transfer responsibility onto the health departments or the regulated community.

Ecology's Response One commenter (Comstock) stated that the definition of inert waste had been improved from WAC 173-304-100(40) but leaves a lot of room for interpretation and is still difficult to understand. Two commenter's (Marek, Hebdon) suggested that the criteria provided in WAC 173-350-990(3)(b) are too nebulous, will be difficult to implement, and need more definition.

Several options were explored for defining inert wastes during the rule development process. One option was to limit inert waste to a list, such as found in WAC 173-350-990(2). Another option was to set physical/chemical criteria for inert waste. The first option was simple but would prevent other inert wastes from being considered. Using only a criteria was deemed to be too complicated when there are several wastes that are generally regulated as inert. Ultimately, it was decided to include both a list and criteria.

While the criteria in WAC 173-351-990(3) do provide room for interpretation and judgment, it is expected to be fairly easy to apply in practice. The concentration based criteria in paragraph 990(3)(b) will be the most difficult to establish firm limits for determining if a waste is an inert waste and Ecology recognizes the need to provide more clarification in the rule.

One commenter (Marek) was told during rule development that the criteria in subsection 990(3) is intended to set the standard so high (stringent) that essentially nothing will be considered 'inert' except for the listed wastes. Earlier drafts of the proposed rule provided specific leaching test methods and criteria, and toxicity criteria that set specific constituent concentration limits for inert wastes. Because the criteria did not provide any room for judgment, they were set at a level that would be protective in any circumstance. The situation described by the commenter was the result. The approach of providing firm specific inert criteria was abandoned because of this.

In subsection 990(3), Ecology intends that persons using the criteria will use the inert materials listed in subsection 990(2) as a reference point. For example, other inert wastes should have similar structural integrity, toxicity, and not produce leachate with chemical concentrations significantly greater than that from cured concrete, asphalt, or the other wastes listed as inert. Language will be added to the inert criteria to reflect this intent.

One commenter (Marek) suggested that due to the high costs of disposal at municipal solid waste landfills, many waste generators are looking to classify their wastes as 'inert wastes'. Concern was expressed that generators will deem their wastes as inert and put local health departments in the position to prove otherwise. In essence, that local government will have to challenge the designation as "inert" and prove otherwise. This was considered an undue burden to jurisdiction health departments. An alternative approach was suggested to require generators demonstrate to the jurisdictional health department that the waste in question is in fact "inert" prior to actually managing it as such. This commenter considered the approach Ecology has taken to list certain wastes as 'inert waste' (concrete, asphaltic concrete, brick, glass, et cetera) an effective method that is enforceable by local health departments.

The requirements in the rule applicable to inert wastes are the same as other solid wastes with two exceptions. These are the storage of inert waste in piles and inert waste landfills. Except for these two cases, a person would have no motivation to classify their waste as inert.

Inert waste landfills greater than 250 cubic yards are required to obtain a permit from the jurisdictional health department. The owner or operator of an inert waste landfill is required to develop, keep, and abide by a plan of operation approved as part of the permitting process. Each plan of operation is required to include a description of the types of solid waste to be handled on-site. The plan of operation is also required to include acceptance criteria, procedures for waste screening, and procedures for handling unacceptable wastes received at the facility. It is intended that issues relating to which wastes may be inert will be dealt with during the permitting process.

Inert waste in piles may be categorically exempt from solid waste handling permitting, provided the owner and operator complies with the terms and conditions in WAC 173-350-320(1)(e). These terms and conditions ensure that at least fifty percent of the material is used within one year and all the material is used within three years, Ecology and jurisdictional health department representatives be allowed to inspect the facility, the facility conforms to the performance standards of WAC 173-350-040. Ecology believes that these terms and conditions are sufficient to prevent threats to human health and the environment or undue burden to jurisdiction health departments from generators classifying a waste as inert improperly.

Commenter **Hendrickson** ***Section*** ***Comment #*** 117

Comment The BP Cherry Point Refinery operates a limited purpose landfill permitted by Whatcom County Health and Human Services. The facility is designed and operated as a land treatment system for non-hazardous petroleum contaminated soil, stormwater solids and biosolids produced by the refinery wastewater treatment system. While the design, operation and performance of the facility are substantively in compliance with the proposed rule (173-350 WAC) we note that the regulation does not recognize land treatment and the conventional operating practices of land treatment systems.

Ecology's Response There are no specific standards for "landfarming" of contaminated soils. Under the proposed rule the example facility would likely have to meet the requirements of section -320, Piles used for Storage and Treatment. However, there is insufficient detail presented to make that determination. It should also be noted that, while Ecology has attempted to provide a comprehensive regulation, there will be solid waste handling methods that are not specifically addressed in the rule. In these cases section -490, Other Methods of Solid Waste Handling should be applied.

Commenter **Hendrickson** ***Section*** **320** ***Comment #*** 121

Comment In addition, WAC 173-350-320 allows for the establishment of inert waste piles such as asphaltic and concrete materials. Cherry Point is proud of its on-going materials recycling and reuse program and has both asphalt and concrete rubble piles to be used during road construction activities common during refinery turnarounds, Major turnaround events happen on an infrequent basis, at times more than 3 years apart. Use of all of our asphaltic and concrete materials within this time frame is not practical.

Ecology's Response One commenter suggested that the time restrictions for piles of inert waste categorically exempt from permitting be extended or deleted from the rule. The turnover requirements of this section were developed to ensure that piles of inert waste exempt from solid waste permitting were being actively used and not created to avoid regulation under Section 410, inert waste landfills. However, while reviewing this comment it became clear that the rule was more stringent for piles of inert waste than it was for landfills. The subsection exempting inert waste stored in piles has been amended so that piles of inert waste less than 250 cubic yards are only subject to the performance standards of Section 040.

Commenter **Hendrickson** ***Section*** **400** ***Comment #*** 118

Comment WAC 173-350-400 (4)(b)(ii) requires compaction of solid waste before succeeding layers are applied. This requirement is contrary to current and historic operating practice at our facility where the surface is tilled to promote the biodegradation of petroleum hydrocarbons and volatile solids.

WAC 173-350-400 (4)(b)(iii) requires the covering of disposed waste. Again, this requirement is counter to our operations where aeration and sun exposure are necessary to promote drying and aeration during the treatment season. The materials placed in the facility:
•do not contain litter
•are not combustib1e
•are not conducive to scavenging
•do not encourage disease vectors
Odor control is another reason cited in the proposed regulation for covering waste material. While odors are a natural aspect of any biosolids handling system, we have had good success managing our system in a manner that minimizes odor impacts. We encourage Ecology to allow adoption of alternate operational or control strategies acceptable to the local permitting jurisdiction for odor control when the covering of waste is inconsistent with an essential facility operating practice.

Ecology's Response The commenter is concerned that compacting solid waste before succeeding layers are added, or covering disposed waste, would be contrary and counterproductive for their landfill. Ecology understands that many of the operating standards in WAC 173-350-400(b) are not appropriate for all landfills. These standards apply "unless a demonstration can be made during the permitting process that due to the nature, source of the waste, or quality of the leachate generated, these standards are not necessary for the protection of human health or the environment." It is anticipated that a successful demonstration could be made for an operation standard that is contrary to normal landfill operations.

Commenter **Hendrickson** ***Section*** **500** ***Comment #*** 120

Comment WAC 173-350-500 establishes requirements for a groundwater monitoring program. Groundwater at our site has been monitored on a quarterly basis since 1993 under the program established during the initial permitting process. The proposed rule does not allow for modifications from the jurisdictional health department due to site specific conditions or allowances. Our program was established based on the unique properties of the materials being managed in the land treatment facility. We believe such flexibility is critical for established program that are protective of human health and the environment.

Ecology's Response Ecology believes provisions in WAC 173-350-500(4)(i) will provide for special allowance and modifications to required monitored constituents based on site and waste-specific characterization. These provisions would be unique to the facility and allow jurisdictional permitting authorities flexibility in the assignment of permit conditions.

Commenter **Johnson** ***Section*** **040** ***Comment #*** 366

Comment WAC 173-350-040(1) – The phrase "does not present risks" denotes an unreasonably low evaluation threshold.

Discussion – Demonstrating achievement of the performance standards listed in WAC 173-350-040 serve as a pre-requisite for gaining categorically exempt status on numerous solid waste handling activities. If interpreted literally, the requirement not to present any risk to "human health of the environment" through the entire design, construction, operation and closure of a solid waste handling facility (hereafter, "SWHF"), would be a formidable accomplishment. A goal of this regulation should be to reasonably allow the categorical exemption provisions to be used, not to micro-analyze SWHF to ascertain if any risk might be imparted.

Proposed Change – Add the word "unacceptable" or "significant" to qualify the practical intent of the needed "risk" assessment in this section. While this qualification still relies on the need for a subjective judgment to be made, it at least sends a policy signal that something other than "no potential risk" will be considered.

Ecology's Response Ecology agrees with the comment and has modified the subsection to be consistent with other areas of the rule.

Commenter **Johnson** ***Section*** **240** ***Comment #*** 371

Comment WAC 173-350-240(1)(c) – The phrase "from the manufacturing of paper" should be expanded to recognize other types of pulping and paper-making facilities. A change in –240(1)(d)(iv) is also needed.

Discussion – Some facilities in this industry only manufacture and sell wood "pulp;" i.e., they do not make a final "paper" product. The Weyerhaeuser Cosmopolis mill is an example. This mill and possibly others should not have their wastewater treatment sludge disqualified from the provisions of this regulation section simply because the terminology is not comprehensive.

Ecology's Response Ecology concurs with the commenter. The suggested changes will clarify Ecology's intent for this categorical exemption.

Commenter **Johnson** ***Section*** **240** ***Comment #*** 367

Comment WAC 173-350-240(1)(d)(ii) – the requirement that acceptable fuels need to be "approved in writing" could be better stated.

Discussion – Not all fuels approved for use in combustion units are recognized "in writing" by Washington air pollution control agencies. A better characterization would be to say:

(ii) Ensure that only fuels permitted by the jurisdictional air pollution control agency for the facility are combusted;

Ecology's Response Ecology does not concur with the suggested change. Ecology is of the opinion that a written authorization should be necessary for the combustion of waste. Permits are only one form of written authorization. By limiting the written authorization to a permit there would be no opportunity to recover energy from one of the specified permit exempt fuels without revisions to the air permit or issuance of a solid waste permit.

Commenter **Johnson** ***Section*** **500** ***Comment #*** 369

Comment WAC 173-350-500(5)(b)(ii)(B)(III) – references to the Model Toxics Control Act should be deleted.

Discussion - This subsection is predicated on a statistical analysis determining a significant increase over background (see -(5)(b)). For active SWHF's, or SWHF's undergoing closure, the regulatory means to evaluate and determine appropriate corrective actions should be required under the authority of proposed WAC 173-350. In fact, proposed section WAC 173-350-500(5)(b)(ii)(B)(II) does that by demanding the assessment and implementation of appropriate intermediate measures to remedy the release. The use of the conjunction "and" to introduce subsection -(III) effectively imposes a mandatory requirement for the implementation of WAC 173-340. This is an unnecessary leap. It would likely force a premature, somewhat duplicative, and resource intensive regulatory process to move forward in tandem with the corrective provisions of WAC 173-350.

Proposed Change - References to the MTCA should be deleted from this section. The extensive regulatory authority of WAC 173-340 should be reserved and sequenced to address closed sites for which WAC 173-350 remedies are inadequate.

Ecology's Response The use of the conjunction "and" is intended to finish the sequence of requirements of 500(b)(ii)(B)(I); (II); and (III)—without necessarily implying (III) must be used in all cases. In fact, the first sentence of (III) requiring the evaluation, selection, and implementation of remedial measures under chapter 173-340 WAC (MTCA) specifically concludes with the phrase "…where applicable" (emphasis added). Remedial measures under MTCA may not be required or necessary in many or even most cases. For example, exceeding the ground water criteria of chapter 173-200 WAC for secondary contaminant parameters would not necessarily require or deserve the invocation of MTCA.

Commenter **Johnson** ***Section*** **500** ***Comment #*** 368

Comment WAC 173-350-500(5)(b)(ii)(A) – This section is confusing and should be clarified.

Discussion – This subsection is predicated on a statistical analysis determining a significant increase over background (at -(5)(b)). But in (5)(b)(ii)(A), if the levels of constituents "Meet the criteria" established in WAC 173-200, why would there be interest or a need to accomplish what is directed in –(5)(b)(ii)(A)(I) and (II)?

Ecology's Response The intent of statistical analysis in this and other regulations is to identify trends in ground water quality. A statistically significant increase in some parameter(s) may indicate a degradation of ground water quality before actual violation of specific criteria occurs. In this case, Ecology believes it is appropriate to require an assessment of the source(s) of contamination and the implementation of remedial measures to arrest and prevent possible further degradation. The necessity for such remedial measures would be determined in consultation with the jurisdictional health department and Ecology.

Commenter **Johnson** ***Section*** **700** ***Comment #*** 370

Comment The Variance section from the Minimum Functional Standards for Solid Waste Handling Facilities (WAC 173-304-700) should be retained and placed into WAC 173-350. While the proposed WAC 173-350 provides language allowing for "alternative" approaches for certain requirements, there may be a limited set of site-specific issues which could be best be dealt with through the flexibility provided in this variance section. An example may be with "woodwaste landfills." By re-categorizing these landfills as "limited purpose landfills," some new requirements are imposed. These requirements may be difficult to satisfy, and customized "solutions" may need to be crafted. The variance procedures may provide the most efficient regulatory mechanism to address these needs.

Ecology's Response Ecology concurs with the commenter that variance provisions are necessary. They can be found in section -710 (7).

Commenter **Jones Ward** ***Section*** **710** ***Comment #*** 253

Comment Philip Services Corp (PSC) appreciates the opportunity to provide comments on the proposed Solid Waste Handling Standards in WAC 173-350. We have reviewed the proposed standards and have determined that they may impact operations at two of our facilities in the Pacific Northwest: Burlington Environmental Inc. (BEI) Kent Facility and our BEI Washougal Facility.

The Kent Facility currently operates under a RCRA, Part B Facility Permit from Washington Department of Ecology and a Moderate Risk Waste (MRW) Permit from King County. The Washougal Facility operates as a transfer facility and is in the final application process for a Solid Waste Permit from Clark County. Financial assurance instruments and exceptional environmental protective measures and practices cover both facilities. Our comments below address one area in the proposed rule language that warrants additional clarity. Proposed new section WAC 173-350-710 (8), states conditions by which the jurisdictional health department may waive the requirement that a solid waste permit be issued for a facility that

has other environmental permits that provide an equivalent or superior level of environmental protection. We believe our current RCRA and Solid Waste permits, along with the financial assurance that we currently hold for these facilities afford such a level of protection. As such we propose the following change to WAC 173-350-710 (8)(a):

Ecology's Response Ecology does not agree with the suggested changes. Ecology does not agree with the suggested changes. The permit deferral criteria are in place to allow the jurisdictional health department the ability to defer solid waste permits to other environmental permits that provide equal or greater environmental protection. Although a RCRA Part B permit may meet this test the JHD must first be interested in deferring the permit. The legislature stated very clearly that the JHD may defer "at its discretion". The suggested language would take away the discretionary aspect of permit deferral.

Commenter **Ladenburg** ***Section*** ***Comment #*** 365

Comment There will be insufficient opportunities for public review and comment prior to the start up of a business intending to operate under some exempt categories. An identified public review process is lacking for: a) exempt beneficial uses which have been given Statewide approval; b) exempt inert waste piles used for storage and treatment, and c) for some large agricultural composting facilities.
The following are examples of how public review will be skirted:
Businesses which stockpile inert waste in outside piles usually do not need a structure to function. If no building permit is applied for and there is no land use permit requiring a hearing, there is nothing to trigger environmental review or any other opportunities for citizen comment prior to start up of the operation. As it is now in these cases, the solid waste permit is the trigger for the environmental review process. Without the solid waste permit, where will be the opportunity for the public to comment on transportation impacts, operating hours, protection for critical area buffers, or for the amounts and length of time for waste to be stored on the site?
The same is true for the agricultural composting facilities of more than 40 cubic yards which take Type 1 and Type 2 feedstocks generated off-site. A farm plan does not have a public review process. Where is the opportunity for the public to comment on odor issues and transportation impacts? What if this agricultural compost facility grows into a yardwaste drop-off site for the general public, which could easily occur if the operator chooses to cut costs by advertising to the public? What opportunities then will nearby neighbors have for prior comment about controlling odor or about actions to mitigate the impact of general public traffic and heavy trucks driving to the site? Is the only alternative for citizens and local governments to then begin an after-the-fact compliance effort after complaints have been made?

Ecology's Response This comment period is the public involvement opportunity for categorical permit exemptions. Ecology believes that additional public review is unnecessary because the categorical exemptions proposed are all within the scope of the authorizing statute and do not pose an environmental threat. Beneficial use exemptions are subject to a separate review process for each beneficial use application.

Commenter **Ladenburg** ***Section*** ***Comment #*** 364

Comment This regulation shifts the responsibility to local governments to devise other means for ensuring review of new operations. This will probably mean local governments will need to amend their zoning codes or other regulations to take up the slack for the loss of the solid waste permit, unless the local JHD continues to require a solid waste permit for these exempt uses when they first begin to operate.

Ecology's Response Ecology does not believe that the activities proposed for permit exemptions need the same level of scrutiny as those facilities still subject to permitting. Local government may impose additional requirements thru other regulations, such as zoning, if they choose to do so. However, the local health department cannot require an exempt facility to obtain a solid waste permit unless the facility is out of compliance with the terms and conditions of the exemption.

Commenter **Ladenburg** ***Section*** ***Comment #*** 363

Comment There are construction debris recycling and composting businesses in Pierce County which have gone to considerable expense to ensure that their facilities are operating according to all environmental regulations and to ensure that the waste they are accepting is appropriate for their facility and does not contain hazardous materials. If similar facilities are allowed to operate without oversight, the existing operators will be penalized because their procedures and requirements for the incoming waste are more expensive then the unregulated facilities.

Ecology's Response Ecology believes that the permit exemption does not create an unlevel playing field. Some of the businesses that are currently under permit will qualify for an exemption. Any facility that operates under a permit exemption must meet performance standards and other terms and conditions of the exemption. Facilities that do not comply with terms and conditions will be required to obtain a permit and may be subject to civil penalties as well.

Commenter **Ladenburg** ***Section*** ***Comment #*** 361

Comment The regulations lack clarity about how long an owner or operator of an exempt facility can be out of compliance before a JHD can require that a facility obtain a solid waste permit. Is it the Department of Ecology's intent that JHD's require solid waste permits of exempt facilities for minor violations? For example, if an exempt facility does not submit an annual report, or submits a late annual report, does the Department of Ecology expect the JHD to then require a solid waste permit?

Ecology's Response RCW 70.95.305 (3) is very clear on this issue. It states, in part, "If a facility does not operate in compliance with the terms and conditions established for an exemption under subsection (1) of this section, the facility is subject to the permitting requirements for solid waste handling under this chapter." There is no implied discretion for making a determination based on the severity of the violation. If Ecology or the jurisdictional health department are aware of any violation of the terms and conditions then the facility should be notified that

they must obtain a permit.

Commenter **Ladenburg** ***Section*** ***Comment #*** 154

Comment The SEPA checklist for these regulations does not adequately address how some of the facilities now proposed to be exempt will have sufficient environmental review and opportunities for public involvement.
The draft regulations pose an implementation conflict. The rules require that exempt facilities be in compliance with local solid waste management plans, -040 (3). Without an established review process, such as the solid waste permit, there is no guarantee that anyone will check to see that these facilities comply with solid waste management plans.

Ecology's Response Ecology believes that the activities proposed for categorical exemptions from permitting pose a very limited risk to the environment. All of the proposed exemptions are within the scope of the authorizing legislation. This comment period is the public involvement opportunity. With regards to review for compliance with local solid waste management plans this should be accomplished upon the required notification being submitted to Ecology by the proponent.

Commenter **Ladenburg** ***Section*** ***Comment #*** 152

Comment After-the-fact enforcement for exempt facilities or exempt application sites later found to be out of compliance does not serve the public nor adequately protect the environment.
There is a heavy reliance in these regulations upon after-the-fact compliance. Meaning that if the JHD somehow finds out that the exempt use did not meet the design and operation requirements, or if the use has created an environmental problem, then the JHD can require a solid waste permit.
The initiation of a solid waste permit process after a facility is found to be out-of- compliance will not sit well with local governments or the public and does not carry out the intent of RCW 70.95 to prevent pollution problems from occurring.
After-the-fact compliance is costing Pierce County upwards of $1,000,000 to complete environmental assessments and shut down one business that began by land-applying gypsum, started stockpiling waste glass, then expanded to taking construction debris, including household garbage and roofing shingles. It resulted in what is, for all intents and purposes, a landfill.
After-the-fact compliance is causing Pierce County to arrange for inspections and environmental assessments and pursue enforcement on a second site which began by stockpiling yard debris from the general public and general contractors for the alleged purpose of recycling. It resulted in a large fire which still is burning underground.

Ecology's Response Ecology understands the commenter's concern about "after-the-fact enforcement" at facilities operating under a categorical exemption from permitting. However, we believe that the proposed categorical exemptions are in keeping with the Legislature's intent. Furthermore, the anecdotal information provided by the commenter to illustrate problems already being encountered does not provide a persuasive argument against permit exemptions. All of the described activities are currently subject to permits. This did not stop the operator of the example facility from violating the regulations. Also, only one of the activities conducted at the example facility (stockpiling waste glass) would be exempt under the proposed new rule.

Commenter **Ladenburg** ***Section*** ***Comment #*** 151

Comment The proposed rule assigns additional duties to jurisdictional health departments without the mechanism of the solid waste permit to fund these duties.
• For most exempt facilities, the regulations: have design and operating standards that must be met; require operators to notify the JHD prior to commencing operations; and require operators to make annual reports to the JHD or to the Department of Ecology. The regulations require JHD's to inspect exempt facilities and review annual reports of exempt facilities or exempt beneficial land application sites.
Because no solid waste permit is required, there is no mechanism provided to pay for the JHD to review the notifications or annual reports, to conduct inspections, and to enforce after-the-fact compliance. Typically, under the current process, the applicant's permit fee pays for the staff review and oversight functions. The proposal will likely result in requests from JI to County governments for funding to cover those actions necessary to protect human health and the environment.
While there will always be those who do illegal activities, these new regulations make it easier
for them to escape detection and easier for small-scale inert recycling operations to expand to handle other construction debris without notifying the JHD. The lack of an established funding process will make it more difficult for local JHD's to inspect and enforce such activities. It will be more expensive for local governments to shut down and cleanup these sites when the operator claims he/she did not need a solid waste permit to begin with and did not need to make annual reports and there is no record of what occurred on the site.

Ecology's Response The proposed rule does not assign a jurisdictional health department (JHD) any work at permit exempt facilities. Although a permit exempt facility must notify the JHD and Ecology of their intent to operate under a categorical exemption, review is at the discretion of the JHD. The operator of a categorically exempt facility must allow the JHD access to inspect, however, the JHD is not required to do so. Lastly, the JHD will receive a copy of the annual report. As is the case with notification, review of the report is at the JHD's discretion. It should also be noted that that these activities will also be eligible for reimbursement under the Coordinated Prevention Grant program.

Commenter **Ladenburg** ***Section*** ***Comment #*** 149

Comment Chapter 173-350 WAC promotes waste reduction and recycling at the expense of overall environmental protection.
The draft regulations make a number of uses in sections -200, -210, -220, and -320 exempt from obtaining a solid waste permit. Without a solid waste permit, there is no means to ensure that the preventative environmental design and handling

procedures are incorporated before the exempt facilities begin operation. There must be some means for initial preventative oversight and for jurisdictional health departments (JHD's) to continue monitoring for compliance on a regular basis, as is provided through the solid waste permit process.
This will be a particular problem for JHD's to ensure compliance from:
a) recycling businesses with outside piles used for storage and treatment (-320),
b) exempt material recovery and recycling facilities (-210), and
c) some of the larger, exempt agricultural composting facilities (-220).
2) The proposed rules go beyond the intent of state legislation both in the number and types of facilities proposed to be exempt and by replacing the preventative review measures of the solid waste permit with self-reporting and monitoring.
The following bullets summarize our basic issues. More detail on this issue is provided throughout all other comments.
• As stated in the proposal statement of inquiry, the State legislature originally directed Ecology to undertake a study of the solid waste permit system (ESHB 1419). It directed the streamlining of the permitting system to encourage reuse and recycling of solid waste. Other than for beneficial land use exemptions, it did not direct that other uses be made exempt from review. Streamlining does not mean exempting.
• Nearly all of the exempt uses are recycling or composting facilities. This seems to be based upon the assumption that recycling is so important that preventing pollution or other problems with these facilities should take a second place. Streamlining does not mean removing preventative up-front review and monitoring, nor does it mean reducing opportunities for public comment.
• These regulations have substituted self-reporting and monitoring for the preventative oversight of the solid waste permit process administered by the JHD in coordination with local governments. The regulations state that the operators must voluntarily meet the design and operations requirements and notify the local JHD when they intend to operate so that the JHD can inspect their operation. At the same time, these regulations have removed the funding for the JHD to do the inspections. Streamlining does not mean removing the means for funding oversight functions.

Ecology's Response

The commenter correctly notes that Ecology is not required to provide categorical permit exemptions. However, the legislature did authorize Ecology to do so in RCW 70.95.305. The commenter is also correct that the categorical exemptions are primarily aimed at recycling and composting. This is the direction that the legislature gave Ecology in the authorizing statute.

Ecology believes that each of the proposed exemptions poses a very limited environmental risk and are all in keeping with the legislature's intent.

Commenter **Ladenburg** ***Section*** ***Comment #*** 148

Comment

This letter contains comments from Pierce County on the proposed rule, Chapter 173-350 WAC. Solid Waste Handling Standards.
Pierce County actively participated in the rule development process, coordinated with the Tacoma-Pierce County Health Department to provide section-by-section detailed comments, and generally supported the broad goals for revising Chapter 173-304. Many of the technical comments submitted to the Department of Ecology have been addressed in the latest draft of Chapter 173-350 WAC.
We are disappointed, however, that the main issues which most concern us about "exempt facilities" were ignored. As presently drafted, Chapter 173-350 WAC will:
(1) make it easier for unscrupulous people to start illegal businesses under the guise of "recycling";
(2) allow these illegal businesses to escape early preventative environmental review; and
(3) create sites which will require costly after-the-fact enforcement and cleanup.
The proposed rule sends the message that the promotion of waste reduction and recycling is more important than the goals of providing an adequate level of environmental protection. Pierce County disagrees with this "recycling at any cost" approach to regulation and is taking steps to cleanup the mess caused by previous versions of this regulatory tactic.
Through the Pierce County Responds program, Pierce County is currently spending considerable time, effort, and money to cleanup and close down sites which, under the guise of "recycling" inert waste, have turned into nothing more than landfills or yard debris dumps. The proposed Chapter 173-350 expands the opportunities for these sorts of activities to occur and makes it more difficult for local governments and jurisdictional health departments to monitor activities and take enforcement action. The County believes that the proposed Chapter 1 73-350 goes beyond the intent of state legislation both in the number and type of facilities proposed to be exempt and by replacing the preventative review measures of the solid waste permit with self-reporting and monitoring.
Attached to this letter are detailed comments prepared by the Solid Waste Division staff in consultation with the Tacoma-Pierce County Health Department and legally permitted solid waste and recycling facilities doing business in our County. The Division's comments focus on potential conflicts, difficulties in implementation, added work loads, a shifting of responsibilities, and insufficiency of public review for many activities proposed to be exempt. I concur with comments being submitted.
I urge the Department of Ecology to take this opportunity to modify the proposed Chapter to be a more responsible guardian of our environment and to be more respectful of the environmental goals of local government. In the end, should the Department of Ecology fail in these efforts, I will work with the Tacoma-Pierce County Board of Health to enact local regulations which are at least as strict as those in place today. Pierce County will not have its efforts to improve the quality of life for our citizens thwarted by the Department of Ecology.
If you have any questions about this letter or the enclosed comments, please feel free to contact me or Steve Wamback, Pierce County Solid Waste Administrator. Mr. Wamback's telephone number is (253) 798-4656.

Ecology's Response

The commenter states that " …the main issues which most concern us about "exempt facilities" were ignored." Ecology did not ignore comments from any commenter on the previously released drafts of the proposed rule. Differing opinions and approaches were thoughtfully considered and incorporated into the proposed rule as Ecology deemed appropriate. This has resulted in a proposed rule that Ecology believes fulfills the primary mission of protecting human health and the environment.

Commenter **Ladenburg** ***Section*** **200** ***Comment #*** 360

Comment The prior review procedures for waste that is to be beneficially used on the land or stored, -200, are inadequate to ensure coordination with local government siting requirements, such as those being developed to implement the 4(d) Rule to protect salmon habitat. Local governments in Western Washington are developing new regulations to prevent ground and surface water pollution and to prevent disturbance of critical habitat in order to implement the Rule. It is likely that stream buffering standards will increase and activities immediately adjacent to streams and creeks will be limited.
The Department certainly must realize that what may be appropriate for application at one site may not protect the environment in another site. These regulations are crafted so as to make it difficult for local JHD's and governments to track just what is occurring where. The inability to track what is occurring for those beneficial use exemptions which get Department approval to be applied anywhere in the State without notification (—200 (5) (e)), might allow inappropriate applications in identified critical area buffers without sufficient oversight.
At the very minimum, applicants who receive statewide beneficial use exemption approval should be required to provide an annual report to the Department and each local JHD and include a list of sites of where the beneficial use waste is applied during that year. This information should be site-specific, by parcel number, township and range.

Ecology's Response As has been the case under current regulation, it is the responsibility of a project proponent to ensure activities comply with all regulatory requirements. Compliance with all applicable federal, state, and local rules, regulations codes, and land use ordinances is one of the general condition of a BUD, as stated in [draft] WAC 173-350-200 (2)(a)(iv). Also, consideration of each complete application will include a forty-five day comment period and each JHD in the state will receive complete copies of the application for review and comment and other agencies with jurisdiction will receive notice of the proposal with information on how to comment. The intent of the BUD program is to provide regulatory relief when solid waste is used in a specified manner approved by the department that poses no risk to human health or the environment [draft WAC 173-350-200 (2)(a)(i)].

Commenter **Ladenburg** ***Section*** **210** ***Comment #*** 362

Comment The proposed regulations penalize those material recovery and recycling operators which may exceed this disposal amount and yet are truthful enough to admit it. They will be penalized in two ways:
a) The truthful operator will be required to obtain a solid waste permit under the more complicated standards of the permit for an intermediate solid waste handling facility, (-310). These requirements were basically created for transfer facilities handling MSW, a substantially different operation.
b) The truthful operator will then be paying to meet more expensive design and operation methods and be paying for ongoing JHD inspections and monitoring required to meet the permit. This will put the operator at an economic disadvantage in competing with the unregulated operator.

Ecology's Response Ecology does not agree with the commenter that the "truthful operator" will be penalized by being required to get a permit. The truthful operator will simply be obeying the regulation. Operations that avoid permitting thru false reporting are subject to civil penalties under RCW 70.95.315.

Commenter **Ladenburg** ***Section*** **210** ***Comment #*** 153

Comment In the effort to make it easier for recycling facilities to operate by streamlining the regulations, Ecology has actually created regulations which provide an uneven playing field for some material recovery and recycling businesses.
In order to maintain an exempt state, the recycling operation must accept only source separated solid waste and dispose of residuals that do "not exceed five percent of the total waste received, by weight per year, or ten percent by weight per load." These rules in section -210 (2) (b) will penalize the truthful operator and encourage those who seek to bend the rules to make false annual reports to hide the amounts that they are actually disposing.
Again, since there is no serious and funded process to provide up front permitting requirements, inspections, and review of annual reports, it is unlikely that JHD's will be able to tell whether a facility has met the percent disposal standard.

Ecology's Response Ecology does not agree with the commenter that the "truthful operator" will be penalized by being required to get a permit. The truthful operator will simply be obeying the regulation. Operations that avoid permitting thru false reporting are subject to civil penalties under RCW 70.95.315.

Commenter **Ladenburg** ***Section*** **320** ***Comment #*** 150

Comment There is inconsistency in not requiring even the minimal annual reports for some exempt facilities. The subsections about exempt piles used for storage or treatment, - 320 (1) (c) & (d), should require annual reports to the jurisdictional health department as required of other exempt facilities and operations. Flow can a business be inspected and monitored for compliance unless a baseline is established of the intended activities and material to be stored on the site? If exempt waste pile businesses are not required to have a solid waste permit, or to make annual reports, how is a local JHD to determine that at least fifty percent of the material stored is used within one year and all the material is used within three years as required in these regulations?

Ecology's Response Ecology did not include annual report requirements for categorically exempt wood waste, wood derived fuel , and agricultural waste on farms because it was deemed that the benefits did not outweigh the difficulties. Most wood waste and wood derived fuels are used as a substitute for raw materials or manufactured fuels. Because storage piles of wood waste and wood derived fuel would often be co-mingled with other fuels, it would not be practicable to track how much of the material in a pile should be reported as waste. Ecology does not have a need to quantify or track most agricultural waste on farms. Therefore, annual reporting would add little or no value. Most inert waste in piles is stored prior to recycling, such as concrete which is crushed to produce aggregate. This waste stream will be reported by the recycler. Ecology does not believe there is a strong need to include annual reporting for

the storage piles.

It is understood that the lack of annual reporting for exempt piles will present some difficulty in determining if the owner or operator is in compliance with the turnover requirements. However, other information available during inspections such as the appearance of the material, the facilities ability to process the quantity of material, etc. should provide the necessary information.

Commenter **Lang** ***Section*** ***Comment #*** 88

Comment Overall, the content of the document is user-friendly, but the numbering system is somewhat confusing and hard to follow. At various times < i > is used both as a lower case letter and as a small Roman numeral.

Ecology's Response The numbering format used in the proposed rule is standard for all State Regulations.

Commenter **Lang** ***Section*** **210** ***Comment #*** 89

Comment We appreciate the language [173-350-210 (2) (h) (ii)] stating that facilities are not exempt if over 5% of their material is residuals. This prevents "dump and pick" operations from claiming the exemption and avoiding the stricter regulations.

Ecology's Response Comment noted. Although the specific citation has changed in response to other commenters the disposal threshold has been maintained (see WAC 173-350-310 [2][b][ii]).

Commenter **Lang** ***Section*** **220** ***Comment #*** 91

Comment Schedule for metals testing [173-350-220 (4) (a) (viii) (A) & (B), page 29] requires that all the listed tests be performed every 10,000 yards or 6 months, whichever is sooner. A medium-sized facility like Spokane's would have to test at least quarterly, and a very large compost operation might have to take samples every 10 days to two weeks. These tests are quite expensive, and in all the years that Spokane's compost was tested there were no problems with metals. The number of yards processed before a test is required should be raised. After a period of time, such as a year, testing should he reviewed for cost effectiveness.

Ecology's Response Commenter suggests the frequency of testing for final product is too expensive. Ecology wrote the testing requirements to allow health departments the flexibility to reduce testing frequency based on historical data at individual facilities.

Commenter **Lang** ***Section*** **220** ***Comment #*** 90

Comment Design standards for facilities do not take into account the climate differences within the state [173—350— 220 (3)]. The amount of rainfall should affect the requirements for paved surfaces, leachate collection and pond design. Facilities in eastern Washington or central Washington are unlikely to need ponds designed to prevent wave action [173-350-220 (3) (c) (ii) (C)]. Many of these standards are not necessary for an Eastern WA site and are a disincentive to composting.

Ecology's Response Commenter suggests the design criteria are too stringent for composting facilities in Eastern Washington and areas of the state with limited rainfall. Ecology disagrees. The design criteria, taken as a whole, require that composting facilities be designed to result in "zero discharge" for leachate. There are a number of ways in which to accomplish this goal. The key is to evaluate the climate, geography and rainfall patterns, and design the facility to accommodate the expected amount of precipitation with the size of the leachate collection system. For many Eastern Washington facilities, a small leachate lagoon or a tank may be sufficient due to limited rainfall. Calculations for leachate collection system should take into account leachate used as "make-up water" for moisture control and evaporation losses.

Regarding compost pad surfaces, the rule allows for alternative pad construction when the permit applicant can demonstrate that the pad will meet the requirements of subsection 220(3)(e). These decisions must be made on a case by case basis. In the Yakima Valley area, we already have an example of an alternative pad construction that was approved during the permitting process. Ecology agrees that the distinct climate and geography differences across the state can lead to concern about burdensome requirements for those areas of lower precipitation . However, the composting facility standards are written with enough flexibility to accommodate these differences when the design process acknowledges site-specific conditions.

Commenter **Lang** ***Section*** **350** ***Comment #*** 92

Comment Whole waste tires stored outside cause environmental and human health problems. Allowing storage of 50,000 cubic feet of whole tires is excessive [173-350-350 (5) (a)]. In addition to being a fire danger, they can become breeding grounds for mosquitoes. With new insect-borne diseases (i.e. West Nile virus, etc.) spreading throughout the country, this is a legitimate health concern. Ecology should require shredding or other processing of all tires stored outdoors. All whole tires for recapping, manufacturing of products, and/or reuse should be stored within a building with appropriate weather and fire protection. The number of tires stored should only be sufficient to allow for annual fluctuations in supply and demand.

Ecology's Response Persons applying for a local solid waste handling permit for a waste tire storage site must submit to the local jurisdictional health department a proposed operating plan that addresses, among other things, a vector control component. Method of control will vary and should be specific to site conditions.

Commenter **Lang** ***Section*** **400** ***Comment #*** 93

Comment We agree with the concept of separating inert wastes from demolition materials, and requiring liners for the limited purpose landfills. A comment received at the public hearing indicated that demolition waste regulations would increase costs to businesses. That may be true in some areas, because unlined "holes in the ground" are very cheap, but inappropriate waste management methods should not be allowed to continue just because they are less costly. Future

public costs for environmental damage and cleanup need to be accounted for.

Ecology's Response Two comments were received regarding separating inert wastes and demolition wastes in the landfill standards. One commenter (Hebdon) stated "This is apparently being done in order to prevent disposal of inappropriate waste forms (i.e., waste forms that represent an increased threat to the environment) in less protective landfills. Exclusion of such waste streams is understandable; however, the proposed rule may have gone beyond what is necessary by totally eliminating the inert/demolition landfill option rather than on identifying and restricting the specific demolition waste components that are problematic. It is recommended that Ecology reconsider the regulation with the notion of targeting and restricting the most significant and problematic waste streams."

The other commenter (Lang) stated "We agree with the concept of separating inert wastes from demolition materials, and requiring liners for the limited purpose landfills. A comment received at the public hearing indicated that demolition waste regulations would increase costs to businesses. That may be true in some areas, because unlined "holes in the ground" are very cheap, but inappropriate waste management methods should not be allowed to continue just because they are less costly. Future public costs for environmental damage and cleanup need to be accounted for."

Inert wastes were segregated from other types of waste in the rule, for the purposes of landfill standards, for several reasons. The primary reason for this decision was that materials commonly found in demolition wastes, as defined in WAC 173-304-100(19), present a threat to ground water and air quality in many circumstances given the design and operational standards in WAC 173-350-410. Problems associated with demolition wastes include leachate, gas generation, and landfill fires. Excluding waste streams associated with these problems eliminates essentially all demolition wastes that do not meet the criteria for inert waste.

Another reason that demolition wastes are no longer included is that the initial reason for providing inert and demolition landfills has not proven to be a workable solution. Demolition wastes were originally included as a waste type in WAC 173-304-461 because of the generally inert materials in demolition waste and the difficulty in segregating materials when razing a structure. The design and operation standards were developed around the average characteristics of wastes generated from demolishing whole structures. Single-type wastes, such as those generated by roofing contractors, were not intended to be include as demolition waste. The definition of demolition waste also excluded construction and land clearing debris. All of these materials have found their way into inert and demolition landfills, and have resulted in landfills with average waste characteristics that do not match those for which the standards were originally developed. It should be noted that the rule does not require liners for all limited purpose landfills as suggested by this commenter (Lang).

Commenter **Malchow** ***Section*** **020** ***Comment #*** 138

Comment Recommend adding as an exclusion: (21) Asbestos waste regulated under 40 CRF Part 61-National Emission Standards for Hazardous Air Pollutants, Subpart M and regional Air Agency regulations.

Ecology's Response The commenter suggests that Asbestos wastes regulated under 40 CFR Part 61, National Emissions Standards for Hazardous Air Pollutants, Subpart M and regional air agency regulations should be added to the list indicating materials that the rule does not apply to. This rule is intended to apply to these wastes as allowed by 40 CFR Part 61 and local ordinances. Limited purpose landfills are allowed to accept asbestos wastes.

Commenter **Malchow** ***Section*** **100** ***Comment #*** 140

Comment "Contaminated dredge spoils" and "Contaminated soils". See "clean soils" comment

Ecology's Response Please see response to Malchow, comment #139.

Commenter **Malchow** ***Section*** **100** ***Comment #*** 141

Comment "Recyclable material" definition.
Recommend removing "or reuse" from this definition.
a) Many items are reused that are not identified in a CSWP and
b) By your own definition of "recycling", reusable materials do not qualify.

Recommend adding: "Reusable material" means an item that is capable of being used again (for either it's intended purpose or another purpose) without transformation or remanufacturing.

Ecology's Response The definitions of "recyclable material" is taken from the authorizing statute, chapter 70.95 RCW. In the interest of consistency Ecology has chosen not to modify this statutory definition. Also, the term "reusable material" is not used in the proposed regulation, making a definition unnecessary.

Commenter **Malchow** ***Section*** **100** ***Comment #*** 143

Comment Recommend removing "rubbish".....unless you intend to define it once again.

Ecology's Response The definition of "solid waste" comes from the authorizing statute chapter 70.95 RCW. For the sake of consistency Ecology has chosen not to modify this statutory definition. Also, since the definition of solid waste is the only use of the term "rubbish" Ecology does not believe it is necessary to further

define the term.

Commenter **Malchow** ***Section*** **100** ***Comment #*** 144

Comment "Waste Reduction" means reducing the amount or toxicity of waste generated or reusing materials. This sentence would be more clear if you would put "reusing materials" before "reducing the amount….generated."

Ecology's Response Ecology has determined that this definition is unnecessary and has deleted it from the proposed rule.

Commenter **Malchow** ***Section*** **100** ***Comment #*** 147

Comment I cannot find anywhere in the document that addresses Bulk Product PCB waste that is allowed to go into a solid waste landfill per 40 CFR 761. This has been an issue in the past, and the WDOE had to overrule the Bremerton Kitsap County Health District's interpretation. You may want to specifically include Bulk Product PCB waste within your definition of solid waste and that would eliminate potential confusion.

Ecology's Response The commenter suggests that PCB bulk product waste be added to the definition of solid waste or the rule specifically state that appropriate PCB bulk product wastes are allowed to be disposed of in limited purpose landfills to avoid confusion. Ecology believes that the proposed rule should be modified to include applicability to PCB household wastes and the PCB bulk product wastes identified in 40 CFR Part 761.62(b)(1). Section 020(15) and 400(4) have been so modified from the proposed rule.

Commenter **Malchow** ***Section*** **100** ***Comment #*** 139

Comment This definition is extremely vague and open to the interpretation of the local health district, as well as being too subjective for the user. Any concentration could have some negative impact on the environment or humans. Although petroleum is an obvious suspect contaminant, metals always becomes an issue when determining "clean". Please establish concentration levels. If concentration levels are established as requested, please use the logical approach of establishing TCLP levels rather than totals when addressing metals.

Ecology's Response One commenter (Gries) suggested to replace the term "dredge spoils" with "dredged material" since dredge spoils has not been commonly used within the industry for many years. The term was a carry over from the previous rule but has been replaced as suggested.

Two commenter's (Malchow, McNeill) stated the proposed definitions of "clean soils and dredge spoils", contaminated dredge spoils", and "contaminated soils" were vague and excessively subjective. The commenter's requested that contaminant concentration levels should be established to delineate clean and contaminated soils and dredged material. One commenter suggested that the concentration levels be based upon leach tests, such as the Toxicity Characteristic Leaching Procedure (TCLP). Another commenter suggested that the concentration levels be based upon cleanup levels established in Chapter 173-340 WAC, Model Toxics Control Act Cleanup Regulation (MTCA).

One of the tasks in developing this rule is to establish criteria for determining when soils and dredged materials are clean or contaminated. This is important because the rule does not apply to clean soils or dredged material. Ecology initially attempted to incorporate specific concentration-based criteria for delineating clean and contaminated soils and dredged material. The goal was to eliminate ambiguity. It was well understood that this approach would be the easiest to understand and implement, both by generators and jurisdictional health departments.

The concentration-based standards included leaching and toxicity criteria that were initially proposed as both reasonable and protective of the environment. Comments received during earlier review drafts pointed out that the proposed concentrations would not be protective, or the assumptions incorporated would not reflect reality in many circumstances. It was also pointed out that the proposed concentrations were so low that most soils and dredged material would not qualify as "clean." This would subject common fill activities to the limited purpose landfill standards. Other difficulties included the inability of leach tests to reflect actual contaminant fate and transport in the environment for many constituents and the inability to establish concentrations for materials lacking toxicity values (e.g. reference dose and carcinogenic potency factor.)

Two options were considered in order to address these concerns. The first was to modify the testing methodology and criteria to make it perform as needed and be protective of the environment in all probable circumstances. The other option was to abandon the concentration-based approach altogether.

It was often suggested that the MTCA Method A soil cleanup levels for unrestricted land uses, WAC 173-340-900 Table 740-1, should be used as the concentration threshold for determining if a soil or dredge material was "clean." This is not practicable for several reasons. The basis for the MTCA Method A cleanup levels are limited to human health effects for a limited number of constituents and exposure assumptions. These levels are not protective of terrestrial ecological receptors and cannot be used when a soil contains several hazardous substances. Many of the soil cleanup levels are based on impacts to ground water but do not implement the antidegradation policy of WAC 173-200-030. MTCA provides a process and cleanup standards to address sites that have been contaminated. The solid waste rules have a wider scope and must protect sites that are relatively contaminant free.

Ecology found that it was not practicable to pursue the concentration-based option, primarily because any contaminant concentration levels that would protect the environment in likely circumstances would be too stringent to be practicable. To provide a concentration-based standard, with sufficient flexibility

to be appropriate to the wide variety of circumstances, would require an excessively complex rule. Ecology opted to abandon the concentration-based approach and develop a definition that can be applied to any situation; understanding the difficulties involved with a definition that requires judgment. The final definition for clean soils and dredged material requires knowledge of the soils or dredged material characteristics and the characteristics of the site and manner in which they are placed.

The definition of clean soils and dredged material contains two conditions. First, clean soils or dredged material must not "contain contaminants at concentrations which could negatively impact the quality of air, waters of the state, soils, or sediments…" Second, clean soils or dredged material must not "pose a threat to the health of humans or other living organisms." Commenter's suggested that it would be difficult to determine when a contaminant could "negatively impact" the environment or "pose a threat" or that some contaminants would have a negative impact or pose a threat at any concentration.

The first condition is meant to ensure that the concentration of contaminants in a "clean" soil or dredged material are not significantly higher than those at the site where they are placed. Soils or dredged material with similar or lower levels of contamination than the site where they are placed will not have negative impacts on the environment and would meet the definition of "clean". Conversely, soils or dredged material with higher levels of contamination than the site where they are placed could have negative impacts on the environment and would meet the definition of "contaminated". Clean soils or dredged material placed at a location that has not been influenced by regional or localized human activity could not contain any contaminants (as defined in the rule.) Soils or dredged material placed at a heavy industrial area could contain contaminants at levels similar to existing conditions at the site and be "clean", so long as the second condition is met.

The second condition is primarily meant to ensure that soils or dredged material with high levels of contaminants are not placed at contaminated sites that pose a threat to human health or the environment. This condition is also meant to address contaminants with characteristics that may have different impacts due to the quantity of a soil or dredged material, such as organic matter or metallic constituents in a form that produces acid leachate.

The manner in which a soil or dredged material is used also needs to be considered when determining if it is clean or contaminated. For example, manufactured soils derived from contaminated soils, or other solid waste residuals, would need to have very low concentrations of contaminants (at or near natural background) in order to be marketed for unrestricted use as a clean soil. The marketer would need to ensure that the soil would meet the definition of clean soil for all probable uses. Many naturally occurring substances in soil, such as wood particles found in log sort yard waste fines, would not be expected to have a negative impact at most locations if placed in relatively thin layers. However, large quantity fills of the same soil would produce leachate and generate gas that could pose a threat to human health and the environment. Similarly, gravelly soils containing heavy petroleum hydrocarbons that would generally be regulated as contaminated soil may meet the definition of "clean" when used as a base material for asphalt cement pavement.

One commenter (Marek) stated that many waste generators are looking to classify their soils as 'clean soils' due to the high costs of disposal at solid waste landfills. An alternative approach suggested was to require generators to demonstrate to the jurisdictional health department that the soil in question is in fact "clean" prior to actually managing it as such as a proactive, prevention-oriented approach to enforcement rather than the approach currently described. Ecology deems such a demonstration for every soil and dredged material decision an unreasonable burden to both generators and jurisdictional health departments. However, it is expected that facilities that treat contaminated soils, or manufacture soils from solid waste residuals, include criteria and testing protocols in their plan of operation to ensure that all soils from the facility are either "clean" or handled at a permitted solid waste facility.

One commenter (McNeill) suggested that the definition for clean dredged material be related to the definition for contaminated dredged material, so that any given material may be defined as one or the other. Ecology agrees with this and has amended the definitions of clean/contaminated soils and dredged material to be opposites with no overlap. The commenter suggested that clean dredged material be defined as those that meet the conditions for open water disposal, and contaminated dredged material be defined as those that do not. While this is intuitive, it is not an appropriate approach for this rule as dredged material that meet the conditions for open water are exempted from the rule (when the open water disposal is under an appropriate permit.) This rule is also concerned with dredged material that is placed on land without a permit. Because of this, clean dredged material must be defined in a way that addresses the upland impacts. However, the definition for clean dredged material has been revised in a manner that would include most material suitable for open water
disposal. They would not negatively impact the existing quality of sediments at the disposal site.

One commenter (Gries) suggested that the applicability to dredged material regulated under sections 404 of the Federal Clean Water Act was problematic and vague. Ecology agrees with this comment and has amended the rule to clarify applicability to dredged material.

Commenter **Malchow** ***Section*** **300** ***Comment #*** 145

Comment Solid covers or screens are often not on containers used to accumulate CDL waste. The open containers are tarped during transportation, which is addressed in the next paragraph. Recommend adding an addendum to sentence (2) (b) (iii) as follows:

Detachable containers used to accumulate CDL waste may be constructed without solid cover or screens; however, they must have capability of securing the contents as described in paragraph (3) while in transport.

Ecology's Response The requirement for solid covers or screens on detachable containers has been in place since 1985. Ecology believes that it is appropriate to continue this requirement. Often containers that are used for construction waste one week, may be used for an entirely different purpose at the next location. Although it is common practice not to employ the screens on containers at construction and demolition sites they should be available for use.

Commenter **Malchow** ***Section*** **990** ***Comment #*** 146

Comment Might railroad ballast and cured plastics also be considered as additional items for the list?

Ecology's Response Plastics are not inert waste because they are often combustible (e.g. polystyrene) and may produce highly toxic fumes when exposed to heat or flame (e.g. polyvinylchloride.) Railroad ballast was not considered appropriate to be listed as an inert waste because of the wide variability in the material and the probability of contamination. Ballast is subject to spills from fuels, battery fluids, and the wide variety of materials transported by rail. Ecology has also had experiences when wastes such as tailings from toxic metal smelters have been used for railroad ballast.

Commenter **Marek** ***Section*** ***Comment #*** 201

Comment Financial Assurance for Solid Waste Handling Facilities – The proposed rule requires financial assurance for three types of facilities - limited purpose landfills, moderate risk waste facilities and waste tire storage facilities. The TPCHD concurs with the need for the financial assurance for each of these facility types. However, based upon the TPCHD's extensive experience, it is also our belief that financial assurance should be required for several other types of solid waste facilities as well. The TPCHD strongly recommends that Ecology require financial assurance for piles, inert waste landfills and material recovery facilities as well. The purpose of financial assurance for these additional types of facilities is the same as for the three currently listed: insure against the risk that a facility operator fails to perform various closure and/or post-closure activities. The TPCHD has been burdened in the past by unscrupulous operators filling a site with waste and then walking away. The burdens in these instances are potential public health impacts due to accumulated wastes, and potential financial implications in the event of cleanup actions. Requiring financial assurance as a part of the permitting process serves as a prevention-based tool and will help avoid creating these hardships for state and local governments.

Ecology's Response As noted by the commenter Ecology has limited the requirement for financial assurance to three facility types in the proposed rule. The reason for this limitation was based on statutory requirement (limited purpose landfills, waste tire storage and transportation) and demonstrated need (waste tire storage, large-scale moderate risk waste facilities). An additional factor that Ecology considered is the cost of maintaining financial assurance instruments. In some cases these costs can be equal to, or even exceed the value of the instrument.

Commenter **Marek** ***Section*** **020** ***Comment #*** 203

Comment WAC 173-350-020 Applicability. Section (1)(f) states that this chapter does not apply to " Single family residences and single family farms...regulated under WAC 173-350-700(4)." No such section exists. Please include a correct reference.

Ecology's Response The commenter must have been reviewing an older version of the draft rule. The error has been corrected in the official review draft.

Commenter **Marek** ***Section*** **100** ***Comment #*** 204

Comment WAC 173-350-100 Definitions. The TPCHD recommends reviewing, as a whole, the definitions of "Conditionally Exempt Small Quantity Generator", "Household hazardous waste", and "moderate risk waste." In particular, the definition of moderate risk waste would better read "…means solid waste that is limited to household hazardous waste (HHW) and waste generated by a CESQG, as defined in this chapter."

Ecology's Response Ecology concurs with the commenter that the definition could be improved. Based on our review we have determined that the best approach is to define "conditionally exempt small quantity generator waste" and use this term in the definition of "moderate risk waste".

Commenter **Marek** ***Section*** **210** ***Comment #*** 199

Comment Exempting Material Recovery Facilities from Solid Waste Permitting – The TPCHD is concerned with the approach taken by this rule to exempt recycling facilities from the need for a solid waste permit. The proposed rule establishes an after-the-fact enforcement approach to these facilities and places an unfunded mandate on jurisdictional health departments (JHDs) to deal with these facilities. One of the most fundamental approaches to public health is prevention. Requiring a solid waste permit provides for an upfront review of facility operations and minimize or eliminate potential impacts. The TPCHD is aware of the legislative history that has driven Ecology to this position. However, the TPCHD is also committed to maintaining a prevention-based approach in Pierce County and will, if necessary, implement a more restrictive rule than that proposed by Ecology.

The Pierce County Solid Waste Division has expressed concerns on this issue in the past and on this draft as well. As you can see, we share their concern, and encourage Ecology to reconsider the treatment of recycling facilities under this rule.

Ecology's Response Ecology believes that changes made in response to other comments may address some of the concerns that this commenter has with material recovery facilities. Please see response to Hansen,

comment #30.

Furthermore, Ecology understands the commenter's concern with "after-the-fact enforcement". However, based on our experience, as well as anecdotal information provided by local government, requiring a permit does not ensure compliance.
It should also be noted that Ecology does not believe the proposed rule places an "unfunded mandate" on the jurisdictional health department (JHD) to deal with permit exempt facilities. Nothing in the proposed rule requires a JHD to review facility notifications and annual reports, or conduct inspections of the facility. There are provisions that give the JHD the ability to conduct these activities if they choose to do so.

Commenter **Marek** ***Section*** **220** ***Comment #*** 205

Comment 1. WAC 173-350-220 Composting facilities. Section (4)(viii)(C). Recommend replacing "Nitrogen content" with "Nutrient content". Nutrient content should include Total Kjeldahl Nitrogen, ammonia-nitrogen, nitrate-nitrogen, potassium and phosphorus.

Ecology's Response Ecology included nitrogen content to give additional information about the composted material in order to evaluate stability. Individual respirometry tests are not adequate to evaluate whether or not composted material is stable enough for distribution.

The other nutrient parameters suggested fall into the realm of marketing parameters in Ecology's view. Although they are tests that all composters should consider as part of good information about their product, Ecology has not included them in the required testing for protection of human health and the environment.

Commenter **Marek** ***Section*** **230** ***Comment #*** 206

Comment 1. WAC 173-350-230 Land Application. Section (4)(a)(i)(A) – last word of this sentence should be "prevented".

Section (4)(b)(iii) and (v) – other appropriate units of measurement should be identified in the rule in addition to tons. For liquid wastes, "gallons with percent solids" should be reported. Also, volume--such as "cubic yards"--should also be an acceptable reporting unit.

Section (8)(iii)(E) and (F) – The TPCHD recommends that the regulation specify that analytical results shall be reported on a "dry weight basis".

Ecology's Response This comment has three parts. The word "prevented" is already used in the section referenced. The reference to any specific volumetric reporting unit has been eliminated from the section.
The term "dry weight basis" has been added to the two sections referenced.

Commenter **Marek** ***Section*** **320** ***Comment #*** 200

Comment Contaminated Soils Treatment Facilities – The TPCHD currently has seven facilities under solid waste handling permits that deal with management of contaminated soils. Two of these facilities are fixed petroleum-contaminated soils treatment facilities, while the other five manage street maintenance wastes (street sweepings and vactor waste). The TPCHD is extremely disappointed that Ecology deleted the stand-alone section dealing with contaminated soil treatment facilities. Addressing these facilities independently, as in the "Contaminated Soils Treatment Facilities" section of the Stakeholder Internal Review Draft, was a substantially better approach than incorporating these requirements into the "Piles Standards" section. The management of contaminated soils is becoming an increasingly common problem. Having clear standards dedicated to the management of these problem wastes would be immensely helpful for health districts and health departments throughout the state. The TPCHD urges Ecology to re-think the current approach and to restore a stand-alone section addressing contaminated soils treatment facilities in the adopted regulation.

Ecology's Response Several commenter's suggested that a section specific to contaminated soils treatment facilities, such as was found in previous drafts of the rule, is warranted and would like to have the section reinstated.

A stand-alone section applicable to all contaminated soil treatment facilities found in early drafts of the proposed rule was removed for several reasons. The primary reason was that most of the requirements found in the contaminated soils treatment facilities were identical to those found in the section applicable to piles used for storage or treatment. The additional requirements were operating standards addressing recordkeeping to ensure that soils were sufficiently characterized prior to being received and after treatment.

It was expected that these requirements would not need to be specifically identified and that they would be incorporated in the plan of operation for any facility that accepted contaminated soils for storage or treatment. For example, owners or operators of piles used for treatment must provide a description of the types of solid waste to be handled at the facility [WAC 173-350-320(4)(e)(i)] and ensure that nonpermitted waste is not accepted at the facility [WAC 173-350-320(4)(a)(iii)]. It was anticipated that the potential range of contaminants and concentrations in soils would need to be specified during permitting in order to evaluate the design and operation of a facility to ensure conformance with performance standards and that full characterization of soils received would be required to ensure that nonpermitted waste are not accepted. Furthermore, all solid waste generated at any site must be managed in accordance with all applicable rules. Therefore, Ecology presumed that any treated soil would be characterized to ensure that any soils that were not clean would be handled appropriately.

However, many commenter's have requested that the section applicable to storage and treatment of contaminated soils be reinstated into the rule. Ecology does not believe that this step is necessary but

understands that the requirements that were originally proposed in that section can be added back into the rule to clarify the expectations on soil characterization and facility design and operation. Section WAC 173-350-320, Piles used for storage and treatment, has been revised to incorporate these requirements. The revisions include soil characterization, recordkeeping, design and operation standards that would be specifically applicable to facilities that treat or store contaminated soil.

Commenter **Marek** ***Section*** **320** ***Comment #*** 207

Comment WAC 173-350-320 Piles used for treatment. Section (1)(b) – Recommend including item (iv) to state that "the storage of such exempt piles do not contaminate surface or ground water."

Section (4)(d)(iii) – units should be tons or cubic yards.

Ecology's Response The commenter suggests that the categorical exemption from solid waste permitting for wood waste, wood derived fuel and agricultural waste on farms be amended to include specific language addressing contamination of surface and ground water. All facilities with categorically exempt piles must meet the performance standards of Section -040. WAC 173-350-040(2) addresses the protection of waters of the state.

The commenter also suggests that owners and operators should be able to report annually the quantity of solid waste in either tons or cubic yards. Ecology requires that waste be reported in tons for consistency. However, an owner or operator may maintain records of waste handled in any unit. They must convert the quantity to tons for annual reporting.

Commenter **Marek** ***Section*** **330** ***Comment #*** 208

Comment WAC 173-350-330 Surface impoundments and tanks. In Section (4)(c), replace the word "weights" with "gallons"--or simply add "or gallons".

In Section (4)(e)(vi), include "gallons".

In section (5)(b), the word "lead" should be "leak".

Ecology's Response Two commenter's pointed out the difficulties in maintaining the operating records in the proposed rule. Ecology concurs that recording the weight of wastes received or removed from a surface impoundment would be problematic. The requirements for recordkeeping have been revised so that only the quantity and type of waste removed from a surface impoundment or tank needs to be recorded. Because this change in the rule will make it impossible for many owners or operators to provide information on the quantity of waste needed for annual reporting, that requirement has been eliminated from the final rule.

The commenter's referenced section, 330(4)(e)(vi), did not exist in the rule. However, Ecology believes that the concern may have been addressed by changes to recordkeeping requirements and deletion of annual reporting requirements.

The editing comment regarding Subsection 330(5)(b) has been corrected.

Commenter **Marek** ***Section*** **360** ***Comment #*** 209

Comment WAC 173-350-360 Moderate risk waste handling. The TPCHD recommends inclusion in this regulation of a list of moderate risk waste types or categories. While we recognize that such a list cannot be comprehensive, it can be instructive to the general public and help make this regulation stand-alone. A list similar to that used by Ecology in previous guidance documents could be included in either the body of the regulation, as an appendix, or via reference, and prefaced by "Examples of moderate risk waste types include, but are not limited to, the following. . .". Note that this may require modifying the definition of "Moderate risk waste" in Section 100.

Ecology's Response An example list of categories and types of waste considered HHW was part of an earlier draft of this rule. At the request of several commenter's it was deleted.

Commenter **Marek** ***Section*** **990** ***Comment #*** 202

Comment Criteria for Inert Waste / Clean Soils – Due to the high costs of disposal at municipal solid waste landfills, many waste generators are looking to classify their wastes as 'inert wastes' or their soils as 'clean soils'. The approach Ecology has taken to list certain wastes as 'inert waste' (concrete, asphaltic concrete, brick, glass, et cetera) is an effective method that is enforceable by local health departments. However, implementing the criteria in WAC 173-350-990(3)(b)(i-iii) is going to be difficult, if not impossible. As it has been explained to the TPCHD, this approach is intended to set the standard so high (stringent) that essentially nothing will be considered 'inert' except for the listed wastes. If that was in fact the intent, then why establish these additional criteria? More immediately, we are concerned with the practical implementation of the additional criteria. Generators will in fact deem their wastes as inert and put local health departments in the position to prove otherwise. In essence, local governments will have to challenge the designation as "inert" and prove otherwise. This is an undue burden. An alternative approach would be to require generators to demonstrate to the jurisdictional health department that the waste in question is in fact "inert" prior to actually managing it as such. Once again, this approach would provide local governments with a proactive, prevention-oriented approach to enforcement rather than the approach currently described.

Ecology's Response

One commenter (Comstock) stated that the definition of inert waste had been improved from WAC 173-304-100(40) but leaves a lot of room for interpretation and is still difficult to understand. Two commenter's (Marek, Hebdon) suggested that the criteria provided in WAC 173-350-990(3)(b) are too nebulous, will be difficult to implement, and need more definition.

Several options were explored for defining inert wastes during the rule development process. One option was to limit inert waste to a list, such as found in WAC 173-350-990(2). Another option was to set physical/chemical criteria for inert waste. The first option was simple but would prevent other inert wastes from being considered. Using only a criteria was deemed to be too complicated when there are several wastes that are generally regulated as inert. Ultimately, it was decided to include both a list and criteria.

While the criteria in WAC 173-351-990(3) do provide room for interpretation and judgment, it is expected to be fairly easy to apply in practice. The concentration based criteria in paragraph 990(3)(b) will be the most difficult to establish firm limits for determining if a waste is an inert waste and Ecology recognizes the need to provide more clarification in the rule.

One commenter (Marek) was told during rule development that the criteria in subsection 990(3) is intended to set the standard so high (stringent) that essentially nothing will be considered 'inert' except for the listed wastes. Earlier drafts of the proposed rule provided specific leaching test methods and criteria, and toxicity criteria that set specific constituent concentration limits for inert wastes. Because the criteria did not provide any room for judgment, they were set at a level that would be protective in any circumstance. The situation described by the commenter was the result. The approach of providing firm specific inert criteria was abandoned because of this.

In subsection 990(3), Ecology intends that persons using the criteria will use the inert materials listed in subsection 990(2) as a reference point. For example, other inert wastes should have similar structural integrity, toxicity, and not produce leachate with chemical concentrations significantly greater than that from cured concrete, asphalt, or the other wastes listed as inert. Language will be added to the inert criteria to reflect this intent.

One commenter (Marek) suggested that due to the high costs of disposal at municipal solid waste landfills, many waste generators are looking to classify their wastes as 'inert wastes'. Concern was expressed that generators will deem their wastes as inert and put local health departments in the position to prove otherwise. In essence, that local government will have to challenge the designation as "inert" and prove otherwise. This was considered an undue burden to jurisdiction health departments. An alternative approach was suggested to require generators demonstrate to the jurisdictional health department that the waste in question is in fact "inert" prior to actually managing it as such. This commenter considered the approach Ecology has taken to list certain wastes as 'inert waste' (concrete, asphaltic concrete, brick, glass, et cetera) an effective method that is enforceable by local health departments.

The requirements in the rule applicable to inert wastes are the same as other solid wastes with two exceptions. These are the storage of inert waste in piles and inert waste landfills. Except for these two cases, a person would have no motivation to classify their waste as inert.

Inert waste landfills greater than 250 cubic yards are required to obtain a permit from the jurisdictional health department. The owner or operator of an inert waste landfill is required to develop, keep, and abide by a plan of operation approved as part of the permitting process. Each plan of operation is required to include a description of the types of solid waste to be handled on-site. The plan of operation is also required to include acceptance criteria, procedures for waste screening, and procedures for handling unacceptable wastes received at the facility. It is intended that issues relating to which wastes may be inert will be dealt with during the permitting process.

Inert waste in piles may be categorically exempt from solid waste handling permitting, provided the owner and operator complies with the terms and conditions in WAC 173-350-320(1)(e). These terms and conditions ensure that at least fifty percent of the material is used within one year and all the material is used within three years, Ecology and jurisdictional health department representatives be allowed to inspect the facility, the facility conforms to the performance standards of WAC 173-350-040. Ecology believes that these terms and conditions are sufficient to prevent threats to human health and the environment or undue burden to jurisdiction health departments from generators classifying a waste as inert improperly.

Commenter **Martin** ***Section*** **100** ***Comment #*** 218

Comment

"Nuisance" means unlawfully doing an act, or omitting to perform a duty, which act or omission either annoys, injures, or endangers the comfort, repose, health or safety of others, offends decency, or unlawfully interferes with, obstructs or tends to obstruct, any lake or navigable river, bay, stream, canal, or basin, or any public park, square, street or highway; or in any way renders other persons insecure in life, or in the use of property.

DOE and local health jurisdictions should not be concerned with decency or security. Those responsibilities are the responsibility of law enforcement. We only should be focusing on nuisances that affect public health and/or the environment. This definition is too broad. We cannot police all nuisances, i.e., those that endanger someone's comfort or repose.

Ecology's Response Ecology agrees with the commenter that the definition of nuisance is not appropriate for use in the proposed rule. Because the term nuisance is used primarily in discussion of odors Ecology has determined that best way to resolve this concern is to create a new definition of "nuisance odor" and delete all other references to nuisance.

Commenter **Martin** ***Section*** **100** ***Comment #*** 217

Comment "Municipal solid waste (MSW)" means a subset of solid waste which includes unsegregated garbage, refuse and similar solid waste material discarded from residential, commercial, institutional and industrial sources and community activities... The term MSW does not include:

Municipal solid waste should exclude "solid wastes from other sources, such as construction and demolition debris, autobodies, municipal sludges, combustion ash, and industrial process wastes that might also be disposed of in municipal waste landfills or incinerators." (U.S. EPA, Characterization of Municipal Solid Waste in The United States: 1996 Update. EPA530-R-97-015. Washington, DC.)

Ecology's Response Ecology believes that the definition already accommodates the commenter's concern. The waste types that are included in the suggested language are not "unsegregated garbage, refuse, or similar waste material".

Commenter **Martin** ***Section*** **100** ***Comment #*** 216

Comment "Materials recovery facility" means any facility that accepts source separated solid waste for the purpose of recycling and disposes of an incidental and accidental residual not to exceed five percent of the total waste received, by weight per year, or ten percent by weight per load.

This definition should be used for a Recycling Facility, not a Materials Recovery Facility. MRF's do not accept source separated solid waste; they accept commingled solid waste and recover recyclable material from the waste stream for reuse or sale. A more realistic number for the amount of incidental or accidental residual waste should be no more than 50%. A 95% recovery rate is too difficult to achieve. Remove the term "source separated."

Ecology's Response The commenter is correct that some material recovery facilities accept commingled waste and have a significant volume of residual waste to dispose of. However, this is not the type of facility that was envisioned as being appropriate to operate under a permit exemption. Ecology has made some changes to this definition and the regulatory structure that these facilities will work under in response to other comments (see response to Hansen, comment #30). In brief, material recovery facilities as a category will be subject to permitting and will be regulated much like a transfer station unless they accept only recyclable materials and meet the disposal threshold.

Commenter **Martin** ***Section*** **200** ***Comment #*** 220

Comment Add the words, "and/or the jurisdictional health department" after "The department ..."

Ecology's Response There is no authority for a jurisdictional health department (JHD) to place additional or more stringent requirements on a beneficial use determination (BUD) through the BUD process. Ecology will weigh all comments received during the 45 day comment period and incorporate information in the form of conditions as necessary. The regulation will allow modification, by Ecology, under the circumstances described in proposed WAC 173-350-200(2)(c)(i)& (ii), or Ecology will revoke the BUD, require application to the appropriate JHD for a solid waste permit, and notify JHDs statewide of the action.

Commenter **Martin** ***Section*** **200** ***Comment #*** 219

Comment Add the words, "… and objectionable odors" after "… vector attraction;"

Ecology's Response Ecology will determine the need for odor controls on a case-by-case basis, and will include such requirements in the specific terms and conditions for exemption.

Commenter **Martin** ***Section*** **210** ***Comment #*** 221

Comment Add the words, "and/or local health jurisdiction" after "… of the department"
"Any additional information required by written notification of the department. "Add the words, "and/or local health jurisdiction" after "… of the department"

Ecology's Response Ecology does not concur with the suggested change. Ecology is concerned that the suggested change would result in an inconsistent approach to working with permit exempt facilities.

Commenter **Martin** ***Section*** **220** ***Comment #*** 223

Comment Add the words, "and until the owner or operator demonstrates to the jurisdictional health department that the actual construction is in conformance with the design standards of subsection (3)"

Ecology's Response Commenter recommends additional language regarding assurance to the health department about conforming to design standards in WAC 173-350-220(9). Ecology views the current language as adequate. It was written to provide assurance that solid waste facilities are constructed according to designs presented as part of the permit application. Ecology has prepared a checklist to assist in reviewing permit applications for conformance to composting facility design standards.

Commenter **Martin** ***Section*** **220** ***Comment #*** 222

Comment Add "(iii) Methods of removing and properly disposing of leachate."

Ecology's Response Ecology concurs that leachate needs to be appropriately managed at closure and has edited the subsection -220 (6)(a) to reflect this.

Commenter **Martin** ***Section*** **230** ***Comment #*** 225

Comment A management plan describing how ground water will be protected should be required if the depth to ground water is "50 feet or less" from the surface. Delete the words, "… three feet or less …"

Ecology's Response Appropriate application rates that are protective of groundwater should be arrived at by analysis of site conditions and the characteristics of the waste to be land applied. Ecology intended that an application rate ensure no leaching of contaminants or nutrients to groundwater when the land application section was developed. Section (4)(d)(iv) requires a management plan describing how groundwater will be protected if the seasonal high groundwater is less than three feet from the surface and Section 230 (8) (a) (iv) (C) requires discussion of depth to seasonal groundwater as part of the solid waste application. This information, regardless of the actual depth must be considered along with contaminant and nutrient analysis when establishing an appropriate application rate. Because an application rates must be protective of groundwater regardless of the actual depth, monitoring requirements are not warranted.

Commenter **Martin** ***Section*** **230** ***Comment #*** 224

Comment Change the word "risks" to "hazards" or "threats."

Ecology's Response The term "risks" has been changed to "threat".

Commenter **Martin** ***Section*** **230** ***Comment #*** 226

Comment Delete the word "except" before "… as provided …" If you don't delete the word "except", then owners and operators will not have to follow the requirements of WAC 173-350-040(5).

Ecology's Response Language changed to be consistent with language used in other sections of the rule where no specific groundwater monitoring requirements exist.

Commenter **Martin** ***Section*** **310** ***Comment #*** 230

Comment WAC 173-350-310 Intermediate solid waste handling facilities.
(6) Intermediate solid waste handling facilities – Closure requirements.

Add the requirement that a sign be posted upon closure, which provides directions to and the location to the nearest transfer station or disposal site where solid waste can be disposed of. This will eliminate a lot of illegal dumping at the gate of the closed transfer station.

Ecology's Response Ecology believes that the jurisdictional health department could require the type of signage recommended by the commenter as part of closure plan approval. However, we do not believe that it will be necessary or preferable in all cases to require this type of information be posted.

Commenter **Martin** ***Section*** **310** ***Comment #*** 229

Comment a) Add the requirement that the operation plan include details on how the operator is going to detect and prevent the disposal of dangerous or unacceptable waste at a transfer station, i.e., via random load checks, visual inspections, waste screening, etc.

b) The operation plan should include details on how the owner or operator is going to respond if dangerous waste is inadvertently received at a transfer station and how they are going to contain and properly dispose of it if it has been accidentally disposed at the transfer station.

c) Add the requirement that the owner or operator is responsible for providing information to the public on proper disposal methods and locations for dangerous/unacceptable waste disposal if the public shows up at the gate with a load of dangerous/unacceptable waste. There should be tracking or follow-up procedures for determining if the person who showed up at the gate with dangerous/unacceptable waste properly disposed of it, i.e., requiring the owner or operating to record license plate information and to contact the department or jurisdictional health department with such information for follow-up.

d) Add the requirement that the operations plan provide details on the procedures for responding to an equipment failure, fire, severe storm, etc. The operations plan should explain where waste will be diverted during such incidents and whether backup equipment is available to keep the facility in operation and to remove on-site waste to a final disposal site.

e) Include the requirement that solid waste be removed to a landfill or final disposal site at the end of each operating day so that solid waste does not accumulate indefinitely.

f) The operations plan should include information on the maximum amount of solid waste that will be handled at the facility at any give time (facility capacity).

Ecology's Response Ecology agrees in part with the commenter's suggested changes. Ecology will revise the operating standards and operating plan criteria to reflect the need to prohibit dangerous and other unacceptable waste. Ecology also agrees that facility capacity is a detail that should be included in the operations plan. Ecology believes that the concern with responding to fire or storm events is inherent in the safety and emergency plan requirement and does not necessitate any changes. The recommendation to require all waste be removed from the facility at the end of each work day is not practical.

Commenter **Martin** ***Section*** **310** ***Comment #*** 228

Comment WAC 173-350-310 Intermediate solid waste handling facilities.
(4)(B) Intermediate solid waste handling facilities – Operating standards. "Provide all-weather approach roads, exit roads, and all other vehicular areas;" "All-weather roads" should be changed to "roads paved with asphalt or concrete." "All-weather roads" is too open to interpretation and do not adequately control fugitive dust. Some owners or operators will try to get by with a couple inches of gravel and call it an "all-weather road." There are problems with inclement weather, which causes the "all-weather roads" to become laden with mud and dirt, which causes "track-out" and fugitive dust emissions. "All-weather roads" not paved with asphalt or concrete cannot adequately be washed down or sweeped.

Ecology's Response Ecology understands the commenter's concern. However, the suggested change is unnecessary to accomplish the intended result. There are already requirements to protect air quality [-310 (3)(a)(vii)] and control dust [-310 (4)(a)(1)(G)]. If a jurisdictional health department does not believe a proposed design or an existing design adequately address these requirements they can require thru the permitting process that a different all-weather surface be constructed.

Commenter **Martin** ***Section*** **310** ***Comment #*** 227

Comment WAC 173-350-310 Intermediate solid waste handling facilities.
(3) Intermediate solid waste handling facilities – Design standards.

Include the requirement that the applicant provide fire control features and response procedures approved by the fire control jurisdictional agency.

Ecology's Response Intermediate solid waste handling facilities must comply with all other applicable laws and regulations. Ecology believes that the performance standards of section -040 sufficiently address this issue.

Commenter **Martin** ***Section*** **330** ***Comment #*** 231

Comment Add the words, "and until the owner or operator demonstrates to the jurisdictional health department that the actual construction is in conformance with the design standards of subsection (3)" after "… documentation in writing."

Ecology's Response Conformance with design standards is determined during review of engineering reports/plans and specifications. Once a design has been approved, the facility must be constructed in accordance with the approved design. The construction records are intended to provide a demonstration that this has been accomplished. Approval of construction documentation by the jurisdictional health department indicates that the facility has, to the satisfaction of the health department, been constructed in accordance with the approved design.

In order to provide clarity regarding this aspect of the permitting process Ecology has modified all sections with requirements for construction records to indicate that the jurisdictional health department must determine that the construction was completed in accordance with the approved design plans/specifications prior to facility operation.

Commenter **Martin** ***Section*** **350** ***Comment #*** 233

Comment Add the words, "The application fee for a solid waste handling permit for the storage of waste tires charged by a jurisdictional health department shall remain separate from the application fee for a waste tire storage site owner license charged by the department of licensing." Owners and operators might get confused between the fees charged for the license and the permit.

Ecology's Response Ecology does not concur with the suggested change. The authority for the jurisdictional health department to charge permit fees is stated in WAC 173-350-710 (1)(b).

Commenter **Martin** ***Section*** **350** ***Comment #*** 232

Comment WAC 173-350-350 Waste tire storage and transportation.
(6)(e)(iii)(C) "Safety, fire and emergency plans addressing the following: Procedures for fire fighting and the operation of fire control equipment;"

Add the requirement that the fire emergency plan, including a list of fire control equipment, be reviewed and approved by the fire jurisdictional agency.

Ecology's Response Chapter 70.95 RCW explicitly authorizes delegation of responsibilities to local jurisdictional health departments. No such authority for delegating tasks to local fire districts exists in the referenced statute. A proposed waste tire storage facility, like any solid waste handling facility, is already subject to any applicable local ordinance without being specifically call out in this regulation, including any applicable fire code.

Commenter **Martin** ***Section*** **360** ***Comment #*** 236

Comment WAC 173-350-360 Moderate risk waste handling.
(8) Moderate risk waste facilities – Closure requirements.

Add the requirement that a sign be posted upon closure, which provides directions to and the location of the nearest permitted moderate risk waste handling site. This will eliminate a lot of illegal dumping at the gate of the closed moderate risk waste handling facility.

Ecology's Response Ecology believes that the jurisdictional health department could require the type of signage recommended by the commenter as part of closure plan approval. However, we do not believe that it will be necessary or preferable in all cases to require this type of information be posted.

Commenter **Martin** ***Section*** **360** ***Comment #*** 235

Comment Add the words, "and or jurisdictional health department" after "… of the department…" so that the jurisdictional health departments can also ask for additional information.

Ecology's Response Ecology does not concur with the suggested change. Ecology is concerned that the suggested change would result in an inconsistent approach to working with permit exempt facilities.

Commenter **Martin** ***Section*** **360** ***Comment #*** 234

Comment Add the words, "and or jurisdictional health department" after "… of the department…" so that the jurisdictional health departments can also ask for additional information.

Ecology's Response Ecology does not concur with the suggested change. Ecology is concerned that the suggested change would result in an inconsistent approach to working with permit exempt facilities.

Commenter **Martin** ***Section*** **360** ***Comment #*** 237

Comment Add the words, "and until the owner or operator demonstrates to the jurisdictional health department that the actual construction is in conformance with the design standards of subsection (5)" after "… documentation in writing."

Ecology's Response Conformance with design standards is determined during review of engineering reports/plans and specifications. Once a design has been approved, the facility must be constructed in accordance with the approved design. The construction records are intended to provide a demonstration that this has been accomplished. Approval of construction documentation by the jurisdictional health department indicates that the facility has, to the satisfaction of the health department, been constructed in accordance with the approved design.

In order to provide clarity regarding this aspect of the permitting process Ecology has modified all sections with requirements for construction records to indicate that the jurisdictional health department must determine that the construction was completed in accordance with the approved design plans/specifications prior to facility operation.

Commenter **Martin** ***Section*** **400** ***Comment #*** 238

Comment Add the words, "and until the owner or operator demonstrates to the jurisdictional health department that the actual construction is in conformance with the design standards of subsection (3)" after "… documentation in writing."

Ecology's Response The commenter suggests that the subsection addressing construction record include a demonstration that a landfill's construction is in conformance with the design standards. Conformance with landfill design standards is determined during review of engineering reports/plans and specifications. Once a design has been approved, the facility must be constructed in accordance with the approved design. The construction records are intended to provide a demonstration that this has been accomplished. Approval of construction documentation by the jurisdictional health department indicates that the facility has, to the satisfaction of the health department, been constructed in accordance with the approved design.

In order to provide clarity regarding this aspect of the permitting process Ecology has modified all sections with requirements for construction records to indicate that the jurisdictional health department must determine that the construction was completed in accordance with the approved design plans/specifications prior to facility operation. To further insure that this is the case, subsection 3 has been amended so that it more clearly states that the requirements apply to both design and construction.

Commenter **Martin** ***Section*** **710** ***Comment #*** 239

Comment Add the words, "or the applicant shall be notified regarding the information or documentation that is missing from the application" after the words "… approved or disapproved …" There is a difference between the time requirements for notifying an applicant whether an application is approved or disapproved and whether it is complete. An application is not complete unless all of the required documentation and information is included in the application. Provide a different time frame for notifying an applicant whether an application is complete and approving or disapproving an application.

Ecology's Response Ecology does not believe that it is appropriate to set a different time limit for the jurisdictional health department's (JHD) review of an application for completeness than the 90 day limit specified by RCW 70.95.180. As a practical matter the JHD will need to make a completeness determination in less than 45 days because Ecology is granted a 45 day review period within the 90 day JHD review. Although not specifically noted the comment does bring to light a problem with section -710 (2)(a) which states that

every "completed" application shall be approved or disapproved within 90 days by the JHD. This is in conflict with RCW 70.95.180 which requires all permits be approved or denied within 90 days of receipt of an application. Ecology will rectify this problem by deleting the word completed from -710 (2)(a).

Commenter **Martin** ***Section*** **710** ***Comment #*** 240

Comment WAC 173-350-710 Permit application and issuance.
(3)(a) Permit renewals. "Prior to permitting, … on the site continue to: (i) Meet the minimal functional standards of the department …" This wording should be changed to "Meet the solid waste handling standards (WAC 173-350)" rather than "… minimal functional standards of the department …"

Ecology's Response Ecology agrees with the suggested change.

Commenter **Martin** ***Section*** **710** ***Comment #*** 241

Comment WAC 173-350-710 Permit application and issuance.
(6)(c) Permit suspension and appeals. "If the jurisdictional health department denies a permit renewal or suspends a permit for an operating waste recycling facility … continued operation of the waste recycling facility …" Change the words, "waste recycling facility" to "solid waste handling facility" in both instances.

Ecology's Response Ecology does not agree with suggested change. The requirements of WAC 173-350-710 (6)(c) come directly from RCW 70.95.210.

Commenter **McNeill** ***Section*** ***Comment #*** 347

Comment In conclusion, WMI generally supports the Draft MF S as published because the rules are far more comprehensive and clear than the old regulations. After over fifteen years, the rules had clearly become outdated. Ecology has been working hard and patiently for some time in updating the MFS, and staff is to be commended. We believe the facility specific provisions make the Draft MFS reader friendly. Despite the length of the rules, a reader can go to the section that applies to a specific kind of operation, and have a succinct presentation of the requirements. Overall, WMI supports the standards for performance, operation and design contained in this draft, although we hope our comments will help improve what is already a good product.

Ecology's Response Comment noted.

Commenter **McNeill** ***Section*** ***Comment #*** 297

Comment Thank you for this opportunity to provide comments on the draft Minimum Functional Standards for Solid Waste Handling, Chapter 173 351 WAC (Draft MFS). On behalf of Waste Management of Washington, Inc. (WMI), we offer these observations, suggestions and questions with the goal of assisting Ecology's efforts. All of us who have reviewed the Draft MFS for WMI appreciate the hard work and careful thought that went into this project. We particularly applaud the stakeholder process employed for creating this Draft. It was time consuming and involved varied and sometimes conflicting view points, but we think it resulted in a worthy product, and certainly one that significantly improves the current rules.

Unfortunately, the very nature of comments is that they seem critical rather than praiseworthy, but we hope you will accept these suggestions in the constructive spirit in which they are offered. This letter presents WMI's comments section by section, in the same order as the Draft: they are not presented in order of importance.

Ecology's Response Comment noted.

Commenter **McNeill** ***Section*** **010** ***Comment #*** 298

Comment 010 (Purpose):
Subsection (5) would require "best available technology for siting" and "all known available and reasonable methods for designing, constructing, operating and closing" facilities. First, the individual rules contain location standards for siting each kind of facility, and they speak for themselves. In combination with local land use development regulations, the location standards adequately address siting concerns. A reader might infer that the language in this subsection permits or even encourages further siting restrictions to be imposed, subject to a discretionary and potentially arbitrary determination of what is "best available technology." Second, "AKART" is a term of art. In other regulatory contexts, such as air or water quality, the phrase has been interpreted to require engineering studies and extensive feasibility analyses in determining what is AKART. It is also susceptible to change over time, as technology develops. Please consider eliminating or rephrasing this subsection.

Ecology's Response In reviewing the section relative to this comment Ecology has determined changes are warranted. We have revised subsection (5) to clearly describe the purpose of the rule.

Commenter **McNeill** ***Section*** **020** ***Comment #*** 299

Comment 020 Applicability):
Perhaps the exception set forth in Subsection (9) for biosolids should not use the phrase "beneficially used," since that describes a permit exemption condition here in the Draft MFS.

The use of the new term "fully regulated" in Subsection (13) is confusing, especially as similar terminology is not used in Subsections (7) (12) and (14) (16) of the section. Each of the cited regulations includes exemptions and exclusions, yet the "fully regulated" language is used only in the context of dangerous waste. In this context, certain wastes are regulated,

but may be conditionally or fully exempted or excluded from all or a portion of the rule. We cannot determine whether or how Chapter 173 350 WAC would apply in all cases. It seems appropriate to delete the word "fully" and to use appropriate sections, such as the moderate risk waste section (360), to define applicability to specific waste types.

Ecology's Response Subsection (9) - Ecology agrees that the use of the term "beneficially used" in this exemption may be confusing, and will modify the subsection accordingly.
Subsection (13) - The use of the term "fully regulated" is intended to separate those waste that are managed directly under the hazardous waste rules, while maintaining the ability to apply the solid waste rules to those waste that are appropriately managed as moderate risk waste.

Commenter **McNeill** ***Section*** **030** ***Comment #*** 300

Comment 030 (Effective Dates):
With regard to Subsection (2)(a)(iii), please consider separating performance and design requirements. Meeting performance standards within the set period of time should be nonnegotiable, but an absolute requirement to meet design standards may be problematic for facilities built prior to the adoption of these MFS. For example, a pile operator may not be able to construct all weather roads; a preexisting tank at a facility may not be double lined; a limited purpose landfill owner may not be able to produce purified methane gas upon closure. We suggest that meeting applicable design requirements within thirty six months be required, unless the jurisdictional health department deems the relevant requirement unnecessary to protect human health and the environment. This gives each facility operator and health department flexibility.

Ecology's Response Ecology believes that the flexibility that the commenter desires is already built into the rule. If the jurisdictional health department believes that a design criteria is unnecessary for a particular facility it may grant, with Ecology's written concurrence, a variance to the requirement.

Commenter **McNeill** ***Section*** **030** ***Comment #*** 301

Comment 030 (Effective Dates):
Subsection (2)(b) requires operators to initiate a permit modification process within twelve months of the effective date. To be complete, this should expressly include both modified permits and new permits for currently unpermitted facilities. More important, though, we note that Section 700 gives health departments twelve months to adopt local ordinances implementing this regulation. We suggest that operators should not be asked to analyze whether a permit modification is required or to begin a permit modification process until the local ordinance is adopted and its contents known.

Because the health department is responsible for interpreting regulations, it makes more sense procedurally for the health department first to analyze operations under its jurisdiction and determine its facilities" permit status. Then, once the local ordinance is in place, and the health department's analysis is complete, operators should be given a set amount of time to seek new permits, permit modification, or termination.

Ecology's Response Ecology agrees that it is reasonable for the permit modification process to follow the local ordinance. This is also true for compliance with operating criteria. In light of this we will modify the schedule to extend initiation of the permit modification process to 18 months after the effective date of the rule, and implementation of operating standards to 24 months.

Commenter **McNeill** ***Section*** **040** ***Comment #*** 302

Comment 040 (Performance Standards):
The prohibition on dilution in Subsection (6) and elsewhere in facility specific sections seems misplaced. The prohibition typically is applied to dangerous wastes. Because solid wastes are not regulated according to the level of listed contaminants, it is not clear why dilution poses an environmental problem or why it should be prohibited. The section could be read to imply that a recycling technology that mixes solid waste with another material to create a useful product is banned. We recommend either deleting this subsection or demonstrating that the environmental risk associated with dilution and the statute itself provide good reason for its inclusion.

Ecology's Response The commenter) states that the prohibition on dilution in the proposed performance standards, WAC 173-350-040 (6) and elsewhere in facility specific sections seems misplaced. Because solid wastes are not generally regulated according to the level of contaminants, it was not clear why dilution poses an environmental problem or why it should be prohibited. The section could have been interpreted to prohibit a recycling technology that mixes solid waste with another material to create a useful product. Ecology agrees that the restriction on diluting any waste as a substitute for treatment of disposal as proposed in the performance standards was problematic and had many unintended consequences.

This performance standard was intended to prevent a person from merely diluting toxic or hazardous constituents in a waste that would be released to the environment instead of performing treatment to mitigate the toxicity or hazard. The primary activity that Ecology believed needed to be addressed to protect human health and the environment was simple dilution of contaminated soils, or solid wastes used to make soils, in lieu of effective treatment. In order to address the problems associated with the restriction on all solid wastes and to clarify the intent, the prohibition on dilution in lieu of treatment or disposal will be moved into a section applicable to the storage and treatment of contaminated soils.

Commenter **McNeill** ***Section*** **100** ***Comment #*** 303

Comment 100 (Definitions):
Although it's not typically done, we suggest indicating in the body of the regulation when a defined term appears. In contracts, for example, defined terms are capitalized. With so many definitions, it would be helpful when reading a facility specific provision to know which terms are defined. In addition, some regulations specifically cross reference the

definitions section when a defined term is used, but most do not. See, e.g., WAC 173 350 400(2)(c) ("channel migration zone as defined in WAC 173 350 100"). Capitalization or some other method of identifying defined terms would foster consistency.

Ecology's Response The commenter asks that terms that have been defined in section -100 be identified as such in the body of the regulation. As required by law Ecology has followed standard rule format for this regulation. To capitalize whole words simply because they have been defined would not be in accordance with this formatting. Also, as the commenter correctly notes, Ecology's rules do not generally include phrases that indicate that a term is defined. This approach would lengthen the rule and potentially be confusing if some terms were not included.

Commenter **McNeill** ***Section*** **100** ***Comment #*** 304

Comment 100 (Definitions):
We also suggest that you check the usages of defined terms, to determine whether this many terms warrant specific definition. Many actually appear on a very limited basis, and can be defined by context or defined within the relevant section. We recognize that some of these terms need to be defined, even if they are used sparingly in the regulation, simply because a common understanding of the concept is important. With that caveat, we offer the following observations based on our electronic search of the Draft MFS, subject to your confirmation. We do not address all definitions with limited usage, but nonetheless point out the following for your consideration:

-"Agricultural composting" This term appears only in Section 220,
-Composting Facilities. Perhaps it simply should be defined there.
-"Agronomic rate" This term appears only in Section 020,
-Applicability. Perhaps Subsection 020(4) should contain the definition. (The term "agronomic" appears as an adjective several places, but is not separately defined.)
-"Aquifer" Please provide guidance on what is meant by "significant" in the phrase, "yielding a significant amount of water to wells or springs." Currently, this term appears only in the section for limited purpose landfills.
-"Ashes" This term has limited usage. It appears in the definitions of "solid waste" and "limited purpose landfill," where the context suggests a broader meaning than the one stated. Otherwise, it is used only in the context of exceptions for "Special Incinerator Ash," regulated under Ch. 70.138 RCW and/or Ch. 173 306 WAC (but it is not the same definition), or in Section 240, Energy Recovery and Incineration, where it has a contextual use. Possibly it simply should be defined in that section, or eliminated.
-"Beneficial use" Consider either employing the phrase "use of unprocessed solid waste or recyclable materials as an ingredient . .. " or adding the requirement that the solid waste be directly used as an ingredient. We are concerned that this definition would seem to include recycling, which we understand is not the same concept as that used in Section 200, Beneficial Use Permit Exemptions. Further, because this term is used only in Section 210, we suggest incorporating the definition into that section. Please see discussion of Section 210, below.
-"Buffer" Shouldn't this be defined by each jurisdiction, depending on its land use regulations? It only appears three times in the Draft MFS (here, in the definition of "facility," and in Section 230, Land Application). In particular, the requirement that buffers be "permanently vegetated" and used for a runoff filter seems unusual, and certainly different from the land use context of the term.
-"Buy back recycling center" This term was not found in our search.
-"Cab card" This term was not found in our search.
-"Captive insurance companies" This term is used only in Section 600, Financial Assurance, and it is defined again there. The definition, therefore, seems unnecessary.
-"Clean soils and clean dredge spoils"; "Contaminated dredge spoils" The definition for clean spoils should be related to the definition for contaminated spoils, so that any given spoil may be defined as one or the other. In this case, clean spoils should be defined as those that meet the conditions for open water disposal, and contaminated spoils should be defined as those that do not. It would be helpful to the reader if applicable regulations were cited. We note, however, that we were unable to find the term "contaminated dredge spoils" used anywhere else in the regulation.
-"Contaminated soils" Rather than leaving it to the reader to determine what concentrations of contaminants "could negatively impact" the environment, we suggest referring to cleanup standards and/or clean soil standards. We were able to find this term only in Section 220, Composting, so perhaps it should just be defined in that context instead.
-"Crop residue" This term was found only in Section 020, Applicability (next to "agronomic rates") and in the definition of "Type 1 feedstock."
-"Disposable containers" The items listed may be used to store products, and may be used more than once to manage wastes. This term, as well as "Detachable containers" appears only in Section 300, On site Storage, so perhaps it could be defined in that context instead.
-"Domestic septage" and "Domestic wastewater facility" These terms appear only in Section 020, Applicability.
-"Energy recovery" The term is limited to technologies that use heat or combustion to generate energy from solid waste. Given newly developing technologies that rely on biological decay or landfill gas to generate methane or natural gas for energy, it may be useful to develop definitions and regulations to manage such systems.
-"Final treatment" This term was not found in our search.
-"Garbage" The definition does not seem to allow any mechanism for food waste to be defined as a recyclable, despite the fact that a solid waste management plan could define it as a recyclable.
-"Home composting" This term appears only in Section 020, Applicability.
-"Industrial solid wastes" This term appears only once, in Section 220, Composting. Perhaps it should be defined in that provision instead. In any event, the definition seems to be limited to manufacturing waste, though manufacturing waste is, in fact, a subset of the larger universe of industrial wastes.
-"Intermediate solid waste handling facility" We suggest adding the phrase "and recycling facilities" to the list of inclusions in the last sentence. Alternatively, you may consider adding, "and recycling facilities that do not meet the diversion requirements for permit exemption under Section 210," but in reality recycling facilities are a kind of intermediate solid waste handling facility regardless of whether they are exempt from permitting.
-"Land Application" and "Land reclamation" These terms appear only in Section 230, Land Application.
-"Leachate" The way this term is defined it would convert ground water outside the disposal area, but impacted by landfill

gas, to leachate.
-"Limited moderate risk waste" We suggest allowance should be made for an expansion of this term. For instance, we can see where paint might be included.
-"Local fire control agency" This term appears only in Section 320, Piles Use for Storage or Treatment.
-"New facility" Given the strict diversion limits for recycling facilities that will be exempt from permitting under these Draft MFS, there may be several currently operating unpermitted recycling facilities that will come under the permit requirements. It may be useful to include them in the definition of new facilities.
-"Overburden" This term appears only in Section 020, Applicability.
-"Private facility" and "Public facility" Both of these definitions suggest that a facility itself "owns" waste, and the grammar needs to be corrected. In addition, we found these terms only in Section 600, Financial Assurance.
-"Processing" We suggest revising this definition to state, "… convert solid waste into a useful product, an ingredient in a product, or to prepare it for disposal."
-"Pyrolosis" This term appears only in the definition for "energy recovery."
-"Representative sample" While "sample" appears frequently, this phrase appears only once, in Section 400, Limited Purpose Landfills.
-"Retail take back center" This term appears only in Section 360, MRW.
-"Soil water" This term was not found in our search.
-"Solid waste management" This phrase appears only in conjunction with the word "plan"; because "solid waste management plan" is a common term implemented by Chapter 70.95, we suggest deleting this definition.
-"Surface impoundment" This might be a good place to clarify that impoundments for surface water not coming into contact with solid wastes are not within the scope of the MFS. Please refer to our comments under Section 330, Surface Impoundments and Tanks, below.
-"Tire derived materials" This term was not found in our search.
-"Transfer station" This is not the same definition as contained in RCW 36.58.030. Since that is a statutory definition, we strongly urge Ecology to use that definition to avoid confusion and ambiguity.
-Vadose zone" This term was not found in our search, although the term "vadose" appears in Section 500, Ground Water Monitoring.

Ecology's Response

The commenter calls into question the usefulness of several definitions, primarily because of the frequency of the use of the term. In some cases the commenter suggests that the definition be moved from section -100 to the specific section that the term is used in. Numerous comments during development of the rule prompted us to place all definitions in section -100. In only one case were two defined terms repeated in the specific section (financial assurance, section -600).
The following are Ecology's determinations on the specific recommendations of the commenter:

"Agricultural composting" - Ecology believes this definition is necessary for clarity.
"Agronomic rate" - Ecology believes this definition is necessary for clarity.
"Aquifer" – Ecology agrees that this definition is confusing and has determined that it is unnecessary. For consistency we have deleted the definition and inserted a definition of "hydrostratigraphic unit".
"Ashes" – Definition unnecessary, deleted.
"Beneficial use" – The intent is not to limit beneficial use determinations to unprocessed wastes. A determination will apply only to USE of a waste in a specified manner approved by the department. Any facility engaged in processing in order to make a waste suitable for an approved use will be subject to the appropriate section of the rule.
"Buffer" – Term is not used in a land use context. Ecology believes this definition is necessary for clarity.
"Buy back recycling center" – Definition unnecessary, deleted.
"Cab card" – Ecology believes this definition is necessary for clarity.
"Captive insurance company" - Ecology believes this definition is necessary for clarity.
"Clean soils and dredge spoils" – Definition changed to "clean soils and clean dredged material to implement suggested revisions (see response to Gries, comment #180).
"Contaminated soils" – Definition changed to "contaminated soils and contaminated dredged material to implement suggested revisions (see response to Gries, comment #180).
"Crop residue" - Ecology believes this definition is necessary for clarity.
"Disposable containers" – refers only to containers that are used once. The material types are examples only. No change is necessary.
"Domestic septage" and "Domestic wastewater facility" - Ecology believes these definitions are necessary for clarity.
"Energy recovery" – The commenter is correct that there are emerging technologies that will require better definitions and regulations. Ecology will look to revise this regulation as appropriate when these technologies are further developed. No change at this time.
"Final treatment" – Definition unnecessary, deleted.
"Garbage" – Ecology does not agree with the commenter's analysis of this definition. The key to determining that a waste is a recyclable material is whether or not the local solid waste management plan declares it to be one. Food waste, although defined as garbage, is not excluded from consideration in the local plan as a recyclable material. Please also see the response to Hansen, comment #28 for changes to this definition.
"Home composting" - Ecology believes this definition is necessary for clarity.
"Industrial solid wastes" - Ecology believes this definition is necessary for clarity, but will modify the definition to indicate broader applicability. Please also see response to comment Dawson, #166.
"Intermediate solid waste handling facility" – Changes made to section -210 in response to Hansen, comment #30 negate the benefits of this suggestion.
"Land application" and "Land reclamation" - Ecology believes these definitions are necessary for clarity.

"Leachate" – Ecology agrees with the commenter that an unintended consequence of this definition

would be to include contaminated groundwater as leachate. The definition will be modified to limit leachate to liquids within the solid waste handling unit.
"Limited moderate risk waste" – Ecology has determined that expansion of this definition at this time is not appropriate. However, the definition of retail take-back center has been replaced with a new definition of "product take-back center" that accommodates return of other materials such as paint.
"Local fire control agency" - Ecology believes this definition is necessary for clarity.
"New facility" – Ecology did not intend that facilities not currently subject to permit requirements be considered a new facility. The definition of an existing facility specifically contains the condition that the owner or operator must have "obtained permits or approvals necessary". However, this comment does point out the need for additional clarity. Ecology has determined that the definition of "new facility" is unnecessary and has deleted it from the rule. Additionally, we have reworded section -030 to clarify applicability.
"Overburden" - Ecology believes this definition is necessary for clarity.
"Private facility" and "Public facility" – Ecology agrees that the definition of "private facility" inappropriately conveys ownership of waste to the facility and have modified the definition. We do not believe that the comment is correct for "public facility" and have left this definition unchanged.
"Processing" – The addition of the suggested language is unnecessary. Ingredients are products.
"Pyrolysis" - Ecology believes this definition is necessary for clarity.
"Representative sample" - Ecology believes this definition is necessary for clarity.
"Retail take back center" - Ecology has replaced this definition with "product take-back center".
"Soil water" – Definition unnecessary, deleted.
"Solid waste management" – Definition unnecessary, deleted.
"Surface impoundment" – Ecology agrees that additional clarity regarding the management of non-contact stormwater is necessary. However, we have chosen to address this issue in section -330, rather than in this definition.
"Tire derived materials" – Definition unnecessary, deleted.
"Transfer station" – The definition proposed by the commenter contains several regulatory requirements that are not appropriate for inclusion in this rule. However, Ecology has made some changes to the existing definition (please see response to Hansen, comment #30.)
"Vadose zone" - Ecology believes this definition is necessary for clarity.

Commenter **McNeill** ***Section*** **200** ***Comment #*** 305

Comment

200 (Beneficial Use Permit Exemptions):
Overall, WMI supports a cautious approach to beneficial use exemptions, and indeed, to any permit exemption allowed under these MFS. Here, we think the rule assures appropriate scrutiny of these requests, and maintains a focus on the use rather than the waste itself for this exemption. We also concur that it is not appropriate at this time to exempt by rule any specific beneficial uses from permitting.

However, here as with other permit exemptions, if any operation exempted from permitting in the various facility specific sections fails to comply with the general performance standards and reporting requirements, then it must obtain a permit and comply with the full regulation. We agree with this approach, but note that there does not seem to be a mechanism to terminate the permit later and to comply with the reduced requirements should the situation warrant. We suggest that the annual permit renewal process be used to review whether such a facility warrants reduced regulatory oversight in the coming year.

Ecology's Response

Ecology will not rescind an exemption without a significant violation(s) of the terms and conditions. The appropriate mechanism for reinstating a Beneficial Use Exemption would be reapplication through the standard process. This would provide a public process for determining that the applicant has demonstrated that appropriate adjustments have been incorporated into the proposal and they would/could operate in accordance with the terms and conditions.

Commenter **McNeill** ***Section*** **210** ***Comment #*** 306

Comment

210 Material Recovery and Recycling Facilities:
The heading refers to both "material recovery and recycling facilities" and the first sentence in Subsection (1) distinguishes between "material recovery facilities" and "facilities engaged in recycling solid waste." We note that only the former term is defined, and that the definition is where the diversion requirements for exempted facilities are first set forth. (The diversion requirement is then restated as a performance standard under Subsection (b)(ii) of this section.) We assume, then, that Ecology intended these phrases to mean two different facilities, one potentially exempt from permitting, and the other not. Is this correct? If so, as mentioned earlier, the defined term is used only in Section 210, and moving the diversion standards from Section 100 to here would clarify the regulatory distinction between the two kinds of facilities. We suggest Subsection (b) be revised so that the first sentence reads, "In accordance with RCW 70.95.305, material recovery and recycling facilities which accept source separated solid waste [insert remainder of diversion requirement of definition and Subsection (b)(ii) here] are subject solely to the requirements of (b) ...." The second sentence then would state, "A material recovery and recycling facility which does not meet the diversion requirements or which does not comply with the terms and conditions of (b) of this subsection is required to obtain a permit ...."

We expect Ecology will receive other comments about the threshold. The five percent annual weight limit is quite low, but perhaps because the only effect is to exempt these facilities from permitting, and not to restrict recycling by other kinds of facilities with higher residual rates, it may be appropriate. All of WMI's facilities are permitted, and the company does not oppose the standards articulated in this section. We believe very few facilities will qualify for permit exemptions, but that may be good. We do note, however, that these regulations will result in more recycling facilities requiring permits. Many facilities are fully enclosed and are not currently required to have permits. These proposed regulations will require

permits, and very few of these facilities will be able to meet a five percent threshold. In addition, believes the weight per truck load standard is impractical, even though we acknowledge the policy goal behind it. It is not possible to measure incoming trucks with any accuracy, though outgoing materials may be accurately measured.

Finally, we urge you to create a more lenient standard for determining whether a recycling facility conforms with a comprehensive plan. WMI suggests that any recycling facility should be presumed by operation of law to be in conformance with the county comprehensive solid waste management plan. We cannot envision any situation in which operating a recycling facility would be contrary to the goals of Chapter 70.95 RCW. There is a risk that comprehensive plan conformance could limit recycling opportunities, if the plans are not specific enough or if they are too specific, or if they simply are outdated. Because recycling facilities that do not qualify for a permit exemption will now be regulated under the same provision as "transfer stations," their ability to conform with a plan may unintentionally be limited. Plans in place now will not incorporate the terminology as used in these Draft MFS.

If an outright assumption of conformance is not possible, please consider a rebuttable presumption. The ability to develop new recycling facilities should not be constrained by politics.

Ecology's Response Several commenter's have expressed similar concerns. Ecology has made changes to the approach to categorical exemptions for material recovery facilities (MRFs) and recycling to address these comments (see Hansen, comment #30). The basic approach is to regulate all material recovery facilities (MRF) as intermediate solid waste handling facilities (section -310), with categorical exemptions from permitting available only to those facilities that accept only "recyclable material", meet the disposal threshold criteria, and other standard terms and conditions. Section -210 would then be applied only to recycling operations that did not classify as a MRF per the revised definitions. These recyclers would be those operations that were truly recycling, actually processing the waste into a new product or usable material, rather than just collecting and processing waste materials for transport. Terms and conditions for recycling facilities have been modified to delete the disposal threshold as it would not be a factor at the non-MRF recyclers.

Commenter **McNeill** ***Section*** **230** ***Comment #*** 307

Comment 230 Land Application:
We suggest a new exception in Subsection (1) for use of inert waste as fill material. As written, this provision appears to regulate soil amendment activities. But, for example, the use of glass cullet or other inert material as road bed is not uncommon, and a strict reading of the regulation leads to a conclusion that a permit would be necessary for such activities.

Ecology's Response The commenter expresses concern that the language in the rule could be interpreted to be applicable to the use of recycled solid waste for engineering applications. The land application section was not developed to be applicable to solid waste beneficially used for engineering purposes. Solid waste used as fill material is subject to landfilling standards. However, this does not mean that the rule is intended to apply to the use of recycled solid waste, such as glass cullet or crushed concrete, used as a road bed during construction when the material does not have an adverse effect on the environment and it is used in a legitimate engineering application.

Commenter **McNeill** ***Section*** **240** ***Comment #*** 308

Comment 240 (Energy Recovery and Incineration):
WMI has very few comments here. Unless we are operating under a misunderstanding, we would expect the Special Incinerator Ash laws (Chapter 70.58 RCW and Chapter 173 306 WAC) to apply to handling residues from these facilities, and therefore be cross referenced under Subsections (4)(a) and (e). In Subsection (4)(e)(ii), we suggest replacing the word "breakdown" with "situation" or some other more generic term, so that the usefulness of alternative storage and disposal plans is not limited to equipment malfunctions (i.e., it could include weather, labor dispute, or any other disruption of normal operations).

Ecology's Response It should be noted that section -240 is applicable to all solid waste incineration and energy recovery devices that are not specifically exempted. The Special Incinerator Ash rules only apply to facilities that burn municipal solid waste and generate ash that would otherwise be regulated in chapter 173-303 WAC.

Ecology agrees with the commenter's suggestion to replace the word "breakdown" with "situation" in section -240 (4) (e) (ii).

Commenter **McNeill** ***Section*** **300** ***Comment #*** 309

Comment 300 (On site Storage, Collection, and Transportation Standards):
WMI believes that container sizing standards in Subsection (2)(b)(i) and (ii)(G) should reflect weight rather than volume. Subsection (1)(b)(iii) requires that detachable containers be "nonleaking." We suggest a better adjective is "leak resistant," a distinction that is in keeping with the requirement in Subsection (3)(c) that containers not "leak in quantities to cause a nuisance."

Ecology's Response The requirement for container sizing by volume has not changed from the current rule, chapter 173-304 WAC. This has not been problematic in the past and Ecology finds no compelling reason to change this approach.
With regards to the suggestion to change the requirement for "non-leaking" containers to "leak resistant" containers in order to be consistent with the requirement that containers "not leak in quantities that

would cause a nuisance" Ecology has determined that the best course of action is to keep the non-leaking requirement and strike reference to quantities that would cause a nuisance.

Commenter **McNeill** ***Section*** **300** ***Comment #*** 310

Comment 300 (On site Storage, Collection, and Transportation Standards):
The prohibition against littering in Subsection (3)(a) should not be limited to unloading at permitted transfer stations or other permitted facilities. The new MFS will result in permit exemptions, and littering should be prohibited at those locations as well. Simply putting a period after "unloading of solid waste" would broaden the prohibition appropriately.

Ecology's Response Ecology agrees with the commenter and will make the suggested change.

Commenter **McNeill** ***Section*** **300** ***Comment #*** 311

Comment 300 (On site Storage, Collection, and Transportation Standards):
Finally, we encourage you to cross reference to Ch. 81.77 RCW in this section, as is done in WAC 173 350 350(1)(b)(iii) (waste tire collectors). Someone new to Washington might be under the impression that a permit from the health department is all that is necessary to perform collection, and we have had experiences with companies starting up collection operations without being aware of the WUTC's regulations. A reminder here that compliance with the WUTC laws is necessary may reduce need for enforcement actions after a company has made capital investments.

Ecology's Response Ecology does not believe that cross-referencing chapter 81.77 RCW is necessary in this section. The reference in section -350 is used to identify an exemption to the licensing requirements for waste tire carriers. The performance standards of section -040 (5) require compliance with all other applicable laws and rules. Lastly, there are no requirements for permitting in section -300.

Commenter **McNeill** ***Section*** **310** ***Comment #*** 317

Comment 310 (Intermediate Solid Waste Handling Facilities):
Finally, as noted in our comments regarding materials recovery and recycling facilities, this section on Intermediate Solid Waste Handling Facilities is a sort of "catch all" provision under which specialized facilities that don't fall into any other category will be regulated. This is fine, but we are concerned that inattention to this fact may lead to lack of conformance with updated and existing solid waste management plans. Specifically, many plans prohibit or limit development of new transfer stations; if they are not updated (or simply updated to change the references to new "interim solid waste handling facilities") then new recycling facilities may inadvertently be prohibited.

Ecology's Response Ecology believes that the commenter's concerns have been adequately addressed by changes made in response to Hansen, comment #30.

Commenter **McNeill** ***Section*** **310** ***Comment #*** 312

Comment 310 (Intermediate Solid Waste Handling Facilities):
The exemptions from Section 310 are intended to direct the reader to the section that regulates the activity in question. In Subsection (1)(e) (waste tires) and (f) (moderate risk waste facilities), storage prior to both recycling and/or disposal should be exempted, as both activities are addressed by the relevant section. The draft language, however, exempts only storage prior to recycling. We suggest deleting the language "prior to recycling" in both cases.

Ecology's Response Ecology agrees with the suggested change.

Commenter **McNeill** ***Section*** **310** ***Comment #*** 313

Comment 310 (Intermediate Solid Waste Handling Facilities):
The inclusion statement in Subsection (1)(d) would be clearer if it said material recovery and recycling facilities that "do not meet the diversion requirements of WAC 173 350 210"; this would make it consistent with our other proposed revisions to that section.

Ecology's Response Ecology believes that the commenter's concerns have been adequately addressed by changes made in response to Hansen, comment #30.

Commenter **McNeill** ***Section*** **310** ***Comment #*** 314

Comment 310 (Intermediate Solid Waste Handling Facilities):
We think it would be more useful if the design standards in Subsection 310(3)(a) focused on the desired outcome, rather than specifying a method. For example, Subsection (3)(i) could be changed to require facilities to restrict unauthorized access, rather than specifying fences, trees, and natural features; Subsection (3)(iii) could simply state "Provide effective means to control rodents"; and Subsection (3)(iv) could say "Provide effective means to control off site litter." Aesthetic issues and views should be left to local land use requirements rather than solid waste permits. Flexibility should be allowed for facilities either surrounded by industrial neighbors or in isolated locations, where complete screening is not necessary.

Some of the specific terms in this provision are ambiguous. For instance, what is intended by the term "fully enclosed" in Subsection (3)(i)? It is not clear whether a three sided building with a roof and floor would be considered an enclosed building, and if not, why not. Regardless, the number of walls is not relevant from a screening perspective. How does Ecology believe the terms "sturdy" and "easily cleanable" in Subsection (3)(ii) should be interpreted? WMI suggests that building codes area more appropriate source of structural standards. The term "all weather" in describing access roads in Subsection (4)(a)(i)(B) is not clear. In rural locations, for example, dirt or gravel approach roads might be sufficient.

Ecology's Response Ecology agrees that the prescriptive design standards are unnecessary and has revised this section to provide performance based design criteria.

Commenter **McNeill** ***Section*** **310** ***Comment #*** 315

Comment 310 (Intermediate Solid Waste Handling Facilities):
As presented in Subsection 310(4)(e)(iii) (and elsewhere), the requirement for safety or emergency plans always has been somewhat unclear. We suggest that rather than requiring numerous safety plans which have little relevance to solid waste handling, and which neither Ecology nor the health department have authority to review (such as Fall Prevention, Confined Space, Lockout/ragout, etc.), this subsection should specify submittal of the site Fire Prevention and Emergency Response Plan. This would help clarify exactly what should be submitted with a complete permit application.

We suggest Ecology review use of the terms "drop box" and "drop box facility" in this section, to make sure that typical commercial drop boxes are not unintentionally swept into this regulation. As defined in Section 100, commercial drop boxes used by customers would not be within the term "drop box facility." But here in this section, design standards and permit application requirements are for "drop boxes," a term that is not otherwise defined. We are certain that commercial drop boxes serviced by solid waste collection companies are not intended to be within the scope of this rule. (Although, we note and support that commercial customers have some performance obligations regarding their on site drop boxes under Section 300.) Perhaps a statement in Subsection (1) that this section is not applicable to drop boxes used by generators to deposit their own waste would correct this potential ambiguity.

Ecology's Response With regard to the commenter's first point regarding Safety and Emergency Plans it should be noted that the Plan of Operation is intended to explain facility operations to both the regulatory agencies and the facility employees. Facility employees need to be aware of safety issues beyond fire prevention.

The commenter's second point has merit. It is not Ecology's intent that a drop box at a construction site be regulated as a drop box facility. Ecology has amended -310 (1) to clarify this issue.

Commenter **McNeill** ***Section*** **310** ***Comment #*** 316

Comment 310 (Intermediate Solid Waste Handling Facilities):
Subsection (6)(a), as well as the closure subsection of all facility specific requirement sections throughout the Draft MFS, should be modified to allow removal of wastes to a facility that meets the requirements of Ch 70.95 RCW "and/or a facility permitted under a state or federal Subtitle D program in another state." We believe that the draft language unintentionally restricts disposal to facilities located in Washington state.

Also, Subsection 310(6)(a) (as well as in Section 320, Piles), requires a 60 day notice prior to closure. In contrast, Section 240, Energy Recovery, and Section 360, Moderate Risk Waste, require 180 days" advance notification of closure. If there is no reason for the difference, we suggest that the regulation would be simpler to work with if pre closure notification timelines were the same for all facility types.

Ecology's Response Ecology agrees, at least in part, with the commenter on both points made. We have determined that an alternate approach to resolving the first point is preferable to the suggested approach. In sections -220, -230, -240, -310, -320, -330, -360 we have revised closure requirements to specify that waste will be removed to a facility that conforms with the applicable regulations for handling the waste.

With regards to the second point we have changed the required closure notification to 180 days prior to closure for intermediate solid waste handling facilities. We do not feel that this extended time frame is necessary except in the case where a facility type may be the major handler of household waste in a service area (transfer station, incinerator) or when financial assurance has been required (MRW, limited purpose landfills, waste tire facilities).

Commenter **McNeill** ***Section*** **330** ***Comment #*** 321

Comment 330 (Surface Impoundments and Tanks):
Under Subsection (6)(a), the closure requirement specifies removal to a facility that meets the requirements of RCW 70.95. Because the materials generally are in a liquid state and may be inappropriate for disposal at a solid waste facility, allowance should be made for disposal at a publicly owned treatment plant permitted to accept the material.

Ecology's Response The commenter points out that waste contained in a surface impoundment or tank may not be subject to chapter 70.95 RCW upon removal at closure. Ecology concurs that the proposed language could be confusing or inadequate to address most scenarios and has amended the subsection to address any type of waste and all applicable regulations.

Commenter **McNeill** ***Section*** **330** ***Comment #*** 320

Comment 330 (Surface Impoundments and Tanks):
We suggest that there be greater leniency in the inspection requirements of Subsection (4)(b). For instance, it might not be possible to inspect both liners in a double lined pond, or the upper liner in a pond with ballast on the top liner. The health department has leeway regarding testing frequency; it should have similar discretion to accommodate facility limitations for testing.

With regard to the records and reporting requirements of Subsections (4)(c) and (d), we believe the requirements may not be appropriate for all kinds of ponds and tanks. Why are the requirements for reporting weights and types of waste released at the facility included for ponds and tanks? The requirement under Subsection (4)(d)(iii) for reporting the quantity of waste "received" might be problematic for tanks or impoundments handling liquids generated on site. Reporting what goes out can be done, but calculating what goes in is not always possible.

Ecology's Response The commenter suggests that more leniency be provided for inspections of surface impoundment liners. The paragraph does not provide specific requirements for how liner inspections are performed. An owner or operator bases the method of inspection on the type of liner and specifies it in the plan of operation. Ecology does not believe further leniency is warranted.

Two commenter's pointed out the difficulties in maintaining the operating records in the proposed rule. Ecology concurs that recording the weight of wastes received or removed from a surface impoundment would be problematic. The requirements for recordkeeping have been revised so that only the quantity and type of waste removed from a surface impoundment or tank needs to be recorded. Because this change in the rule will make it impossible for many owners or operators to provide information on the quantity of waste needed for annual reporting, that requirement has been eliminated from the final rule.

Commenter **McNeill** ***Section*** **330** ***Comment #*** 319

Comment 330 (Surface Impoundments and Tanks):
Also, please note that WMI has considered siting leachate ponds (tanks) on waste within lined landfill footprints. As currently written, this section makes no provision for such an activity in the design standards of Subsection (3). In that instance, it would seem that a single lined pond would be sufficiently protective; there should be no need for a secondary liner. Similarly, the ground water monitoring requirement under Subsection (3)(a)(ii) and Subsection (5)(a) would be redundant. Please consider making allowance for such a facility.

For tanks, the proposed draft would require tightness testing of both above and below ground tanks prior to use, and ongoing tightness testing or leak detection for below ground tanks under Subsections (3)(b)(i) and (ii). We agree that tightness testing is one appropriate tool to confirm the integrity of underground and belowground tanks, where all or a portion of the tank is not readily visible. Where the tank is fully visible, as is the case with most above ground tanks, tightness testing may not be needed.

Also, in Subsection (3)(b)(iv), there needs to be allowance for double walled tanks, where the capacity to contain volume and twenty five year storm precipitation is not relevant.

Ecology's Response The commenter suggests that the design requirements for surface impoundments and tanks address the placement of leachate surface impoundments and tanks within the footprint of a landfill constructed with a liner system. There are no location or design standards that prohibit locating surface impoundments or tanks within the footprint of a landfill. However, this creates special engineering challenges to address potential settlement and instability of waste. Because this situation is uncommon and because each proposal for placing surface impoundments or tanks within a landfill footprint will require site specific analysis, Ecology does not believe that it is appropriate to place standards in the rule for cases such as this. For any situation that presents unique engineering challenges, an owner or operator may apply for a variance from normal standards.

The commenter also suggests that retesting for tightness should be required for tanks with portions that are not readily visible along with below ground tanks. Ecology concurs with this suggestion and has revised the section to expand retesting to tanks with portions that are not readily visible.

Finally, the commenter suggests that the design requirements for above ground tanks provide an allowance for double wall tanks, where the capacity to contain the volume of precipitation from a twenty-five-year storm is not relevant. Ecology concurs that containing precipitation is not relevant to most double wall tank installations. In that case the additional volume would be zero. The rule does not need to be amended to allow for this.

Commenter **McNeill** ***Section*** **330** ***Comment #*** 318

Comment 330 (Surface Impoundments and Tanks):
Please clarify that both retention and detention ponds for handling clean surface water are not intended to be within the scope of the MFS. The way Subsection (1)(b)(i) is written, only surface water impoundments whose discharge is permitted by local, state, or federal water pollution control permits are excepted. We suspect Ecology intended also to include detention ponds, if the impoundment involves surface water that has not contacted solid waste. (Otherwise, apparently even storm water detention ponds must employ ground water monitoring, per WAC 173350 500(1)(b).) Even though no "water pollution control permit" typically is required for detention ponds, local governments nonetheless regulate sizing, construction and operations, so perhaps deleting the phrase "water pollution control" from the permit modifier would fix our concern.

Ecology's Response The applicability statements in WAC 173-350-330 (1)(a)(i)&(ii) have been amended to include only those surface impoundments and tanks that are used to contain "solid waste".

Commenter **McNeill** ***Section*** **360** ***Comment #*** 322

Comment 360 (Moderate Risk Waste Handling):
We suggest that the annual report requirement is impractical and therefore not appropriate for limited collection events, and therefore Subsection (2)(k) should not apply.

Ecology's Response There is no reference to a "limited collection events" in this proposed rule. Mobile systems and collection events, subsection (2), are not limited in the type or quantities of MRW they accept. These modes of collecting MRW have always reported annually to Ecology and are an important accountability measure for the state.

Commenter **McNeill** ***Section*** **400** ***Comment #*** 328

Comment Subsection (3)(b)(iii) discusses liner separation. We suggest that liner separation should be determined by a qualified engineer rather than limited to the specified ten foot separation (which has been arbitrarily lifted from the CMSWI,F regulations). There may be instances where a limited purpose landfill is located or operated such that a distance of less than ten feet is protective, even without a hydraulic gradient control system. The permittee should be given the flexibility of making that demonstration.

Ecology's Response Several comments were received regarding WAC 173-350-400(3)(b)(iii), liner separation from ground water. This requirement is intended to protect liner systems from harm caused by ground water. Harm can be caused by range of effects from buoyancy pressures to chemical and physical changes of liner components. As noted by a commenter, the concerns related to ground water impacts are different during construction and early in the landfill's life than they are later when waste is in place, including post-closure care. The liner separation requirement in the rule is intended to protect the liner system from construction through the post-closure care period and beyond.

One comment requested clarification when a water bearing unit would be deemed "volumetrically significant". The language in the rule provides the circumstances when liner separation is a concern; when it will "harm or endanger the integrity of the liner at any time." The ability to harm or endanger the liner is the threshold criteria for water bearing units of concern. Liner separation is not intended to apply to situations where the ground water is not sufficiently "horizontally and vertically extensive, hydraulically recharged, and volumetrically significant" to harm or endanger the liner.

Another comment suggested that the required liner separation from ground water be determined by a qualified engineer and not be set in the rule. The ten foot separation requirement is also found in the Criteria for Municipal Solid Waste Landfills, WAC 173-351-140(1)(a). Site characterizations preformed during the permitting process often do not provide information regarding shallow ground water elevations during relative high precipitation periods or other potential influences that vary over time. The ten foot limit is intended to accommodate long term fluctuations of ground water elevations when a hydraulic gradient control system is not in place. A qualified engineer could make a determination regarding the potential of harm from ground water for a particular design. However, long-term ground water elevation fluctuations are generally not known.

One comment suggested that earthen components of a liner system, such as compacted clay, should be counted as part of the ten foot separation. The rule is intended to prevent harm to all engineered components of a liner system. Clay and other earthen materials often exhibit chemical, physical, and structural changes when ground water saturates the material. This is especially true when saturated intermittently. Because of this, ground water separation is maintained from all engineered components of a liner system. If ground water separation has no potential impacts on a specific design, an owner or operator may apply for a variance from this requirement under WAC 173-350-710(7) if needed.

One major difference in this rule from the liner separation requirements in the Criteria for Municipal Solid Waste Landfills is that WAC 173-351-140(1)(a) requires a hydraulic gradient control system to maintain a five foot separation while this rule only requires that it maintain separation.

Commenter **McNeill** ***Section*** **400** ***Comment #*** 335

Comment In Subsection (9)(b), owners located within one thousand feet of the "facility property boundary" must be notified. To make it consistent with the location standard of Subsection (2)(b), this subsection should refer to those property owners within one thousand feet of the "active area." This also will avoid creating conflicting notice requirements for property owners within the stated distance for notice under this subsection, but not within the stated distance for down gradient wells under the other. (This same observation applies to the parallel provision for inert waste landfills, Subsection 410(8)(c).)

Ecology's Response The commenter suggests that the requirement to notify owners of property within one thousand feet of the property boundary should be amended to be consistent with the location standards of WAC 173-350-400(2)(b), and that the distance be measured from the landfill unit's active area instead of the property boundary. The Minimum Standards for Construction and Maintenance of Wells, Chapter 173-160 WAC, prohibits the construction of wells within one thousand feet from the property boundary of a landfill facility. The notification requirement in this rule is intended to ensure that property owners have an opportunity to have involvement in the permit process and is not intended to specifically correlate with the location standards. The property boundary is used because it is generally the location of monitoring wells and, therefore, the location where contamination is first detected.

Commenter **McNeill** ***Section*** **400** ***Comment #*** 334

Comment In Subsection (4)(b)(iii)(B), a permittee may demonstrate the use of alternative materials or alternative thicknesses for cover materials, but only "during the permit process." We suggest this demonstration could happen at other times as well, and therefore that phrase should be eliminated.

Ecology's Response The commenter suggests that alternative materials or thickness used for cover could be approved by the jurisdictional health department at times other than just the permit process. Ecology concurs that alternative cover materials or thickness would constitute a significant change and could be proposed and approved at anytime. The section has been amended to remove the restriction.

Commenter **McNeill** ***Section*** **400** ***Comment #*** 333

Comment The need to weigh all incoming loads in accordance with Subsection (4)(a)(iv) may be problematic for existing facilities, either because they do not have scales or because scales are not always used as measurement. If quantity reporting is the goal, then cubic yards could satisfy the requirement. We note that, ironically, Subsection (4)(a)(vi), which requires personnel on the active face for some landfills, uses the cubic yard standard rather than tonnage. For limited purpose landfills, cubic yards may be a better standard for measurement, and should be permitted as an alternative.

Ecology's Response The commenter points out that the requirement to weigh all incoming waste on scales or to provide an alternative method of measuring waste tonnage to within plus or minus five percent would be problematic for facilities. This requirement is one in the Minimum Functional Standards for Solid Waste Handling at WAC 173-304-460(g)(iii) that was carried forward into this rule. However, Ecology concurs that the cost associated with this requirement do not outweigh the benefits gained from more accurate reporting. The requirement to weigh all incoming waste on scales has been removed from the rule. Furthermore, the proposed multi-tiered annual reporting requirements in WAC 173-350-400(4)(e)(iii) have been simplified.

Commenter **McNeill** ***Section*** **400** ***Comment #*** 332

Comment Under the operating standards, we have just a few comments. Although "liquid waste" is defined, the phrase "free liquids" is not, and in any case Subsection (4)(a)(iii) may establish an impossible standard, due to wet weather conditions when saturated materials are delivered for disposal. Perhaps the restriction could be qualified to prohibit "separate loads of liquid waste or free liquids.

Ecology's Response One commenter (Hansen) pointed out that the definition of the term “free liquids” was improper as it referred to the solid waste and not the liquids in the waste. The definition is being amended to correct this.

Another commenter (McNeill) suggested that the liquids restriction in WAC 173-350-400(4)(a)(iii) may create an impossible standards, due to wet weather conditions when saturated materials are delivered for disposal. The restriction on liquid wastes is specifically intended to preclude acceptance of saturated wastes. An owner or operator that desires to add liquids or liquid waste to a limited purpose landfill would need to apply for a variance in accordance with WAC 173-350-710(7).

Commenter **McNeill** ***Section*** **400** ***Comment #*** 331

Comment Alternate liners should be approved when the permittee demonstrates that an alternative liner/cover is equivalent or superior to the presumptive design. We believe that Subsection (3)(b)(ii) allows the health department to permit such designs, although such discretion appears to be allowed only in situations where no liner would be required. The phrasing here in Subsection (3)(b)(v) could cause confusion, because it seems to allow (and require) alternative liner system design only in those situations where the presumptive design is not feasible. (This same wording is used again in Subsection (3)(e)(ii) regarding presumptive final closure cover, in that case without any express authority for discretion granted to the health department.)

Ecology's Response Two commenter’s (Hebdon, Beery) stated that by adopting a performance standard based design requirement, instead of multi-tiered standardized provisions, the rule provides a lower level of flexibility for limited purpose landfill design than Chapter WAC 173-304. One commenter (McNeill) supported the flexibility allowed in Subsection (3) for liner design features. This commenter predicted that there will be a tendency by owners or operators to default to the presumptive liner design.

The limited purpose landfill provisions were developed around two primary objectives. These were to simplify the provisions in Chapter 173-304 WAC regarding landfill standards and to provide an appropriate relationship between the risk posed by any landfill and the standards that would apply.

Chapter 173-304 WAC provides four distinct landfill types (limited purpose, inert and demolition, wood waste, and problem waste) with eleven different design standards (limited purpose - standard, alternative, equivalent, arid, small, and other; inert and demolition; wood waste - ≤10,000 cubic yards, and two for >10,000 cubic yards; and problem waste – reserved.) Ecology has determined that the minimum standards in the current rule for arid design, demolition waste, and wood waste landfills have not been sufficiently protective of the environment and did not consider bringing these forward into this rule.

In order to simplify the landfill standards, Chapter 173-350 WAC provides two landfill types, limited purpose and inert waste. Limited purpose landfills were given a design criteria based upon a performance standard because of the wide variety of waste types and circumstances. This approach was actually chosen to provide greater flexibility than that provided by either a single or series of standard designs. Ecology did not want to limit a landfill owner or operator to specific types of materials or design techniques as materials, such as low permeability soils, are not always readily available and because materials technology continue to evolve.

In order to lessen the potential design burden from demonstrating liner system performance, a “presumptive liner design” is provided. This landfill liner design has been used extensively and Ecology believes it would be protective of the environment for all probable circumstances. The limited purpose landfill design standards were created to allow designers maximum flexibility when developing designs and choosing materials. Any design is allowed so long as it meets the performance standard provided

in the rule. Inert waste landfills were given a simple standard design because of the limited and well understood risks associated with the waste type.
One commenter (McNeill) suggested that the rule provide for equivalency demonstration for liner and cover system designs compared to the presumptive designs provided in WAC 173-350-400(3)(b)(v) and 400(e)(ii). Equivalent design provisions are found in WAC 173-304-460(3)(c)(iii) and WAC 173-351-300(2)(a)(iii). Ecology has found true equivalency to be a difficult concept to apply in practice. Generally, alternative materials provide advantages to standard materials in one area and deficiencies in others. A liner material may provide lower hydraulic conductivity but provide a lower level of protection from contaminant vapor transport. This is the primary reason that an equivalent design demonstration was not specifically incorporated into the rule.

There are provisions in the rule for equivalency demonstrations, however. Any liner or cover system design may be used that meets the performance standards. The owner or operator of a limited purpose landfill has been provided with two options for designing liner and cover systems. They may choose to develop a design with materials for liner and cover systems that meet the performance standards or use the presumptive designs provided in the rule. Engineering report/plans and specifications addressing the applicable design standards must be submitted with the permit application. The rule provides flexibility and does not specify how conformance with design standards must be demonstrated. Because the "presumptive" designs are presumed to meet the applicable performance standards, it can also be assumed that an equivalent design would also meet the same performance standards. This is one way for and owner or operator to demonstrate conformance with liner and cover system design standards.

Commenter **McNeill** ***Section*** **400** ***Comment #*** 329

Comment We have questions about particular wording in the design standards. For instance, we note the use in Subsection (3)(b)(iii) of the term "volumetrically significant." Could Ecology explain what conditions would be deemed "volumetrically significant" such that a stated separation distance is necessary to protect the integrity of the liner? (This is similar to our question under the definition of "aquifer.") Also, in the context of these Draft MFS, perhaps the term "aquifer" is a more appropriate unit of protection than the one described in this subsection. It already is a defined term (although it still includes the adjective "significant"). Finally, the phrase "at any time" creates further ambiguity and we suggest it be deleted. Separation issues at liner construction may be quite different than those that arise after the waste is in place to hold down the liner.

Ecology's Response Several comments were received regarding WAC 173-350-400(3)(b)(iii), liner separation from ground water. This requirement is intended to protect liner systems from harm caused by ground water. Harm can be caused by range of effects from buoyancy pressures to chemical and physical changes of liner components. As noted by a commenter, the concerns related to ground water impacts are different during construction and early in the landfill's life than they are later when waste is in place, including post-closure care. The liner separation requirement in the rule is intended to protect the liner system from construction through the post-closure care period and beyond.

One comment requested clarification when a water bearing unit would be deemed "volumetrically significant". The language in the rule provides the circumstances when liner separation is a concern; when it will "harm or endanger the integrity of the liner at any time." The ability to harm or endanger the liner is the threshold criteria for water bearing units of concern. Liner separation is not intended to apply to situations where the ground water is not sufficiently "horizontally and vertically extensive, hydraulically recharged, and volumetrically significant" to harm or endanger the liner.

Another comment suggested that the required liner separation from ground water be determined by a qualified engineer and not be set in the rule. The ten foot separation requirement is also found in the Criteria for Municipal Solid Waste Landfills, WAC 173-351-140(1)(a). Site characterizations preformed during the permitting process often do not provide information regarding shallow ground water elevations during relative high precipitation periods or other potential influences that vary over time. The ten foot limit is intended to accommodate long term fluctuations of ground water elevations when a hydraulic gradient control system is not in place. A qualified engineer could make a determination regarding the potential of harm from ground water for a particular design. However, long-term ground water elevation fluctuations are generally not known.

One comment suggested that earthen components of a liner system, such as compacted clay, should be counted as part of the ten foot separation. The rule is intended to prevent harm to all engineered components of a liner system. Clay and other earthen materials often exhibit chemical, physical, and structural changes when ground water saturates the material. This is especially true when saturated intermittently. Because of this, ground water separation is maintained from all engineered components of a liner system. If ground water separation has no potential impacts on a specific design, an owner or operator may apply for a variance from this requirement under WAC 173-350-710(7) if needed.

One major difference in this rule from the liner separation requirements in the Criteria for Municipal Solid Waste Landfills is that WAC 173-351-140(1)(a) requires a hydraulic gradient control system to maintain a five foot separation while this rule only requires that it maintain separation.

Commenter **McNeill** ***Section*** **400** ***Comment #*** 327

Comment Consider tying the gas migration performance standards for liners under Subsection (3)(b)(i)(B) to the criteria for explosive gases set forth in Subsection (4)(b)(v)(A)I, II and III.

Ecology's Response The commenter suggests tying the performance standards for controlling explosive gasses in the proposed operating standards to the design standards for liner systems. Ecology agrees that this provides better detail regarding liner system performance standards. The liner system design and operating standards have been amended as suggested.

Commenter **McNeill** ***Section*** **400** ***Comment #*** 326

Comment With regard to design standards, we note and appreciate the flexibility conferred on the health department by Subsection (3)(b)(ii) for liner design features. The tendency, however, will be to default to the standards set forth in this section for liners and other design features, with no room for the health department to exercise discretion.

Ecology's Response Two commenter's (Hebdon, Beery) stated that by adopting a performance standard based design requirement, instead of multi-tiered standardized provisions, the rule provides a lower level of flexibility for limited purpose landfill design than Chapter WAC 173-304. One commenter (McNeill) supported the flexibility allowed in Subsection (3) for liner design features. This commenter predicted that there will be a tendency by owners or operators to default to the presumptive liner design.

The limited purpose landfill provisions were developed around two primary objectives. These were to simplify the provisions in Chapter 173-304 WAC regarding landfill standards and to provide an appropriate relationship between the risk posed by any landfill and the standards that would apply.

Chapter 173-304 WAC provides four distinct landfill types (limited purpose, inert and demolition, wood waste, and problem waste) with eleven different design standards (limited purpose - standard, alternative, equivalent, arid, small, and other; inert and demolition; wood waste - ≤10,000 cubic yards, and two for >10,000 cubic yards; and problem waste – reserved.) Ecology has determined that the minimum standards in the current rule for arid design, demolition waste, and wood waste landfills have not been sufficiently protective of the environment and did not consider bringing these forward into this rule.

In order to simplify the landfill standards, Chapter 173-350 WAC provides two landfill types, limited purpose and inert waste. Limited purpose landfills were given a design criteria based upon a performance standard because of the wide variety of waste types and circumstances. This approach was actually chosen to provide greater flexibility than that provided by either a single or series of standard designs. Ecology did not want to limit a landfill owner or operator to specific types of materials or design techniques as materials, such as low permeability soils, are not always readily available and because materials technology continue to evolve.

In order to lessen the potential design burden from demonstrating liner system performance, a "presumptive liner design" is provided. This landfill liner design has been used extensively and Ecology believes it would be protective of the environment for all probable circumstances. The limited purpose landfill design standards were created to allow designers maximum flexibility when developing designs and choosing materials. Any design is allowed so long as it meets the performance standard provided in the rule. Inert waste landfills were given a simple standard design because of the limited and well understood risks associated with the waste type.
One commenter (McNeill) suggested that the rule provide for equivalency demonstration for liner and cover system designs compared to the presumptive designs provided in WAC 173-350-400(3)(b)(v) and 400(e)(ii). Equivalent design provisions are found in WAC 173-304-460(3)(c)(iii) and WAC 173-351-300(2)(a)(iii). Ecology has found true equivalency to be a difficult concept to apply in practice. Generally, alternative materials provide advantages to standard materials in one area and deficiencies in others. A liner material may provide lower hydraulic conductivity but provide a lower level of protection from contaminant vapor transport. This is the primary reason that an equivalent design demonstration was not specifically incorporated into the rule.

There are provisions in the rule for equivalency demonstrations, however. Any liner or cover system design may be used that meets the performance standards. The owner or operator of a limited purpose landfill has been provided with two options for designing liner and cover systems. They may choose to develop a design with materials for liner and cover systems that meet the performance standards or use the presumptive designs provided in the rule. Engineering report/plans and specifications addressing the applicable design standards must be submitted with the permit application. The rule provides flexibility and does not specify how conformance with design standards must be demonstrated. Because the "presumptive" designs are presumed to meet the applicable performance standards, it can also be assumed that an equivalent design would also meet the same performance standards. This is one way for and owner or operator to demonstrate conformance with liner and cover system design standards.

Commenter **McNeill** ***Section*** **400** ***Comment #*** 325

Comment The locational standards should accommodate a limited purpose landfill that has disposal areas specifically set aside for inert materials only. For instance, the location standard for drinking well distances should not have to be one thousand feet from the "active area" to the extent that the defined term includes "inert" waste disposal areas at a limited purpose landfill. Under the inert waste landfill provisions, only fifty feet is required. See WAC 173 350 410(2)(c). Many of the standards set forth in this section would be unduly burdensome when applied to or measured from those discrete disposal areas.

Ecology's Response The commenter expressed concern that the location standards in WAC 173-350-400(2) would apply to inert waste landfill units located at facilities with limited purpose landfills. The standards provided in WAC 173-350-210 through 490 apply to specific solid waste handling units. It is anticipated that a solid waste handling facility may operate several types of solid waste handling units. For example, a transfer station, limited purpose landfill, inert waste landfill, and composting may all be located at a facility. The standards in section 400 would only apply to the limited purpose landfill units at the facility. Inert waste landfill units would be required to meet the requirements, including location standards, of section 410.

Commenter **McNeill** ***Section*** **400** ***Comment #*** 324

Comment Ironically, there are some aspects of this Draft MFS section that we believe are more stringent than the CMSWLF. For example, limited purpose landfills should be able to demonstrate around the location standards, at least to the same extent as permitted under the CMSWLF. Some of the MFS provisions infer that same flexibility, but use less detail in the language. We believe that to be the case with Subsection 400(2)(a) (prohibiting siting over Holocene faults, etc., "which could compromise the structural integrity of the facility") and Subsection 400(2)(d) (more than ten thousand feet from an airport runway "where a bird hazard to aircraft would be created"). For other location standards, though, these Draft MFS contain an absolute prohibition, such as the one against surface water proximity, that is more burdensome that what is allowed under the CMSWLF, and appears unnecessary. Wetlands are prevalent throughout western Washington, and do not in all cases present a risk to the environment that justifies an unconditional ban. Under WAC 173 351130(4), MSW landfills can demonstrate around that criterion; there is no good reason that limited purpose landfills should not be afforded the same potential relief Also with regard to this subsection, please confirm that man made features that may periodically contain surface water (such as gravel pits, sedimentation ponds, leachate ponds, etc.) are not "ponds" that trigger the surface water location standard in Subsection 400(2)(e) (or the one for inert waste landfills in Subsection 410(2)(d)).

Ecology's Response The commenter expressed concern that there are no provisions in the rule for relief from the location standards for surface waters in WAC 173-350-400(2)(c) and that the restriction could apply to man-made features such as leachate ponds. The surface waters listed in WAC 173-350-400(2)(c) refer to "waters of the state", or surface waters and watercourses within the jurisdiction of the state of Washington. This does not include some man-made structures, such as leachate ponds, but may apply to others such as reservoirs. The provisions for relief from the location standards are found in WAC 173-350-710(7), variances.

Commenter **McNeill** ***Section*** **400** ***Comment #*** 323

Comment 400(Limited Purpose Landfills):
Many of these provisions in this section are lifted from the Criteria for Municipal Solid Waste Landfills, Chapter 173 351 WAC (the "CMSWLF"), but are written in a more informal manner. WMI generally supports the application of most, if not all, of the CMSWLF standards to new limited purpose landfills, but also recognizes the policy of allowing somewhat greater flexibility.

Ecology's Response One commenter (Coleman) stated that the rule includes some very prescriptive requirements for limited purpose landfills. The commenter claims that the limited purpose landfill standards are as demanding as those in Chapter 173-351 WAC, Criteria for Municipal Solid Waste Landfills, while limited purpose landfills pose less environmental risks than municipal solid waste landfills. It is suggested that the rule impose such features as liners, impermeable caps, gas removal systems, and groundwater monitoring without regard to specific factors, such as waste type, hydrologic conditions, etc… The commenter suggests that design and operational details be determined during the permit process. The minimum parameters included for ground water monitoring was provide as an example. Another commenter (McNeill) supported the proposed standards and recognized the flexibility inherent in the language.
The limited purpose landfill provisions were developed to provide as much flexibility as possible while protecting human health and the environment. The design standards were developed around a performance standard concept that attempts to avoid prescriptive requirements as much as possible. The operating standards are divided into two paragraphs, 400(4)(a) and (b). Paragraph (a) does provide prescriptive standards, such as controlling access, controlling dust, and prohibiting non-permitted open burning, that Ecology believes should be applicable to all limited purpose landfills. The operating standards in paragraph (b) are meant to be flexible so that they will not be required when not needed. These include waste inspections, compaction, daily cover, and explosive gas monitoring that are not expected to be required in many cases.

Ecology reviewed and incorporated some components from both Chapter 173-351 WAC and Chapter 173-304 WAC because of the demonstrated success of these operational standards. However, many operating standards that apply to all landfills in the other rules are either not included, such as employee facilities or marking active areas, or made optional when not necessary.

It has been suggested during the development of this rule that the waste types disposed of in limited purpose landfills will present a lower level of risk than municipal solid waste. Ecology agrees that this will often be the case. However, the scope of applicable waste types is very broad. Waste can range from near inert to near dangerous waste and include highly putrescible wastes. Limited purpose landfills with highly contaminated leachate and high gas generation are certainly possible.

The parameters required to be analyzed for in ground water monitoring at limited purpose landfills are the minimum required to characterize the hydrology and geochemistry of a water bearing unit, and to detect potential influences from leachate. A ground water monitoring plan with less than these

minimum parameters would not be likely to detect impacts from a limited purpose landfill.

The rule attempts to provide a flexible approach that only requires limited purpose landfills to protect human health and the environment without prescribing specific designs. The rule allows for landfills to be designed and constructed without liner systems or specific final cover materials where appropriate. It also provides presumptive liner and cover system designs that are deemed to be protective in all conceived circumstances. As suggested by the commenter, the design performance evaluation and operational details are evaluated and determined during the permit process.

Commenter **McNeill** ***Section*** **400** ***Comment #*** 330

Comment As now worded, the separation required by Subsection (3)(b)(iii) is measured from the bottom of the lowest "liner" for MSW landfills under the CMSWLF, but from the lowest liner "component" here. This results in a potential ambiguity. We suggest neither is appropriate for limited purpose landfills, unless Ecology means the "lowest level of the synthetic liner portion of the liner system." Components often are clay, but that layer should be counted as part of the separation.

Liner separation aside, a clay component should not be required for all limited purpose landfills. Indeed, many landfills use geo synthetic liner systems instead of soil barriers. For that reason, the presumptive liner standard in Subsection (3)(b)(v) is too narrow. The standard should call for a liner that provides for 1 x 10-7 cm/sec. permeability, with no two foot earthen minimum.

Ecology's Response The commenter suggests that earthen components of a liner system, such as compacted clay, should be counted as part of the ten foot separation. The rule is intended to prevent harm to all engineered components of a liner system. Clay and other earthen materials often exhibit chemical, physical, and structural changes when ground water saturates the material. This is especially true when saturated intermittently. Because of this, ground water separation is maintained from all engineered components of a liner system. If ground water separation has no potential impacts on a specific design, an owner or operator may apply for a variance from this requirement under WAC 173-350-710(7) if needed.

One major difference in this rule from the liner separation requirements in the Criteria for Municipal Solid Waste Landfills is that WAC 173-351-140(1)(a) requires a hydraulic gradient control system to maintain a five foot separation while this rule only requires that it maintain separation.

The commenter also states that the presumptive liner system design in WAC 173-350-400(3)(b)(v) was overly prescriptive and that a two foot layer of compacted soil should not be required for all limited purpose landfills. The commenter suggested a permeability performance standard in place of the soil component. Ecology selected a conservative design for use as a presumptive liner design because it may be used in any limited purpose landfill situation. The characteristics and construction requirements of the presumptive design are well understood. The knowledge base for other materials that are sometimes substituted for the two foot soil component, such as geosynthetic clay liners, is still being developed. A simple permeability performance standard is not appropriate for the presumptive design because there are other considerations, such as vulnerability to damage, stability when in contact with leachate, and vapor transport to consider.

Commenter **McNeill** ***Section*** **500** ***Comment #*** 337

Comment 500 (Ground Water Monitoring):
In Subsection (2)(b)(vi), please allow the drilling analysis to be done "under the direction of a licensed professional . ..."

Ecology's Response Ecology concurs with the suggested change.

Commenter **McNeill** ***Section*** **500** ***Comment #*** 340

Comment 500 (Ground Water Monitoring):
Subsection (5)(b)(i)(B) should state that only parameter(s) that had a statistically significant increase need be reanalyzed.

Ecology's Response Ecology concurs with the suggested change.

Commenter **McNeill** ***Section*** **500** ***Comment #*** 336

Comment 500 (Ground Water Monitoring):
In Subsection (2)(b)(ii), please add the word "representative" to the second sentence; without such modification, testing for all samples will be required. For similar reasons, please insert "if appropriate" after "tested for the following." The Atterberg limits are only for plastic soil samples, but the current wording would require it for all samples regardless of appropriateness.

Ecology's Response Ecology concurs with the suggested change.

Commenter **McNeill** ***Section*** **500** ***Comment #*** 338

Comment 500 (Ground Water Monitoring):
In Subsection (2)(d), we suggest that "site boundaries" should be changed to "active area" (but excluding inert waste units), to be consistent with siting standards.

Ecology's Response In this context (general site characterization) a requirement for the location of public and private wells

within a two thousand foot radius of the site boundary is consistent with similar identification requirements in WAC 173-35-500(2)(e) and (f) for water rights and surface waters.

Commenter **McNeill** ***Section*** **500** ***Comment #*** 339

Comment 500 (Ground Water Monitoring):
Under Subsection (4)(g), we agree that ground water sampling no less than semiannually is appropriate for the upper aquifer. For the lower aquifer, however, less frequent monitoring, such as annual, would be sufficient.

Ecology's Response WAC 173-350-500(3)(a)(i) requires monitoring wells to "…be installed at appropriate…depths to yield representative ground water samples from those hydrostratigraphic units…identified…as the earliest potential contaminant flowpaths;", in order to detect a release as close to the facility as possible. Monitoring of other hydrostratigraphic units not identified as the earliest potential contaminant flowpath would depend on site and facility specific monitoring objectives.

Commenter **McNeill** ***Section*** **700** ***Comment #*** 341

Comment 700 (Permits and Local Ordinance:
With regard to Subsection (1)(b), the MFS are not an appropriate means to regulate CERLCA or MTCA cleanup actions. (MTCA is not specifically referenced, but we assume Ecology ordered cleanups under that regulatory scheme also were intended to be within the scope of this exemption, since RCW 70.105D.090 exempts MTCA remediation from the procedural requirements of Chapter 70.95 RCV) MTCA has its own SEPA process under which environmental impacts from the remediation as a whole are to be analyzed. And, requiring that someone else (presumably the health department) undertake an investigation to determine that the cleanup "results in an overall improvement of the environmental impact of the site" to qualify as an exemption contradicts that authority, as well as express statutory requirements. Under both CERCLA and MTCA, compliance with the substantive aspects of the MFS would be required, but the obligation to obtain a permit clearly is exempt, We suggest that Subsection (1)(b) end after "consent decree."

Ecology's Response Ecology agrees with the commenter's analysis and suggested change for this section.

Commenter **McNeill** ***Section*** **710** ***Comment #*** 344

Comment -710 Permit Application and Issuance):
Under Subsection (4), the requirement for following these procedures prior to making "any change in facility operation, design, performance or monitoring" seems vague and overly broad. Perhaps it could be limited to any variation from the conditions specified in the operations plan or permit. Day to day adjustments in operations, particularly, cannot and will not always be reported, as a practical matter.

Ecology's Response Permit modifications are only required when the facility makes a "significant change" to the operations, design, capacity, performance or monitoring of a facility. Changes to a facility's operation that are beyond the scope of the Plan of Operation may not need a permit modification, but should be approved by the jurisdictional health department nonetheless.

Commenter **McNeill** ***Section*** **710** ***Comment #*** 343

Comment (710 Permit Application and Issuance):
The statute for permit renewals requires only that the facility be "not in conflict with" the comprehensive plan. See RCW 70.95.190. Therefore, Subsection (3)(a)(iii) should not require that it "conform." The legislature apparently intended a more lenient standard for permit renewals, which should be reflected in this rule. We assume this distinction is intended to protect existing facilities from being written out of a comprehensive plan and forced out of business.

Ecology's Response Ecology does not agree with the suggested change. Ecology is of the opinion that the legislature used the terms "conform" and not be in conflict" interchangeably. The statute specifically requires Ecology to review new and renewed permits in accordance with RCW 70.95.185, which requires the permit conform with the approved comprehensive solid waste management plan (CSWMP). Likewise, the jurisdictional health department (JHD) is required to determine that newly issued permits conform with approved CSWMP. The only reference to not being in conflict with the CSWMP is in regards to the JHD review of a renewal.

Commenter **McNeill** ***Section*** **710** ***Comment #*** 342

Comment (710 Permit Application and Issuance):
In order to avoid a situation where a permit application sits in limbo for an extended period of time, we suggest a required timeline in Subsection(1)(c)(ii) for the health department to determine completeness and to respond to the applicant, in writing, that the permit is complete, or to identify missing items. We suggest twenty eight days, which is the time limit for a completeness determination under land use statutes.

Ecology's Response Ecology does not believe that it is appropriate to set a different time limit for the jurisdictional health department's (JHD) review of an application for completeness than the 90 day limit specified by RCW 70.95.180. As a practical matter the JHD will need to make a completeness determination in less than 45 days because Ecology is granted a 45 day review period within the 90 day JHD review. Although not specifically noted the comment does bring to light a problem with section -710 (2)(a) which states that every "completed" application shall be approved or disapproved within 90 days by the JHD. This is in conflict with RCW 70.95.180 which requires all permits be approved or denied within 90 days of receipt of an application. Ecology will rectify this problem by deleting the word completed from -710 (2)(a).

Commenter **McNeill** ***Section*** **710** ***Comment #*** 345

Comment (710 Permit Application and Issuance):
Under Subsection (7)(a), these Draft MFS prohibit a variance from statutory requirements of Ch. 70.95 RCW. Why? Also, in Subsection 700(7)(a)(ii), the word "public" should be replaced with "environment" so that the section remains consistent with the expertise and authority of the health department.

More importantly, though, the standard that a variance will be granted only if it produces hardship is too limiting. The health department should be able to grant variances if there is a technical justification for doing so, or if the regulatory requirement results in benefit disproportionate to its cost. Please consider adding the ability to grant a variance where circumstances other than mere hardship justify it.

Ecology's Response Ecology is of the opinion that it is inappropriate for variances to be granted to those facility specific requirements set forth by the legislature in chapter 70.95 RCW. Some examples of facility specific requirements include location standards for large scale landfills (see RCW 70.95.060 [2]), permit requirements (see RCW 70.95.170), conformance with local comprehensive solid waste management plans (see RCW 70.95.180), and financial assurance for landfills (see RCW 70.95.215).

Ecology also is of the opinion that the need to demonstrate a "hardship without equal or greater benefits to the public" is necessary. There is a reasonable amount of flexibility built into the proposed rule. In many instances the owner/operator is able to demonstrate an alternative to the standard requirements without going through a variance process. However, the rule was developed with protection of human health and the environment as the fundamental basis for all requirements. The variance section was drafted with this in mind. Additionally it should be noted that much of the language in this section (including the "hardship" clause) comes directly from the current rule, WAC 173-304-700.

Commenter **McNeill** ***Section*** **715** ***Comment #*** 346

Comment 715 General Permit Application Contents):
Under Subsection (3)(i), we ask that Ecology permit signatures by authorized representatives, rather than only by a vice president. If Ecology wants to ensure authorization, a corporate resolution for signatories other than vice presidents can be required.

Ecology's Response The requirement for vice-president level signatures on applications was taken from WAC 173-351-730 (7). Ecology is not aware of any problems that have occurred as a result of this requirement in chapter 173-351 WAC and has chosen to maintain the requirement as is for consistency.

Commenter **Miller** ***Section*** ***Comment #*** 77

Comment Recommend that financial assurance be a requirement for all facilities that require the materials remaining onsite to be disposed of at another permitted facility.

Ecology's Response In the proposed rule Ecology limited the requirement for financial assurance to three facility types. The reason for this limitation was based on statutory requirement (limited purpose landfills, waste tire storage and transportation) and demonstrated need (waste tire storage, large-scale moderate risk waste facilities). An additional factor that Ecology considered is the cost of maintaining financial assurance instruments. In some cases these costs can be equal to, or even exceed the value of the instrument.

Commenter **Miller** ***Section*** **020** ***Comment #*** 44

Comment 173-350-020 APPLICABILITY
(1)(n) Recommend reinstating the composted material exemption language included in subsection-020(1)(n) of the December 2000 version along with an exemption for the finished product as defined in WAC 1 73-350-220(4)(a)(viii).

Ecology's Response The exemption for composted material has been moved to the compost section.

Commenter **Miller** ***Section*** **100** ***Comment #*** 46

Comment Limited moderate risk waste facility It is not clear what is meant by “limited’. Recommend that this be clarified.

Ecology's Response Please see the definition of "limited moderate risk waste".

Commenter **Miller** ***Section*** **100** ***Comment #*** 49

Comment Surface water definition should include wetlands in the list of water courses.

Ecology's Response The commenter suggests including wetlands in the list of water courses under the definition of surface water. The definition is intended to include surface waters that are within the jurisdiction of the State of Washington. These include many but not all wetlands. The definition of surface water has been amended to include wetlands within the jurisdiction of the State of Washington and to exclude ground water.

Commenter **Miller** ***Section*** **100** ***Comment #*** 47

Comment Open Burning Recommend adding to the existing definition “as specified under chapter 173-425 WAC”.

Ecology's Response Although some of the requirements of Chapter 173-425 WAC are applicable to "open burning" it is not the only pertinent air quality regulation. Ecology has chosen to leave the definition unchanged.

Commenter **Miller** ***Section*** **100** ***Comment #*** 45

Comment Contaminant: It should be noted that contaminants may decrease pH resulting in values less than the natural background levels. Recommend that the definition be amended accordingly.

Ecology's Response One commenter stated that the definition for "contaminant" was problematic for pH because extremes can be either higher or lower than natural background and the definition is limited to "concentrations greater than natural background. While pH units may be either above or below natural background, the concentrations of the actual substances (hydrogen and hydroxyl ions) are greater than natural background at either high or low pH values. Therefore the definition is appropriate for pH.

Commenter **Miller** ***Section*** **100** ***Comment #*** 48

Comment Soil amendment: Recommend amending to also include improvements in chemical characteristics.

Ecology's Response Ecology understands the potential confusion between legal definitions based on statutory language and common use of terms. However, the terms listed in the definitions section apply "when used in this chapter," and don't impact common use of terms in other contexts.

"Soil amendment" is a term that has specific meaning under RCW 70.95.030. Composted material was exempt from the definition of soil amendment during the 1998 legislative session because of the regulatory construction of the exemption process under RCW 70.95.205 Exemption from solid waste permit requirements -- Waste derived soil amendments.

In public outreach and education materials it is appropriate to refer to compost as a "valuable soil amendment."

Commenter **Miller** ***Section*** **200** ***Comment #*** 50

Comment (2)(a)(viiii) It is not clear why the requirement in subsection -200(2)(a)(vi) of the December 2000 version to "ensure that a minimum of seventy-five percent of the waste generated or received annually at the facility is beneficially used" was deleted.

Ecology's Response Reference to accumulation was moved to [draft] WAC 350-173-200 (2)(b)(iii). For soil amendments approved under this section, the department limited the on-site accumulation (meaning site where an approved waste is to be applied) to no more than the annual need to ensure all materials are used. The previous reference required use of at least 75% of the material annually. The implication was that it was acceptable to accumulate 25% annually which eventually could inadvertently allow storage of the material well beyond the annual site needs. Facilities where wastes are centralized for eventual distribution or processing will be subject to the appropriate section of the regulation. A beneficial use determination exempts the use of a waste from solid waste permitting when used in a specific manner approved by the department.

Commenter **Miller** ***Section*** **200** ***Comment #*** 51

Comment (2)(a)(x) Recommend reinstating the requirement in subsection -200(a)(viii)(D) of the December 2000 version to identify the "total volume of solid waste received".

Ecology's Response The requirement was removed because the information requested was of no value. An exemption holder is required to report the amount of an exempted waste beneficially used. Reporting the amount received infers that storage activities, other than staging, are part of the exemption. Facilities that are used for staging or processing prior to exempted use are still subject to applicable sections of the regulation.

Commenter **Miller** ***Section*** **200** ***Comment #*** 52

Comment (5)(j) The local solid waste planning authority should also be able to appeal. Recommend amending to allow county solid waste comprehensive management planning authority to appeal.

Ecology's Response The Legislature set the authorities for appeals in statute. Appeals for waste derived soils amendments are addressed in RCW 70.95.205 (4). appeals for Beneficial Use Determinations are addressed in RCW 70.95.300 (5).

Commenter **Miller** ***Section*** **220** ***Comment #*** 53

Comment (4) Table A It is not clear why there are different standards for pollutants concentrations in compost versus biosolids. For consistency, the pollutant concentrations for composting (and biosolids) should be no higher than the permissible cleanup levels for unrestricted land uses as defined in the MTCA regulation chapter 173-340 WAC. Some discrepancies noted include cleanup levels in MTCA for cadmium and mercury are 1 mg/Kg and 2 mg/Kg, respectively, while Table A allows 10 mg/Kg and 8 mg/Kg, respectively.

Ecology's Response Ecology received two comments about the threshold level of metals in composted material. One commenter (Miller) suggested using the same metals numbers contained in the Model Toxics Control Act (MTCA). Metals levels under MTCA are standards used to evaluate whether or not a contaminated site has been cleaned up to an appropriate level. This type of cleanup standard is very different from a standard used to evaluate product quality. Using MTCA metals standards for evaluating composted material would be an inappropriate use of those standards.
Another commenter (Gage) questioned why Ecology chose metal levels equal to the "Grade AA" levels in the current guidance "Interim Guidelines for Compost Quality" publication # 94-38. Commenter notes

the result of this decision will be different metals levels for biosolids compost regulated under Chapter 173-308 WAC, Biosolids Management, and other types of composted material regulated under this rule. Ecology's rational for continuing to use the more stringent Grade AA metals levels for composted material is the same as it was when the Guidelines were published. A complete explanation of the rational can be found in Appendix II of the Interim Guidelines for Compost Quality.

Commenter **Miller** ***Section*** **220** ***Comment #*** 54

Comment (4) Table B Footnote 2 references subsection (4)(b)(ii) which was deleted.

Ecology's Response Commenter notes typographical error in footnote under Table B. Ecology has removed the footnote.

Commenter **Miller** ***Section*** **220** ***Comment #*** 55

Comment (4)(b) Recommend reinstating the minimum information an inspection log should include as described in subsection —220(4)(d) of the December 2000 version.

Ecology's Response Regarding regular inspections at composting facilities, the language in WAC 173-350-220(4)(b) is performance-based language intended to be consistent with inspection requirements at other types of solid waste handling facilities.

Depending on the technology in use at any facility, inspection schedules will vary according to equipment and maintenance requirements.

The weekly inspections required in this section are intended to ensure overall vigilance is part of any composting operation. The details of inspections need to be included in the operations plan during permitting of the facility.

Commenter **Miller** ***Section*** **220** ***Comment #*** 56

Comment (7)(a) Recommend including financial assurance requirements for those facilities not exempt from the permitting process as outlined in subsection (l)(b).

Ecology's Response In the proposed rule Ecology limited the requirement for financial assurance to three facility types. The reason for this limitation was based on statutory requirement (limited purpose landfills, waste tire storage and transportation) and demonstrated need (waste tire storage, large-scale moderate risk waste facilities). An additional factor that Ecology considered is the cost of maintaining financial assurance instruments. In some cases these costs can be equal to, or even exceed the value of the instrument.

Commenter **Miller** ***Section*** **230** ***Comment #*** 57

Comment Recommend adding a minimum depth to groundwater as a locational standard.

Ecology's Response Appropriate application rates that are protective of groundwater should be arrived at by analysis of site conditions and the characteristics of the waste to be land applied. Ecology intended that an application rate ensure no leaching of contaminants or nutrients to groundwater when the land application section was developed. Section (4)(d)(iv) requires a management plan describing how groundwater will be protected if the seasonal high groundwater is less than three feet from the surface and Section 230 (8) (a) (iv) (C) requires discussion of depth to seasonal groundwater as part of the solid waste application. This information, regardless of the actual depth must be considered along with contaminant and nutrient analysis when establishing an appropriate application rate. Because an application rates must be protective of groundwater regardless of the actual depth, monitoring requirements are not warranted.

Commenter **Miller** ***Section*** **230** ***Comment #*** 61

Comment (8)(a)(iv)(G)(XIII) and (XIV) The agency Natural Resource Conservation Service should be capitalized.

Ecology's Response Ecology concurs with the suggested change.

Commenter **Miller** ***Section*** **230** ***Comment #*** 59

Comment Recommend for consistency use the terms "run-on" and "run-off" which are already defined in Section —100.

Ecology's Response Ecology concurs with the suggested change.

Commenter **Miller** ***Section*** **230** ***Comment #*** 60

Comment (8)(a)(iv)(D) At a minimum, recommend sampling the soil for those pollutants listed under (8)(a)(iii)(1l Recommend sampling the surface 6 inches and then one-foot increments thereafter since many of the parameters will concentrate in the topsoil. Recommend c1arif what standards these analyses will be compared to and how the information will be sued by the regulatory agencies.

Ecology's Response Section 230 (4) states that the jurisdictional health department (JHD) shall determine the appropriate level of environmental monitoring for operation of land application sites. During the permit application process, a JHD may determine that the level of data collection suggested by the commenter is appropriate. However, such a need may not be universal given the potential variability of land application proposals.

Commenter **Miller** ***Section*** **230** ***Comment #*** 58

Comment Recommend that the depth at which a management plan for the protection of ground water be developed be based on site-specific information. The minimum depth of three feet cited in this subsection may be too shallow for most soils and contaminants could readily leach into the groundwater in a relatively short period of time.

Ecology's Response Appropriate application rates that are protective of groundwater should be arrived at by analysis of site conditions and the characteristics of the waste to be land applied. Ecology intended that an application rate ensure no leaching of contaminants or nutrients to groundwater when the land application section was developed. Section (4)(d)(iv) requires a management plan describing how groundwater will be protected if the seasonal high groundwater is less than three feet from the surface and Section 230 (8) (a) (iv) (C) requires discussion of depth to seasonal groundwater as part of the solid waste application. This information, regardless of the actual depth must be considered along with contaminant and nutrient analysis when establishing an appropriate application rate. Because an application rates must be protective of groundwater regardless of the actual depth, monitoring requirements are not warranted.

Commenter **Miller** ***Section*** **240** ***Comment #*** 62

Comment (9) Recommend reinstating the requirement that the relationship of the facility to the county solid waste comprehensive plan and zoning be included in the permit application as previously stat in subsection —240(8)(a)(i)(A) of the December 2000 version. Recommend that this be done for all facilities governed under this chapter.

Ecology's Response The suggested requirement is contained in section -040, Performance Standards.

Commenter **Miller** ***Section*** **310** ***Comment #*** 63

Comment (3)(a)(iii) It is impossible to have no rat harborages, especially if landscaping is required. Recommend rewriting to read: "the attraction of and provide effective means to control rodents, insects, birds and other vermin;" or language similar to that used in subsection 173-3 0-320(3)(a)(iii).

Ecology's Response Ecology agrees that the prescriptive design standards are unnecessary and has revised this section to provide performance based design criteria.

Commenter **Miller** ***Section*** **320** ***Comment #*** 64

Comment (3) In order to be protective of human health, recommend including a reference to the sharps and pathogen performance standards in subsection 173-350-220(4) Table B.

Ecology's Response Ecology does not believe that it is possible to provide a performance standard that would be universally applicable to all waste piles. The protection of facility personnel is addressed by the applicable worker safety regulation. Protection to the public is addressed in the control of vectors.

Commenter **Miller** ***Section*** **320** ***Comment #*** 65

Comment (8) Recommend reinstating the requirement to describe the facility layout and the types of waste to be handled at the facility as previously stated in subsection —320(8)(b)(i) of the December 2000 version.

Ecology's Response The commenter suggests that permit applications for solid waste piles include the facility layout and types of solid waste to be handled at the facility, as was shown in previous draft proposals. This information is part of the permit application contents. A description of the types of solid wastes handled at the facility is included in the plan of operation. While there is no specific requirement to include a layout of the facility, the engineering reports/plans and specifications along with the description of how wastes are to be handled on-site needs to provide sufficient information to ensure that all requirements are met.

Commenter **Miller** ***Section*** **350** ***Comment #*** 66

Comment (5)(b) Recommend that there be a site-specific minimum groundwater separation required before a surface impoundment without a leak detection layer would be approved.

Ecology's Response The commenter recommends that a separation for between ground water and liners for surface impoundments without a leak detection layer. Ecology concurs with the recommendation but believes that a separation is also appropriate for surface impoundments with leak detection layers. The rule has been amended to provide a five foot separation above the seasonal high level of ground water unless the owner or operator can demonstrate that the liner design will not be effected by contact with ground water. All surface impoundment liners must be above the seasonal high level of ground water.

Commenter **Miller** ***Section*** **360** ***Comment #*** 69

Comment (6)(d)(iv) Recommend deleting final disposition reporting requirement from the annual report. Although this information is tracked, in the past the level of detail required for the facilities permit and for grant reporting varies, sometimes considerably, from year to year. This makes it very difficult to prepare reports in an efficient manner. For the solid waste handling permit annual report total weights of all waste handled by waste type i.e.; flammables, corrosives, etc. should be sufficient.

Ecology's Response The level of detail for the MRW grant reporting requirements have been significantly reduced in the past few years. The final disposition of the MRW remaining in the annual report to Ecology is needed to understand the proportion of MRW being managed by various parts of the waste management hierarchy.

Commenter **Miller** ***Section*** **360** ***Comment #*** 67

Comment (2)(f) and (6)(a)(iv) This requirement appears to suggest that during normal HHW collection operations all MRW collection containers need to be completely sealed at all times, unless adding or removing waste. Sealing drums and boxes each time waste is added in effect would require each container to be opened and sealed hundreds of times per day. It is not feasible as a facility operator to continuously open, close and then seal containers. In addition to not being feasible logistically, this requirement may also contribute to repetitive motion trauma.
Recommend this requirement be amended as follows: "Containers shall remain covered except when it is necessary to add or remove waste or when it is not feasible due to method of consolidation, for example hulking of latex paint. A covered container shall include, but not b limited to, closed head drums with covered funnels placed in bung openings, or open head drums with a lid covering the opening, or tub skids with a lid covering the opening. Cardboard shipping containers holding intact non- leaking materials and open drums under can crushers will be exempt from this requirement.

Ecology's Response The commenter is concerned with what is meant by a closed container and avoiding a narrow interpretation of "closed except when adding or removing waste". A container is closed if it prevents the container from "a release of MRW through evaporation or spillage if overturned." A self closing funnel installed in the bung of a drum or a drum cover may provide closure if it prevents the release or MRW. A shipping box with intact lids on non-leaking paint cans would probably be considered closed.

The phrase "when adding or removing waste" is not intended to be strictly interpreted as including only the moments when waste is being placed into a container. It should not be used to severely restrict operational efficiencies by requiring a drum to be sealed and unsealed hundreds of times per day.

It is intended to assure that there are standard operating practices that reasonably limit the volatilization of potentially harmful or flammable vapors and fumes during normal operations. It is also intended to eliminate the practice of leaving open drums unattended for hours or days.

There will be judgment applied at each facility to find the appropriate operating practice for this requirement. The objective is to eliminate hazards to the greatest extent practical. In some cases self-closing funnels, improved ventilation or other engineering controls may be reasonable changes to address this requirement. In other facilities changes to operating practices may need to be examined. For many facilities Ecology anticipates no changes may be required to meet this requirement.

Commenter **Miller** ***Section*** **360** ***Comment #*** 68

Comment (6)(c) Including the time of the inspection for bi-annual and annual inspections would be difficult since the inspections may require different tests run over several days and sometimes conducted by a variety of contractors. Therefore, recommend deleting time from the facility inspection reports.

Ecology's Response If the inspection elements take multiple days or at multiple timeframes, the inspections record can indicate that for the purposes of complying with this requirement. Recording the time or times of inspection should not be a significant burden and as a historical record of facility performance and compliance, may provide important factual context for the inspection document.

Commenter **Miller** ***Section*** **400** ***Comment #*** 70

Comment (4)(b) Sixty days seems too long a period to wait for the facility to implement a remediation plan. Recommend that this time frame be shortened to thirty days for submittal to the appropriate agency for review, comment and approval.

Ecology's Response The commenter suggests that implementing a remediation plan when explosive gasses exceed the levels should be required to be accomplished within thirty days instead of sixty. While thirty days may be sufficient in some circumstances, more time would likely be required to accomplish more complicated situations, such as times when gas extraction wells may need to be installed. The maximum time allowed for implementation was left at sixty days for this reason.

Commenter **Miller** ***Section*** **400** ***Comment #*** 71

Comment (4)(c) Recommend reinstating the minimum information an inspection log should include as described in subsection —400(4)(a)(viii) of the December 2000 version.

Ecology's Response The commenter suggests that the minimum contents of the inspection report, as found in the December, 2000 informal public review draft, be reinstated into the rule. The contents included the date and time of the inspection, the printed name and signature of the inspector, a notation of the observations made, and the date and nature of any repairs or corrective actions. The inspection report contents were inadvertently eliminated from the proposed rule and Ecology concurs that they should be reinstated.

Commenter **Miller** ***Section*** **410** ***Comment #*** 72

Comment (3)(a) Recommend that a minimum depth above the seasonal high level of groundwater be included.

Ecology's Response Two commenters suggested that a distance be specified to separate inert wastes from the seasonal high level of ground water. Ten feet was suggested in one case. Ecology believes that the proposed requirement, all waste above the seasonal high level of ground water, will be protective of ground water.

This judgment is based upon the limitations placed on the types of waste materials meeting the inert criteria and that many of these materials (such as concrete) are used in below ground water applications.

Commenter **Miller** ***Section*** **500** ***Comment #*** 73

Comment (4)(c) Recommend including a reference to chapter 173-200 WAC when discussing quantification of ground water quality.

Ecology's Response Numerical ground water quality standards (i.e., maximum contaminant levels) are specified in WAC 173-350-500(4)(k).

Commenter **Miller** ***Section*** **600** ***Comment #*** 74

Comment (2)(a) and (b) Recommend deleting definitions since these are already included in section —100.

Ecology's Response Chapter 70.95.215 RCW requires each applicant for a landfill disposal facility permit to have an appropriate level of financial assurance. The definition of private, in this proposed rule, is to differentiate the financial assurance options available between publicly and privately utilized facilities.

Commenter **Miller** ***Section*** **710** ***Comment #*** 75

Comment (6)(b) The regulations should provide a time frame within which the applicant or permit holder must request a hearing.

Ecology's Response Ecology has chosen not to accept the suggested change. The appeal procedure comes from RCW 70.95.210. The statute does not specify a time limit within which aggrieved parties may appeal a decision by the jurisdictional health department. Ecology does not believe that this is an oversight, especially in light of the statutory time limits placed on Ecology for appealing permits.

Commenter **Miller** ***Section*** **715** ***Comment #*** 76

Comment Recommend including in the vicinity map all domestic and irrigation wells.

Ecology's Response Ecology believes that mapping domestic and irrigation wells is only necessary for facilities required to conduct ground water monitoring. Identification of all wells within a 2000 foot radius is required as part or the site characterization report (see section -500 [2][e]).

Commenter **Moon** ***Section*** ***Comment #*** 1

Comment Given that animal manure is known to contain human pathogens, these regulations do not address topsoil operations that do not claim to compost these wastes. There are numerous facilities located throughout Washington that simply mix raw materials together into various retail blends and distribute to residential and commercial end-users without the need for any permits or quality controls. How can these facilities be brought under these regulations?

Ecology's Response Ecology is aware of top soil manufacturers who use various solid wastes as part of the top soil blend. We understand these operations have developed during a time when the top soil business (in general) has evolved from sale of "loam" scraped from the top layer of earth to the "manufacture" of top soil from many different materials. The original "exempt" status of topsoil dates back to the concept of "clean soil" and "clean dredge spoils" not being viewed as solid waste under state regulations.
The current solid waste structure relies on the definition of "clean soil" in WAC 173-350-100 to prevent activities such as those described by the commenter. "Clean soils" are soils that "do not contain contaminants at concentrations which could negatively impact the quality of air, waters of the state, soils, or sediments; or pose a threat to the health of humans or other living organisms."

The authority lies with local health departments to decide whether or not practices that include mixing various solid wastes with mineral soils results in a material that can meet the definition of "clean soil."

Commenter **Moon** ***Section*** **100** ***Comment #*** 8

Comment Ref: WAC 173-350-100 Definitions: Type 2 Feedstocks and Type 3 Feedstocks

Most manure is considered to be high in human pathogens, hence the criteria for pathogen reduction under Section (4) Operating Standards. Given this, is herbivorous animal manure and bedding considered a Type 2 or Type 3 Feedstock? If they are Type 3 Feedstocks, should they be included under sections –220 (1) (b) (v), (vi), (vii) and (ix)? (Note that I have shown these in parentheses on the attached table).

Ecology's Response Manure from herbivorous animals is explicitly defined as a Type 2 feedstock.

Commenter **Moon** ***Section*** **220** ***Comment #*** 7

Comment Under Section 220 (6) (a), "The site shall be decontaminated". How is this to be measured?

Ecology's Response Ecology has removed the requirement for site decontamination and is only requiring that all solid waste be removed at closure.

Commenter **Moon** ***Section*** **220** ***Comment #*** 6

Comment Under Section 220 (4) (d) (iii) & (iv), "Annual quantity of feedstocks received / composted material sold or distributed reported in tons. Many facilities operate on a volume (cubic yard) basis. Would it be possible to give them the option of 1) reporting in tons or cubic yards or 2) providing a reasonable conversion factor for them to use?

Ecology's Response Ecology will develop guidance to help with this reporting requirement.

Commenter **Moon** ***Section*** **220** ***Comment #*** 5

Comment Under Section 220 (4) (v), "Ensure facility employees are trained in appropriate facility operations, maintenance procedures, and safety and emergency procedures …" Should this be included in the WORC Certification Class or is the operator required to provide this training on his / her own?

Ecology's Response The intent of training requirements in WAC 173-350-220(4)(a)(v) is to make sure that people have been instructed in their job duties according to the particular workings at their facility. General education and training such as the Compost Facility Operator Training offered by the Washington Organic Recycling Council is very important and Ecology supports such training programs. However, general training will not replace site-specific training that must be a part of operations for every facility to ensure safe and successful composting.

Commenter **Moon** ***Section*** **220** ***Comment #*** 4

Comment Under Section 220 (e) (i), "Design calculations shall be based upon the volume of water resulting from a twenty-five-year storm event as defined in Section –100". Most facilities have compost piles on the pad at any given point in time, and this material has the ability to absorb a considerable amount of precipitation. A simple "parking lot" analysis may be overly conservative in terms of sizing the leachate collection and holding facilities. Also, roof cover needs to be taken into consideration if much of the water can be controlled as run-on.

Ecology's Response The design storm cited in WAC 173-350-220(3)(e)(i) is specified to address storm water "run-on" to compost pads. The curbing or other designs that would prevent storm water from flowing onto the pad from areas outside the pad would have to withstand the precipitation from a twenty five year storm as defined in WAC 173-350-100. The calculations for sizing leachate collection devices would have to take into account the anticipated precipitation on the pad itself. These requirements are spelled out in WAC 173-350-220(3)(c) and speak to the commenter's concern about sufficient flexibility in design criteria for leachate containment.

Commenter **Moon** ***Section*** **220** ***Comment #*** 3

Comment Under Section 220 (c) (ii), the regulations state that the facility operator must "Protect surface water and ground water through the use of best management practices and all known available and reasonable methods of prevention, control, and treatment as appropriate". Is there a set of published BMP's that we can refer to for guidance? Also, it seems that the phrase "all known available and reasonable" leaves it wide open to interpretation. In other words, what are the criteria for "reasonable"?

Ecology's Response Ecology does not have specific BMPs at this time.

Commenter **Moon** ***Section*** **220** ***Comment #*** 2

Comment The proposed regulations discuss run-on control but they do not address flood plain issues. Is this to be left up to the Counties as a land use and/or flood hazard issue? Snohomish and King Counties, for example, view this issue very differently. Where this is pertinent is with on-farm composting, which in Western Washington is mostly located in flood prone areas. Specifically, can a 40 – 1,000 cy agricultural compost facility, that meets the permit exemption criteria, be located in a flood plain?

Ecology's Response When locating a composting facility in a flood plain zone, the owner/operator will have to meet all the local zoning requirements for composting activities. Counties with flood zone areas will decide whether or not the categories of exemption requiring notification can be located in those areas.

Commenter **Nelson** ***Section*** ***Comment #*** 213

Comment Any and all references that deal with agriculture should not be listed in this WAC at all. Anything to do with agricultural composting should not be listed. The Department of Ecology is outside its scope of direction mandated by the Legislature in including any of this in a proposed WAC. Listing exemptions and then putting provisions on them is not in the best interest of agriculture or the Department of Ecology. By putting overbearing requirements and regulations on farmers you will not be encouraging recycling or composting.

Ecology's Response Please see response to Nelson, comment #210.

Commenter **Nelson** ***Section*** ***Comment #*** 210

Comment The proposed WAC 173-350 is extensively outside the scope and intent of what the Washington State Legislature intended for the Department of Ecology to oversee solid waste handling. The Department of Ecology's exemptions are as burdensome as permit coverage.

The Department of Ecology's purpose in WAC 173-350 was to consolidate two previous WACs (173-304 and 173-314) into one comprehensive one. Unfortunately, the Department of Ecology extensively expanded on the previous two WAC's instead of simplifying them. No one from agriculture was on the advisory panel for this WAC. No economic impact statement is included on composting facilities. The Department implies that these new regulations will not create a

hardship or expense for farms that are already certified with farm plans approved by their local conservation district using NRCS standards.

Ecology's Response Ecology disagrees with the commenter's interpretation of legislative intent. The citation the commenter references is not the stated purpose of the statute. The purpose is contained in RCW 70.95.020, which states, in part, " The purpose of this chapter is to establish a comprehensive state-wide program for solid waste handling, and solid waste recovery and/or recycling which will prevent land, air, and water pollution and conserve the natural, economic, and energy resources of this state."

It is also important to consider that "solid waste" by definition in RCW 70.95.100 includes "all putrescible and nonputrescible solid and semisolid wastes…". There is no specific exclusion for agricultural wastes. Furthermore it should be noted that the current rule , chapter 173-304 WAC, applies management of agricultural waste. The proposed rule is actually less stringent in this regard than the current rule

Commenter **Nelson** ***Section*** **010** ***Comment #*** 211

Comment DOE's proposed WAC 173-350-010 Purpose under (1) DOE states that setting minimum functional performance standards for the proper handling and disposal of solid waste originating from residences, commercial, agricultural and industrial operations and other sources. These standards will cost time and money to implement, track and for businesses to administer.

Ecology's Response Ecology recognizes that implementation of the proposed rule will not be without cost. However, the standards are minimum requirements for the protection of human health and the environment.

Commenter **Nelson** ***Section*** **100** ***Comment #*** 212

Comment Under WAC 173-350-100 Definitions it lists "Agricultural composting," "Agricultural wastes" and "Agronomic rates" "Composting," and "Crop residues." All of these definitions can be interpreted as agricultural, which the Legislature did not list in its intent of regulations for solid waste.

Also under the definition for "Soil amendment" means any substance that is intended to improve the physical characteristics of soil, except composted material, commercial fertilizers, agricultural liming agents, unmanipulated animal manures, unmanipulated vegetable manures, food wastes, food processing wastes, and materials exempted by rule of the department … Why are these even listed if they are going to be exempted? This would seem to make it more confusing than it needs to be. It would be clearer to the average lay reader to not have any of this listed at all.

Ecology's Response The definition of soil amendment was developed by the legislature and is contained in RCW 70.95.030. Not all soil amendments are exempt from regulation. One of the exemptions, the land application of crop residues and manures at agronomic rates, is directly applicable to this comment. However, Ecology does not agree that agriculture should be exempt from all aspects of this regulation (see response to Nelson, comment #210.)

Commenter **Nelson** ***Section*** **200** ***Comment #*** 214

Comment Under WAC 173-350-200 Beneficial use permit exemptions this section says that if you are exempt you have to apply for a permit, then DOE will decide if you get to have one, adding to the regulatory burden on DOE and farmers. Again DOE starts talking about agronomic rates land application etc. All of these specifications are covered under farm plans prepared by the local conservation district and NRCS. The Department of Ecology is duplicating a regulation that is already in place. Department of Ecology has strayed outside the Legislature's intent for this WAC.

Ecology's Response The commenter has misunderstood the section being commented on. Proposed WAC 173-350-200 creates by rule, an application process to apply for a beneficial use determination explicitly authorized by the Legislature as stated in RCW 70.95.300 (2). If an activity is otherwise exempted by a different section of the rule, section -200 is not applicable.

Commenter **Nelson** ***Section*** **220** ***Comment #*** 215

Comment New Section WAC 173-350 220 Composting facilities. This section states it is not applicable to those exempt from a handling permit, but lists agricultural composting throughout this section.

The end result of this regulation will be a reduction in composting, an increase in the regulatory burden on our farms and businesses all to provide a solution to a problem that doesn't exist. In the end this regulation fails in both goals. It does not simplify anything and it will not encourage composting.

Ecology's Response Commenter refers to the composting section as an increase in the regulatory burden on farms. Ecology established the exemptions for agricultural composting based on repeated requests for clarification by health departments and farmers alike. With increasing links between farms and urban/suburban areas, Ecology received increasing pressure to address composting as an industry and composting as an agricultural practice used to maintain soil fertility.
Ecology agrees that a table or graphic explanation of the exemption categories would be helpful. However, Ecology maintains that the categories themselves represent a good balance between farmers engaged in activities solely for the purpose of improving soil health, and farmers who want to move into the commercial composting arena. The regulation simplifies composting regulations by sorting out which kinds of composting activities require solid waste handling permits and which don't.

Commenter **Newman** ***Section*** **200** ***Comment #*** 279

Comment Vaagen Brothers Lumber, Inc. thank the State of Washington Dept of Ecology for the opportunity to respond to the proposed solid waste regulation revisions, in their effort to streamline the regulatory process for affected private sector parties. Our comment focuses on the State's recognition of the potential benefits of wood residue materials.

We applaud the Dept of Ecology for their recognition of the potential of wood residue produced by the sawmill industry. We at Vaagen Brothers Lumber, Inc. began exploring the benefits of wood residue produced at our Republic facility approximately three years ago. We have found that, just as perhaps the DOE has envisioned in some instances, wood residue by-products show merit for their use to rehabilitate disturbed land surfaces, as beauty bark in commercial and consumer landscape design, as sight and sound buffers in conjunction with berm construction, and as base material for agronomic field trials, and for soil supplements. We currently employ our wood by-products in beneficial field applications and shall continue to do so for the foreseeable future.

We believe the revised proposed solid waste regulations can help the sawmill industry to focus on all the products in the production process and re-think the role that sawmill by-products can have in the marketplace.

Ecology's Response Comment Noted

Commenter **Penor** ***Section*** **314** ***Comment #*** 289

Comment The revisions to WAC 173-314 Waste Tire carrier and storage site licenses

Comment: All the revision in this section have been made to the waste tire storage section and any changes to the waste tire hauler have been minimal. If no more regulated emphasis is put on waste tire carriers Washington states tire problem will increase as the waste stream volume increases. If you have not checked out EPA State scrap tire programs that is a quick reference guide to all states scrap tire management please do. For your convenience here is the link http://www.epa.gov/oswrcra/non-hw/tires/scrapti.pdf

Ecology's Response Ecology does not agree that there has been a disproportionate emphasis placed on tire storage facilities in this section of the proposed rule. Ecology has blended the requirements of chapter 173-314 WAC and the current solid waste rule chapter 173-304 WAC to create this section. The requirements are relatively unchanged for both waste tire storage facilities and tire transporters. It should also be noted that the requirements for tire transporters follow the statutory authority granted Ecology in chapter 70.95 RCW.

Commenter **Penor** ***Section*** **350** ***Comment #*** 288

Comment Section (1) (a) Applicability

Comment: This section exempts waste tire stored in enclosed buildings or mobile containers. There should be some sort of finality with waste tires stored or housed in enclosed building or containers. These waste tire volumes should be reported to the local health department so it could be forwarded on to the Local fire department.

Ecology's Response Language regarding tires stored in enclosed buildings reflects current waste tire regulation found in chapters 173-314 WAC and 173-304-420. Ecology's intent is to incorporate existing requirements for tire management into new statewide solid waste regulation with minimal change and repeal chapter 173-314. Current regulation is applicable to waste tire storage facilities that are required to obtain a solid waste handling permit from a local jurisdictional health department. Chapter 173-304-420 (1)(c) currently exempts waste piles stored in buildings provided no liquids or sludges with free liquids are added and no solid waste permit is required. Any current obligation of a property or business owner to notify local fire authorities of activities currently subject o existing fire codes and inspections is unaffected by the proposed rule.

Commenter **Penor** ***Section*** **350** ***Comment #*** 287

Comment Section (3). Waste tire carrier license requirements

Comment: Should have a section that states if a waste tire carrier handles tires in any other way needed other than for transporting purposes waste tires (processing/recycling) a solid waste handling permit would be required.

Ecology's Response Handling, including processing, would already be subject to applicable sections of the regulation. This section speaks to tire storage and hauling as authorized in RCW 70.95

Commenter **Penor** ***Section*** **350** ***Comment #*** 286

Comment WAC 173-350-350 Waste Tire Storage and Transportation

Section (2) (b) All waste tires that are being transported shall be delivered to a facility that meets WAC 173-350-040 (5).

Comment: With out any record reporting by licensed haulers the only volume reports documented are by storage facilities. Tires are being hauled by licensed tire haulers that are not being taken to facilities that have to keep and report records. This makes the reporting that does get documented annotated from the true waste tire volume being hauled in Washington State.

Ecology's Response Ecology's intent is to incorporate existing requirements for tire management into new statewide solid

waste regulation with minimal change and repeal chapter 173-314. If a solid waste permit is applicable, reporting requirements are a permit condition.

Commenter **Pohle** ***Section*** **310** ***Comment #*** 98

Comment After reviewing Chapter 173-350 WAC, Grant County is providing a written comment regarding intermediate solid waste handling facilities (WAC 173-350-310). Presently, Grant County has 13 drop box sites located in rural areas to minimize illegal dumping. Each site has four large metal containers with metal screens to control litter. Each container is inspected on a regular basis to ensure that there are not any holes.
One section of the rule states that each drop box will be required to have a lid that prevents water infiltration. Adoption of the rule would be a financial hardship for Grant County because drop boxes are not a large source of revenue. Fitting each container with a new metal lid would cost thousands of dollars. Besides, attendants would not be able to operate the heavy lids anyway. Purchasing new containers with lids or building a cover over each site would also not be feasible.
In addition, Grant County is situated in an arid region with only 7 to 8 inches of annual rainfall. With such low rainfall, there is minimal rainfall accumulation in drop box containers. With more than 300 sunny days per year, evaporation takes care of most of the water accumulation.

Ecology's Response Ecology agrees that the requirement for drop box lids that prevent infiltration would be very difficult to implement, and have determined that the current requirement for a screened lid is adequate. The section has been revised in accordance with this determination.

Commenter **Prosch** ***Section*** ***Comment #*** 94

Comment Thank you for the opportunity to comment on the proposed WAC 173-350 Solid Waste Handling Standards, version OTS 5495.3. Over all the regulation is a vast improvement over the WAC 173-304. We are aware no regulation will please everyone. The following comment is our concern regarding the proposed regulation.

Financial assurance is provided for Waste Tire, Moderate Risk Waste and Limited Purpose Landfill facilities. This should remain in tact. Composting Facilities and Piles Used for Storage and Treatment facilities can also foist burden on a landowner or a jurisdictional agency when the facility operator/owner abandons the facility.

Composting facilities can store large amounts of feedstock and partially composted materials. These piles can become waste materials in the event the facility operator/owner abandons the facility. The same could be said for Piles Used for Storage Facilities where thousands of yards of petroleum contaminated soil waiting for treatment or partially treated is abandoned.

Relying upon local jurisdictions to have the political will to write ordinances that require financial assurance can inadvertently target certain communities for operators that find no accountability in the form of financial assurance attractive.

Financial assurance needs to be added for Composting Facilities and Piles Used for Storage Facilities.

Ecology's Response In the proposed rule Ecology limited the requirement for financial assurance to three facility types. The reason for this limitation was based on statutory requirement (limited purpose landfills, waste tire storage and transportation) and demonstrated need (waste tire storage, large-scale moderate risk waste facilities). An additional factor that Ecology considered is the cost of maintaining financial assurance instruments. In some cases these costs can be equal to, or even exceed the value of the instrument.

Ecology acknowledges the concern about potential abandonment of organic materials at a composting facility. We have received comments requesting financial assurance instruments for all composting facilities as part of the permitting process. Ecology views financial assurance as an important tool for many types of solid waste handling. However, requiring composting facilities to secure financial assistance would be an undue barrier to entrance into the industry. Ecology views the permitting process and design requirements as tools that will prevent speculative accumulation of organic materials. In addition, under the new composting facility standards, immediate environmental health would not be threatened if a permitted facility were abandoned.
Ecology recognizes there would be costs associated with the removal of partially composted material from a facility in the event an owner or operator "walks away." These materials do have value, however, and would likely not require disposal at a landfill.

Commenter **Sells** ***Section*** ***Comment #*** 178

Comment Please consider this letter as comments on behalf of the Washington Refuse and Recycling Association regarding the above referenced draft solid waste handling standards.

The Department will receive a much more detailed comment on the proposed standards from individual members. On behalf of WRRA, please accept our appreciation for the job done by Department staff in revising the minimum functional standards. We consider this draft to be a significant improvement over the existing regulations. Specifically, the facility specific organization of the rules is very helpful, and makes the rules much more user friendly. We also appreciate the manner in which Department staff listened to our members" comments and implemented many of them. It is always gratifying to see those of us actually on the "front lines" involved this deeply in the rule making procedure.

As I indicated above, you will receive specific comments from various members, but please be assured that the industry is very pleased with the work that has been done and looks forward to working with the Department towards a final draft.

Ecology's Response Comment noted.

Commenter **Snyder** ***Section*** ***Comment #*** 18

Comment Exemptions clauses: Sections 200, 210, 220 and 320 refer to exemptions from the solid waste handling permitting process. As a fully compliant permitted solid waste composter and recycler, this causes our company some concerns. The draft regulation sets design and operating standards, requiring the operator to make certain notifications to the JHD prior to commencing operations and to make annual reports to the JHD. The sections also "allow" the JHD to inspect the facility. However, because no solid waste permit is required there appears to be no mechanism for the JHD to review the notifications or enforce any non-compliant activity.
issue 1: The enforcement becomes an after-the-fact activity.
Issue 2: Typically solid waste permit fees pay for staff review time and oversight functions. How will this activity be funded?

Ecology's Response The proposed rule does not assign a jurisdictional health department (JHD) any work at permit exempt facilities. Although a permit exempt facility must notify the JHD and Ecology of their intent to operate under a categorical exemption, review is at the discretion of the JHD. The operator of a categorically exempt facility must allow the JHD access to inspect, however, the JHD is not required to do so. Lastly, the JHD will receive a copy of the annual report. As is the case with notification, review of the report is at the JHD's discretion. It should also be noted that that these activities will also be eligible for reimbursement under the Coordinated Prevention Grant program.

Commenter **Tebaldi** ***Section*** ***Comment #*** 106

Comment A second area of emphasis is the blanket exemptions for recycling facilities. While an increase in recycling facilities will help recycling to be a bigger part of a sustainable society, recent history has shown that improperly designed or operated recycling facilities can be environmental problems as well. In addition, many local recycling companies have invested heavily in environmental controls and operations. In some cases, the impetus for the increased control was the solid waste handling permit. Removing this requirement for facilities with a higher risk of environmental problems will result in facilities with lesser environmental controls.

Ecology's Response Several commenters have expressed similar concerns. Ecology has made changes to the approach to categorical exemptions for material recovery facilities (MRFs) and recycling to address these comments (see Hansen, comment #30). The basic approach is to regulate all material recovery facilities (MRF) as intermediate solid waste handling facilities (section -310), with categorical exemptions from permitting available only to those facilities that accept only "recyclable material", meet the disposal threshold criteria, and other standard terms and conditions. Section -210 would then be applied only to recycling operations that did not classify as a MRF per the revised definitions. These recyclers would be those operations that were truly recycling, actually processing the waste into a new product or usable material, rather than just collecting and processing waste materials for transport. Terms and conditions for recycling facilities have been modified to delete the disposal threshold as it would not be a factor at the non-MRF recyclers.

Commenter **Tebaldi** ***Section*** **020** ***Comment #*** 107

Comment Comment: The City of Tacoma supports the exemption of drop boxes that contain recyclable materials from regulation under the proposed rule. It is suggested that language be added that the drop boxes exempted from 173-350 WAC contain no more than five percent (of the total contents of the box), of materials unacceptable to the receiving facility. This is consistent with the proposed language for recycling facilities proposed in section 210. Recycling by public and private entities will be necessary factor in the achieving sustainability for our region, but an increasing amount of waste is currently transported improperly as recyclable material.

Ecology's Response Ecology does not believe that adding a requirement to maintain a 5% maximum contaminant level is warranted in this case. The exemption is for drop boxes used solely for collecting "recyclable materials". The key to this exemption is with the term recyclable materials. Recyclable materials are defined so that the local county solid waste plan determines what recyclable materials are. If materials other than those identified in the local plan as "recyclable materials" are being handled the activity may be subject to permitting.

Commenter **Tebaldi** ***Section*** **100** ***Comment #*** 108

Comment definition of "Home composting"
Comment: The definition of "Home composting" would allow some to interpret that home composting of garbage is acceptable. The City of Tacoma believes that the definition of home composting should specifically prohibit the composting of garbage, rubbish or trash.

Ecology's Response Ecology has worked to develop a definition for home composting that describes the intended activity clearly enough without listing many individual materials that may or may not be composted at the household level. Commenter requests explicitly prohibiting "garbage, rubbish and trash," from the materials allowed to be composted under "home composting."
Ecology does not view these additional terms as necessary to the success of home composting. Only one of these terms is already defined. Ecology does not believe listing all three would bring any clarity to the activity. Many materials one might consider "trash" are safely and easily composted in home composting systems.
Washington state is fortunate to have local governments and non-profit organizations that have lead the country in promoting backyard composting programs for more than a decade. These programs teach

people how to compost yard and garden debris as well as foodwastes at the household level, using appropriate methods depending on the type of material being composted. Home composting is an important waste reduction activity. Ecology does not see the need to include individual waste types in the definition.

Commenter **Tebaldi** ***Section*** **100** ***Comment #*** 109

Comment Definition of "Materials recovery facility"
Comment: The City of Tacoma supports the language specifying a maximum contamination level.

Ecology's Response Comment noted. Although the definition has been changed the volumetric threshold is maintained in the terms and conditions for permit exemptions. Please see response to Tebaldi, comment #106.

Commenter **Tebaldi** ***Section*** **100** ***Comment #*** 110

Comment Definition of "Municipal solid waste"
Comment: The City of Tacoma supports the language that defines MSW with the following revision to the last bullet in the definition, "Mixed or segregated recyclable material that has been source separated from garbage, refuse and similar solid waste. Individual loads of mixed or source separated recyclable material shall not exceed five percent by weight or volume residual material that cannot be recycled at the intended recycling facility. The residual from source separated recyclables is MSW."

Ecology's Response The suggested change to the definition of municipal solid waste is unnecessary. The volumetric thresholds are contained in the terms and conditions for a material recovery facility to operate under a permit exemption.

Commenter **Tebaldi** ***Section*** **210** ***Comment #*** 111

Comment The City of Tacoma supports the relaxation of the standards for Recycling Facilities, but believes the proposed standards allow too much freedom from the permitting requirements. Recycling facilities in Pierce County and the City of Tacoma have had problems resulting in cleanup activities. Blanket exemptions should only be allowed when the materials recycled pose very little risk or require minimal oversight, or the facilities themselves are enclosed. In many cases the businesses that are regulated by solid waste permits have had a much better history of environmental compliance and have a higher margin of safety due to improved facility design and operation. In Pierce County and the City of Tacoma, many of the established recycling businesses have invested heavily in environmental controls and safe operations because of the regulatory restrictions. Some suggestions include the following:
• There should be clear criteria and processes for the thresholds that would require a solid waste permit. This is a very subjective area, and it will be difficult to determine the applicability of the solid waste permitting process without a clear process and criteria.
• One option is to develop Best Available Control Technology (BACT) or Best Management Practices for which the exemption is allowed for specific recycling facilities. There are different types of recycling facilities that are currently already permitted in Washington State. Many of these facilities, particularly those that handle difficult materials (demolition waste) or other materials with the potential for environmental problems, can provide the basis for BACT that should be applied to earn the exemption.
• The Jurisdictional Health Department should be given more than thirty days notice from the facility operator. It is suggested that the regulation provide for Health Department review and approval of an application for the exemption prior to development of the facility. Similar to the requirements for other facilities, an opportunity for the public to comment on the proposed facility should also be incorporated.

Ecology's Response Ecology is making several changes to sections -210 and -310 (please see response to Tebaldi, comment #106). One of the key elements of the rule that these changes seek to clarify is that the traditional "recycling facility" is now defined as a material recovery facility. "Recycling" is the actual transformation or remanufacturing of the material into a usable form or a new product. Because of the variability of recycling activities it would be very difficult for Ecology to determine Best Management Practices tailored to each type.

Commenter **Tebaldi** ***Section*** **220** ***Comment #*** 112

Comment Compost Facilities exempt from Solid Waste Handling Permits Subsections (iii) and (viii)
Comment: These exemptions appear to conflict Section (iii) sets the upper limit of on-site material at 40 cubic yards and Section (viii) sets the upper limit at 250 cubic yards. Also, Section (viii) does not define on-site material as Section iii does. The exemptions should be consistent.

Ecology's Response The primary difference between the two categorical exemptions cited are in which terms and conditions apply to the composting activity. Ecology will produce a user friendly guidance document as part of rule implementation to explain the categories.

Commenter **Tebaldi** ***Section*** **240** ***Comment #*** 113

Comment Comment: The City of Tacoma Steam Plant is permitted under Section 240 and does not accept solid waste from the general public. While there are systems set up to divert some recyclable materials (commingled household type materials generated by employees, cardboard and metal) generated by facility operations there is no need to set up a separate recycling facility for the plant. The City suggests the phrase 'for all facilities that accept solid wastes from the general public or self haul residential, commercial or industrial solid waste generators' be added to the requirement specified in this section.

Ecology's Response Ecology concurs with the commenter that the requirement to provide recycling facilities needs to be modified to only include those facilities receiving waste from public and has revised the section accordingly.

Commenter **Tebaldi** ***Section*** **360** ***Comment #*** 114

Comment Comment: There are two comments related to this subsection regarding notification. Notification of the type of material to be collected can be accomplished if the notification can be kept relatively general and broad. Estimating quantities is difficult unless there is a historical record for an individual collection site. Quantities of specific types of HHW collected vary from location to location and are impacted by other factors as well. Notification of the jurisdictional health department should be sufficient. Requiring notification to Ecology is an unnecessary step.

Ecology's Response The intent is for the notification requirements to be broad and general in nature. All counties in the state have experience with HHW over a number of years, so making reasonable magnitude estimates should not be problematic. Ecology maintains a statewide, toll-free hotline which assists local citizens to find mobile collection events. Ecology also tracks the number and type of collection events annually. Lastly, notification to Ecology is required for all categorically exempt solid waste handling activities because Ecology has an enforcement role in the event that terms and conditions are not met.

Commenter **Tebaldi** ***Section*** **360** ***Comment #*** 115

Comment The specific requirements described in this section can be a problem for older facilities, Provisions should be added to the regulations that would allow "grandfathering" of existing facility designs that have been approved and permitted. Just one example in the case of the City of Tacoma is the requirement for secondary containment, Tacoma has one storage are for all packed (loose, lab and bulk packed) HRW materials and that area shares one large containment area. If the Tacoma HHW Facility secondary containment area were required to have segregated areas for incompatible wastes, significant additions would be required. Segregated areas would decrease the usable floor space of the facility. The current design has been reviewed, approved and permitted by the jurisdictional health department, and the Department of Ecology has also been involved in the process. There are other areas of concern for the design standards such as the secondary containment capacity for fire suppression systems.

Ecology's Response The commenter mentions loose-packed, lab-packed, and bulk consolidated drums and the problems with segregating the secondary containment for those drums. MRW in loose-pack and lab-packed drums already has secondary containment. The primary container is in the drum and holds the waste in smaller bottles, cans and other small containers. The drum is the secondary containment for the smaller containers. The only remaining issue is for drums of bulk consolidated materials which are chemically incompatible with other bulk consolidated drums (or other wastes without independent secondary containment) in the same secondary containment area. The vast majority of such bulk consolidated containers are drums of flammable liquids. If there are other materials stored in bulk in that area which are chemically incompatible with flammable liquids, they should be placed in another area, placed on spill containment pallet or otherwise rely on separate secondary containment.
The commenter mentions a possible problem in meeting the secondary containment capacity requirements under the new rule for the fire suppression system. This is a standard fire code and environmental protection requirement and has been in Ecology MRW facility guidance for over 10 years. Any existing facility that might not meet this requirement should work with their local fire department and local health department to satisfy this requirement. Changes to existing designs which may resolve problems with secondary containment capacity could include: changing to a different fire-suppressing agent, raising the level of containment berms, installing an overflow tank, and other options.

As an existing facility, under WAC 173-350-030 (2), an HHW collection facility would have up to 36 months after the effective date of the new rule to plan and implement any design requirements that might not already meet the MRW facilities design section of the rule.

Commenter **Tebaldi** ***Section*** **360** ***Comment #*** 116

Comment The City of Tacoma reiterates its position that financial assurance mechanisms for City or County owned and operated MRW facilities are excessive and a waste of resources. The following list supplies background for the City's position:
• Most of the City or County owned facilities are now an integral part of their respective solid waste systems and provide a service that is expected from their citizens. The City of Tacoma continues to expand the services provided at its HHW facility, and there are no plans to close the facility.
• Unlike landfills, there are no capacity issues that would force closure of these facilities. There is no history indicating that the municipal or county owned facilities have been a problem from a closure perspective.
• The city and county run operations are not subject to the same issues as the private MRW facilities, and the financial considerations are very different. The purpose and goal of the government MRW collection facilities is much different that the private MRW facilities that provide transportation and processing services similar to Treatment, Storage and Disposal Facilities.
• A large portion of the closure cost for the City and County owned MRW sites would be the removal of the largest amount of waste stored on site. In the case of Tacoma, there is between a two and four month's accumulation capacity at the facility, depending on the time of the year. Assuming the higher end number, the financial assurance mechanism would be required to cover between 10-15 percent of the facility's annual operating costs. Even if additional funds were required in the fund, in no case should it reach half of the facility's annual operating cost The administrative and financial requirements are not warranted based on the size of the fund or instrument required. The different mechanisms all require significant resources outside the scope of normal operations.
• Since it is likely that there are no plans to close such facilities, schedules for contributing to reserve accounts would likely be very long. The yearly deposits may initially be as low as $5,000-10,000 dollar for larger facilities if the closure

date is projected 10 or more years out.

Ecology's Response Threshold for required financial assurance (subsection -360[9][a])) has been increased from 550 gallons to 9,000 gallon.

IV. Summary of public involvement opportunities

In an effort to develop the best rule possible Ecology engaged in an extensive public involvement campaign for this rule-making process. Public involvement and outreach took many forms, including:

- Scoping Workshops – We conducted scoping workshops around the state to solicit input on needed changes to the existing rule. The Scoping Workshops were held at the following locations:

Bellingham	9/14/98
Bellevue	9/14/98
Lacey	9/15/98
Vancouver	9/15/98
Spokane	9/21/98
East Wenatchee	9/22/98
Kennewick	9/23/98

- State Solid Waste Advisory Committee (SWAC) - The SWAC all has been involved throughout the process. SWAC has been kept apprised of progress through regular briefings at their bi-monthly meetings. Several SWAC members participated on the External Advisory Committee.

- External Advisory Committee (EAC) – The EAC was comprised of twenty (20) members, half of which were also SWAC members. The EAC had representation from local health departments, the solid waste industry (both public and private), the environmental community, agriculture, business, industry associations, consulting, and other state agencies. The EAC met over a fifteen month period and was instrumental in development of the "stakeholder draft" as well as many of the concepts that have carried through to the final rule.

- "Open houses" were held four locations around the state to preview a working draft for stakeholders. The Open Houses were held at the following location:

Spokane	4/10/00
Yakima	4/12/00
Bellevue	4/13/00
Lacey	4/14/00

- Stakeholder Review – In an effort to get as much input prior to formal proposal Ecology conducted an informal comment period for stakeholders. Comments were solicited from a mailing list of over 600 stakeholders. We received approximately 800 comments. We considered each of these comments and incorporated many into the "informal public review draft".

- Informal Public Review – We also solicited comments from the public at large. Mailings were sent to our interested parties list (700+) and display ads were placed in major newspapers around the state. This review generated approximately 1200 comments. During the review period we conducted public workshops around the state. These workshops were held in the following locations:

Ellensburg	12/5/00
Mount Vernon	12/6/00
Spokane	12/7/00
Pasco	12/12/00
Renton	12/14/00
Lacey	12/19/00

- Public Hearing - In accordance with the Administrative Procedures Act, chapter 34.05 RCW, a Public Hearing was held on August 6, 2002. The purpose of the hearing was to receive comments from interested persons on the proposed chapter 173-350 WAC, *Solid Waste Handling Standards*. The Public Hearing was conducted simultaneously in four locations in the state using video-conferencing technology provided by the Washington Department of Information Systems. The locations included Spokane, Yakima, Lacey, and Renton. The hearings

officer (Jerry Thielen) conducted the meeting from the Spokane location. A total of seventy-seven (77) people attended the public hearing. Only four (4) people provided oral testimony. (See Appendix B)

In addition to the workshops and informal review opportunities listed above Ecology provided information through our Internet web site (http://www.ecy.wa.gov/programs/swfa/304revisions/index.html). Information included background on the rule-making effort, contact information, process updates, supporting documents, and draft rule text. Feedback from interested parties indicates that the web site was well received and used extensively.

Ecology also provided information through the use of Focus Sheets, newsletters, post cards, and press releases. Press releases (2) were sent out through Ecology's media distribution list. Six (6) mailings were sent out to the interested parties' mailing list, a total of approximately 3100 mailings. (See Appendix C)

V. Appendices

Appendix A -- Written Comments

Appendix B -- Public Hearing Information

Appendix C – Mailings and Press Releases

Appendix A

Written Comments

VAAGEN BROS. LUMBER, INC.

16391 N. Hwy. 21 - Republic, WA 99166-9623
(509) 775-3346 FAX (509) 775-3461

Washington State Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

Dear Sir/Ms:

I wish to make a comment on the proposed rule change, WAC 173-350.

Vaagen Brothers Lumber, Inc. thank the State of Washington Dept of Ecology for the opportunity to respond to the proposed solid waste regulation revisions, in their effort to streamline the regulatory process for affected private sector parties. Our comment focuses on the State's recognition of the potential benefits of wood residue materials.

We applaud the Dept of Ecology for their recognition of the potential of wood residue produced by the sawmill industry. We at Vaagen Brothers Lumber, Inc. began exploring the benefits of wood residue produced at our Republic facility approximately three years ago. We have found that, just as perhaps the DOE has envisioned in some instances, wood residue by-products show merit for their use to rehabilitate disturbed land surfaces, as beauty bark in commercial and consumer landscape design, as sight and sound buffers in conjunction with berm construction, and as base material for agronomic field trials, and for soil supplements. We currently employ our wood by-products in beneficial field applications and shall continue to do so for the foreseeable future.

We believe the revised proposed solid waste regulations can help the sawmill industry to focus on all the products in the production process and re-think the role that sawmill by-products can have in the marketplace.

Sincerely,

Jon Newman

Plant Manager
Republic Division

Department of Ecology
SEP 02 2002
SW & FAP

VAAGEN BROS. LUMBER, IN
16391 N. Hwy. 21 - Republic, WA 99166-962
(509) 775-3346 FAX (509) 775-3461

Washington State Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

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We believe the revised proposed solid waste regulations can help the sawmill industry to focus on all the products in the production process and re-think the role that sawmill by-products can have in the marketplace.

Sincerely,

Jon Newman
for Newman
Plant Manager
Republic Division

Department of Ecology
SEP 02 2002
SW & FAP

GRANT COUNTY
PUBLIC WORKS DEPARTMENT
124 Enterprise St. S.E.
Ephrata, Washington 98823

Serial No. 02-610

August 29, 2002

Michael Hibbler
WA State Department of Ecology
N. 4601 Monroe Suite 202
Spokane, WA 99205-1295

Subject: Written Comment
Chapter 173-350 WAC

Dear Mr. Hibbler:

After reviewing Chapter 173-350 WAC, Grant County is providing a written comment regarding intermediate solid waste handling facilities (WAC 173-350-310). Presently, Grant County has 13 drop box sites located in rural areas to minimize illegal dumping. Each site has four large metal containers with metal screens to control litter. Each container is inspected on a regular basis to ensure that there are not any holes.

One section of the rule states that each drop box will be required to have a lid that prevents water infiltration. Adoption of the rule would be a financial hardship for Grant County because drop boxes are not a large source of revenue. Fitting each container with a new metal lid would cost thousands of dollars. Besides, attendants would not be able to operate the heavy lids anyway. Purchasing new containers with lids or building a cover over each site would also not be feasible.

In addition, Grant County is situated in an arid region with only 7 to 8 inches of annual rainfall. With such low rainfall, there is minimal rainfall accumulation in drop box containers. With more than 300 sunny days per year, evaporation takes care of most of the water accumulation.

Sincerely,

Derek Pohle, P.E.
Director of Public Works/
County Engineer

JAM:jam

Information ..... (509) 754-6082
FAX ..... (509) 754-6087
e-mail ..... publicworks@grantcounty-wa.com
Derek Pohle, P.E., Director/County Engineer .. Ext. 504
Dave Heilman, Assistant Director ..... Ext. 502

Bob Bersanti, Construction Engineer ..... Ext. 503
Greg Cardwell, Assoc. Construction Engineer. Ext. 113
Zola Myers, Accountant ..... Ext. 105
Vic Levesque, Foreman-Sign Shop ... (509) 754-6085
Phil Slaugh, Supervisor-Solid Waste .. (509) 754-4319

Dean Carroll, Supervisor-Dist. No. 1 ... (509) 754-6586
Dennis Collier, Supervisor-Dist. No. 2 .. (509) 765-4172
Ron Bews, Supervisor-Dist. No. 3 ..... (509) 787-2321
Mike Phelps, Supervisor-Central Shop (509) 754-6086
Jerome Wawers, Bridge Supervisor ... (509) 754-6082

CHELAN-DOUGLAS HEALTH DISTRICT
200 Valley Mall Parkway, East Wenatchee, WA 98802
Personal Health: 509/886-6400 • FAX 886-6478
Environmental Health: 509/886-6450 • FAX 886-6449

Mail & FAX

August 30, 2002

Mike Hibbler
WSDOE
N. 4601 N. Monroe Ave
Spokane, WA 99205-1295

Re: WAC 197-350 Comments

Dear Mr. Hibbler:

Thank you for the opportunity to comment on the proposed WAC 173-350 Solid Waste Handling Standards, version OTS-5495.3. Over all the regulation is a vast improvement over the WAC 173-304. We are aware no regulation will please everyone. The following comment is our concern regarding the proposed regulation.

Financial assurance is provided for Waste Tire, Moderate Risk Waste and Limited Purpose Landfill facilities. This should remain in tact. Composting Facilities and Piles Used for Storage and Treatment facilities can also foist burden on a landowner or a jurisdictional agency when the facility operator/owner abandons the facility.

Composting facilities can store large amounts of feedstock and partially composted materials. These piles can become waste materials in the event the facility operator/owner abandons the facility. The same could be said for Piles Used for Storage Facilities where thousands of yards of petroleum contaminated soil waiting for treatment or partially treated is abandoned.

Relying upon local jurisdictions to have the political will to write ordinances that require financial assurance can inadvertantly target certain communities for operators that find no accountability in the form of financial assurance attractive.

Financial assurance needs to be added for Composting Facilities and Piles Used for Storage Facilities.

If you have any questions please feel free to call me at (509) 886-6460.

Sincerely,

David D. Prosch

David D. Prosch
Environmental Health Specialist
Solid Waste Program

To: Mike Hibbler, Dept. of Ecology
Re: Comments on the proposed solid waste handling minimum functional standards.

Submitted by staff of the Whatcom County Moderate Risk Waste Facility, Keith Fredrikson, Alice Cords and Charles Sullivan.
September 5, 2002

As operators of the moderate risk waste facility (mrwf) in Whatcom County, we would like to submit comments to the proposed changes to the minimum functional standards for solid waste handling facilities. Our experience and professional training in the hazardous waste field gives us specific insights to the challenges of handling, processing, packaging and shipping hazardous waste generated by households and small quantity generators.

In general we are concerned that some of the proposed requirements may be unnecessary, not founded in sound science or so expensive that the costs may outweigh the benefits. These standards are being adopted after the construction of the Whatcom County MRWF, and some of the requirements are greater than those existing at the time of construction. Bringing our existing facility into compliance with these new requirements would be costly for the county and represent an unfunded mandate. We would like to see a clause that would grandfather in existing facilities.

We have specific comments on these sections of the standards that pertain to moderate risk waste facilities:

173-350-360-(5)a(A)III Requiring secondary containment that can hold 20 minutes of flow from a fire suppression system implies that the fire suppression system uses liquid. Our MRWF uses a dry chemical system that would float on top of the liquid in the containment system and would not displace liquid from it. The capacity of our containment system should not have to be increased for this reason.

173-350-360-(5)a(C) makes reference to fire suppression water. Water should not be used as a fire extinguishing material in the event of a chemical fire.

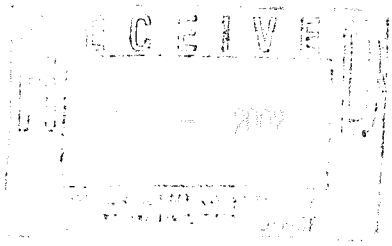
173-350-360-(5)b-iii requires a determination to be made by a corrosion expert of the degree and type of corrosion protection required for tanks. What exactly is a corrosion expert? Does it include a tank manufacturer? Alternatively, could we rely on a visual inspection and concurrence with the jurisdictional health department to determine when a tank needs to be painted?

173-350-360-(5)biv This section requires areas used to load and unload vessels be designed to contain spills, drips, and accidental releases. If this is interpreted to mean that containment sumps be installed in these areas, this could represent a significant expense to our program, and an unfunded mandate.

173-350-360-(5)b-v We currently use traffic cones to protect our oil tank from impact by vehicles. It is unclear whether this section would require us to install bollards. That would be an additional expense and an unfunded mandate.

173-350-360-(6)b-iii The requirement for five year inspections by a licensed engineer represents an additional cost for our program and is an unfunded mandate. It is unclear that this inspection would be able to reveal any deficiencies not found in the annual inspection.

City of Tacoma
Public Works Department



September 4, 2002

Mike Hibbler
Project Manager
Department of Ecology
North 4601 Monroe
Spokane, WA 99205

Subject: Comments on Proposed Regulation, Chapter 173-350

Dear Mr. Hibbler:

Thank you for the opportunity to comment on the draft regulation, Chapter 173-350, of the *Washington Administrative Code* (*WAC*). The attached document contains the comments from the City of Tacoma (City) Solid Waste Management (SWM) Division.

We would like to emphasize the comments directed at the financial assurance requirements and design requirements for Moderate Risk Waste (MRW) facilities. The City SWM Division strongly believes that the financial assurance requirements for MRW facilities, especially those owned by local governments for the purposes of collecting CESQG waste, is excessive and unwarranted. This is an unnecessary administrative exercise that does not appear to solve any real problems. Please refer to the information in the attached comments for further information.

A second area of emphasis is the blanket exemptions for recycling facilities. While an increase in recycling facilities will help recycling to be a bigger part of a sustainable society, recent history has shown that improperly designed or operated recycling facilities can be environmental problems as well. In addition, many local recycling companies have invested heavily in environmental controls and operations. In some cases, the impetus for the increased control was the solid waste handling permit. Removing this requirement for facilities with a higher risk of environmental problems will result in facilities with lesser environmental controls.

Thank you for your consideration. If you have any questions, please contact Gary Kato at 253-593-7713.

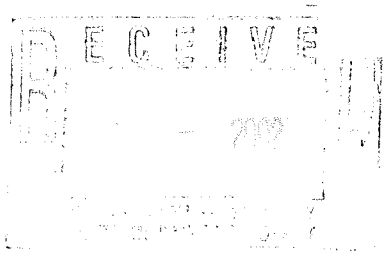
Sincerely,

Alan M. Tebaldi, P.E.
Public Works Division Manager
Solid Waste Management Division

AMT:GHK:sr (W0553SR)

Attachment(s)

File: SWM – Recycling - MRW



Comments on 173-350 WAC
City of Tacoma Solid Waste Management
September 4, 2002

Section: 020 (18) Applicability
Comment: The City of Tacoma supports the exemption of drop boxes that contain recyclable materials from regulation under the proposed rule. It is suggested that language be added that the drop boxes exempted from 173-350 WAC contain no more than five percent (of the total contents of the box), of materials unacceptable to the receiving facility. This is consistent with the proposed language for recycling facilities proposed in section 210. Recycling by public and private entities will be necessary factor in the achieving sustainability for our region, but an increasing amount of waste is currently transported improperly as recyclable material.

Section: 100 – definition of "Home composting"
Comment: The definition of "Home composting" would allow some to interpret that home composting of garbage is acceptable. The City of Tacoma believes that the definition of home composting should specifically prohibit the composting of garbage, rubbish or trash.

Section: 100 – Definition of "Materials recovery facility"
Comment: The City of Tacoma supports the language specifying a maximum contamination level.

Section: 100 – Definition of "Municipal solid waste"
Comment: The City of Tacoma supports the language that defines MSW with the following revision to the last bullet in the definition. "Mixed or segregated recyclable material that has been source separated from garbage, refuse and similar solid waste. Individual loads of mixed or source separated recyclable material shall not exceed five percent by weight or volume residual material that cannot be recycled at the intended recycling facility. The residual from source separated recyclables is MSW."

Section 210 - Material Recovery and Recycling Facilities
Comment: The City of Tacoma supports the relaxation of the standards for Recycling Facilities, but believes the proposed standards allow too much freedom from the permitting requirements. Recycling facilities in Pierce County and the City of Tacoma have had problems resulting in cleanup activities. Blanket exemptions should only be allowed when the materials recycled pose very little risk or require minimal oversight, or the facilities themselves are enclosed. In many cases the businesses that are regulated by solid waste permits have had a much better history of environmental compliance and have a higher margin of safety due to improved facility design and operation. In Pierce County and the City of Tacoma, many of the established recycling businesses

have invested heavily in environmental controls and safe operations because of the regulatory restrictions. Some suggestions include the following:

- There should be clear criteria and processes for the thresholds that would require a solid waste permit. This is a very subjective area, and it will be difficult to determine the applicability of the solid waste permitting process without a clear process and criteria.
- One option is to develop Best Available Control Technology (BACT) or Best Management Practices for which the exemption is allowed for specific recycling facilities. There are different types of recycling facilities that are currently already permitted in Washington State. Many of these facilities, particularly those that handle difficult materials (demolition waste) or other materials with the potential for environmental problems, can provide the basis for BACT that should be applied to earn the exemption.
- The jurisdictional Health Department should be given more than thirty days notice from the facility operator. It is suggested that the regulation provide for Health Department review and approval of an application for the exemption prior to development of the facility. Similar to the requirements for other facilities, an opportunity for the public to comment on the proposed facility should also be incorporated.

Section: 220 (b)- Compost Facilities exempt from Solid Waste Handling Permits Subsections (iii) and (viii)
Comment: These exemptions appear to conflict. Section (iii) sets the upper limit of on-site material at 40 cubic yards and Section (viii) sets the upper limit at 250 cubic yards. Also, Section (viii) does not define on-site material as Section iii does. The exemptions should be consistent.

Section: 240 (4)(a)(iii)
Comment: The City of Tacoma Steam Plant is permitted under Section 240 and does not accept solid waste from the general public. While there are systems set up to divert some recyclable materials (commingled household type materials generated by employees, cardboard and metal) generated by facility operations, there is no need to set up a separate recycling facility for the plant. The City suggests the phrase "for all facilities that accept solid wastes from the general public or self haul residential, commercial or industrial solid waste generators" be added to the requirement specified in this section.

Section: 360 (2)(a)
Comment: There are two comments related to this subsection regarding notification. Notification of the type of material to be collected can be accomplished if the notification can be kept relatively general and broad. Estimating quantities is difficult unless there is a historical record for an individual collection site. Quantities of specific types of HHW collected vary from location

to location and are impacted by other factors as well. Notification of the jurisdictional health department should be sufficient. Requiring notification to Ecology is an unnecessary step.

Section: 360 (5) – MRW Design Standards
Comment: The specific requirements described in this section can be a problem for older facilities. Provisions should be added to the regulations that would allow "grandfathering" of existing facility designs that have been approved and permitted. Just one example in the case of the City of Tacoma is the requirement for secondary containment. Tacoma has one storage are for all packed (loose, lab and bulk packed) HHW materials and that area shares one large containment area. If the Tacoma HHW Facility secondary containment area were required to have segregated areas for incompatible wastes, significant additions would be required. Segregated areas would decrease the usable floor space of the facility. The current design has been reviewed, approved and permitted by the jurisdictional health department, and the Department of Ecology has also been involved in the process. There are other areas of concern for the design standards such as the secondary containment capacity for fire suppression systems.

Section: 360 (9)
Comment: The City of Tacoma reiterates its position that financial assurance mechanisms for City or County owned and operated MRW facilities are excessive and a waste of resources. The following list supplies background for the City's position:

- Most of the City or County owned facilities are now an integral part of their respective solid waste systems and provide a service that is expected from their citizens. The City of Tacoma continues to expand the services provided at its HHW facility, and there are no plans to close the facility.
- Unlike landfills, there are no capacity issues that would force closure of these facilities. There is no history indicating that the municipal or county owned facilities have been a problem from a closure perspective.
- The city and county run operations are not subject to the same issues as the private MRW facilities, and the financial considerations are very different. The purpose and goal of the government MRW collection facilities is much different that the private MRW facilities that provide transportation and processing services similar to Treatment, Storage and Disposal Facilities.
- A large portion of the closure cost for the City and County owned MRW sites would be the removal of the largest amount of waste stored on site. In the case of Tacoma, there is between a two and four month's accumulation capacity at the facility, depending on the time of the year. Assuming the higher end number, the financial assurance mechanism would be required to cover between 10-15 percent of the facility's annual operating costs. Even if additional funds were required in the fund, in no case should it reach half of the facility's annual operating cost.

- The administrative and financial requirements are not warranted based on the size of the fund or instrument required. The different mechanisms all require significant resources outside the scope of normal operations.
- Since it is likely that there are no plans to close such facilities, schedules for contributing to reserve accounts would likely be very long. The yearly deposits may initially be as low as $5,000-10,000 dollar for larger facilities if the closure date is projected 10 or more years out.

Hibbler, Michael A.

From: Shane Martin [Shane.Martin@cdhd.wa.gov]
Sent: Wednesday, September 04, 2002 3:40 PM
To: Hibbler, Michael A.
Subject: WAC 173-350 Comments

Chapter 173-350 WAC Review.doc...

Attached are my comments regarding the proposed WAC 173-350 Solid waste handling standards. I will also send them by fax in case you do not receive this e-mail. I am not sure which method you prefer.

Thanks,

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Chapter 173-350 WAC Comments

Comment 1

"Materials recovery facility" means any facility that accepts source separated solid waste for the purpose of recycling and disposes of an incidental and accidental residual not to exceed five percent of the total waste received, by weight per year, or ten percent by weight per load.

This definition should be used for a Recycling Facility, not a Materials Recovery Facility. MRF's do not accept source separated solid waste; they accept commingled solid waste and recover recyclable material from the waste stream for reuse or sale. A more realistic number for the amount of incidental or accidental residual waste should be no more than 50%. A 95% recovery rate is too difficult to achieve. Remove the term "source separated."

Comment 2

"Municipal solid waste (MSW)" means a subset of solid waste which includes unsegregated garbage, refuse and similar solid waste material discarded from residential, commercial, institutional and industrial sources and community activities... The term MSW does not include:

Municipal solid waste should exclude "solid wastes from other sources, such as construction and demolition debris, autobodies, municipal sludges, combustion ash, and industrial process wastes that might also be disposed of in municipal waste landfills or incinerators." (U.S. EPA, Characterization of Municipal Solid Waste in The United States: 1996 Update. EPA530-R-97-015. Washington, DC.)

Comment 3

"Nuisance" means unlawfully doing an act, or omitting to perform a duty, which act or omission either annoys, injures, or endangers the comfort, repose, health or safety of others, offends decency, or unlawfully interferes with, obstructs or tends to obstruct, any lake or navigable river, bay, stream, canal, or basin, or any public park, square, street or highway; or in any way renders other persons insecure in life, or in the use of property.

DOE and local health jurisdictions should not be concerned with decency or security. Those responsibilities are the responsibility of law enforcement. We only should be focusing on nuisances that affect public

health and/or the environment. This definition is too broad. We cannot police all nuisances, i.e., those that endanger someone's comfort or repose.

Comment 4 **WAC 173-350-200 Beneficial Use permit exemptions.**
(2)(a)(vii) "Manage the waste in a manner that controls vector attraction;"

Add the words, "... and objectionable odors" after "... vector attraction;"

Comment 5 **WAC 173-350-200 (2)(c)** "The department may require ..."

Add the words, "and/or the jurisdictional health department" after "The department ..."

Comment 6 **WAC 173-350-210 Material recovery and recycling facilities**
(2)(b)(v)(D) "Any additional information required by written notification of the department."

Add the words, "and/or local health jurisdiction" after "... of the department"

Comment 7 **WAC 173-350-220 Composting Facilities**
(6)(b) Composting facilities – closure requirements. "The owner or operator of a composting facility shall: Develop, keep and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan shall include:"

Add "(iii) Methods of removing and properly disposing of leachate."

Comment 8 **WAC 173-350-220 Composting Facilities**
(9) Composting Facilities – construction records. "The owner or operator ... construction documentation in writing."

Add the words, "and until the owner or operator demonstrates to the jurisdictional health department that the actual construction is in conformance with the design standards of subsection (3)"

Comment 9 **WAC 173-350-230 Land application**
(4) Land application – Operating standards "The owner or operator of a land application site shall operate the site in a manner to prevent risks ..."

Change the word "risks" to "hazards" or "threats."

Comment 10 **WAC 173-350-230 Land application**
(4)(d)(iv) "If the seasonal high ground water is three feet or less below the surface, a management plan describing how ground water will be protected;"

A management plan describing how ground water will be protected should be required if the depth to ground water is "50 feet or less" from the surface. Delete the words, "... three feet or less ..."

Comment 11 **WAC 173-350-230 Land application**
(5) Land application – Ground water monitoring requirements. "There are no specific ... except as provided under WAC 173-350-040(5).

Delete the word "except" before "... as provided ..." If you don't delete the word "except", then owners and operators will not have to follow the requirements of WAC 173-350-040(5).

Comment 12 **WAC 173-350-310 Intermediate solid waste handling facilities.**
(3) Intermediate solid waste handling facilities – Design standards.

Include the requirement that the applicant provide fire control features and response procedures approved by the fire control jurisdictional agency.

Comment 13 **WAC 173-350-310 Intermediate solid waste handling facilities.**
(4)(B) Intermediate solid waste handling facilities – Operating standards. "Provide all-weather approach roads, exit roads, and all other vehicular areas;"

"All-weather roads" should be changed to "roads paved with asphalt or concrete." "All-weather roads" is too open to interpretation and do not adequately control fugitive dust. Some owners or operators will try to get by with a couple inches of gravel and call it an "all-weather road." There are problems with inclement weather, which causes the "all-weather roads" to become laden with mud and dirt, which causes "track-out" and fugitive dust emissions. "All-weather roads" not paved with asphalt or concrete cannot adequately be washed down or sweeped.

Comment 14 **WAC 173-350-310 Intermediate solid waste handling facilities.**
(4)(B) Intermediate solid waste handling facilities – Operating standards.

a) Add the requirement that the operation plan include details on how the operator is going to detect and prevent the disposal of dangerous or unacceptable waste at a transfer station, i.e., via random load checks, visual inspections, waste screening, etc.

b) The operation plan should include details on how the owner or operator is going to respond if dangerous waste is inadvertently received at a transfer station and how they are going to contain and properly dispose of it if it has been accidentally disposed at the transfer station.

c) Add the requirement that the owner or operator is responsible for providing information to the public on proper disposal methods and locations for dangerous/unacceptable waste disposal if the public shows

up at the gate with a load of dangerous/unacceptable waste. There should be tracking or follow-up procedures for determining if the person who showed up at the gate with dangerous/unacceptable waste properly disposed of it, i.e., requiring the owner or operating to record license plate information and to contact the department or jurisdictional health department with such information for follow-up.

d) Add the requirement that the operations plan provide details on the procedures for responding to an equipment failure, fire, severe storm, etc. The operations plan should explain where waste will be diverted during such incidents and whether backup equipment is available to keep the facility in operation and to remove on-site waste to a final disposal site.

e) Include the requirement that solid waste be removed to a landfill or final disposal site at the end of each operating day so that solid waste does not accumulate indefinitely.

f) The operations plan should include information on the maximum amount of solid waste that will be handled at the facility at any give time (facility capacity).

Comment 15 **WAC 173-350-310 Intermediate solid waste handling facilities.**
(6) Intermediate solid waste handling facilities – Closure requirements.

Add the requirement that a sign be posted upon closure, which provides directions to and the location to the nearest transfer station or disposal site where solid waste can be disposed of. This will eliminate a lot of illegal dumping at the gate of the closed transfer station.

Comment 16 **WAC 173-350-330 Surface impoundments and tanks.**
(9) Surface impoundments and tanks – Construction records. "... Facilities shall not commence operation until the jurisdictional health department has approved the construction documentation in writing."

Add the words, "and until the owner or operator demonstrates to the jurisdictional health department that the actual construction is in conformance with the design standards of subsection (3)" after "... documentation in writing."

Comment 17 **WAC 173-350-350 Waste tire storage and transportation.**
(6)(e)(iii)(C) "Safety, fire and emergency plans addressing the following: Procedures for fire fighting and the operation of fire control equipment;"

Add the requirement that the fire emergency plan, including a list of fire control equipment, be reviewed and approved by the fire jurisdictional agency.

Comment 18 **WAC 173-350-350 Waste tire storage and transportation.**
(11)(a) Waste tire storage and transportation – Storage site license requirements. "In order to obtain a waste tire storage license, the facility owner or operator shall first obtain a solid waste handling permit for the storage of waste tires from the jurisdictional health department."

Add the words, "The application fee for a solid waste handling permit for the storage of waste tires charged by a jurisdictional health department shall remain separate from the application fee for a waste tire storage site owner license charged by the department of licensing." Owners and operators might get confused between the fees charged for the license and the permit.

Comment 19 **WAC 173-350-360 Moderate risk waste handling.**
(2)(k)(vi) Mobile systems and collection events "... Owners and operators of mobile systems and collection events shall: (k) Prepare and submit a copy of an annual report ... include the following information: (vi) Any additional information required by written notification of the department;"

Add the words, "and or jurisdictional health department" after "... of the department..." so that the jurisdictional health departments can also ask for additional information.

Comment 20 **WAC 173-350-360 Moderate risk waste handling.**
(3)(i)(E) Limited MRW Facilities. "... Owners and operators of limited MRW facilities shall: (i) Prepare and submit ... the following information (E) Any additional information required by written notification by the department."

Add the words, "and or jurisdictional health department" after "... of the department..." so that the jurisdictional health departments can also ask for additional information.

Comment 21 **WAC 173-350-360 Moderate risk waste handling.**
(8) Moderate risk waste facilities – Closure requirements.

Add the requirement that a sign be posted upon closure, which provides directions to and the location of the nearest permitted moderate risk waste handling site. This will eliminate a lot of illegal dumping at the gate of the closed moderate risk waste handling facility.

Comment 22 **WAC 173-350-360 Moderate risk waste handling.**
(11) Moderate risk waste facilities – Permit application contents.

Add the words, "and until the owner or operator demonstrates to the jurisdictional health department that the actual construction is in conformance with the design standards of subsection (5)" after "... documentation in writing."

Comment 23 **WAC 173-350-400 Limited purpose landfills.**
(10) "The owner or operator ... department. Facilities shall not commence operation until the jurisdictional health department has approved the construction documentation in writing."

Add the words, "and until the owner or operator demonstrates to the jurisdictional health department that the actual construction is in conformance with the design standards of subsection (3)" after "... documentation in writing."

Comment 24 **WAC 173-350-710 Permit application and issuance.**
(2)(a) Permit issuance. "When the jurisdictional health department ... permit. Every completed solid waste permit application shall be approved or disapproved within ninety days after its receipt by the jurisdictional health department ... "

Add the words, "or the applicant shall be notified regarding the information or documentation that is missing from the application" after the words "... approved or disapproved ..." There is a difference between the time requirements for notifying an applicant whether an application is approved or disapproved and whether it is complete. An application is not complete unless all of the required documentation and information is included in the application. Provide a different time frame for notifying an applicant whether an application is complete and approving or disapproving an application.

Comment 25 **WAC 173-350-710 Permit application and issuance.**
(3)(a) Permit renewals. "Prior to permitting, ... on the site continue to: (i) Meet the minimal functional standards of the department ..."

This wording should be changed to "Meet the solid waste handling standards (WAC 173-350)" rather than "... minimal functional standards of the department ..."

Comment 26 **WAC 173-350-710 Permit application and issuance.**
(6)(c) Permit suspension and appeals. "If the jurisdictional health department denies a permit renewal or suspends a permit for an operating waste recycling facility ... continued operation of the waste recycling facility ..."

Change the words, "waste recycling facility" to "solid waste handling facility" in both instances.

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September 4, 2002

Via Facsimile and U.S. Mail

Mr. Michael A. Hibbler
Section Manager
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Solid Waste & Financial Assistance Program
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Spokane, Washington 99205–1295

Re: Comments on Public Review Draft, Chapter 173–350 WAC, Minimum Functional Standards for Solid Waste Handling

Dear Mike:

Thank you for this opportunity to provide comments on the draft Minimum Functional Standards for Solid Waste Handling, Chapter 173-351 WAC (Draft MFS). On behalf of Waste Management of Washington, Inc. (WMI), we offer these observations, suggestions and questions with the goal of assisting Ecology's efforts. All of us who have reviewed the Draft MFS for WMI appreciate the hard work and careful thought that went into this project. We particularly applaud the stakeholder process employed for creating this Draft. It was time-consuming and involved varied and sometimes conflicting view points, but we think it resulted in a worthy product, and certainly one that significantly improves the current rules.

Unfortunately, the very nature of comments is that they seem critical rather than praiseworthy, but we hope you will accept these suggestions in the constructive spirit in which they are offered. This letter presents WMI's comments section by section, in the same order as the Draft; they are not presented in order of importance.

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-010 (Purpose):

Subsection (5) would require "best available technology for siting" and "all known available and reasonable methods for designing, constructing, operating and closing" facilities. First, the individual rules contain location standards for siting each kind of facility, and they speak for themselves. In combination with local land use development regulations, the location standards adequately address siting concerns. A reader might infer that the language in this subsection permits or even encourages further siting restrictions to be imposed, subject to a discretionary and potentially arbitrary determination of what is "best available technology." Second, "AKART" is a term of art. In other regulatory contexts, such as air or water quality, the phrase has been interpreted to require engineering studies and extensive feasibility analyses in determining what is AKART. It is also susceptible to change over time, as technology develops. Please consider eliminating or rephrasing this subsection.

-020 (Applicability):

Perhaps the exception set forth in Subsection (9) for biosolids should not use the phrase "beneficially used," since that describes a permit exemption condition here in the Draft MFS.

The use of the new term "fully regulated" in Subsection (13) is confusing, especially as similar terminology is not used in Subsections (7)-(12) and (14)-(16) of the section. Each of the cited regulations includes exemptions and exclusions, yet the "fully regulated" language is used only in the context of dangerous waste. In this context, certain wastes are regulated, but may be conditionally or fully exempted or excluded from all or a portion of the rule. We cannot determine whether or how Chapter 173-350 WAC would apply in all cases. It seems appropriate to delete the word "fully" and to use appropriate sections, such as the moderate risk waste section (-360), to define applicability to specific waste types.

-030 (Effective Dates):

With regard to Subsection (2)(a)(iii), please consider separating performance and design requirements. Meeting performance standards within the set period of time should be nonnegotiable, but an absolute requirement to meet design standards may be problematic for facilities built prior to the adoption of these MFS. For example, a pile operator may not be able to construct all-weather roads; a preexisting tank at a facility may not be double lined; a limited purpose landfill owner may not be able to produce purified methane gas upon closure. We suggest that meeting applicable design requirements within thirty-six months be required, unless the jurisdictional health department deems the relevant requirement unnecessary to protect human health and the environment. This gives each facility operator and health department flexibility.

Subsection (2)(b) requires operators to initiate a permit modification process within twelve months of the effective date. To be complete, this should expressly include both modified permits and new permits for currently unpermitted facilities. More important, though, we note that Section 700 gives health departments twelve months to adopt local ordinances implementing this regulation. We suggest that operators should not be asked to analyze whether a permit modification is required or to begin a permit modification process until the local ordinance is adopted and its contents known.

Because the health department is responsible for interpreting regulations, it makes more sense procedurally for the health department first to analyze operations under its jurisdiction and determine its facilities' permit status. Then, once the local ordinance is in place, and the health department's analysis is complete, operators should be given a set amount of time to seek new permits, permit modification, or termination.

-040 (Performance Standards):

The prohibition on dilution in Subsection (6) and elsewhere in facility-specific sections seems misplaced. The prohibition typically is applied to dangerous wastes. Because solid wastes are not regulated according to the level of listed contaminants, it is not clear why dilution poses an environmental problem or why it should be prohibited. The section could be read to imply that a recycling technology that mixes solid waste with another material to create a useful product is banned. We recommend either deleting this subsection or demonstrating that the environmental risk associated with dilution and the statute itself provide good reason for its inclusion.

-100 (Definitions):

Although it's not typically done, we suggest indicating in the body of the regulation when a defined term appears. In contracts, for example, defined terms are capitalized. With so many definitions, it would be helpful when reading a facility-specific provision to know which terms are defined. In addition, some regulations specifically cross-reference the definitions section when a defined term is used, but most do not. *See, e.g.*, WAC 173-350-400(2)(c) ("channel migration zone as defined in WAC 173-350-100"). Capitalization or some other method of identifying defined terms would foster consistency.

We also suggest that you check the usages of defined terms, to determine whether this many terms warrant specific definition. Many actually appear on a very limited basis, and can be defined by context or defined within the relevant section. We recognize that some of these terms need to be defined, even if they are used sparingly in the regulation, simply because a common understanding of the concept is

important. With that caveat, we offer the following observations based on our electronic search of the Draft MFS, subject to your confirmation. We do not address all definitions with limited usage, but nonetheless point out the following for your consideration:

- "Agricultural composting" – This term appears only in Section 220, Composting Facilities. Perhaps it simply should be defined there.

- "Agronomic rate" – This term appears only in Section 020, Applicability. Perhaps Subsection 020(4) should contain the definition. (The term "agronomic" appears as an adjective several places, but is not separately defined.)

- "Aquifer" – Please provide guidance on what is meant by "significant" in the phrase, "yielding a significant amount of water to wells or springs." Currently, this term appears only in the section for limited purpose landfills.

- "Ashes" – This term has limited usage. It appears in the definitions of "solid waste" and "limited purpose landfill," where the context suggests a broader meaning than the one stated. Otherwise, it is used only in the context of exceptions for "Special Incinerator Ash," regulated under Ch. 70.138 RCW and/or Ch. 173-306 WAC (but it is not the same definition), or in Section 240, Energy Recovery and Incineration, where it has a contextual use. Possibly it simply should be defined in that section, or eliminated.

- "Beneficial use" – Consider either employing the phrase "use of *unprocessed* solid waste *or recyclable materials* as an ingredient ... " or adding the requirement that the solid waste be *directly* used as an ingredient. We are concerned that this definition would seem to include recycling, which we understand is not the same concept as that used in Section 200, Beneficial Use Permit Exemptions. Further, because this term is used only in Section 210, we suggest incorporating the definition into that section. Please see discussion of Section 210, below.

- "Buffer" – Shouldn't this be defined by each jurisdiction, depending on its land use regulations? It only appears three times in the Draft MFS (here, in the definition of "facility," and in Section 230, Land Application). In particular, the requirement that buffers be "permanently vegetated" and used for a runoff filter seems unusual, and certainly different from the land use context of the term.

- "Buy-back recycling center" – This term was not found in our search.
- "Cab card" – This term was not found in our search.
- "Captive insurance companies" – This term is used only in Section 600, Financial Assurance, and it is defined again there. The definition, therefore, seems unnecessary.
- "Clean soils and clean dredge spoils"; "Contaminated dredge spoils" – The definition for clean spoils should be related to the definition for contaminated spoils, so that any given spoil may be defined as one or the other. In this case, clean spoils should be defined as those that meet the conditions for open water disposal, and contaminated spoils should be defined as those that do not. It would be helpful to the reader if applicable regulations were cited. We note, however, that we were unable to find the term "contaminated dredge spoils" used anywhere else in the regulation.
- "Contaminated soils" – Rather than leaving it to the reader to determine what concentrations of contaminants "could negatively impact" the environment, we suggest referring to cleanup standards and/or clean soil standards. We were able to find this term only in Section 220, Composting, so perhaps it should just be defined in that context instead.
- "Crop residue" – This term was found only in Section 020, Applicability (next to "agronomic rates") and in the definition of "Type 1 feedstock."
- "Disposable containers" – The items listed may be used to store products, and may be used more than once to manage wastes. This term, as well as "Detachable containers" appears only in Section 300, On-site Storage, so perhaps it could be defined in that context instead.
- "Domestic septage" and "Domestic wastewater facility" – These terms appear only in Section 020, Applicability.
- "Energy recovery" – The term is limited to technologies that use heat or combustion to generate energy from solid waste. Given newly developing technologies that rely on biological decay or landfill gas to generate methane or natural gas for energy, it may be useful to develop definitions and regulations to manage such systems.

- "Final treatment" – This term was not found in our search.
- "Garbage" – The definition does not seem to allow any mechanism for food waste to be defined as a recyclable, despite the fact that a solid waste management plan could define it as a recyclable.
- "Home composting" – This term appears only in Section 020, Applicability.
- "Industrial solid wastes" – This term appears only once, in Section 220, Composting. Perhaps it should be defined in that provision instead. In any event, the definition seems to be limited to manufacturing waste, though manufacturing waste is, in fact, a subset of the larger universe of industrial wastes.
- "Intermediate solid waste handling facility" – We suggest adding the phrase "and recycling facilities" to the list of inclusions in the last sentence. Alternatively, you may consider adding, "and recycling facilities that do not meet the diversion requirements for permit exemption under Section 210," but in reality recycling facilities are a kind of intermediate solid waste handling facility regardless of whether they are exempt from permitting.
- "Land Application" and "Land reclamation" – These terms appear only in Section 230, Land Application.
- "Leachate" – The way this term is defined it would convert ground water outside the disposal area, but impacted by landfill gas, to leachate.
- "Limited moderate risk waste" – We suggest allowance should be made for an expansion of this term. For instance, we can see where paint might be included.
- "Local fire control agency" – This term appears only in Section 320, Piles Use for Storage or Treatment.
- "New facility" – Given the strict diversion limits for recycling facilities that will be exempt from permitting under these Draft MFS, there may be several currently operating unpermitted recycling facilities that will come under the permit requirements. It may be useful to include them in the definition of new facilities.

- "Overburden" – This term appears only in Section 020, Applicability.
- "Private facility" and "Public facility" – Both of these definitions suggest that a facility itself "owns" waste, and the grammar needs to be corrected. In addition, we found these terms only in Section 600, Financial Assurance.
- "Processing" – We suggest revising this definition to state, "... convert solid waste into a useful product, *an ingredient in a product*, or to prepare it for disposal."
- "Pyrolosis" – This term appears only in the definition for "energy recovery."
- "Representative sample" – While "sample" appears frequently, this phrase appears only once, in Section 400, Limited Purpose Landfills.
- "Retail take-back center" – This term appears only in Section 360, MRW.
- "Soil water" – This term was not found in our search.
- "Solid waste management" – This phrase appears only in conjunction with the word "plan"; because "solid waste management plan" is a common term implemented by Chapter 70.95, we suggest deleting this definition.
- "Surface impoundment" – This might be a good place to clarify that impoundments for surface water not coming into contact with solid wastes are not within the scope of the MFS. Please refer to our comments under Section 330, Surface Impoundments and Tanks, below.
- "Tire derived materials" – This term was not found in our search.
- "Transfer station" – This is not the same definition as contained in RCW 36.58.030. Since that is a statutory definition, we strongly urge Ecology to use that definition to avoid confusion and ambiguity.
- "Vadose zone" – This term was not found in our search, although the term "vadose" appears in Section 500, Ground Water Monitoring.

-200 (Beneficial Use Permit Exemptions):

Overall, WMI supports a cautious approach to beneficial use exemptions, and indeed, to any permit exemption allowed under these MFS. Here, we think the rule assures appropriate scrutiny of these requests, and maintains a focus on the use rather than the waste itself for this exemption. We also concur that it is not appropriate at this time to exempt by rule any specific beneficial uses from permitting.

However, here as with other permit exemptions, if any operation exempted from permitting in the various facility-specific sections fails to comply with the general performance standards and reporting requirements, then it must obtain a permit and comply with the full regulation. We agree with this approach, but note that there does not seem to be a mechanism to terminate the permit later and to comply with the reduced requirements should the situation warrant. We suggest that the annual permit renewal process be used to review whether such a facility warrants reduced regulatory oversight in the coming year.

-210 (Material Recovery and Recycling Facilities):

The heading refers to both "material recovery and recycling facilities" and the first sentence in Subsection (1) distinguishes between "material recovery facilities" and "facilities engaged in recycling solid waste." We note that only the former term is defined, and that the definition is where the diversion requirements for exempted facilities are first set forth. (The diversion requirement is then restated as a performance standard under Subsection (b)(ii) of this section.) We assume, then, that Ecology intended these phrases to mean two different facilities, one potentially exempt from permitting, and the other not. Is this correct? If so, as mentioned earlier, the defined term is used only in Section 210, and moving the diversion standards from Section 100 to here would clarify the regulatory distinction between the two kinds of facilities. We suggest Subsection (b) be revised so that the first sentence reads, "In accordance with RCW 70.95.305, material recovery and recycling facilities *which accept source separated solid waste [insert remainder of diversion requirement of definition and Subsection (b)(ii) here]* are subject solely to the requirements of (b)...." The second sentence then would state, "A material recovery and recycling facility which *does not meet the diversion requirements or which does not* comply with the terms and conditions of (b) of this subsection is required to obtain a permit...."

We expect Ecology will receive other comments about the threshold. The five percent annual weight limit is quite low, but perhaps because the only effect is to exempt these facilities from permitting, and not to restrict recycling by other kinds of facilities with higher residual rates, it may be appropriate. All of WMI's facilities are permitted, and the company does not oppose the standards articulated in this section. We believe very few facilities will qualify for permit exemptions, but that may be

good. We do note, however, that these regulations will result in more recycling facilities requiring permits. Many facilities are fully-enclosed and are not currently required to have permits. These proposed regulations will require permits, and very few of these facilities will be able to meet a five-percent threshold. In addition, WMI believes the weight per truck load standard is impractical, even though we acknowledge the policy goal behind it. It is not possible to measure incoming trucks with any accuracy, though outgoing materials may be accurately measured.

Finally, we urge you to create a more lenient standard for determining whether a recycling facility conforms with a comprehensive plan. WMI suggests that any recycling facility should be presumed by operation of law to be in conformance with the county comprehensive solid waste management plan. We cannot envision any situation in which operating a recycling facility would be contrary to the goals of Chapter 70.95 RCW. There is a risk that comprehensive plan conformance could limit recycling opportunities, if the plans are not specific enough or if they are too specific, or if they simply are outdated. Because recycling facilities that do not qualify for a permit exemption will now be regulated under the same provision as "transfer stations," their ability to conform with a plan may unintentionally be limited. Plans in place now will not incorporate the terminology as used in these Draft MFS.

If an outright assumption of conformance is not possible, please consider a rebuttable presumption. The ability to develop new recycling facilities should not be constrained by politics.

-230 (Land Application):

We suggest a new exception in Subsection (1) for use of inert waste as fill material. As written, this provision appears to regulate soil amendment activities. But, for example, the use of glass cullet or other inert material as road bed is not uncommon, and a strict reading of the regulation leads to a conclusion that a permit would be necessary for such activities

-240 (Energy Recovery and Incineration):

WMI has very few comments here. Unless we are operating under a misunderstanding, we would expect the Special Incinerator Ash laws (Chapter 70.58 RCW and Chapter 173-306 WAC) to apply to handling residues from these facilities, and therefore be cross-referenced under Subsections (4)(a) and (e). In Subsection (4)(e)(ii), we suggest replacing the word "breakdown" with "situation" or some other more generic term, so that the usefulness of alternative storage and disposal plans is not limited to equipment malfunctions (i.e., it could include weather, labor dispute, or any other disruption of normal operations).

-300 (On-site Storage, Collection, and Transportation Standards):

WMI believes that container sizing standards in Subsection (2)(b)(i) and (ii)(G) should reflect weight rather than volume. Subsection (1)(b)(iii) requires that detachable containers be "nonleaking." We suggest a better adjective is "leak resistant," a distinction that is in keeping with the requirement in Subsection (3)(c) that containers not "leak in quantities to cause a nuisance."

The prohibition against littering in Subsection (3)(a) should not be limited to unloading at permitted transfer stations or other permitted facilities. The new MFS will result in permit exemptions, and littering should be prohibited at those locations as well. Simply putting a period after "unloading of solid waste" would broaden the prohibition appropriately.

Finally, we encourage you to cross-reference to Ch. 81.77 RCW in this section, as is done in WAC 173-350-350(1)(b)(iii) (waste tire collectors). Someone new to Washington might be under the impression that a permit from the health department is all that is necessary to perform collection, and we have had experiences with companies starting up collection operations without being aware of the WUTC's regulations. A reminder here that compliance with the WUTC laws is necessary may reduce need for enforcement actions after a company has made capital investments.

-310 (Intermediate Solid Waste Handling Facilities):

The exemptions from Section 310 are intended to direct the reader to the section that regulates the activity in question. In Subsection (1)(e) (waste tires) and (f) (moderate risk waste facilities), storage prior to both recycling and/or disposal should be exempted, as both activities are addressed by the relevant section. The draft language, however, exempts only storage prior to recycling. We suggest deleting the language "prior to recycling" in both cases.

The inclusion statement in Subsection (1)(d) would be clearer if it said material recovery and recycling facilities that "do not meet the diversion requirements of WAC 173-350-210"; this would make it consistent with our other proposed revisions to that section.

We think it would be more useful if the design standards in Subsection 310(3)(a) focused on the desired outcome, rather than specifying a method. For example, Subsection (3)(i) could be changed to require facilities to restrict unauthorized access, rather than specifying fences, trees, and natural features; Subsection (3)(iii) could simply state "Provide effective means to control rodents"; and Subsection (3)(iv) could say "Provide effective means to control off-site litter." Aesthetic issues and views should be left to local land use requirements rather than

solid waste permits. Flexibility should be allowed for facilities either surrounded by industrial neighbors or in isolated locations, where complete screening is not necessary.

Some of the specific terms in this provision are ambiguous. For instance, what is intended by the term "fully enclosed" in Subsection (3)(i)? It is not clear whether a three-sided building with a roof and floor would be considered an enclosed building, and if not, why not. Regardless, the number of walls is not relevant from a screening perspective. How does Ecology believe the terms "sturdy" and "easily cleanable" in Subsection (3)(ii) should be interpreted? WMI suggests that building codes are a more appropriate source of structural standards. The term "all-weather" in describing access roads in Subsection (4)(a)(i)(B) is not clear. In rural locations, for example, dirt or gravel approach roads might be sufficient.

Subsection 310(4)(a)(i)(I) requires all transfer, baling, and compacting sites to provide attendant(s) on site during hours of operation. Given that many facilities that formerly were known as MRFs may now be regulated as transfer stations, this may be problematic. We agree that facilities that accept solid waste from the general public should be attended during the hours when waste is accepted. We do not believe that it is necessary to staff a transfer station that does not allow access by the public, and/or only accepts recyclables. Some companies pull commercial recycling routes on weekends and deliver to their own recycling facilities. Access is limited to drivers that are employees or contractors of the site operator, and site rules are known. We do not believe that it is necessary to staff such facilities during all hours of operation because the waste stream is limited to recyclables, is non-putrescible, and because access and delivery are controlled. Please note that language similar to that found in Subsection 320(1)(e)(iii) (controlling unauthorized access at waste piles) could be used to accomplish the goal of preventing unauthorized access, without requiring an attendant at all times.

As presented in Subsection 310(4)(e)(iii) (and elsewhere), the requirement for safety or emergency plans always has been somewhat unclear. We suggest that rather than requiring numerous safety plans which have little relevance to solid waste handling, and which neither Ecology nor the health department have authority to review (such as Fall Prevention, Confined Space, Lockout/Tagout, etc.), this subsection should specify submittal of the site Fire Prevention and Emergency Response Plan. This would help clarify exactly what should be submitted with a complete permit application.

We suggest Ecology review use of the terms "drop box" and "drop box facility" in this section, to make sure that typical commercial drop boxes are not unintentionally swept into this regulation. As defined in Section 100, commercial drop boxes used by customers would not be within the term "drop box facility." But

here in this section, design standards and permit application requirements are for "drop boxes," a term that is not otherwise defined. We are certain that commercial drop boxes serviced by solid waste collection companies are not intended to be within the scope of this rule. (Although, we note and support that commercial customers have some performance obligations regarding their on-site drop boxes under Section 300.) Perhaps a statement in Subsection (1) that this section is not applicable to drop boxes used by generators to deposit their own waste would correct this potential ambiguity.

Subsection (6)(a), as well as the closure subsection of all facility-specific requirement sections throughout the Draft MFS, should be modified to allow removal of wastes to a facility that meets the requirements of Ch 70.95 RCW "and/or a facility permitted under a state or federal Subtitle D program in another state." We believe that the draft language unintentionally restricts disposal to facilities located in Washington state.

Also, Subsection 310(6)(a) (as well as in Section 320, Piles), requires a 60-day notice prior to closure. In contrast, Section 240, Energy Recovery, and Section 360, Moderate Risk Waste, require 180 days' advance notification of closure. If there is no reason for the difference, we suggest that the regulation would be simpler to work with if pre-closure notification timelines were the same for all facility types.

Finally, as noted in our comments regarding materials recovery and recycling facilities, this section on Intermediate Solid Waste Handling Facilities is a sort of "catch-all" provision under which specialized facilities that don't fall into any other category will be regulated. This is fine, but we are concerned that inattention to this fact may lead to lack of conformance with updated and existing solid waste management plans. Specifically, many plans prohibit or limit development of new transfer stations; if they are not updated (or simply updated to change the references to new "interim solid waste handling facilities") then new recycling facilities may inadvertently be prohibited.

-330 (Surface Impoundments and Tanks):

Please clarify that both retention and detention ponds for handling clean surface water are not intended to be within the scope of the MFS. The way Subsection (1)(b)(i) is written, only surface water impoundments whose discharge is permitted by local, state, or federal water pollution control permits are excepted. We suspect Ecology intended also to include detention ponds, if the impoundment involves surface water that has not contacted solid waste. (Otherwise, apparently even storm water detention ponds must employ ground water monitoring, per WAC 173-350-500(1)(b).) Even though no "water pollution control permit" typically is required for detention ponds, local governments nonetheless regulate sizing, construction and

operations, so perhaps deleting the phrase "water pollution control" from the permit modifier would fix our concern.

Also, please note that WMI has considered siting leachate ponds (tanks) on waste within lined landfill footprints. As currently written, this section makes no provision for such an activity in the design standards of Subsection (3). In that instance, it would seem that a single-lined pond would be sufficiently protective; there should be no need for a secondary liner. Similarly, the ground water monitoring requirement under Subsection (3)(a)(ii) and Subsection (5)(a) would be redundant. Please consider making allowance for such a facility.

For tanks, the proposed draft would require tightness testing of both above- and below-ground tanks prior to use, and ongoing tightness testing or leak detection for below-ground tanks under Subsections (3)(b)(i) and (ii). We agree that tightness testing is one appropriate tool to confirm the integrity of underground and below-ground tanks, where all or a portion of the tank is not readily visible. Where the tank is fully visible, as is the case with most above-ground tanks, tightness testing may not be needed. Also, in Subsection (3)(b)(iv), there needs to be allowance for double-walled tanks, where the capacity to contain volume and twenty-five year storm precipitation is not relevant.

We suggest that there be greater leniency in the inspection requirements of Subsection (4)(b). For instance, it might not be possible to inspect both liners in a double-lined pond, or the upper liner in a pond with ballast on the top liner. The health department has leeway regarding testing frequency; it should have similar discretion to accommodate facility limitations for testing.

With regard to the records and reporting requirements of Subsections (4)(c) and (d), we believe the requirements may not be appropriate for all kinds of ponds and tanks. Why are the requirements for reporting weights and types of waste released at the facility included for ponds and tanks? The requirement under Subsection (4)(d)(iii) for reporting the quantity of waste "received" might be problematic for tanks or impoundments handling liquids generated on-site. Reporting what goes out can be done, but calculating what goes in is not always possible.

Under Subsection (6)(a), the closure requirement specifies removal to a facility that meets the requirements of RCW 70.95. Because the materials generally are in a liquid state and may be inappropriate for disposal at a solid waste facility, allowance should be made for disposal at a publicly owned treatment plant permitted to accept the material.

-360 (Moderate Risk Waste Handling):

We suggest that the annual report requirement is impractical and therefore not appropriate for limited collection events, and therefore Subsection (2)(k) should not apply.

-400 (Limited Purpose Landfills):

Many of these provisions in this section are lifted from the Criteria for Municipal Solid Waste Landfills, Chapter 173-351 WAC (the "CMSWLF"), but are written in a more informal manner. WMI generally supports the application of most, if not all, of the CMSWLF standards to new limited purpose landfills, but also recognizes the policy of allowing somewhat greater flexibility.

Ironically, there are some aspects of this Draft MFS section that we believe are more stringent than the CMSWLF. For example, limited purpose landfills should be able to demonstrate around the location standards, at least to the same extent as permitted under the CMSWLF. Some of the MFS provisions infer that same flexibility, but use less detail in the language. We believe that to be the case with Subsection 400(2)(a) (prohibiting siting over Holocene faults, etc., "which could compromise the structural integrity of the facility") and Subsection 400(2)(d) (more than ten thousand feet from an airport runway "where a bird hazard to aircraft would be created"). For other location standards, though, these Draft MFS contain an absolute prohibition, such as the one against surface water proximity, that is more burdensome that what is allowed under the CMSWLF, and appears unnecessary. Wetlands are prevalent throughout western Washington, and do not in all cases present a risk to the environment that justifies an unconditional ban. Under WAC 173-351-130(4), MSW landfills can demonstrate around that criterion; there is no good reason that limited purpose landfills should not be afforded the same potential relief. Also with regard to this subsection, please confirm that man-made features that may periodically contain surface water (such as gravel pits, sedimentation ponds, leachate ponds, etc.) are not "ponds" that trigger the surface water location standard in Subsection 400(2)(c) (or the one for inert waste landfills in Subsection 410(2)(d)).

Furthermore, the locational standards should accommodate a limited purpose landfill that has disposal areas specifically set aside for inert materials only. For instance, the location standard for drinking well distances should not have to be one thousand feet from the "active area" to the extent that the defined term includes "inert" waste disposal areas at a limited purpose landfill. Under the inert waste landfill provisions, only fifty feet is required. *See* WAC 173-350-410(2)(c). Many of the standards set forth in this section would be unduly burdensome when applied to or measured from those discrete disposal areas.

With regard to design standards, we note and appreciate the flexibility conferred on the health department by Subsection (3)(b)(ii) for liner design features. The tendency, however, will be to default to the standards set forth in this section for liners and other design features, with no room for the health department to exercise discretion. With that in mind, we offer the following suggestions.

Consider tying the gas migration performance standards for liners under Subsection (3)(b)(i)(B) to the criteria for explosive gases set forth in Subsection (4)(b)(v)(A)I, II and III.

Subsection (3)(b)(iii) discusses liner separation. We suggest that liner separation should be determined by a qualified engineer rather than limited to the specified ten-foot separation (which has been arbitrarily lifted from the CMSWLF regulations). There may be instances where a limited purpose landfill is located or operated such that a distance of less than ten feet is protective, even without a hydraulic gradient control system. The permittee should be given the flexibility of making that demonstration.

We have questions about particular wording in the design standards. For instance, we note the use in Subsection (3)(b)(iii) of the term "volumetrically significant." Could Ecology explain what conditions would be deemed "volumetrically significant" such that a stated separation distance is necessary to protect the integrity of the liner? (This is similar to our question under the definition of "aquifer.") Also, in the context of these Draft MFS, perhaps the term "aquifer" is a more appropriate unit of protection than the one described in this subsection. It already is a defined term (although it still includes the adjective "significant"). Finally, the phrase "at any time" creates further ambiguity and we suggest it be deleted. Separation issues at liner construction may be quite different than those that arise after the waste is in place to hold the liner down.

As now worded, the separation required by Subsection (3)(b)(iii) is measured from the bottom of the lowest "liner" for MSW landfills under the CMSWLF, but from the lowest liner "component" here. This results in a potential ambiguity. We suggest neither is appropriate for limited purpose landfills, unless Ecology means the "lowest level of the synthetic liner portion of the liner system." Components often are clay, but that layer should be counted as part of the separation.

Liner separation aside, a clay component should not be required for all limited purpose landfills. Indeed, many landfills use geo-synthetic liner systems instead of soil barriers. For that reason, the presumptive liner standard in Subsection (3)(b)(v) is too narrow. The standard should call for a liner that provides for 1×10^{-7} cm/sec. permeability, with no two-foot earthen minimum.

Alternate liners should be approved when the permittee demonstrates that an alternative liner/cover is equivalent or superior to the presumptive design. We believe that Subsection (3)(b)(ii) allows the health department to permit such designs, although such discretion appears to be allowed only in situations where no liner would be required. The phrasing here in Subsection (3)(b)(v) could cause confusion, because it seems to allow (and require) alternative liner system design only in those situations where the presumptive design is not feasible. (This same wording is used again in Subsection (3)(e)(ii) regarding presumptive final closure cover, in that case without any express authority for discretion granted to the health department.)

Under the operating standards, we have just a few comments. Although "liquid waste" is defined, the phrase "free liquids" is not, and in any case Subsection (4)(a)(iii) may establish an impossible standard, due to wet weather conditions when saturated materials are delivered for disposal. Perhaps the restriction could be qualified to prohibit "separate loads of" liquid waste or free liquids.

The need to weigh all incoming loads in accordance with Subsection (4)(a)(iv) may be problematic for existing facilities, either because they do not have scales or because scales are not always used as measurement. If quantity reporting is the goal, then cubic yards could satisfy the requirement. We note that, ironically, Subsection (4)(a)(vi), which requires personnel on the active face for some landfills, uses the cubic yard standard rather than tonnage. For limited purpose landfills, cubic yards may be a better standard for measurement, and should be permitted as an alternative.

In Subsection (4)(b)(iii)(B), a permittee may demonstrate the use of alternative materials or alternative thicknesses for cover materials, but only "during the permit process." We suggest this demonstration could happen at other times as well, and therefore that phrase should be eliminated.

Finally, in Subsection (9)(b), owners located within one thousand feet of the "facility property boundary" must be notified. To make it consistent with the location standard of Subsection (2)(b), this subsection should refer to those property owners within one thousand feet of the "active area." This also will avoid creating conflicting notice requirements for property owners within the stated distance for notice under this subsection, but not within the stated distance for down-gradient wells under the other. (This same observation applies to the parallel provision for inert waste landfills, Subsection 410(8)(c).)

-500 (Ground Water Monitoring):

In Subsection (2)(b)(ii), please add the word "representative" to the second sentence; without such modification, testing for all samples will be required. For similar reasons, please insert "if appropriate" after "tested for the following." The Atterberg limits are only for plastic soil samples, but the current wording would require it for all samples regardless of appropriateness.

In Subsection (2)(b)(vi), please allow the drilling analysis to be done "under the direction of a licensed professional. ..."

In Subsection (2)(d), we suggest that "site boundaries" should be changed to "active area" (but excluding inert waste units), to be consistent with siting standards.

Under Subsection (4)(g), we agree that ground water sampling no less than semiannually is appropriate for the upper aquifer. For the lower aquifer, however, less frequent monitoring, such as annual, would be sufficient.

Finally, Subsection (5)(b)(i)(B) should state that only parameter(s) that had a statistically significant increase need be reanalyzed.

-700 (Permits and Local Ordinances):

With regard to Subsection (1)(b), the MFS are not an appropriate means to regulate CERLCA or MTCA cleanup actions. (MTCA is not specifically referenced, but we assume Ecology-ordered cleanups under that regulatory scheme also were intended to be within the scope of this exemption, since RCW 70.105D.090 exempts MTCA remediation from the procedural requirements of Chapter 70.95 RCW.) MTCA has its own SEPA process under which environmental impacts from the remediation as a whole are to be analyzed. And, requiring that someone else (presumably the health department) undertake an investigation to determine that the cleanup "results in an overall improvement of the environmental impact of the site" to qualify as an exemption contradicts that authority, as well as express statutory requirements. Under both CERCLA and MTCA, compliance with the substantive aspects of the MFS would be required, but the obligation to obtain a permit clearly is exempt. We suggest that Subsection (1)(b) end after "consent decree."

-710 (Permit Application and Issuance):

In order to avoid a situation where a permit application sits in limbo for an extended period of time, we suggest a required timeline in Subsection(1)(c)(ii) for the health department to determine completeness and to respond to the applicant, in writing, that the permit is complete, or to identify missing items. We suggest twenty-

eight days, which is the time limit for a completeness determination under land use statutes.

The statute for permit renewals requires only that the facility be "not in conflict with" the comprehensive plan. *See* RCW 70.95.190. Therefore, Subsection (3)(a)(iii) should not require that it "conform." The legislature apparently intended a more lenient standard for permit renewals, which should be reflected in this rule. We assume this distinction is intended to protect existing facilities from being written out of a comprehensive plan and forced out of business.

Under Subsection (4), the requirement for following these procedures prior to making "any change in facility operation, design, performance or monitoring" seems vague and overly broad. Perhaps it could be limited to any variation from the conditions specified in the operations plan or permit. Day-to-day adjustments in operations, particularly, cannot and will not always be reported, as a practical matter.

Under Subsection (7)(a), these Draft MFS prohibit a variance from statutory requirements of Ch. 70.95 RCW. Why? Also, in Subsection 700(7)(a)(ii), the word "public" should be replaced with "environment" so that the section remains consistent with the expertise and authority of the health department.

More importantly, though, the standard that a variance will be granted only if it produces hardship is too limiting. The health department should be able to grant variances if there is a technical justification for doing so, or if the regulatory requirement results in benefit disproportionate to its cost. Please consider adding the ability to grant a variance where circumstances other than mere hardship justify it.

-715 (General Permit Application Contents):

Under Subsection (3)(i), we ask that Ecology permit signatures by authorized representatives, rather than only by a vice-president. If Ecology wants to ensure authorization, a corporate resolution for signatories other than vice-presidents can be required.

In conclusion, WMI generally supports the Draft MFS as published because the rules are far more comprehensive and clear than the old regulations. After over fifteen years, the rules had clearly become outdated. Ecology has been working hard and patiently for some time in updating the MFS, and staff is to be commended. We believe the facility-specific provisions make the Draft MFS reader-friendly. Despite the length of the rules, a reader can go to the section that applies to a specific kind of operation, and have a succinct presentation of the requirements. Overall, WMI supports the standards for performance, operation and design contained in this draft, although we hope our comments will help improve what is already a good product.

Please feel free to contact me if we can be of any further assistance, or if our comments have raised any questions.

Sincerely,

SUMMIT LAW GROUP PLLC

Polly L. McNeill

cc: Andrew Kenefick
Bob Schille
Tamara Gordy
Roger North
Steve Wulf

Hibbler, Michael A.

From: Chris Chesson [CChesson@co.whatcom.wa.us]
Sent: Wednesday, August 28, 2002 3:50 PM
To: Hibbler, Michael A.
Subject: RE: Comments on proposed 350's

350 com1.doc (19 KB)

Attached are our comments

Thanks,

Chris

-220 Composting Facilities
(b)(i) on-site production of substrate use to grow mushrooms

If it is the intent of this exemption to require a permit for any substrate producer who makes product for off-site use, a revision to the above language would close a potential loop hole for substrate producers who are looking to get around obtaining a permit. In order to make it clear that only those growers who make and use all the substrate produced on-site are exempt from permitting, I propose that (b)(i) read as follows:

(b)(i) production of substrate used solely on-site to grow mushrooms;

This will prevent the potential for substrate producers who are currently not growing on-site but selling their product off-site from adding an ancillary growing operation to be considered for an exemption, and still be shipping substrate to growers off-site.

(10) define very stable or stable in definition section or refer to Code where these terms are defined.

-330 (5) (b) "...lea**k** detection...are not required to **meet** the groundwater monitoring requirements..."

-500 (4) (a) SAP should include re-sampling to reduce or eliminate false positives

- 500 (4) (g) (ii) define MSWLF

- 500 (4) (k), (5)(b)(i)(C), (C)(ii)(A) and (B) if ground water beneath the landfill is being used as a drinking water source by residents in the area, shouldn't MCL's be those specified in WAC 246-290?

-710 (d) (i) Will Ecology will be responsible for assuring a proposed site or facility conforms to the approved **local** comprehensive solid waste plan?

CHESAPEAKE ENVIRONMENTAL GROUP, INC.

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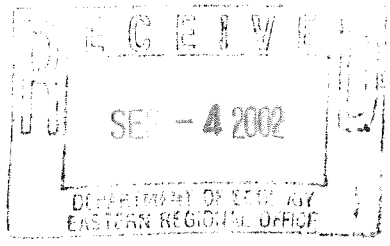
September 2, 2002

Michael A. Hibbler
Washington Department of Ecology
Eastern Regional Office
4601 N. Monroe
Spokane, WA 99205-1295



Dear Mr. Hibbler:

On behalf of TPS Technologies Inc. (TPST), thank you for the opportunity to provide comments to the proposed changes to Chapter 173-350 WAC (Solid Waste Handling Standards). These proposed changes will improve the manner in which solid waste is disposed and will have positive benefits to the quality of Washington's environment.

TPST believes that several additional changes would add to the overall effectiveness of the regulations, particularly as they relate to petroleum contaminated soil (PCS). TPST provides treatment and recycling services for PCS throughout the Pacific Northwest and the Nation and has experience in regulatory programs designed to prevent misuse of PCS and cross-media contamination.

TPST was disappointed that a specific Sub-section for PCS facilities that had appeared in earlier drafts was removed. The inclusion of regulations restricting uncontrolled aeration of VOC-contaminated soil (VOC being an ground-level ozone precursor) such as what occurs when used as daily cover at MSW landfills would have been welcomed by clean air advocates. We would be interested in knowing Ecology's rationale for removing the PCS section and whether Ecology intends to re-visit the issue at a later date.

Without a specific contaminated soil Sub-section to serve as an over-riding regulatory authority, several Sections remaining in the proposal need to be modified. PCS presents a unique problem in solid waste management. It is generated by excavation because it presents an environmental or public health threat in it's original location. It was either too contaminated to remain since it presented a risk to groundwater, was too volatile to remain and was creating emission problems, or was a toxic threat due to the potential for direct human contact. In any of these scenarios the current regulations along with the proposed changes fail to anticipate some of the likely ways PCs can negatively impact Washington's environment. We've identified several of them below.

- The Beneficial Use exemption must be re-written as to prevent the potential mis-use of PCS as a clean-soil substitute. A specific prohibition is needed in WAC 173-350-200 reading;

  " Solid Waste considered for Beneficial Use shall not be capable of producing leachate nor be able to come into direct contact with humans."

  In the absence of a modification along these lines we would like to know Ecology's position on whether PCS could gain a "Beneficial Use" exemption. Representatives of Ecology informed us that this concern is unwarranted and that PCS was not likely to be considered for such an exemption. Is this Ecology policy as well?

- PCS contaminated soil can produce significant quantities of VOC and toxic emissions. Solid Waste regulations and permits generally do not address these issues. We would suggest expanding WAC 170-350-310 (3) (a) (vii) to read;

  Provide pollution control measures to protect air quality. This shall include demonstration of compliance and permitting from the appropriate Air Agency.

- We believe it disingenuous for Ecology to require contaminated soil to be excavated from one location due to it's threat to groundwater, only to allow it to be stored at some other location which is without groundwater monitoring. The exemption at WAC 170-350-310 (5) must not be allowed to apply to facilities that store PCS specifically, and for all leachable wastes in general.

- Under WAC 173-350-320 (Piles used for Storage or Treatment) there is language for a sealed (though not an impermeable) base to protect groundwater. Because of PCS's demonstrated potential for impacting groundwater, we suggest the following change to (3) (b) (i);

  Place waste on a sealed surface, such as concrete or asphaltic concrete, with a permeability coefficient of 10^{-7}, to prevent soil and groundwater contamination.

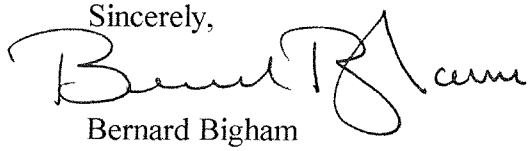
- As with Transfer Stations (See 3) above) we believe that Ecology must require that facilities receiving contaminated soil excavated from elsewhere due to it's threat to groundwater, should store the PCS only at locations that have groundwater monitoring. The exemption at WAC 170-350-310 (5) must not be allowed to apply to facilities that store PCS specifically, and for all leachable wastes in general.

- Lastly the criteria for "inert waste" (WAC 173-350-990) should have a new (c) added that reads as follows;

  Inert waste shall not exhibit the presence of leachable contaminants.

We believe that these changes will improve the proposed regulation and provide a higher level of regulatory protection. If you have any questions please telephone me at (410) 686-8070.

Sincerely,



Bernard Bigham

cc: Blair Dominiak - TPST

Hibbler, Michael A.

From: Gretchen Borck [wawggb@agritel.net]
Sent: Wednesday, September 04, 2002 2:04 PM
To: Hibbler, Michael A.
Cc: Bruce *Nelson
Subject: DOE Solid Waste Handling Standards, 173-350 WAC comments

September 4, 2002

To: Mike Hibbler, Department of Ecology

From: Bruce Nelson, State President, Washington Association of Wheat Growers

RE: DOE Solid Waste Handling Standards, 173-350 WAC comments

The proposed WAC 173-350 is extensively outside the scope and intent of what the Washington State Legislature intended for the Department of Ecology to oversee solid waste handling. The Department of Ecology's exemptions are as burdensome as permit coverage.

The Department of Ecology's purpose in WAC 173-350 was to consolidate two previous WACs (173-304 and 173-314) into one comprehensive one. Unfortunately, the Department of Ecology extensively expanded on the previous two WAC's instead of simplifying them. No one from agriculture was on the advisory panel for this WAC. No economic impact statement is included on composting facilities. The Department implies that these new regulations will not create a hardship or expense for farms that are already certified with farm plans approved by their local conservation district using NRCS standards.

DOE's proposed WAC 173-350-010 Purpose under (1) DOE states that setting minimum functional performance standards for the proper handling and disposal of solid waste originating from residences, commercial, agricultural and industrial operations and other sources. These standards will cost time and money to implement, track and for businesses to administer.

Under WAC 173-350-100 Definitions it lists "Agricultural composting," "Agricultural wastes" and "Agronomic rates" "Composting," and "Crop residues." All of these definitions can be interpreted as agricultural, which the Legislature did not list in its intent of regulations for solid waste.

Also under the definition for "Soil amendment" means any substance that is intended to improve the physical characteristics of soil, except composted material, commercial fertilizers, agricultural liming agents, unmanipulated animal manures, unmanipulated vegetable manures, food wastes, food processing wastes, and materials exempted by rule of the department … Why are these even listed if they are going to be exempted? This would seem to make it more confusing than it needs to be. It would be clearer to the average lay reader to not have any of this listed at all.

Any and all references that deal with agriculture should not be listed in this WAC at all. Anything to do with agricultural composting should not be listed. The Department of Ecology is outside its scope of direction mandated by the Legislature in including any of this in a proposed WAC. Listing exemptions and then putting provisions on them is not in the best interest of agriculture or the Department of Ecology. By putting overbearing requirements and regulations on farmers you will not be encouraging recycling or composting.

Under WAC 173-350-200 Beneficial use permit exemptions this section says that if you are exempt you have to apply for a permit, then DOE will decide if you get to have one, adding to the regulatory burden on DOE and farmers. Again DOE starts talking about agronomic rates land application etc. All of these specifications are covered under farm plans prepared by the local conservation district and NRCS. The Department of Ecology is duplicating a regulation that is already in place. Department of Ecology has strayed outside the Legislature's intent for this WAC.

New Section WAC 173-350 220 Composting facilities. This section states it is not applicable to those exempt from a handling permit, but lists agricultural composting throughout this section.

The end result of this regulation will be a reduction in composting, an increase in the regulatory burden on our farms and businesses all to provide a solution to a problem that doesn't exist. In the end this regulation fails in both goals. It does not simplify anything and it will not encourage composting.

Kuehl, Lynette M.

From: Hibbler, Michael A.
Sent: Wednesday, September 04, 2002 2:06 PM
To: Pozega, Brenda (ECY)
Subject: FW: PSC Comments on Proposed Solid Waste Regulations

-----Original Message-----
From: Ward, Laweeda [mailto:WardL@contactpsc.com]
Sent: Wednesday, September 04, 2002 1:36 PM
To: Hibbler, Michael A.
Cc: Wolfin, Jack; Crueger, Gary; Brady, Mike; O'Donnell, Mike; Azose, Mo; Tedrow, Suzanne
Subject: PSC Comments on Proposed Solid Waste Regulations

SolidWasteCom9-4-02.doc (27 KB...

September 10, 2002

Michael Hibbler
Department of Ecology
Regional Section Manager
Solid Waste and Financial Assistance Program
4601 N. Monroe
Spokane, WA 99205-1295

Transmitted by Electronic Mail: mhib461@ecy.wa.gov

Dear Mr. Hibbler:

Philip Services Corp (PSC) appreciates the opportunity to provide comments on the proposed Solid Waste Handling Standards in WAC 173-350. We have reviewed the proposed standards and have determined that they may impact operations at two of our facilities in the Pacific Northwest: Burlington Environmental Inc. (BEI) Kent Facility and our BEI Washougal Facility.

The Kent Facility currently operates under a RCRA, Part B Facility Permit from Washington Department of Ecology and a Moderate Risk Waste (MRW) Permit from King County. The Washougal Facility operates as a transfer facility and is in the final application process for a Solid Waste Permit from Clark County. Financial assurance instruments and exceptional environmental protective measures and practices cover both facilities. Our comments below address one area in the proposed rule language that warrants additional clarity.

Suggested Language

Proposed new section WAC 173-350-710 (8), states conditions by which the jurisdictional health department may waive the requirement that a solid waste permit be issued for a facility that has other environmental permits that provide an equivalent or superior level of environmental protection. We believe our current RCRA and Solid Waste permits, along with the financial assurance that we currently hold for these facilities afford such a level of protection. As such we propose the following change to WAC 173-350-710 (8)(a):

> *A jurisdictional health department may, at its discretion and with the concurrence of the department, waive the requirement that a solid waste permit be issued for a facility under this chapter by deferring to other air, water or environmental permits issued for the facility which provide an equivalent or superior level of environmental protection. Such deferral shall be granted by the department for permitted RCRA Part B facilities that have existing MRW Permits, adequate financial assurance and demonstrate equivalent environmental protection through existing operational procedures and practices.*

Again we appreciate the opportunity to provide comments and welcome discussion at any time. If you have any questions or require additional information, please feel free to contact me at (425) 227-7527.

Sincerely,

La Weeda Jones Ward
Manager, Regulatory Affairs

cc: Jack Wolfin, PSC

TACOMA-PIERCE COUNTY
HEALTH
DEPARTMENT

Federico Cruz-Uribe, MD, MPH
Director of Health

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September 4, 2002

Mike Hibbler
Solid Waste & Financial Assistance
Department of Ecology
4601 N. Monroe, Suite 202
Spokane, WA 99205-1295

RE: Comments on Chapter 173-350 WAC, *Solid Waste Handling Standards*

Dear Mr. Hibbler:

Thank you for the opportunity to provide comments on the public review draft of the proposed rules for Chapter 173-350 WAC, Solid Waste Handling Standards. The Tacoma-Pierce County Health Department (TPCHD) has been an active participant throughout the development of this proposed rule and welcomes the opportunity to help shape the future of solid waste management in Washington.

The TPCHD recognizes the many challenges Ecology faces in developing a rule such as this and appreciates all of the efforts of your rule development team. With the exception of a few areas of the rule, the TPCHD believes that the proposed Chapter 173-350 WAC represents a significant improvement over the existing rule, Chapter 173-304 WAC, *Minimum Functional Standards for Solid Waste Handling*.

As such, the TPCHD offers the following comments on the public review draft of Chapter 173-350, *Solid Waste Handling Standards*, for consideration by Ecology.

1. **Exempting Material Recovery Facilities from Solid Waste Permitting** – The TPCHD is concerned with the approach taken by this rule to exempt recycling facilities from the need for a solid waste permit. The proposed rule establishes an after-the-fact enforcement approach to these facilities and places an unfunded mandate on jurisdictional health departments (JHDs) to deal with these facilities. One of the most fundamental approaches to public health is prevention. Requiring a solid waste permit provides for an upfront review of facility operations and minimize or eliminate potential impacts. The TPCHD is aware of the legislative history that has driven Ecology to this position. However, the TPCHD is also committed to maintaining a prevention-based approach in Pierce County and will, if necessary, implement a more restrictive rule than that proposed by Ecology.

   The Pierce County Solid Waste Division has expressed concerns on this issue in the past and on this draft as well. As you can see, we share their concern, and encourage Ecology to reconsider the treatment of recycling facilities under this rule.

2. **Contaminated Soils Treatment Facilities** – The TPCHD currently has seven facilities under solid waste handling permits that deal with management of contaminated soils. Two of these facilities are fixed petroleum-contaminated soils treatment facilities, while the other five manage street maintenance wastes (street sweepings and vactor waste). The TPCHD is extremely disappointed that Ecology deleted the stand-alone section dealing with contaminated soil treatment facilities. Addressing these facilities independently, as in the "Contaminated Soils Treatment Facilities" section of the Stakeholder Internal Review Draft, was a

substantially better approach than incorporating these requirements into the "Piles Standards" section. The management of contaminated soils is becoming an increasingly common problem. Having clear standards dedicated to the management of these problem wastes would be immensely helpful for health districts and health departments throughout the state. The TPCHD urges Ecology to re-think the current approach and to restore a stand-alone section addressing contaminated soils treatment facilities in the adopted regulation.

3. **Financial Assurance for Solid Waste Handling Facilities** – The proposed rule requires financial assurance for three types of facilities - limited purpose landfills, moderate risk waste facilities and waste tire storage facilities. The TPCHD concurs with the need for the financial assurance for each of these facility types. However, based upon the TPCHD's extensive experience, it is also our belief that financial assurance should be required for several other types of solid waste facilities as well. The TPCHD strongly recommends that Ecology require financial assurance for piles, inert waste landfills and material recovery facilities as well. The purpose of financial assurance for these additional types of facilities is the same as for the three currently listed: insure against the risk that a facility operator fails to perform various closure and/or post-closure activities. The TPCHD has been burdened in the past by unscrupulous operators filling a site with waste and then walking away. The burdens in these instances are potential public health impacts due to accumulated wastes, and potential financial implications in the event of cleanup actions. Requiring financial assurance as a part of the permitting process serves as a prevention-based tool and will help avoid creating these hardships for state and local governments.

4. **Criteria for Inert Waste / Clean Soils** – Due to the high costs of disposal at municipal solid waste landfills, many waste generators are looking to classify their wastes as 'inert wastes' or their soils as 'clean soils'. The approach Ecology has taken to list certain wastes as 'inert waste' (concrete, asphaltic concrete, brick, glass, et cetera) is an effective method that is enforceable by local health departments. However, implementing the criteria in WAC 173-350-990(3)(b)(i-iii) is going to be difficult, if not impossible. As it has been explained to the TPCHD, this approach is intended to set the standard so high (stringent) that essentially nothing will be considered 'inert' except for the listed wastes. If that was in fact the intent, then why establish these additional criteria? More immediately, we are concerned with the practical implementation of the additional criteria. Generators will in fact deem their wastes as inert and put local health departments in the position to prove otherwise. In essence, local governments will have to challenge the designation as "inert" and prove otherwise. This is an undue burden. An alternative approach would be to require generators to demonstrate to the jurisdictional health department that the waste in question is in fact "inert" prior to actually managing it as such. Once again, this approach would provide local governments with a proactive, prevention-oriented approach to enforcement rather than the approach currently described.

5. **WAC 173-350-020 Applicability.** Section (1)(f) states that this chapter does not apply to " Single family residences and single family farms...regulated under WAC 173-350-700**(4)**." No such section exists. Please include a correct reference.

6. **WAC 173-350-100 Definitions**. The TPCHD recommends reviewing, as a whole, the definitions of "Conditionally Exempt Small Quantity Generator", "Household hazardous waste", and "moderate risk waste." In particular, the definition of moderate risk waste would better read "...means solid waste that is limited to household hazardous waste (HHW) and waste generated by a CESQG, as defined in this chapter." See also comment eleven (11), below.

7. **WAC 173-350-220 Composting facilities.** Section (4)(viii)(C). Recommend replacing "Nitrogen content" with "**Nutrient** content". Nutrient content should include Total Kjeldahl Nitrogen, ammonia-nitrogen, nitrate-nitrogen, potassium and phosphorus.

8. **WAC 173-350-230 Land Application.** Section (4)(a)(i)(A) – last word of this sentence should be "prevent**ed**".

   Section (4)(b)(iii) and (v) – other appropriate units of measurement should be identified in the rule in addition to tons. For liquid wastes, "gallons with percent solids" should be reported. Also, volume--such as "cubic yards"--should also be an acceptable reporting unit.

   Section (8)(iii)(E) and (F) – The TPCHD recommends that the regulation specify that analytical results shall be reported on a "dry weight basis".

9. **WAC 173-350-320 Piles used for treatment.** Section (1)(b) – Recommend including item (iv) to state that "the storage of such exempt piles do not contaminate surface or ground water."

   Section (4)(d)(iii) – units should be tons or cubic yards.

10. **WAC 173-350-330 Surface impoundments and tanks.** In Section (4)(c), replace the word "weights" with "gallons"--or simply add "or gallons".

    In Section (4)(e)(vi), include "gallons".

    In section (5)(b), the word "lead" should be "leak".

11. **WAC 173-350-360 Moderate risk waste handling.** The TPCHD recommends inclusion in this regulation of a list of moderate risk waste types or categories. While we recognize that such a list cannot be comprehensive, it can be instructive to the general public and help make this regulation stand-alone. A list similar to that used by Ecology in previous guidance documents could be included in either the body of the regulation, as an appendix, or via reference, and prefaced by "Examples of moderate risk waste types include, but are not limited to, the following. . .". Note that this may require modifying the definition of "Moderate risk waste" in Section 100.

Thank you for the opportunity to comment. If you have specific questions regarding our suggestions, please contact Andy Comstock at (253)798-6538.

Sincerely,

Steve Marek
Public Health Manager
Environmental Health Programs

SM:AC:llj

cc: Steve Wamback, Pierce County Public Works & Utilities

Hibbler, Michael A.

From: Clifford_E_Cliff_Clark@RL.gov
Sent: Wednesday, September 04, 2002 3:13 PM
To: Hibbler, Michael A.
Cc: Joel_B_Hebdon@rl.gov; RJLandon@mail.bhi-erc.com; Richard_H_Gurske@rl.gov; BLVedder@mail.bhi-erc.com; Wayne_E_Toebe@rl.gov; Anthony_C_Tony_McKarns@rl.gov; George_H_Sanders@rl.gov; Barbara_D_Williamson@rl.gov
Subject: HANFORD COMMENTS REGARDING SOLID WASTE HANDLING STANDARDS; CHAPTE R 173-350 WAC PROPOSED RULE (WSR 02-14-061; Filed June 27, 2002)

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Mr. Hibbler,

The attached MS Word file contains comments from the U.S. Department of Energy, Richland Operations Office (RL) on the proposed solid waste handling standards, Chapter 173-350 Washington Administrative Code. A formal written copy of these comments will also be submitted to your office.

RL appreciates the opportunity to comment on the rule making effort. If there are any questions concerning the comment please contact me at (509) 376-9333.

<<173350wac.Hanford.com.doc>>

Clifford E. Clark

Joel Hebdon

Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

RECEIVED
SEP 2002
EASTERN REGIONAL OFFICE

02-RCA-0562

SEP 06 2002

Mr. Michael A. Hibbler, Regional Director
Solid Waste and Financial Assistance
Eastern Regional Office
State of Washington
Department of Ecology
4601 North Monroe
Spokane, Washington 99205

Dear Mr. Hibbler:

PROPOSED RULEMAKING: SOLID WASTE HANDLING STANDARDS, CHAPTER 173-350 WASHINGTON ADMINISTRATIVE CODE

Enclosed are the comments from the U.S. Department of Energy, Richland Operations Office (RL) on the proposed solid waste handling standards, Chapter 173-350 Washington Administrative Code. An electronic copy of these comments was submitted to your office via e-mail on September 4, 2002. RL appreciates the opportunity to comment on the rulemaking effort. If there are any questions, please contact Clifford Clark, of my staff, on (509) 376-9333.

Sincerely,

Joel Hebdon

Joel Hebdon, Director
Regulatory Compliance and Analysis Division

RCA:CEC

Enclosure

cc w/encl:
A. K. Ikenberry, PNNL
W. T. Dixon, CHG
R. H. Gurske, FHI
R. J. Landon, BHI
J. E. Rasmussen, ORP
B. L. Vedder, BHI

COMMENTS REGARDING
SOLID WASTE HANDLING STANDARDS; CHAPTER 173-350 WAC
PROPOSED RULE
(WSR 02-14-061; Filed June 27, 2002)

General Comment

Competitiveness: The Governor has expressed concern over competitiveness issues for the past several months, noting that action must be taken now to ensure that Washington has the basic tools to compete economically with other states and nations. For the Governor's initiative to be successful, it is important that any new rulemaking be considered in the context of:

- Will this action result in increased costs to business within the State?
- If so, is the increased cost justified for the benefits received?
- Are there less costly measures that would achieve the intended goals?

This proposed rule contains several provisions where the Washington State Department of Ecology (Ecology) has opted for more costly, less competitive regulatory provisions, with no clear benefit in terms of protecting human health or the environment. Examples include:

- **More stringent standards for demolition wastes:** A major component of the proposed rule is to eliminate the disposal of demolition waste (including demolition waste with a wood component) in inert/demolition waste landfills. Instead, demolition waste would require disposal (at a minimum) in accordance with the more stringent standards for limited waste landfills. This is apparently being done in order to prevent disposal of inappropriate waste forms (i.e., waste forms that represent an increased threat to the environment) in less-protective landfills. Exclusion of such waste streams is understandable; however, the proposed rule may have gone beyond what is necessary by totally eliminating the inert/demolition landfill option rather than on identifying and restricting the specific demolition waste components that are problematic. It is recommended that Ecology reconsider the regulation with the notion of targeting and restricting the most significant and problematic waste streams.

- **Additional reporting requirements with little inherent benefit :** The proposed rule would require preparation and submittal of an annual report for inert waste landfills. Given the very restrictive nature of inert waste landfills in the proposed rule, and considering that both the existing regulation at WAC 173-304-461 and the proposed rule require the operator of an inert/demolition landfill to keep records of waste disposal types and volumes, the imposition of an annual report seems unnecessary. If the landfill authority wants to know the pertinent information they can, at any time, simply review the landfill operating record.

This seems much more appropriate than imposing a requirement to submit an annual report that may be of little interest to the jurisdictional health department.

- **Elimination of flexibility allowed under current rules:** The proposal would eliminate standardized provisions of the current rule in favor of more onerous "case-by-case" approvals. For example, the current rule at WAC 173-304-460(3)(c) includes provisions for landfill liners in arid climates. The arid landfill design is not included in the proposed rule, although the concept could apparently be used as an alternative design. This approach places a much higher burden on the landfill owner/operator, and eliminates the straightforward flexibility present in the existing rule.

- **Failure to allow flexibility allowed under Federal rules:** Under Federal rules at 40 CFR 761.62(b), certain regulated PCB wastes can be disposed of in State-permitted non-hazardous waste landfills. The proposed rule appears to prohibit the disposal of any waste regulated by 40 CFR 761 in either limited purpose or moderate risk waste landfills, despite the allowance of the Federal regulations.

Whether the environmental benefit achieved from many of the proposed standards justifies the cost is questionable. In many instances it would seem that a less costly approach could be implemented that would attain essentially the same degree of environmental protection. Clearly the cost of doing business in the State of Washington will go up if the proposed rule is adopted, and the competitiveness gap will increase.

General Comment: The proposed rule is adopted under the authority of RCW 70.95, which states that a person may, without a permit, dump or deposit waste "resulting from his or her own activities onto or under the surface of ground owned or leased by him or her when such action does not violate statutes or ordinances, or create nuisance." (see RCW 70.95.240(1)(a)) This has previously been interpreted by both Ecology and the jurisdictional health department as applying to inert/demolition waste landfills on the Hanford Site that receive only waste generated on the Hanford Site. Therefore, existing Hanford Site facilities would be grand-fathered under this previous written exemption and not require permitting. However, it is unclear from reading the new proposed rule whether this exemption would be allowed for any new activities regulated under this chapter. Suggest that this exemption from permitting be clarified under section 173-350-700.

Specific Comments

1. **WAC 173-350-020(15):** This item indicates that WAC 173-350 does not apply to PCB wastes regulated under 40 CFR Part 761. This provision would appear to preclude disposal of PCB waste in solid waste landfills regulated under WAC 173-350, despite the fact that disposal of certain regulated PCB wastes in a permitted state non-hazardous waste landfill is allowed under 40 CFR 761: 40 CFR 761.62(b) lists several items that could be disposed of in such a landfill. Is there a basis for rejecting

this provision, which the EPA has determined to be adequately protective? If Ecology did not intend to vitiate the Federal regulation, then item (15) should be revised along the following lines, "PCB wastes regulated under 40 CFR Part 761 . . . except for those PCB wastes for which disposal in a permitted state non-hazardous waste landfill is allowed pursuant to 40 CFR 761."

2. **WAC 173-350-400(3)(b):** The arid landfill design criteria currently in WAC 173-340-460(3)(c)(iv) have been eliminated in WAC 173-350. The proposed rule would apparently require that an arid landfill design be approved, on a case-by-case basis, as an alternative liner system under WAC 173-350-400(3)(b). This case-by-case approach increases the likelihood of inconsistent implementation around the State and places an unnecessary burden on the landfill owner/operator given the straightforward, protective arid landfill design established in the current regulation. RL recommends that Ecology include the existing arid landfill design in WAC 173-350 as a reasonable and protective option for sites that receive less than 12 inches of precipitation annually.

3. **WAC 173-350-400(4)(b)(i):** In order not to preclude PCB disposal deemed environmentally protective and allowed under Federal regulations, revise the 1st sentence in this item to read as follows: ". . . and other prohibited wastes including polychlorinated biphenyls (PCBs), except for PCBs authorized for disposal in permitted state non-hazardous waste landfills pursuant to 40 CFR 761."

4. **WAC 173-350-410(3)(c):** The proposed rule would require owners/operators of inert waste landfills to keep a record of the weight of inert waste disposed of. The current rule in WAC 173-304-461 gives owners/operators the option of recording either weight or volume. Limiting owner/operators to recording weight will only add cost to the operation of inert waste landfills, with no demonstrated value. Those landfills not already equipped with weight scales will either have to install scales, or come up with a system for estimating weight that is accurate to plus or minus 20% (this is difficult to do when you are dealing with waste of varying densities). Either way, the cost of operating the landfill goes up. Unless the landfill has a tipping fee that is based on a cost per unit of mass, knowing the actual weight of the inert waste provides little value. Volume is a much more valuable indicator in terms of determining landfill capacity.

5. **WAC 173-350-410(4)(d):** As mentioned in the general comment, the requirement to submit an annual report for inert waste landfills is unnecessary. Landfill operators are already required to maintain daily operating records with the pertinent information. These records are available to jurisdictional health department personnel whenever they wish to review landfill operations. The requirement to submit an annual report that seems likely to be ignored by the receiving agency is an unwarranted burden.

6. **WAC 173-350-600:** This section should be revised to include a statement acknowledging that the federal (and probably state) government is not subject to the financial assurance requirements, similar to the provision in the Dangerous Waste Regulations at WAC 173-303-620(1)(c).

7. **WAC 173-350-990(2):** The list of inert wastes in this section raises questions about other wastes that are not currently identified on the list, but which arguably should be considered inert. Certain metal wastes may fit in this category, such as stainless steel and perhaps carbon steel. Polymerized plastics (e.g., PVC) should also be included. PVC is, of course, routinely used as underground water piping with no deleterious effect on the environment. RL recommends that the inert waste list be expanded to include these minimal threat waste streams.

8. **WAC 173-350-990(3)(b):** The inert waste "criteria" shown in this section needs more definition. What exactly is meant by "negatively impact" soil, ground water; or "pose a health threat"? What are the actual standards that must be met? Alternatively, what models will be used to evaluate whether the generic criteria have been met? As written, the criteria are nebulous. This approach increases the likelihood for inconsistent implementation across the state. It is highly likely that some jurisdictional health departments will simply opt to reject any waste (other than waste listed in –990(2)) as inert simply due to the lack of clear criteria. Issuance of guidance to clarify this issue is unsatisfactory as it represents de facto rulemaking without formal public comment. The inert criteria are important. RL recommends that Ecology reevaluate this issue and present clear criteria for public comment rather than promulgating uncertain criteria which transfer responsibility onto the health departments or the regulated community.

Hibbler, Michael A.

From: Gary Hanada [ghanada@shd.snohomish.wa.gov]
Sent: Wednesday, September 04, 2002 12:50 PM
To: Hibbler, Michael A.
Subject: MFS Review


Jnknown Document (29 KB)


Card for Gary Hanada (417 B)

Mike, attached is the Snohomish Health District's review of the Solid Waste Handling Standards, Chapter 173-350. A hard copy will be mailed today. Please let me know if you cannot open this document. Thanks.

Gary Hanada

September 4, 2002

Mike Hibbler
Section Manager
Solid Waste & Financial Assistance Program
Washington State Department of Ecology
Eastern Regional Office
N. 4601 Monroe St., Suite 202
Spokane, WA 99205

Subject: Solid Waste Handling Standards, WAC 173-350, Review Comments

Dear Mr. Hibbler:

Thank you for the opportunity to review this latest draft of the Solid Waste Handling Standards, WAC 173-350. The following comprises the Snohomish Health District's comments concerning the public review draft:

Page 7. In the definition for "conditionally exempt small quantity generator" add "means a conditionally exempt small quantity generator of less than 220 pounds of hazardous waste, or less than 2.2 pounds of extremely hazardous waste, per month per batch."

Page 9. Add the definition "hazardous waste means those wastes designated by WAC 173-303-090 and/or WAC 173-303-100, and regulated as hazardous waste by the department.

Page 9. Add the definition "household means single or multi-family residences, hotel or motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day-use recreation areas.

Page 9. Replace the definition "Incompatible waste" with the following "means a waste which is unsuitable for placement in a particular device or facility because it may corrode or decay the containment materials, or is unsuitable for mixing with another waste or material because the mixture might produce heat or pressure, fire, or explosion, violent reaction, toxic dust, fumes, mist, or gases, or flammable fumes or gases."

Page 10. In the definition for "leachate" add "a product" after the words ...contact with. Some facilities contend that after their process they have a product, yet that product can still produce leachate.

Page 11. Add the definition " Manifest means the shipping document, prepared in accordance with the requirements of WAC 173-303-180, which is used to identify the quantity, composition, origin, routing, and destination of a hazardous waste while it is being transported to a point of transfer, disposal, treatment, or storage.

Page 13. In the definition for "putrescible waste" add the words "leachate or" after the words ...likely to produce.

Page 14. Add the definition "Secondary containment means a system to contain spills from containers and tanks.

Page 14. In the definition for "source separation" replace the words "of different kinds" with "recyclables out". Separation of different kinds of solid waste does not seem to be an adequate definition.

Page 15. In the definition for "type 1 feedstocks" replace the words "meat free food" with "produce (meaning vegetative waste)". "Meat free food" includes other foods like eggs, dairy, and cheeses, that might not be appropriate type 1 feedstocks.

Page 16. In the definition for "wood derived fuel" include laminates in the list "wood derived fuel does not include...".

Page 17. In the definition for "wood waste" include laminates in the list "but does not include...".

Page 23, section 2.b.ii. Change the sentence to "Accept source separate solid waste for the purpose of energy recovery and/or recycling. Dispose of an..."

Page 23, section 2.b.iv. Add a sentence (E. Documentation that provides evidence of compliance with (ii) of this section).

Page 29, chart. Add under Table B PCBs (1 ppm), TPH other (200 ppm), and Carcinogenic PAHs (1 ppm or .1 ppm).

Page 34, section 1.a.f. What is the definition of materials? Does materials exclude all solid waste or does it include some regulated waste?

Page 34, section 2. Eliminate word "except" in the last sentence.

Page 65, section 1.b. Add (iii) Persons managing SQG waste at a business that is generated by the business as long as the performance standards are met.

Page 65, section 2.d. Add the following language:

> "provide secondary containment to capture and contain releases and spills;"
> "require all storm drains in the vicinity of the collection event to be covered with plastic sheeting or otherwise blocked off in order to prevent any release from entering storm drain systems."

Page 90, section 1. Change the volume to categorically exempt inert waste landfills from solid waste handling permitting to 1,000 cubic yards or less.

Page 113, section 7.b. What is the definition of relative interests? Please add a definition with criteria like public notification and hearing, or eliminate the section completely.

Page 100, section 5.b.i.B. Replace current language with:

> Resample the ground water in the monitoring well (s) where the statistically significant increase has occurred. The additional data shall be used in statistical tests to check for outliers.

Page 100, section 5.b.i.C. The sentence concerning background concentrations higher than protection should include the demonstration requirements for Enforcement Limits already in WAC 173-200-050 (3) (b) (ii).

Page 100, section 5.b.i.c. Add the language; ...the established background concentration must meet the requirements of Enforcement Limits as stated in WAC 173-200-050.

We would like to see definitions for refuse-derived fuel and solid waste digestors.

If you have any questions concerning these comments, please contact me at 425-339-5250.

Sincerely,

Gary Hanada, R.S., Section Manager
Solid Waste and Toxics Section
Environmental Health Division

Hibbler, Michael A.

From: Dumar, Laurie
Sent: Wednesday, August 28, 2002 2:34 PM
To: 'dscott@vaagenbros.com'
Cc: Hibbler, Michael A.
Subject: Public comment on solid waste regulation

Hello, Mr. Scott:

Thank you for your comment.

I am forwarding your message to Mike Hibbler who will include it in the Concise Explanatory Statement for this rule adoption.

Laurie Dumar
Dept. of Ecology
Rules Unit
Phone: 360.407.6606
Fax: 360.407.6989

Visit the Laws and Rules Web Site at: http://www.ecy.wa.gov/laws-rules/index.html

-----Original Message-----
From: webserver@www.ecy.wa.gov [mailto:webserver@www.ecy.wa.gov]
Sent: Wednesday, August 28, 2002 2:20 PM
To: Dumar, Laurie
Subject: Feedback from the Laws and Rules Web Site

****

MessageType: Suggestion
Subject: (Other)
SubjectOther: 173-350
Username: Dave Scott
Address:
City:
UserEmail: dscott@vaagenbros.com
UserTel:
UserFAX:
ContactRequested:
Submit: Submit Comments
Date: Wednesday August 28, 2002
Time: 02:19:45 PM -0700

Comments:

Vaagen Brothers Lumber, Inc. thank the State of Washington Dept of Ecology for the opportunity to respond to the proposed solid waste regulation revisions, in their effort to streamline the regulatory process for affected private sector parties. Our comment focuses on the State's recognition of the potential benefits of wood residue materials.

We applaud the Dept of Ecology for their recognition of the potential of wood residue produced by the sawmill industry. We at Vaagen Brothers Lumber, Inc. began exploring the benefits of wood residue produced at our Republic facility approximately three years ago. We have found that, just as perhaps the DOE has envisioned in some instances, wood residue by-products show merit for their use to rehabilitate disturbed land surfaces, as beauty bark in commercial and consumer landscape design, as sight and sound buffers in conjunction with berm construction, and as base material for agronomic field trials, and for soil supplements. We currently employ our wood by-products in beneficial field applications and shall continue to do so for the foreseeable future.

We believe the revised proposed solid waste regulations can help the sawmill industry to focus on all the products in the production process and re-think the role that sawmill by-products can have in the marketplace.

Tacoma
City of Tacoma
Public Works Department

September 4, 2002

Mike Hibbler
Project Manager
Department of Ecology
North 4601 Monroe
Spokane, WA 99205

Subject: Comments on Proposed Regulation, Chapter 173-350

Dear Mr. Hibbler:

Thank you for the opportunity to comment on the draft regulation, Chapter 173-350, of the *Washington Administrative Code* (*WAC*). The attached document contains the comments from the City of Tacoma (City) Solid Waste Management (SWM) Division.

We would like to emphasize the comments directed at the financial assurance requirements and design requirements for Moderate Risk Waste (MRW) facilities. The City SWM Division strongly believes that the financial assurance requirements for MRW facilities, especially those owned by local governments for the purposes of collecting CESQG waste, is excessive and unwarranted. This is an unnecessary administrative exercise that does not appear to solve any real problems. Please refer to the information in the attached comments for further information.

A second area of emphasis is the blanket exemptions for recycling facilities. While an increase in recycling facilities will help recycling to be a bigger part of a sustainable society, recent history has shown that improperly designed or operated recycling facilities can be environmental problems as well. In addition, many local recycling companies have invested heavily in environmental controls and operations. In some cases, the impetus for the increased control was the solid waste handling permit. Removing this requirement for facilities with a higher risk of environmental problems will result in facilities with lesser environmental controls.

Thank you for your consideration. If you have any questions, please contact Gary Kato at 253-593-7713.

Sincerely,

Alan M. Tebaldi, P.E.
Public Works Division Manager
Solid Waste Management Division

AMT:GHK:sr (W0553SR)

Attachment(s)

File: SWM – Recycling - MRW

Comments on 173-350 WAC
City of Tacoma Solid Waste Management
September 4, 2002

Section: 020 (18) Applicability
Comment: The City of Tacoma supports the exemption of drop boxes that contain recyclable materials from regulation under the proposed rule. It is suggested that language be added that the drop boxes exempted from 173-350 WAC contain no more than five percent (of the total contents of the box), of materials unacceptable to the receiving facility. This is consistent with the proposed language for recycling facilities proposed in section 210. Recycling by public and private entities will be necessary factor in the achieving sustainability for our region, but an increasing amount of waste is currently transported improperly as recyclable material.

Section: 100 – definition of "Home composting"
Comment: The definition of "Home composting" would allow some to interpret that home composting of garbage is acceptable. The City of Tacoma believes that the definition of home composting should specifically prohibit the composting of garbage, rubbish or trash.

Section: 100 – Definition of "Materials recovery facility"
Comment: The City of Tacoma supports the language specifying a maximum contamination level.

Section: 100 – Definition of "Municipal solid waste"
Comment: The City of Tacoma supports the language that defines MSW with the following revision to the last bullet in the definition. "Mixed or segregated recyclable material that has been source separated from garbage, refuse and similar solid waste. Individual loads of mixed or source separated recyclable material shall not exceed five percent by weight or volume residual material that cannot be recycled at the intended recycling facility. The residual from source separated recyclables is MSW."

Section 210 - Material Recovery and Recycling Facilities
Comment: The City of Tacoma supports the relaxation of the standards for Recycling Facilities, but believes the proposed standards allow too much freedom from the permitting requirements. Recycling facilities in Pierce County and the City of Tacoma have had problems resulting in cleanup activities. Blanket exemptions should only be allowed when the materials recycled pose very little risk or require minimal oversight, or the facilities themselves are enclosed. In many cases the businesses that are regulated by solid waste permits have had a much better history of environmental compliance and have a higher margin of safety due to improved facility design and operation. In Pierce County and the City of Tacoma, many of the established recycling businesses

have invested heavily in environmental controls and safe operations because of the regulatory restrictions. Some suggestions include the following:

- There should be clear criteria and processes for the thresholds that would require a solid waste permit. This is a very subjective area, and it will be difficult to determine the applicability of the solid waste permitting process without a clear process and criteria.
- One option is to develop Best Available Control Technology (BACT) or Best Management Practices for which the exemption is allowed for specific recycling facilities. There are different types of recycling facilities that are currently already permitted in Washington State. Many of these facilities, particularly those that handle difficult materials (demolition waste) or other materials with the potential for environmental problems, can provide the basis for BACT that should be applied to earn the exemption.
- The jurisdictional Health Department should be given more than thirty days notice from the facility operator. It is suggested that the regulation provide for Health Department review and approval of an application for the exemption prior to development of the facility. Similar to the requirements for other facilities, an opportunity for the public to comment on the proposed facility should also be incorporated.

Section: 220 (b)- Compost Facilities exempt from Solid Waste Handling Permits Subsections (iii) and (viii)
Comment: These exemptions appear to conflict. Section (iii) sets the upper limit of on-site material at 40 cubic yards and Section (viii) sets the upper limit at 250 cubic yards. Also, Section (viii) does not define on-site material as Section iii does. The exemptions should be consistent.

Section: 240 (4)(a)(iii)
Comment: The City of Tacoma Steam Plant is permitted under Section 240 and does not accept solid waste from the general public. While there are systems set up to divert some recyclable materials (commingled household type materials generated by employees, cardboard and metal) generated by facility operations, there is no need to set up a separate recycling facility for the plant. The City suggests the phrase "for all facilities that accept solid wastes from the general public or self haul residential, commercial or industrial solid waste generators" be added to the requirement specified in this section.

Section: 360 (2)(a)
Comment: There are two comments related to this subsection regarding notification. Notification of the type of material to be collected can be accomplished if the notification can be kept relatively general and broad. Estimating quantities is difficult unless there is a historical record for an individual collection site. Quantities of specific types of HHW collected vary from location

to location and are impacted by other factors as well. Notification of the jurisdictional health department should be sufficient. Requiring notification to Ecology is an unnecessary step.

Section: 360 (5) – MRW Design Standards
Comment: The specific requirements described in this section can be a problem for older facilities. Provisions should be added to the regulations that would allow "grandfathering" of existing facility designs that have been approved and permitted. Just one example in the case of the City of Tacoma is the requirement for secondary containment. Tacoma has one storage are for all packed (loose, lab and bulk packed) HHW materials and that area shares one large containment area. If the Tacoma HHW Facility secondary containment area were required to have segregated areas for incompatible wastes, significant additions would be required. Segregated areas would decrease the usable floor space of the facility. The current design has been reviewed, approved and permitted by the jurisdictional health department, and the Department of Ecology has also been involved in the process. There are other areas of concern for the design standards such as the secondary containment capacity for fire suppression systems.

Section: 360 (9)
Comment: The City of Tacoma reiterates its position that financial assurance mechanisms for City or County owned and operated MRW facilities are excessive and a waste of resources. The following list supplies background for the City's position:

- Most of the City or County owned facilities are now an integral part of their respective solid waste systems and provide a service that is expected from their citizens. The City of Tacoma continues to expand the services provided at its HHW facility, and there are no plans to close the facility.
- Unlike landfills, there are no capacity issues that would force closure of these facilities. There is no history indicating that the municipal or county owned facilities have been a problem from a closure perspective.
- The city and county run operations are not subject to the same issues as the private MRW facilities, and the financial considerations are very different. The purpose and goal of the government MRW collection facilities is much different that the private MRW facilities that provide transportation and processing services similar to Treatment, Storage and Disposal Facilities.
- A large portion of the closure cost for the City and County owned MRW sites would be the removal of the largest amount of waste stored on site. In the case of Tacoma, there is between a two and four month's accumulation capacity at the facility, depending on the time of the year. Assuming the higher end number, the financial assurance mechanism would be required to cover between 10-15 percent of the facility's annual operating costs. Even if additional funds were required in the fund, in no case should it reach half of the facility's annual operating cost.

- The administrative and financial requirements are not warranted based on the size of the fund or instrument required. The different mechanisms all require significant resources outside the scope of normal operations.
- Since it is likely that there are no plans to close such facilities, schedules for contributing to reserve accounts would likely be very long. The yearly deposits may initially be as low as $5,000-10,000 dollar for larger facilities if the closure date is projected 10 or more years out.

RECEIVED
EASTERN REGIONAL OFFICE

bp

Mr. Michael Hibbler
Washington Department of Ecology
Eastern Regional Office
4601 N. Monroe
Spokane, WA 99205-1295

Re: Comments to Proposed Rule Chapter 173-350 WAC

Dear Mr. Hibbler:

The BP Cherry Point Refinery operates a limited purpose landfill permitted by Whatcom County Health and Human Services. The facility is designed and operated as a land treatment system for nonhazardous petroleum contaminated soil, stormwater solids and biosolids produced by the refinery wastewater treatment system. While the design, operation and performance of the facility are substantively in compliance with the proposed rule (173-350 WAC), we note that the regulation does not recognize land treatment and the conventional operating practices of land treatment systems.

WAC 173-350-400 (4)(b)(ii) requires compaction of solid waste before succeeding layers are applied. This requirement is contrary to current and historic operating practice at our facility where the surface is tilled to promote the biodegradation of petroleum hydrocarbons and volatile solids.

WAC 173-350-400 (4)(b)(iii) requires the covering of disposed waste. Again, this requirement is counter to our operations where aeration and sun exposure are necessary to promote drying and aeration during the treatment season. The materials placed in the facility:

- do not contain litter
- are not combustible
- are not conducive to scavenging
- do not encourage disease vectors

Odor control is another reason cited in the proposed regulation for covering waste material. While odors are a natural aspect of any biosolids handling system, we have had good success managing our system in a manner that minimizes odor impacts. We encourage Ecology to allow adoption of alternate operational or control strategies acceptable to the local permitting jurisdiction for odor control when the covering of waste is inconsistent with an essential facility operating practice.

WAC 173-350-500 establishes requirements for a groundwater monitoring program. Groundwater at our site has been monitored on a quarterly basis since 1993 under the program established during the initial permitting process. The proposed rule does not allow for modifications from the jurisdictional health department due to site specific conditions or allowances. Our program was established based on the unique properties of the materials being managed in the land treatment facility. We believe such flexibility is critical for established program that are protective of human health and the environment.

In addition, WAC 173-350-320 allows for the establishment of inert waste piles such as asphaltic and concrete materials. Cherry Point is proud of its on-going materials recycling and reuse program and has both asphalt and concrete rubble piles to be used during road construction activities common during refinery turnarounds. Major turnaround events happen on an infrequent basis, at times more than 3 years apart. Use of all of our asphaltic and concrete materials within this timeframe is not practical.

Thank you for consideration of these issues during the final establishment of WAC 173-350. Please do not hesitate to call should you have any questions regarding these comments. I can be reached at 360-371-1340.

Sincerely,

Kelda R. Hendrickson
Waste Engineer

CC: E. Daly

Pierce County

Office of the County Executive

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August 28, 2002

Mike Hibbler
Solid Waste & Financial Assistance
Department of Ecology
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Spokane, WA 99205-1295

RE: Comments on Chapter 173-350 WAC, *Solid Waste Handling Standards*

Dear Mr. Hibbler:

This letter contains comments from Pierce County on the proposed rule, Chapter 173-350 WAC, *Solid Waste Handling Standards*.

Pierce County actively participated in the rule development process, coordinated with the Tacoma-Pierce County Health Department to provide section-by-section detailed comments, and generally supported the broad goals for revising Chapter 173-304. Many of the technical comments submitted to the Department of Ecology have been addressed in the latest draft of Chapter 173-350 WAC.

We are disappointed, however, that the main issues which most concern us about "exempt facilities" were ignored. As presently drafted, Chapter 173-350 WAC will:

(1) make it easier for unscrupulous people to start illegal businesses under the guise of "recycling";
(2) allow these illegal businesses to escape early preventative environmental review; and
(3) create sites which will require costly after-the-fact enforcement and cleanup.

The proposed rule sends the message that the promotion of waste reduction and recycling is more important than the goals of providing an adequate level of environmental protection. Pierce County disagrees with this "recycling at any cost" approach to regulation and is taking steps to cleanup the mess caused by previous versions of this regulatory tactic.

Through the Pierce County Responds program, Pierce County is currently spending considerable time, effort, and money to cleanup and close down sites which, under the guise of "recycling" inert waste, have turned into nothing more than landfills or yard debris dumps. The proposed Chapter 173-350 expands the opportunities for these sorts of activities to occur

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and makes it more difficult for local governments and jurisdictional health departments to monitor activities and take enforcement action. The County believes that the proposed Chapter 173-350 goes beyond the intent of state legislation both in the number and type of facilities proposed to be exempt and by replacing the preventative review measures of the solid waste permit with self-reporting and monitoring.

Attached to this letter are detailed comments prepared by the Solid Waste Division staff in consultation with the Tacoma-Pierce County Health Department and legally permitted solid waste and recycling facilities doing business in our County. The Division's comments focus on potential conflicts, difficulties in implementation, added work loads, a shifting of responsibilities, and insufficiency of public review for many activities proposed to be exempt. I concur with comments being submitted.

I urge the Department of Ecology to take this opportunity to modify the proposed Chapter to be a more responsible guardian of our environment and to be more respectful of the environmental goals of local government. In the end, should the Department of Ecology fail in these efforts, I will work with the Tacoma-Pierce County Board of Health to enact local regulations which are at least as strict as those in place today. Pierce County will not have its efforts to improve the quality of life for our citizens thwarted by the Department of Ecology.

If you have any questions about this letter or the enclosed comments, please feel free to contact me or Steve Wamback, Pierce County Solid Waste Administrator. Mr. Wamback's telephone number is (253) 798-4656.

Sincerely,

John W. Ladenburg
Pierce County Executive

Cors/so2039.jwl.doc

cc: Lyle Quasin, Chief of Staff
Frederico Cruz-Uribe, Director
Steve Marek, Public Health Manager
John Trent, Director, Department of Public Works and Utilities
Karen Goon, Deputy Director
Steve Wamback, Solid Waste Administrator
Sally Sharrard, Senior Planner
George Walk, Director, Government Relations
Pierce County Legislative Delegation

Comments on Chapter 173-350 WAC, *Solid Waste Handling Standards*

Pierce County Department of Public Works and Utilities, Solid Waste Division
Steve Wamback, Solid Waste Administrator
Sally Sharrard, Senior Planner

The Pierce County Solid Waste Division submits the following comments on the proposed rules for Chapter 173-305, *Solid Waste Handling Standards*.

1) Chapter 173-350 WAC promotes waste reduction and recycling at the expense of overall environmental protection.

- The draft regulations make a number of uses in sections -200, -210, -220, and -320 exempt from obtaining a solid waste permit. Without a solid waste permit, there is no means to ensure that the preventative environmental design and handling procedures are incorporated before the exempt facilities begin operation. There must be some means for initial preventative oversight and for jurisdictional health departments (JHD's) to continue monitoring for compliance on a regular basis, as is provided through the solid waste permit process.
  This will be a particular problem for JHD's to ensure compliance from:
  a) recycling businesses with outside piles used for storage and treatment (-320),
  b) exempt material recovery and recycling facilities (-210), and
  c) some of the larger, exempt agricultural composting facilities (-220).

- The prior review procedures for waste that is to be beneficially used on the land or stored, -200, are inadequate to ensure coordination with local government siting requirements, such as those being developed to implement the 4(d) Rule to protect salmon habitat. Local governments in Western Washington are developing new regulations to prevent ground and surface water pollution and to prevent disturbance of critical habitat in order to implement the Rule. It is likely that stream buffering standards will increase and activities immediately adjacent to streams and creeks will be limited.

  The Department certainly must realize that what may be appropriate for application at one site may not protect the environment in another site. These regulations are crafted so as to make it difficult for local JHD's and governments to track just what is occurring where. The inability to track what is occurring for those beneficial use exemptions which get Department approval to be applied anywhere in the State without notification (-200 (5) (e)), might allow inappropriate applications in identified critical area buffers without sufficient oversight.

- At the *very minimum*, applicants who receive statewide beneficial use exemption approval should be required to provide an annual report to the Department and each local JHD and include a list of sites of where the beneficial use waste is applied during that year. This information should be site-specific, by parcel number, township and range.

2) The proposed rules go beyond the intent of state legislation both in the number and types of facilities proposed to be exempt and by replacing the preventative review measures of the solid waste permit with self-reporting and monitoring.

The following bullets summarize our basic issues. More detail on this issue is provided throughout all other comments.

- As stated in the preposal statement of inquiry, the State legislature originally directed Ecology to undertake a study of the solid waste permit system (ESHB 1419). It directed the *streamlining of the permitting system* to encourage reuse and recycling of solid waste. Other than for beneficial land use exemptions, it did not direct that other uses be made *exempt from review*. Streamlining does not mean exempting.

- Nearly all of the exempt uses are recycling or composting facilities. This seems to be based upon the assumption that recycling is so important that preventing pollution or other problems with these facilities should take a second place. *Streamlining* does not mean removing preventative up-front review and monitoring, nor does it mean reducing opportunities for public comment.

- These regulations have substituted self-reporting and monitoring for the preventative oversight of the solid waste permit process administered by the JHD in coordination with local governments. The regulations state that the operators must voluntarily meet the design and operations requirements and notify the local JHD when they intend to operate so that the JHD can inspect their operation. At the same time, these regulations have removed the funding for the JHD to do the inspections. *Streamlining* does not mean removing the means for funding oversight functions.

3) The proposed rule assigns additional duties to jurisdictional health departments without the mechanism of the solid waste permit to fund these duties.

- For most exempt facilities, the regulations: have design and operating standards that must be met; require operators to notify the JHD prior to commencing operations; and require operators to make annual reports to the JHD or to the Department of Ecology. The regulations require JHD's to inspect exempt facilities and review annual reports of exempt facilities or exempt beneficial land application sites.

  Because no solid waste permit is required, there is no mechanism provided to pay for the JHD to review the notifications or annual reports, to conduct inspections, and to enforce after-the-fact compliance. Typically, under the current process, the applicant's permit fee pays for the staff review and oversight functions. The proposal will likely result in requests from JHD's to County governments for funding to cover those actions necessary to protect human health and the environment.

- There is inconsistency in not requiring even the minimal annual reports for some exempt facilities. The subsections about exempt piles used for storage or treatment, - 320 (1) (c) & (d), should require annual reports to the jurisdictional health department as required of other exempt facilities and operations. How can a business be inspected and monitored for compliance unless a baseline is established of the intended activities and material to be stored on the site? If exempt waste pile businesses are not required to have a solid waste permit, or to make annual reports, how is a local JHD to determine that at least fifty percent of the material stored is used within one year and all the material is used within three years as required in these regulations?

4) After-the-fact enforcement for exempt facilities or exempt application sites later found to be out of compliance does not serve the public nor adequately protect the environment.

- There is a heavy reliance in these regulations upon after-the-fact compliance. Meaning that if the JHD somehow finds out that the exempt use did not meet the design and operation requirements, or if the use has created an environmental problem, then the JHD can require a solid waste permit.

  The initiation of a solid waste permit process after a facility is found to be out-of-compliance will not sit well with local governments or the public and does not carry out the intent of RCW 70.95 *to prevent* pollution problems from occurring.

  After-the-fact compliance is costing Pierce County upwards of $1,000,000 to complete environmental assessments and shut down one business that began by land-applying gypsum, started stockpiling waste glass, then expanded to taking construction debris, including household garbage and roofing shingles. It resulted in what is, for all intents and purposes, a landfill.

  After-the-fact compliance is causing Pierce County to arrange for inspections and environmental assessments and pursue enforcement on a second site which began by stockpiling yard debris from the general public and general contractors for the alleged purpose of recycling. It resulted in a large fire which still is burning underground.

- While there will always be those who do illegal activities, these new regulations make it easier for them to escape detection and easier for small-scale inert recycling operations to expand to handle other construction debris without notifying the JHD. The lack of an established funding process will make it more difficult for local JHD's to inspect and enforce such activities. It will be more expensive for local governments to shut down and cleanup these sites when the operator claims he/she did not need a solid waste permit to begin with and did not need to make annual reports and there is no record of what occurred on the site.

- The regulations lack clarity about how long an owner or operator of an exempt facility can be out of compliance before a JHD can require that a facility obtain a solid waste permit. Is it the Department of Ecology's intent that JHD's require solid waste permits of

exempt facilities for minor violations? For example, if an exempt facility does not submit an annual report, or submits a late annual report, does the Department of Ecology expect the JHD to then require a solid waste permit?

5) In the effort to make it easier for recycling facilities to operate by streamlining the regulations, Ecology has actually created regulations which provide an uneven playing field for some material recovery and recycling businesses.

- In order to maintain an exempt state, the recycling operation must accept only source separated solid waste and dispose of residuals that do "not exceed five percent of the total waste received, by weight per year, or ten percent by weight per load." These rules in section -210 (2) (b) will penalize the truthful operator and encourage those who seek to bend the rules to make false annual reports to hide the amounts that they are actually disposing.

  Again, since there is no serious and funded process to provide up front permitting requirements, inspections, and review of annual reports, it is unlikely that JHD's will be able to tell whether a facility has met the percent disposal standard.

- The proposed regulations penalize those material recovery and recycling operators which may exceed this disposal amount and yet are truthful enough to admit it. They will be penalized in two ways:
  a) The truthful operator will be required to obtain a solid waste permit under the more complicated standards of the permit for an intermediate solid waste handling facility, (-310). These requirements were basically created for transfer facilities handling MSW, a substantially different operation.
  b) The truthful operator will then be paying to meet more expensive design and operation methods and be paying for ongoing JHD inspections and monitoring required to meet the permit. This will put the operator at an economic disadvantage in competing with the unregulated operator.

- There are construction debris recycling and composting businesses in Pierce County which have gone to considerable expense to ensure that their facilities are operating according to all environmental regulations and to ensure that the waste they are accepting is appropriate for their facility and does not contain hazardous materials. If similar facilities are allowed to operate without oversight, the existing operators will be penalized because their procedures and requirements for the incoming waste are more expensive then the unregulated facilities.

6) The SEPA checklist for these regulations does not adequately address how some of the facilities now proposed to be exempt will have sufficient environmental review and opportunities for public involvement.

- The draft regulations pose an implementation conflict. The rules require that exempt facilities be in compliance with local solid waste management plans, -040 (3). Without an

established review process, such as the solid waste permit, there is no guarantee that anyone will check to see that these facilities comply with solid waste management plans.

- This regulation shifts the responsibility to local governments to devise other means for ensuring review of new operations. This will probably mean local governments will need to amend their zoning codes or other regulations to take up the slack for the loss of the solid waste permit, unless the local JHD continues to require a solid waste permit for these exempt uses when they first begin to operate.

- There will be insufficient opportunities for public review and comment prior to the start up of a business intending to operate under some exempt categories. An identified public review process is lacking for: a) exempt beneficial uses which have been given Statewide approval; b) exempt inert waste piles used for storage and treatment, and c) for some large agricultural composting facilities.

  The following are examples of how public review will be skirted:

  - Businesses which stockpile inert waste in outside piles usually do not need a structure to function. If no building permit is applied for and there is no land use permit requiring a hearing, there is nothing to trigger environmental review or any other opportunities for citizen comment prior to start up of the operation. As it is now in these cases, the solid waste permit is the trigger for the environmental review process. Without the solid waste permit, where will be the opportunity for the public to comment on transportation impacts, operating hours, protection for critical area buffers, or for the amounts and length of time for waste to be stored on the site?

  - The same is true for the agricultural composting facilities of more than 40 cubic yards which take Type 1 and Type 2 feedstocks generated off-site. A farm plan does not have a public review process. Where is the opportunity for the public to comment on odor issues and transportation impacts? What if this agricultural compost facility grows into a yardwaste drop-off site for the general public, which could easily occur if the operator chooses to cut costs by advertising to the public? What opportunities then will nearby neighbors have for prior comment about controlling odor or about actions to mitigate the impact of general public traffic and heavy trucks driving to the site? Is the only alternative for citizens and local governments to then begin an after-the-fact compliance effort after complaints have been made?

Thank you for the opportunity to comment.

King County

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September 3, 2002

Michael A. Hibbler
Washington State Department of Ecology
Eastern Regional Office
4601 N Monroe
Spokane, WA 99205-1295

Dear Mr. Hibbler:

This letter represents the King County Solid Waste Division's comments on the Proposed Rule Making for WAC 173-350, Minimum Functional Standards for Solid Waste Handling Facilities. Our comments are organized by section of the proposed rule.

Section: 100 – Definitions

- It would be cleaner to remove carcasses from the definition of "agricultural waste" and separately deal with the handling of carcasses.
- The definition of "buffer zone" has been deleted from the rule.
- "Composted Material" definition is problematic. It defines the material as a solid waste yet the rule seeks to later define what composted materials are solid wastes and which are not. It would be better to define "Composted Material" as the product of the controlled aerobic degradation of primarily organic material.
- "Domestic Wastewater" is not defined.
- The definition of "Dredge Spoils" has been deleted from the rule.
- Need a definition for "Feedstock." It is used generically in Section 200.
- The definition of "Free Liquids" is incorrect. Free liquids are the liquid products of the paint filter test.
- There is an opportunity here to clean up the definition of Garbage. It is a run-on sentence with significant potential to be misunderstood.

- The definition of "Land Reclamation" is a problem. The definition could be construed to apply to either structural fill or improving the organic content of severely altered sites for the purpose of revegetation. Land Reclamation for the latter purpose should be regulated under Land Application. Land Reclamation for the former purpose should be regulated under either the Limited Purpose Landfill Section or the Inert Waste Landfill Section.
- The definition of "Materials Recovery Facility" needs to be changed to say: "means any facility that accepts source separated recyclable materials..." This is a significant point. As presented, the definition doesn't make sense and is inconsistent with common usage. The definition of "solid waste" lists a number of different things that make up solid waste. These things include "...garbage, rubbish, ashes, ... and recyclable materials." A materials recovery facility processes commingled recyclable materials that have been separated out of the solid waste stream at the source. As defined, it seems one could be processing sludge, or swill, or garbage, or other things that have been separated out of the mixed waste stream. Section – 210 exempts material recovery facilities from solid waste handling permitting. All of the discussion in development of this regulation has focused on recyclable materials, not on these other things.
- Need a definition for "Natural Resource Conservation Service Standards" used in the rule.
- Need a definition for "Responsible Person." This term is used in the rule.
- "Soil Amendment" – composted material is excepted from this definition. This is potentially confusing. In many of King County and our partners' educational outreach materials, residents are encouraged to improve their soils with a soil amendment such as compost. It is not clear why compost is not a substance covered as a soil amendment used to improve the physical characteristics of soil.
- "Treatment" is used elsewhere in the rule to mean a process which converts a solid waste into a product which does not need to be handled as a solid waste.

Section: 210 – Material Recovery and Recycling Facilities

The first paragraph needs to be modified to say: "These standards apply to material recovery facilities and facilities engaged in recycling of Source Separated Recyclable Materials." In addition, with a correct definition for the term "Material's recovery facility," the last clause of this sentence is redundant.

As written, this section exempts all recycling facilities from solid waste handling permitting so long as the residuals do not exceed the amounts specified in – 210(2)(6)(ii). This includes mixed waste processing facilities, given the definition discussed above, the use of the term "source separated solid waste," and the application of this section to any facility" ..."engaged in recycling solid waste." I do not believe this is an intended outcome here, and it was not reflected in any of the discussions leading to the proposed regulation.

Section 220 – Composting Facilities

-220 (1) (b) (i) – (x): Interpretation of the exempted activities is cumbersome and difficult to understand. It would be helpful to include a visual table or spreadsheet to aid this interpretation. An example of such a table is enclosed and would greatly facilitate an understanding of who's exempted and who is required to obtain permits. This is particularly important to agricultural interests who have an interest in composting yet are unfamiliar with Solid Waste rule interpretation.

Other: The practice of "manure share" exists in several regions around the state where those who produce/have manure are linked up with small-scale garden users. Where is this practice covered in the revised WAC?

Section: 230 – Land Application

The term land reclamation is never properly defined. Nothing in this rule prohibits land application of mixed municipal solid waste as long as it is applied at agronomic rates. And, as soil amendment is defined to specifically exclude composted materials, this section prohibits land application of composted materials.

Section: 320 – Piles used for storage or treatment

Reorder this section so that the second subsection is permit application and contents.

What would be the procedure for evaluating whether the pile was likely to produce leachate or not?

Section: 330 – Surface Impoundments and Tanks Subsection 2

You need to include a criterion that tanks should not be located in unstable areas.

Section: 330 – Surface Impoundments and Tanks Subsection 4 Paragraph: a

We are concerned about how this standard can be applied retroactively to existing facilities. There needs to be a grandfather clause for existing facilities in conformance with existing requirements.

Section: 360 – Moderate Risk Waste Handling

A mobile MRW Collection Permit Exemption requires no review for consistency with Local Solid Waste Management Plans.

Section: 400 – Limited Purpose Landfills

There is the need to include numerous definitions from WAC 173-351 in order to bring clarify to this section of the rule.

Thank you for the opportunity to comment on this rule. If you have any questions, please call Shirley Jurgensen at (206) 296-4417.

Sincerely,

Rodney G. Hansen
Manager

RGH:SJ:er
SJ6/Comments_Proposed Rule 173 350

Enclosures

cc: Kevin Kiernan, Engineering Services Manager, Solid Waste Division
Shirley Jurgensen, Supervising Engineer

WAC 173-350-220 Proposed Composting Regulations / Permit Exempt Facilities

Type 1 Feedstocks - Source separated yard and garden wastes, wood wastes, agricultural crop residues, wax-coated cardboard, preconsumer meat-free food wastes, other similar source-separated materials that the JHD determines to have comparable low levels of risk in hazardous substances, human pathogens, and physical contaminants.

Type 2 Feedstocks - Manure and bedding from herbivorous animals that the JHD determines to have a comparable low level of risk in hazardous substances and physical contaminants.

Type 3 Feedstocks - mean and post consumer source-separated food wastes or other similar materials that the JHD determines to have a comparable low level of risk in hazardous substances and physical contaminants, **but are likely to have high levels of human pathogens**.

Type 4 Feedstocks - mixed municipal solid wastes, postcollection separated or processed solid wastes, industrial solid wastes, industrial biological treatment sludges, or other similar compostable materials that the JHD determines to have a comparable **high level of risk in hazardous substances, human pathogens and physical contaminants.**

								Section -220 (1)							
Exempt from Solid Waste Handling Permits	**Section -220 (1)**	**Feedstock**	**Vol. (CY) All Mtl's**	**Prod. On-Site**	**Prod. Off-Site**	**Used On-Site**	**Dist. Off-Site**	c. i. **Perform Stands.**	c. ii. **SW/GW BMP's**	c. iii. **Odor Control**	c. iv. **VAR**	c. v. **An. Test (4.a.viii)**	c. vi. **Annual Report**	c. vii. **JHD Access**	c. viii. **JHD Notify**
Production of Mushroom Substrate	b. i.	?	No Limits	Yes	No	Yes	?	Yes	Yes	Yes	Yes	No	No	Yes	No
Vermicomposting	b. ii.	Type 1 ,2, 3	No Limits	Yes	No	Yes	?	Yes	Yes	Yes	Yes	No	No	Yes	No
"Landscaper, Golf Course, Nursery, Small Farm, etc."	b. iii.	Type 1, 2	up to 40	Yes	Yes	Yes	?	Yes	Yes	Yes	Yes	No	No	Yes	No
Food waste, containers for VAR and odor control	b. iv.	Type 1, 3	up to 10	Yes	No	Yes	?	Yes	Yes	Yes	Yes	No	No	Yes	No
Agricultural Composting	b. v.	Type 1 ,2, 3	No Limits	Yes	No	Yes	No	Yes	Yes	Yes	Yes	No	No	Yes	No
Agricultural Composting	b. vi.	Type 1 ,2, 3	up to 1,000	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	No	Yes	No
Agricultural Composting / NRCS Dairy Nutrient Management Plan	b. vii.	Type 1 ,2, 3	Plan Limits	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Composting	b. viii.	Type 1, 2	40 - 250	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Agricultural Composting w/ Farm Management Plan	b. ix.	Type 1 ,2, 3	40 - 1,000	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vermicomposting	b. x.	Type 1, 2	up to 1,000	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
1601 N. Monroe Street • Spokane, Washington 99205-1295 • (509) 456-2926

August 14, 2002

Mr. Steven E. George
Hop Growers of Washington
504 North Naches Avenue, Suite 11
Yakima, WA 98901

Dear Mr. George:

Thank you for interest in the proposed chapter 173-350 WAC, Solid Waste Handling Standards. I appreciate your taking the time to attend the public hearing and providing written comments on the proposed rule. In accordance with the provisions of the Administrative Procedures Act, chapter 34.05 RCW, your comments, as well as all other comments received by 5:00 p.m., September 4, 2002, will be included in the Concise Explanatory Statement. You will receive a copy of the Concise Explanatory Statement which will include Ecology's official response to all of the comments.

Thank you again for your interest in this proposed rule.

Sincerely,

Michael A. Hibbler
Regional Section Manager
Solid Waste and Financial Assistance Program

MH:bp

Hop Growers of Washington

504 North Naches Avenue • Suite 11 • Yakima, Washington 98901
(509) 453-4749 • FAX (509) 457-8561

A-82

August 8, 2002

Mike Hibbler
Eastern Regional office
Department of Ecology
4601 N. Monroe
Spokane, WA 99205-1295

RE: Comments on Chapter 173-350 WAC
Solid Waste Handling Standards

Dear Mr. Hibbler:

I was present in Yakima for the public hearing held on August 6 conserning the solid waste handling standards. Our organization has had ongoing dialog and supplied input to Dept. of Ecology over the past year regarding these proposed regulations concerning agricultural activities. While it appears the regulations have gone a long way in clearing up confusion in the more traditional solid waste and composting arenas, we are concerned that non-composted agricultural commodities would become regulated as well, when there is no demonstrated need for this regulation.

I was still not clear on this aspect after the hearing, so I inquired about it with your two staff that were present in Yakima. First, it does not appear this regulation is written in the clear rule writing format that agencies, including Dept. of Ecology, currently use. It is very difficult to determine what is regulated and what is not, and there was no index provided with the draft so finding specific sections without going through the whole document could not be done.

Your definition of composting states, "Natural decay of organic solid waste under uncontrolled conditions is not composting." Therefore, it appears that the regulation does not regulate those who are NOT composting, or intending to compost their agricultural plant materials which are the reminants of harvesting operations such as hop debries (vines and leaves) and mint slugs (leftover plant material after the oil is extracted).

Your staff at the hearing confirmed that the regulation does not affect growers who have their own organic byproducts stored for less than a year, and then apply them to their own lands. I am requesting you provide me with a written response in this regard so there is no confusion on this issue.

Thank you for your time concerning this matter. I look forward to hearing from you. Feel free to contact me if you have any questions.

Sincerely,

Steven E. George
Governmental Affairs

c. Central Washington legislators
Polly Zehm, DOE Regional Administrator
Chris Cheney, HGW Legislative Advocate

Kitsap County Department of Public Works
614 Division Street (MS-27), Port Orchard, WA 98366-4699 *R.W. Casteel, P.E., Director*

August 30, 2002

Michael A. Hibbler
Washington State Department of Ecology
Eastern Regional Office
4601 N. Monroe, Suite 202
Spokane, WA 99205-1295

FAX: 509-456-5056

RE: Comments on the Review Draft Chapter 173-350 WAC

Dear Michael:

Kitsap County Public Works (KCPW) appreciates the time and effort that the Washington State Department of Ecology has put into revising the existing Chapter 173-304 WAC. The attached document presents KCPW's comments on the revised regulations.

If you have any questions or comments, please feel free to contact me at 360-337-4485.

Sincerely,

Michelle Miller, Ph.D.
Solid Waste Operations & Compliance Manager

Enclosure (1)

email: Gretchen Olsen,KCPW
Dave Peters, KCPW
Niels Nicolaisen, KCPW
Dean Boening. KCPW
cc: Project file

173-350-020 APPLICABILITY

(1)(n) Recommend reinstating the composted material exemption language included in subsection-020(1)(n) of the December 2000 version along with an exemption for the finished product as defined in WAC 173-350-220(4)(a)(viii).

173-350-100 DEFINITIONS

Contaminant It should be noted that contaminants may decrease pH resulting in values less than the natural background levels. Recommend that the definition be amended accordingly.

Limited moderate risk waste facility It is not clear what is meant by "limited'. Recommend that this be clarified.

Open Burning Recommend adding to the existing definition "as specified under chapter 173-425 WAC".

Soil amendment Recommend amending to also include improvements in chemical characteristics.

Surface water definition should include wetlands in the list of water courses.

173-350-200 BENEFICIAL USE PERMIT EXEMPTIONS

(2)(a)(viiii) It is not clear why the requirement in subsection -200(2)(a)(vi) of the December 2000 version to "ensure that a minimum of seventy-five percent of the waste generated or received annually at the facility is beneficially used" was deleted.

(2)(a)(x) Recommend reinstating the requirement in subsection -200(a)(viii)(D) of the December 2000 version to identify the "total volume of solid waste received".

(5)(j) The local solid waste planning authority should also be able to appeal. Recommend amending to allow county solid waste comprehensive management planning authority to appeal.

173-350-220 COMPOSTING FACILITIES

(4) Table A It is not clear why there are different standards for pollutants concentrations in compost versus biosolids.

For consistency, the pollutant concentrations for composting (and biosolids) should be no higher than the permissible cleanup levels for unrestricted land uses as defined in the MTCA regulation chapter 173-340 WAC. Some discrepancies noted include cleanup levels in MTCA for cadmium and mercury are 1 mg/Kg and 2 mg/Kg, respectively, while Table A allows 10 mg/Kg and 8 mg/Kg, respectively.

(4) Table B Footnote 2 references subsection (4)(b)(ii) which was deleted.

(4)(b) Recommend reinstating the minimum information an inspection log should include as described in subsection –220(4)(d) of the December 2000 version.

(7)(a) Recommend including financial assurance requirements for those facilities not exempt from the permitting process as outlined in subsection (1)(b).

173-350-230 LAND APPLICATION

(2) Recommend adding a minimum depth to groundwater as a locational standard.

(4)(d)(iv) Recommend that the depth at which a management plan for the protection of ground water be developed be based on site-specific information. The minimum depth of three feet cited in this subsection may be too shallow for most soils and contaminants could readily leach into the groundwater in a relatively short period of time.

(8)(a)(iv)(C) Recommend for consistency use the terms "runon" and "runoff" which are already defined in Section –100.

(8)(a)(iv)(D) At a minimum, recommend sampling the soil for those pollutants listed under (8)(a)(iii)(E). Recommend sampling the surface 6 inches and then one-foot increments thereafter since many of the parameters will concentrate in the topsoil. Recommend clarifying what standards these analyses will be compared to and how the information will be sued by the regulatory agencies.

(8)(a)(iv)(G)(XIII) and (XIV) The agency Natural Resource Conservation Service should be capitalized.

173-350-240 ENERGY RECOVERY AND INCINERATORS

(9) Recommend reinstating the requirement that the relationship of the facility to the county solid waste comprehensive plan and zoning be included in the permit application as previously stated in subsection –240(8)(a)(i)(A) of the December 2000 version. Recommend that this be done for all facilities governed under this chapter.

173-350-310 INTERIM SOLID WASTE HANDLING FACILITIES

(3)(a)(iii) It is impossible to have no rat harborages, especially if landscaping is required. Recommend rewriting to read: "Minimize the attraction of, and provide effective means to control rodents, insects, birds and other vermin;" or language similar to that used in subsection 173-350-320(3)(a)(iii).

173-350-320 PILES USED FOR STORAGE AND TREATMENT

(3) In order to be protective of human health, recommend including a reference to the sharps and pathogen performance standards in subsection 173-350-220(4) Table B.

(8) Recommend reinstating the requirement to describe the facility layout and the types of waste to be handled at the facility as previously stated in subsection –320(8)(b)(i) of the December 2000 version.

173-350-350 SURFACE IMPOUNDMENTS AND TANKS

(5)(b) Recommend that there be a site-specific minimum groundwater separation required before a surface impoundment without a leak detection layer would be approved.

173-350-360 MODERATE RISK WASTE FACILITIES

(2)(f) and **(6)(a)(iv)** This requirement appears to suggest that during normal HHW collection operations all MRW collection containers need to be completely sealed at all times, unless adding or removing waste. Sealing drums and boxes each time waste is added in effect would require each container to be opened and sealed hundreds of times per day. It is not feasible as a facility operator to continuously open, close and then seal containers. In addition to not being feasible logistically, this requirement may also contribute to repetitive motion trauma.

Recommend this requirement be amended as follows: "Containers shall remain covered except when it is necessary to add or remove waste or when it is not feasible due to method of consolidation, for example bulking of latex paint. A covered container shall include, but not be limited to, closed head drums with covered funnels placed in bung openings, or open head drums with a lid covering the opening, or tub skids with a lid covering the opening. Cardboard shipping containers holding intact non- leaking materials and open drums under can crushers will be exempt from this requirement.

(6)(c) Including the time of the inspection for bi-annual and annual inspections would be difficult since the inspections may require different tests run over several days and sometimes conducted by a variety of contractors. Therefore, recommend deleting time from the facility inspection reports.

(6)(d)(iv) Recommend deleting final disposition reporting requirement from the annual report. Although this information is tracked, in the past the level of detail required for the facilities permit and for grant reporting varies, sometimes considerably, from year to year. This makes it very difficult to prepare reports in an efficient manner. For the solid waste handling permit annual report total weights of all waste handled by waste type i.e.; flammables, corrosives, etc. should be sufficient.

173-350-400 LIMITED PURPOSE LANDFILLS

(4)(b)(v)(C)(VI) Sixty days seems too long a period to wait for the facility to implement a remediation plan. Recommend that this time frame be shortened to thirty days for submittal to the appropriate agency for review, comment and approval.

(4)(c) Recommend reinstating the minimum information an inspection log should include as described in subsection –400(4)(a)(viii) of the December 2000 version.

173-350-410 INERT WASTE LANDFILLS

(3)(a) Recommend that a minimum depth above the seasonal high level of groundwater be included.

173-350-500 GROUND WATER MONITORING

(4)(c) Recommend including a reference to chapter 173-200 WAC when discussing quantification of ground water quality.

173-350-600 FINANCIAL ASSURANCE REQUIREMENTS

(2)(a) and **(b)** Recommend deleting definitions since these are already included in section –100.

173-350-710 PERMIT APPLICATION AND ISSUANCE

(6)(b) The regulations should provide a time frame within which the applicant or permit holder must request a hearing.

173-350-715 GENERAL PERMIT APPLICATION REQUIREMENTS

(1)(d) Recommend including in the vicinity map all domestic and irrigation wells.

GENERAL COMMENT

Recommend that financial assurance be a requirement for all facilities that require the materials remaining onsite to be disposed of at another permitted facility.

PUBLIC HEALTH
Prevent • Promote • Protect
BENTON-FRANKLIN HEALTH DISTRICT

471 Williams Blvd. • Richland, WA 99352 • Phone: **(509) 943-2614**

August 30, 2002

Mike Hibbler
Washington Department of Ecology
N. 4601 Monroe
Spokane, WA 99205-1295

Re: Proposed WAC 173-350(Minimum Functional Standard for Solid Waste Handling) Comments on Current Draft.

Mr. Hibbler:

This office has completed a thorough review of the latest draft of WAC 173-350(proposed) and have the following comments and/or requests for changes in the document.

1. **173-350-020 – Applicability**

   (2)(a)(i) requires facilities to meet all operational standards within 12 months. Subsection (2)(b) states modifications to existing permits shall be initiated within 12 months. These two sections are contradictory and need to be reconciled.

2. **173-350-100 - Definitions**

   Composted Material: definition should be changed to ***"decomposition at a registered solid waste facility".*** This would prevent false advertising to promote sales of aged manure or other materials as compost. Registered would be any site, which had fulfilled the notification requirements and was in compliance with the farm plan or any permitted solid waste facility.

   Industrial solid wastes: definition should be changed from "manufacturing operations such as" to ***"manufacturing and processing operations such as but not limited to".*** Repeatedly we have encountered difficulties with food processors claiming that their waste is a crop residue as they are a processor not a manufacturer.

Inert Waste: add to the definition of Inert Waste - ***"means noncombustible, nondangerous solid wastes that meets the criteria for inert wastes in WAC 173-350-990."*** Including these two words will help to quickly determine that a waste is not inert.

Land Reclamation: definition should be changed from "disturbed lands including" to ***"disturbed lands or lands void of vegetation including".*** This would allow the inclusion of land areas containing sterile soils or large rocky areas.

Liner: There needs to be a definition for a liner with parameters of permeability included. For example, soils and synthetic liners with a permeability for water of 1 x 10^{-5} or 10^{-7} cm/sec shall be considered of an acceptable permeability to be utilized as a liner.

Biohazard Wastes: There are no regulations addressing biohazard wastes? Commercial or residential. At the very least a definition of biohazardous waste should be included.

Use: You have used the word use to define the word use.

3. **WAC 173-350-040 Performance Standards**

It appears that Ecology is set on using this section as a catch all; and as such, these items need to be added and all facilities would then be required to comply with the provisions of 173-350-040:

(7) ***Establish an appropriate financial assurance device as deemed necessary by the JHD.***

(8) ***No solid waste facility active area may be located within 100 feet of any potable or non potable water source nor within a flood plain.***

(9) ***No solid waste facility shall be located at a site where the bottom of the lowest liner is any less than ten feet above the seasonal high level of ground water in the uppermost aquifer, except waste materials applied at an agronomic rates which shall be a minimum three feet above a maximum seasonal high level of ground water.***

(10) ***No solid waste facility shall be located over a Holocene fault, in subsidence areas, or on or adjacent to geologic features which could compromise the structural integrity of the facility.***

Please keep in mind that much of this information has been extracted from the existing Minimum Functional Standards and no evidence has been provided by Ecology supporting the elimination of these statutes.

4. WAC 173-350-200 - BENEFICIAL USE PERMIT EXEMPTION

Neither the Department of Ecology nor JHD's have the resources to inspect exempt facilities without additional funding. Enforcement grants currently directed to JHD's require some matching funds that are usually generated from permit fees, without these fees to provide matching dollars for the grants no inspections will likely be performed. This will lead to exemptions being issued and the only way compliance will be evaluated is through response to complaints. Some form of annual inspection should be required for each of these facilities at their own expense to be performed by Ecology, a JHD, or a qualified engineering firm.

Add this language: All exempted beneficial use facilities must be inspected annually by the department, the JHD or qualified engineering firm at the operator's expense.

Subsection (5)(a)(new) Beneficial use exemption process: Allowing local JHD comment without the authority to justifiably deny a practice within their jurisdfiction does not deal with local issues that may preclude the use of an exempt solid waste.

Add language: The department shall not exempt a solid waste from permitting within any health jurisdiction where all conditions and comments regarding said exemption have not been addressed to the satisfaction of the JHD.

The WSDOE should not approve any facility within the jurisdiction of a local health department that the JHD has a valid concern or objection. Because you don't give said consideration to the JHD ---JHD's can only appeal a decision the department has made (subsection 5(j)(ii). Thus, putting the two departments at odds with each other instead of maintaining and improving on our working relationship. Both departments have one ultimate goal reuse of solid wastes while protecting the public health and safety.

In addition, state wide permit exemptions will require all JHD's to review and comment on every proposed exemption proposal as these will be applicable anywhere in the state. Thus, significantly tapping available resources for solid waste enforcement locally.

5. WAC 173-350-220 – COMPOSTING FACILITIES

WAC 173-350-220, Subsection (1)(b)(v) should be combined with Subsection (1)(b)(vi). Agricultural composting "means composting of agricultural waste as an agricultural operation conducted on lands employed for farm use."

Ecology is expected to categorically exempt certain types of composting facilities. However, the legislature intended the exemption to be based on an evaluation of the environmental risk posed by the facility. The resulting law did not address exemptions based on where the compost would be utilized.

RCW 70.95.305, Solid waste handling permit -- Exemption from requirements – states: (1) Notwithstanding any other provision of this chapter, the department may by rule exempt from the requirements to obtain a solid waste handling permit any category of solid waste handling facility that it determines to: (a) Present little or no environmental risk; and (b) Meet the environmental protection and performance requirements required for other similar solid waste facilities.

Volume limits must be placed on all exempt facilities based on risk.

WAC 173-350-220, Subsection (1)(b)(iii) and WAC 173-350-220, Subsection (1)(b)(viii) directly conflict each other.

Operation Standards must clarify that distribution of leachate back into composting material may be allowed. For instance, when an outdoor facility directs leachate and stormwater to a containment area. and the collected liquids are immediately (or within a short period, such as, 24 hours) applied to the piles in a manner which controls further generation of runoff (drip irrigation), then an NPDES permit would not be necessary. Is this a correct interpretation? Now that you have captured leachate what are the options for getting rid of it?

173-350-220, Subsection (1)(c)(ii) These setbacks need to be specified or a statement that setbacks may be determined by the local JHD should be added.

173-350-220, Subsection (2) states there are no locational standards yet Section (1)(c)(ii) implies there are or should be. We agree there should be setbacks, the public needs locational standards as does the regulator, not a conflict between regulations.

173-350-220, Subsection (3)(c)(ii)(A) Allows for the JHD to approve other types of liners, but does not offer a permeability standard to meet (i.e., 1 X 10^{-5} cm/sec). A minimum permeability is needed to review other proposals.

173-350-220, Subsection (3)(e)(v) States "The jurisdictional health department may approve other materials for compost pad construction if the permit applicant is able to demonstrate that the compost pad will meet the requirements of the subsection." Yet, Section (3)(e)(iv), which is one of the requirements, states you **shall** use concrete, etc.... We need a specified minimum parameter for comparison to the examples (i.e., permeability of 1 X 10^{-5} cm/sec).

Any compost produced under an exemption must meet all testing requirements in subsection 220(4)(a)viii). In discussions with the conservation district we were informed that it is quite common for sharps to be located in animal wastes. This compost is often distributed to a local nursery for residential use. Compost applied in bulk to agricultural lands could still be exempt from testing. **All material manufactured for retail needs to be tested.**

What do you do with composted material that does not meet the testing standards in subsection 220(4)(a)(viii)? This is a material being manipulated so that does not become a waste. Does it become huge accumulations of solid wastes? Can it be mixed with other composted materials to bring it into compliance?

Subsection 220(4)(a)(viii)(B), references Table B which has a footnote to Subsection (4)(b)(ii). There is no subsection with that heading [(4)(b)(ii)].

6. 173-350-230 LAND APPLICATION

Operating Standards, Section (4)(a)(i)(C) should be changed to ***"Storage must comply with the requirements of section –320; and"*** This requirement should clearly indicate the storage piles must meet specific criteria in 320. Current language implies there are locations where storage would not be subject to 320.

Operating Standards, Subsection (4)(d)(iv): Insert this language: ***Land application is expressly prohibited in areas where the seasonal ground water table is less than three feet. Requests for permits to land apply materials at sites with less than three feet of separation to ground water may be allowed provided conclusive documentation can be supplied to demonstrate that no potential for ground water degradation exists from the application of said material.***

Subsection (4)(d) States: "If necessary, the plan shall be modified with the approval of the JHD. Include the words ***"approval or at the direction of the JHD"***

Ground Water Monitoring Requirements Section (5) There are currently no ground water monitoring requirements for land application including sites with shallow ground water. The following language should be added: ***Ground water monitoring requirements may be implemented for any site with extremely porous soils over an unconfined aquifer or on any site where seasonal ground water table exists less than at 10 feet. The nature and extent of the monitoring shall be determined by the JHD.***

7. 173-350-320 Piles for Storage or Treatment

Section 3(b)(i): The liner requirements should specify an acceptable permeability and allow the applicant to demonstrate the effectiveness of an alternate design based on waste characteristics, operating practices and site specific conditions. The current choices allow for a wide range of permeability (i.e.. asphalt to geosynthetic liners) without specifying a scientific basis for design (i.e.. 10^{-5}). As in previous section there is no minimum permeability standard.

Section 3(b)(i): The rule should allow for the applicant to demonstrate the effectiveness of an alternate design allowing for innovation and site specific conditions.

Section 3(b)(i): Clay liners should be added back into the currently approved list of pads.

8. 173-350-350 Waste Tire Storage

General Comment: this section needs to specify a length of time that tire can be stored at a site by percentage. Suggested language is: ***At least fifty percent of the tires must be shown to have been recycled or processed for disposal in the past three years and all tires should be processed within five years; failure to complete these tasks may allow the JHD to request the facility to be closed in accordance with the approved closure plan including implementation of the financial assurance instrument.***

Locational Standards: There needs to locational standards for waste tire piles. The fact that they need a permit implies that something in the pile is not good.

9. 173-350-400 Limited Purpose Landfills

Subsection (3)(f)(i)(A): The rule should state that the HELP model must be supported by additional data and modeling. Appropriate language may be found in 173-351-300(2)(a)(ii) (A-F) and 173-351-480(1-8); and could be used to describe the requirements of the demonstration.

Use of the HELP model is found in the operating standards of Subsection (4), but needed up front in the design phase.

10. 173-350-410 Inert Waste Landfill

Section (2): A locational requirement must be added requiring the inert landfill to be placed 10ft above the seasonal high groundwater water table and 100ft from any domestic well or surface water. Ecology has stated concrete and asphalt (listed inert wastes) will fail the criteria specified in the inert definition based primarily on leaching. This would ensure siting criteria of inert landfills is protective of the groundwater quality.

Inert Waste in WAC 173-350-990, Sections (1, 2,): Keep these sections and incorporate them directly into the inert landfill section.

Section (4): Add new language ***that "all wastes accepted must be characterized to ensure disposal at an inert landfill will not create a contaminated site under Chapter 173-340 WAC."*** This would allow JHD's to utilize all the tools available including: Table 740-1, Method A residential cleanup levels; Table 745-1, Method A industrial cleanup levels if appropriately sited; Method B diagnostic formulas; TPH spreadsheets analyzing the mobility of TPH in soil based on chain length and evaluating impacts to health, surface water and groundwater; as well as others which may be developed in the future. It is important to remember these sites are permitted facilities operated in a manner which restricts access, controls storm water run-on and runoff, wind erosion and other impacts to health and the environment.

11. 173-350-710 Permit Application and Issuance

Section (1)(c)(iv)(new): Notify all owners of property located within one thousand feet of any new or expanded landfill that the proposed facility may impact their ability to construct water supply wells, in accordance with chapter 173-160 WAC, Minimum Standards for Construction and Maintenance of Wells.

Section (2)(a), The language should be changed back to the original 304 language as follows: ***"When the jurisdictional health department has evaluated all pertinent information, it may issue a permit. Every completed solid waste permit application shall be approved or disapproved within ninety days after its receipt by the jurisdictional health department or the applicant shall be informed as to the status of the application."***

Section (6)(b)(i): This section allows for administrative appeals by an applicant/operator of a facility that is denied a permit or has their permit suspended. Included in this section are timelines for holding hearings by the JHD but not for actually the filing of an appeal. Language should be changed to: ***Upon request of the applicant or holder of the permit, grant a hearing on such denial or suspension, requests must be submitted within thirty (30) days following completion of such action, decision or policy adoption. All requests shall be in writing and submitted to the Health Officer, and shall be heard with thirty days of the request.***

12. General

Petroleum Contaminated Soils: WDOE was required by the legislature to incorporate policy and guidelines into the revised rule. WDOE has used "Guidance for Remediation of Releases from Underground Storage Tanks" published in July 1991, as a guidance for the treatment of petroleum contaminated soils. Therefore, this must be incorporated into the revised rule.

Enforcement: An enforcement section needs to be added to this regulation without specific reference to actions that may be taken against anyone violating this rule this standard will be virtually unenforceable against those that do not willingly comply.

Anyone violating the provisions of this rule will be subject to criminal and civil prosecution as authorized in RCW 70.95.

We sincerely hope that you take the time an effort to review and consider each of these comments, and make the necessary changes to the rule. Please be advised that this office does not take the management of solid waste lightly and firmly believes that these changes are important to provide a workable blueprint for solid waste management.

If you have any questions please contact our office at 509-582-7761.

Sincerely,

Clifford L. Bates
Solid Waste Coordinator

James R. Dawson
Supervisor
Land Use, Sewage and Water Section

PACIFIC TOPSOILS,INC.
a service company

805 80th Street SW, Everett, WA 98203
(425) 337-2700 ** FAX (425) 514-3499

August 27, 2002

Mike Hibbler
Section Manager
Solid Waste and Financial Assistance Program
Washington State Department of Ecology
Eastern Regional Office
N. 4601 Monroe St. Suite 202
Spokane, WA 99205

Dear Sir,

Thank you for this opportunity to comment on the development of Washington State Solid Waste Handling Standards WAC 173-350.

Pacific Topsoils Inc. is a topsoil manufacturer and anticipates a great deal of additional expense to continue composting according to proposed standards in WAC 173-350. These comments though are not about composting but about the recycle of building construction residuals into "wood derived fuels". This category of material is not harmful to the environment when stored, transported, processed or when incinerated. It provides an environmentally safe and beneficial source of fuel. Several sections of the regulations conditionally exempt this material but other sections are vague. It appears unclear to the reader whether or not to require a permit and impose conditions. This leads to excessive interpretation, confusion, and inconsistency, State wide, in solid waste handling practices.

The end use of the waste derived fuels for energy production is specifically mentioned in WAC 173-350-240 (1)(c). Incineration of this material does not require a permit given that several general conditions are met.

In the section "Piles used for storage or treatment", WAC 173-350-320(1)(b) wood derived fuels are regulated by general guidelines and exempt from permitting by the jurisdictional health department.

In each of these sections the waste derived fuels, because of the low environmental impact, is specifically removed from the permitting process given general conditions are met. We believe this promotes recycling and is helpful to waste recycling efforts.

Under other sections of WAC 173-350 the inclusion of waste derived fuels is vague and according to how the regulation is interpreted could be regulated similar to municipal waste. This degree of regulation is not necessary and would be a hindrance to utilization.

We suggest that the following sections require modifications as indicated:

WAC 173-350-210 Material recovery and recycling facilities.
Add to paragraph (1) a list of examples and include waste derived fuel processing as one of the examples. This will remove some of the ambiguity for the jurisdictional health department.

WAC 173-350-300 On-site storage collection and transportation standard.
Add a section similar to WAC 173-350-320 (1)(b)&(c)

WAC 173-350-310 Intermediate solid waste handling facilities.
Add a section similar to WAC 173-350-320 (1)(b)&(c)

If processing of waste derived fuels is specifically stated and covered under section 210 then suggested changes for sections 300 and 310 may not be necessary.

In summary we suggest that the collection and processing of waste derived fuels not be regulated as strictly as municipal or putrescible solid wastes and that the regulation be written to avoid misinterpretation and unnecessary regulation by jurisdictional health departments.

Regarding the utilization of clean dimensional lumber residuals. Wood residuals, which are free of paint, binders, chemicals and non-wood constituents have a higher value when used for road building or mulch. Currently this residual is regulated by some jurisdictional health departments and use of this material is restricted. We feel it would be beneficial and encourage source separation to specifically define and mention clean dimensional lumber residuals as a wood waste and allowing use similar to other materials defined as a wood waste.

Sincerely,

Laurent Girard
General Manager

DEPARTMENT OF THE NAVY
PUGET SOUND NAVAL SHIPYARD
1400 FARRAGUT AVENUE
BREMERTON, WASHINGTON 98314-5001

IN REPLY REFER TO:
5090.14
Ser 106.33/0335
AUG 29 2002

Mr. Michael Hibbler
Washington Department of Ecology
North 4601 Monroe
Spokane, WA 99205-1295

Dear Mr. Hibbler:

SUBJ: PROPOSED WAC 173-350, SOLID WASTE HANDLING STANDARDS

Thank you for giving us the opportunity to review the subject proposed regulation. Our comments are provided in enclosure (1).

If you have any questions, please contact our Solid Waste Program Manager, Ms. Linda LongCrane at telephone number (360)476-6016 or E-mail longcranel@psns.navy.mil.

Sincerely,

J. R. MALCHOW
Head, Environmental Division
Environmental, Safety and
Health Office
By Direction of the
Shipyard Commander

Encl: (1) Puget Sound Naval Shipyard Comments to Final Draft of Proposed WAC 173-350, Solid Waste Handling Standards

Copy to:
Commander, Navy Region Northwest (N45-JL)

Puget Sound Naval Shipyard Comments to Final Draft of Proposed WAC 173-350, Solid Waste Handling Standards

Item #1 Refer to: Page [3] OTS-5495.3 Under: NEW SECTION **WAC 173-350-020 Applicability.**	Comment: Recommend adding as an exclusion: *(21) Asbestos waste regulated under 40 CFR Part 61—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS, Subpart M and regional Air Agency regulations.*
Item #2 Refer to: Page [6] OTS-5495.3 Under: NEW SECTION **WAC 173-350-100 Definitions.** **"Clean soils and clean dredge spoils"** means soils and dredge spoils that do not contain contaminants at concentrations which could negatively impact the quality of air, waters of the state, soils, or sediments; or pose a threat to the health of humans or other living organisms.	Comment: This definition is extremely vague and open to the interpretation of the local health district, as well as being too subjective for the user. **Any** concentration could have **some** negative impact on the environment or humans. Although petroleum is an obvious suspect contaminant, metals always becomes an issue when determining "clean". Please establish concentration levels. If concentration levels are established as requested, please use the logical approach of establishing TCLP levels rather than totals when addressing metals.
Item #3 Refer to: Page [7] OTS-5495.3 Under: **"Contaminated dredge spoils"** means dredge spoils resulting from the dredging of surface waters where contaminants are present at concentrations not suitable for open water disposal, or which could negatively impact the quality of air, waters of the state, soils or sediments, or pose a threat to the health of humans or other living organisms. *And* **"Contaminated soils"** means soils that contain contaminants at concentrations which could negatively impact the quality of air, waters of the state, soils or sediments, or pose a threat to the health of humans or other living organisms.	Comment: See "clean soils" comment.

Item #4 Refer to: Page [13] OTS-5495.3 Under: **"Recyclable materials"** means those solid wastes that are separated for recycling or reuse, including, but not limited to, papers, metals, and glass, that are identified as recyclable material pursuant to a local comprehensive solid waste plan.	Comment: Recommend removing *"or reuse"* from this definition. **a)** Many items are reused that are not identified in a CSWP ***and*** **b)** By your own definition of *"recycling"*, reusable materials do not qualify.
Item #5 Refer to: Page [13] OTS-5495.3 Under: Definitions	Comment: Recommend adding: ***"Reusable material"*** *means an item that is capable of being used again (for either its intended purpose or another purpose) without transformation or remanufacturing.*
Item #6 Refer to: Page [14] OTS-5495.3 Under: **"Solid waste"** or **"wastes"** means all putrescible and nonputrescible solid and semisolid wastes including, but not limited to, garbage, rubbish, ashes, industrial wastes, swill, sewage sludge, demolition and construction wastes, abandoned vehicles or parts thereof, contaminated soils and contaminated dredge spoils, and recyclable materials.	Comment: Recommend removing *"rubbish"*... unless you intend to define it once again.
Item #7 Refer to: Page [16] OTS-5495.3 Under: **"Waste reduction"** means reducing the amount or toxicity of waste generated or reusing materials.	Comment: This sentence would be more clear if you would put *"reusing materials"* before *"reducing the amount... generated."*

Puget Sound Naval Shipyard Comments to Final Draft (Proposed WAC 173-350, Solid Waste Handling Standard

Item #8

Refer to:
Page [44 & 45] OTS-5495.3

Under:
NEW SECTION
WAC 173-350-300 On-site storage, collection and transportation standards. Paragraph (2)(b)(iii)
(2) *On-site storage….*
(b) The owner, operator, or occupant of any premises, business establishment, or industry shall store solid wastes in containers that meet the following requirements:…
(iii) Detachable containers shall be durable, corrosionresistant, nonabsorbent, nonleaking and have either a solid cover or screen cover to prevent littering….
(3) *Collection and transportation standards.*
(a) All persons collecting or transporting solid waste shall avoid littering, or the creation of other nuisances at the loading point, during transport and during proper unloading of the solid waste at a permitted transfer station, or other permitted solid waste handling facility.
(b) Vehicles or containers used for the collection and transportation of solid waste shall be tightly covered or screened where littering may occur, durable and of easily cleanable construction. Where garbage is being collected or transported, containers shall be cleaned as necessary to prevent nuisances, odors and insect breeding and shall be maintained in good repair.
(c) Vehicles or containers used for the collection and transportation of any solid waste shall be loaded and moved in such manner that the containers will not fail, and the contents will not spill or leak in quantities to cause a nuisance. Where such spillage or leakage does occur the waste shall be picked up immediately by the collector or transporter and returned to the vehicle or container and the area properly cleaned.
(d) All persons commercially collecting or transporting solid waste shall inspect collection and transportation vehicles at least monthly. Inspection records shall be maintained at the facility normally used to park such vehicles or such other location that maintenance records are kept. Such records shall be kept for a period of at least two years, and be made available upon the request of the jurisdictional health department.

Comment:
Solid covers or screens are often not on containers used to accumulate CDL waste. The open containers are tarped during transportation, which is addressed in the next paragraph. Recommend adding an addendum to sentence (2)(b)(iii) as follows: *Detachable containers used to accumulate CDL waste may be constructed without solid cover or screens; however, they must have capability of securing the contents as described in paragraph (3) while in transport.*

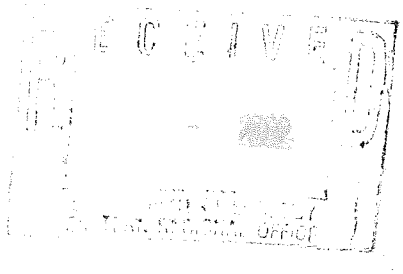
Puget Sound Naval Shipyard Comments to Final Draft of Proposed WAC 173-350, Solid Waste Handling Standards

Item #9 Refer to: Page [118 & 119] OTS-5495.3 Under: **WAC 173-350-990 Criteria for inert waste.** (within paragraph (2) *Criteria for inert waste - Listed inert wastes.*) (a) Cured concrete that has been used for structural and construction purposes, including imbedded steel reinforcing, that was produced from mixtures of Portland cement and sand, gravel or other similar materials; (b) Asphaltic materials that have been used for structural and construction purposes (e.g., roads, dikes, paving) that were produced from mixtures of petroleum asphalt and sand, gravel or other similar materials. Waste roofing materials are not presumed to be inert; (c) Brick and masonry that have been used for structural and construction purposes; (d) Ceramic materials produced from fired clay or porcelain; and (e) Glass, composed primarily of sodium, calcium, silica, boric oxide, magnesium oxide, lithium oxide or aluminum oxide. Glass presumed to be inert includes, but is not limited to, window glass, glass containers, glass fiber, glasses resistant to thermal shock, and glass-ceramics. Glass containing significant concentrations of lead, mercury, or other toxic substance is not presumed to be inert.	Comment: Might railroad ballast and cured plastics also be considered as additional items for the list??
Item #10 Refer to: N/A General comment: I cannot find anywhere in the document that addresses Bulk Product PCB waste that is allowed to go into a solid waste landfill per 40 CFR 761.	Comment: This has been an issue in the past, and the WDOE had to overrule the Bremerton-Kitsap County Health District's interpretation. You may want to specifically include Bulk Product PCB waste within your definition of solid waste and that would eliminate potential confusion.

Weyerhaeuser
The future is growing™

Corporate Headquarters
PO Box 9777
Federal Way WA 98063-9777
Tel (253) 924 2345

September 4, 2002



Michael Hibbler
Washington Department of Ecology
Eastern Regional Office
4601 North Monroe
Spokane, WA 99025-1295

Dear Mr. Hibbler:

Weyerhaeuser Company's comments on the proposed WAC 173-350 *Solid Waste Handling Standards* are presented below.

1. WAC 173-350-040(1) – The phrase "does not present risks" denotes an unreasonably low evaluation threshold.

   Discussion – Demonstrating achievement of the performance standards listed in WAC 173-350-040 serve as a pre-requisite for gaining categorically exempt status on numerous solid waste handling activities. If interpreted literally, the requirement not to present <u>any risk</u> to "human health or the environment" through the entire design, construction, operation and closure of a solid waste handling facility (hereafter, "SWHF"), would be a formidable accomplishment. A goal of this regulation should be to reasonably allow the categorical exemption provisions to be used, not to micro-analyze SWHF to ascertain if <u>any</u> risk <u>might</u> be imparted.

   Proposed Change – Add the word "unacceptable" or "significant" to qualify the practical intent of the needed "risk" assessment in this section. While this qualification still relies on the need for a subjective judgment, it at least sends a policy signal that something other than "no potential risk" will be considered.

2. WAC 173-350-240(1)(c) – The phrase "from the manufacturing of paper" should be expanded to recognize other types of pulping and paper-making facilities. A change in –240(1)(d)(iv) is also needed.

   Discussion – Some facilities in this industry only manufacture and sell wood "pulp;" i.e., they do not make a final "paper" product. The Weyerhaeuser Cosmopolis mill is an example. This mill and possibly others should not have their wastewater treatment sludge disqualified from the provisions of this regulation section simply because the terminology is not comprehensive.

3. WAC 173-350-240(1)(d)(ii) – the requirement that acceptable fuels need to be "approved in writing" could be better stated.

Discussion – Not all fuels approved for use in combustion units are recognized "in writing" by Washington air pollution control agencies. A better characterization would be to say:

(ii) Ensure that only fuels permitted by the jurisdictional air pollution control agency for the facility are combusted;

4. WAC 173-350-500(5)(b)(ii)(A) – This section is confusing and should be clarified.

   Discussion – This subsection is predicated on a statistical analysis determining a significant increase over background (at -(5)(b)). But in (5)(b)(ii)(A), if the levels of constituents "Meet the criteria" established in WAC 173-200, why would there be interest or a need to accomplish what is directed in –(5)(b)(ii)(A)(I) and (II)?

5. WAC 173-350-500(5)(b)(ii)(B)(III) – references to the Model Toxics Control Act should be deleted.

   Discussion - This subsection is predicated on a statistical analysis determining a significant increase over background (see -(5)(b)). For active SWHF's, or SWHF's undergoing closure, the regulatory means to evaluate and determine appropriate corrective actions should be required under the authority of proposed WAC 173-350. In fact, proposed section WAC 173-350-500(5)(b)(ii)(B)(II) does that by demanding the assessment and implementation of appropriate intermediate measures to remedy the release. The use of the conjunction "and" to introduce subsection -(III) effectively imposes a mandatory requirement for the implementation of WAC 173-340. This is an unnecessary leap. It would likely force a premature, somewhat duplicative, and resource intensive regulatory process to move forward in tandem with the corrective provisions of WAC 173-350.

   Proposed Change - References to the MTCA should be deleted from this section. The extensive regulatory authority of WAC 173-340 should be reserved and sequenced to address closed sites for which WAC 173-350 remedies are inadequate.

6. The Variance section from the *Minimum Functional Standards for Solid Waste Handling Facilities* (WAC 173-304-700) should be retained and placed into WAC 173-350. While the proposed WAC 173-350 provides language allowing for "alternative" approaches for certain requirements, there may be a limited set of site-specific issues which could be best be dealt with through the flexibility provided in this variance section. An example may be with "woodwaste landfills." By re-categorizing these landfills as "limited purpose landfills," some new requirements are imposed. These requirements may be difficult to satisfy, and customized "solutions" may need to be crafted. The variance procedures may provide the most efficient regulatory mechanism to address these needs.

Thank you for the opportunity to offer these comments.

Sincerely,

Ken Johnson
Washington Regulatory Affairs Manager

SNOHOMISH HEALTH DISTRICT

ENVIRONMENTAL HEALTH DIV
3020 Rucker Avenue, Suite 104
Everett, WA 98201-3900
425.339.5250 Fax: 425.339.5254

Healthy Lifestyles, Healthy Communities

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DATE: 9-4-02 NUMBER OF PAGES: 4 (Including this cover sheet)

TO: Mike Hibbler FAX NUMBER: 509.456.5056

DEPT: SW + Financial Asst Program CONTACT PHONE NUMBER: _____

FROM: Gary Hanada

DEPT: SW + T

PHONE NUMBER/EXT: 425.339.5250 X 4082

MESSAGE:

SNOHOMISH
HEALTH
DISTRICT

ENVIRONMENTAL HEALTH DIVISION
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Healthy Lifestyles, Healthy Communities

September 4, 2002

Confirmation of FAX (509.456.5056) mailed on September 4, 2002

Mike Hibbler, Section Manager
Solid Waste & Financial Assistance Program
Washington State Department of Ecology
Eastern Regional Office
N. 4601 Monroe St., Ste 202
Spokane, Washington 99205

Subject: Solid Waste Handling Standards, WAC 173-350, Review Comments

Dear Mr. Hibbler:

Thank you for the opportunity to review this latest draft of the Solid Waste Handling Standards, WAC 173-350. The following comprises the Snohomish Health District's comments concerning the public review draft:

Page 7. In the definition for "conditionally exempt small quantity generator" add "means a conditionally exempt small quantity generator of less than 220 pounds of hazardous waste, or less than 2.2 pounds of extremely hazardous waste, per month per batch."

Page 9. Add the definition "hazardous waste means those wastes designated by WAC 173-303-090 and/or WAC 173-303-100, and regulated as hazardous waste by the department."

Page 9. Add the definition "household means single or multi-family residences, hotel or motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day-use recreation areas."

Page 9. Replace the definition "Incompatible waste" with the following "Means a waste which is unsuitable for placement in a particular device or facility because it may corrode or decay the containment materials, or is unsuitable for mixing with another waste or material because the mixture might produce heat or pressure, fire, or explosion, violent reaction, toxic dust, fumes, mist, or gases, or flammable fumes or gases."

Page 10. In the definition for "leachate" add "a product" after the words ...contact with. Some facilities contend that after their process they have a product, yet that product can still produce leachate.

Page 11. Add the definition "Manifest means the shipping document, prepared in accordance with the requirements of WAC 173-303-180, which is used to identify the quantity, composition, origin, routing, and destination of a hazardous waste while it is being transported to a point of transfer, disposal, treatment, or storage."

Page 13. In the definition for "putrescible waste" add the words "leachate or" after the words ...likely to produce.

Page 14. Add the definition "Secondary containment means a system to contain spills from containers and tanks."

Page 14. In the definition for "source separation" replace the words "of different kinds" with "recyclables out." Separation of different kinds of solid waste does not seem to be an adequate definition.

Page 15. In the definition for "type 1 feedstocks" replace the words "meat free food" with "produce (meaning vegetative waste)." "Meat free food" includes other foods like eggs, dairy, and cheeses, which might not be appropriate type 1 feedstocks.

Page 16. In the definition for "wood derived fuel" include laminates in the list "wood derived fuel does not include..."

Page 17. In the definition for "wood waste" include laminates in the list "but does not include..."

Page 23, section 2.b.ii. Change the sentence to "Accept source separate solid waste for the purpose of energy recovery and/or recycling. Dispose of an..."

Page 23, section 2.b.iv. Add a sentence "(E. Documentation that provides evidence of compliance with (ii) of this section)."

Page 29, chart. Add under Table B PCBs (1 ppm), TPH other (200 ppm), and Carcinogenic PAHs (1 ppm or .1 ppm).

Page 34, section 1.a.f. What is the definition of materials? Does materials exclude all solid waste or does it include some regulated waste?

Page 34, section 2. Eliminate word "except" in the last sentence.

Page 54, section 1.a.ii. Is the intent of this section to govern tanks at solid waste handling and disposal facilities as regulated under the 350s or does this include tanks used at other facilities where solid waste is handled? If so, add "as regulated under this chapter and chapter 173-351" as stated in the previous section.

Page 65, section 1.b. Add (iii) "Persons managing SQG waste at a business that is generated by the business as long as the performance standards are met."

Page 65, section 2.d. Add the following language:
"provide secondary containment to capture and contain releases and spills;"
"require all storm drains in the vicinity of the collection event to be covered with plastic sheeting or otherwise blocked off in order to prevent any release from entering storm drain systems."

Page 90, section 1. Change categorically exempt from solid waste handling permitting to volume, 1,000 cubic yards or less.

Page 100, section 5.b.i.B.	Replace current language with: Resample the ground water in the monitoring well (s) where the statistically significant increase has occurred. The additional data shall be used in statistical tests to check for outliers.
Page 100, section 5.b.i.C.	The sentence concerning background concentrations higher than protection should include the demonstration requirements for Enforcement Limits already in WAC 173-200-050 (3) (b) (ii).
Page 100, section 5.b.i.c.	Add the language; ...the established background concentration must meet the requirements of Enforcement Limits as stated in WAC 173-200-050.
Page 113, section 7.b.	What is the definition of relative interests? Please add a definition with criteria like public notification and hearing, or eliminate the section completely.

We would like to see definitions for refuse-derived fuel and solid waste digesters.

If you have any questions concerning these comments, please contact me at 425.339.5250.

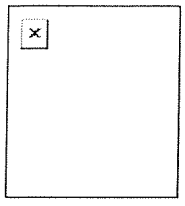
Sincerely,

Gary G. Hanada, R.S., Section Manager
Solid Waste and Toxics Section
Environmental Health Division

GGH:jsf

From: Hibbler, Michael A.
Sent: Tuesday, September 03, 2002 3:45 PM
To: Kuehl, Lynette M.
Subject: FW: Draft Minimum Functional Standards Chapter 173-350-WAC
-----Original Message-----
From: Terre Skelly [mailto:terre@rsulaw.com]
Sent: Tuesday, September 03, 2002 3:24 PM
To: Dumar, Laurie; Freeze, Judy
Cc: Brad Lovaas
Subject: Draft Minimum Functional Standards Chapter 173-350-WAC

This letter will also be mailed, but we wanted to get it in under the deadline for comments.



WASHINGTON REFUSE & RECYCLING ASSOCIATION
4160 – 6th Ave. S.E., Ste. 205, Lacey, WA 98503
(360) 943-8859 Fax (360) 357-6959

September 3, 2002

via U.S. Mail and E-mail to:
Laurie Dumar ldum461@ecy.wa.gov and
Judy Freeze jfre461@ecy.wa.gov

Washington State Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

RE: Draft Minimum Functional Standards Chapter 173-350 WAC

Dear Sir or Madam:

Please consider this letter as comments on behalf of the Washington Refuse and Recycling Association regarding the above referenced draft solid waste handling standards.

The Department will receive a much more detailed comment on the proposed standards from individual members. On behalf of WRRA, please accept our appreciation for the job done by Department staff in revising the minimum functional standards. We consider this draft to be a significant improvement over the existing regulations. Specifically, the facility specific organization of the rules is very helpful, and makes the rules much more user friendly. We also appreciate the manner in which Department staff listened to our members' comments and implemented many of them. It is always gratifying to see those of us actually on the "front lines" involved this deeply in the rule making procedure.

As I indicated above, you will receive specific comments from various members, but please be assured that the industry is very pleased with the work that has been done and looks forward to working with the Department towards a final draft.

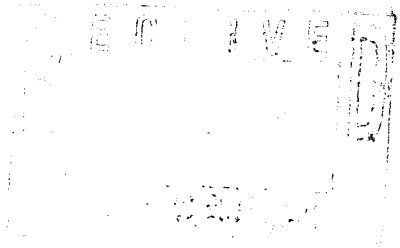
Very truly yours,

James K. Sells, WRRA Special Counsel

JKS:tms
cc: Brad Lovaas

City of Seattle

Seattle Public Utilities
Chuck Clarke, Director



September 4, 2002

Michael Hibbler
Department of Ecology
Eastern Regional Office
4601 N. Monroe
Spokane, WA 99205-1295

Re: Solid Waste Handling Rule, Chapter 173-350 WAC

Dear Mr. Hibbler:

The new Solid Waste Handling Rule is a vast improvement over the existing Minimum Fuctional Standards and the Department of Ecology has put much time and effort into incorporating stakeholder comments. We still see the need for clarification, however, in a few sections of the proposed Rule.

1) Material Recovery Facility Definition (173-350-100)
Facilities meeting the definition for "Material Recovery Facility" will be exempt from solid waste permitting requirements. The definition given for MRFs, however, is vague. MRFs are defined as *"any facility that accepts source separated solid waste for the purpose of recycling and disposes of an incidental and accidental residual not to exceed 5% of the total waste received, by weight per year, or 10% by weight per load"*. Would a facility accepting source separated putrescible waste such as yard trimmings, food scraps or commingled yard trimmings/food scraps qualify as a MRF? The definition should clarify if "source separated solid waste" only applies to nonputrescible material or if it includes some forms of putrescible materials that are source separated.

Under the composting section of the new rule, operations exempt from solid waste permitting are processing only small amounts of incoming source separated yard debris or preconsumer meat free food scraps in an environmentally sound manner. If the definition of a MRF is to include source separated putrescible solid waste then this argues for the inclusion of a limit on the types and amounts of incoming material in order for this type of facility to be exempt from solid waste permitting requirements.

2) Construction, Demolition and Land Clearing Debris – Lack of Definition Under 173-350-100
There is no definition in the Rule for the CDL category of solid waste.

3) Recycling Reporting Requirements
SPU has long sought to have a penalty provision in place for recycling facilities which do not report quanitities of materials processed and recycled for the State's annual recycling survey. The proposed Rule includes reporting requirements to the jurisdictional Health Department as a provision for both facilities which need to obtain a solid waste permit (as transfer stations and large-scale composting facilities) and those which are exempt (as material recovery facilities). However, there is still no penalty mechanism in place for facilities that fail to report. DOE should consider tying permit renewal or review of exemption status as a mechanism for getting facilities to report to the annual recycling survey.

4) Composting Facilities (173-350-220)
On page 33 it is mentioned that *"composted materials meeting the limits for metals in Table A and the parameters of Table B of this section, and having a stability rating of very stable or stable, shall no longer be considered a solid waste and shall no longer be subject to this chapter"*. Table B on page 30 does not list "stability" as one of the parameters to be tested for in a compost product. Table B should include stability as a testing parameter with the accepted rating as "stable or very stable". A footnote could clarify the accepted methodologies to be used for stability testing.

It should also be clarified that composted materials not meeting the limits for metals in Table A and the parameters of Table B (including the stability testing requirement) may be able to qualify for beneficial use under the Land Application section of the Rule instead of having to be disposed in a landfill.

5) Land Application (173-350-230)
There are no pollutant concentration thresholds given for the list of metals and pathogens that solid waste is to be tested for before being land applied on a case by case basis. Local Health Departments should be given guidance in this section on testing methodologies, interpretation of testing results (as for volatile solids) and pollutant concentration thresholds. The threshold set for mercury in a land applied material, for example, should coincide with DOE's own short and long-term goals for reducing this PBT (persistent bioaccumlative toxin) in the environment.

Thank you very much for the opportunity to comment on the Solid Waste Handling Rule.

Sincerely,

Chuck Clarke, Director

cc: Cullen Stephenson, DOE
Nancy Ahern, SPU
Timothy Croll, SPU
Chris Luboff, SPU
Paul Fleming, SPU
Jenny Bagby, SPU
Gabriella Uhlar-Heffner, SPU
Jeff Neuner, SPU
Sean McDonald, SPU
Theresa Wagner, Law Department

A-113

Kuehl, Lynette M.

From: Jeff Gage [jpgage@msn.com]
Sent: Friday, August 30, 2002 9:24 PM
To: Hibbler, Michael A.
Subject: Response to WAC 173-350

Dear Mike,
I have finally got around to responding to the regulation. Please find enclosed a Word Document with my submissions for the testimony on the WAC 173-350. I hope you notice by the short 3 page response that there were very few items in this regulation that concerned me. As a whole I am pleased with the great step forward this regulation can be for the Organics processing industry. I look forward to the responsiveness summary, please mail or email to the address below. Thanks for all the time you and your staff have spent on this project, I believe it was worth it for all parties to the regulation.

Sincerely,

Jeff Gage
Compost Design Services
617 Sherman St. SW
Olympia, WA 98502-5454
jpgage@msn.com
Phone (360) 556-0948
Fax (360)753-1567

"Bringing Compost to Life"

September 9, 2002

Mike Hibbler
Washington State Department of Ecology

Dear Sir:

I would like to takes this opportunity to comment on the proposed WAC 173-350.

WAC 173-350-040 Performance standards. ... all owners and operators of solid waste facilities shall:
(1) Design, construct, operate, and close all facilities in a manner that does not present risks to human health or the environment;

The concept of not presenting risks is untenable and places an undue legal burden on any facility falling under this regulation. There is risk in almost any endeavor especially in solid waste management. Determining and setting a level of acceptable risk has been the main tenet and biggest point of debate in the environmental rules put forth by the Federal Government and by most other rules concerning waste handling in Washington State. This proposed wording could be interpreted by anyone that the risk level is set at zero. This could be viewed as a distinct burden of liability on an operator, architect, engineer, or facility owner to assure that no risk is presented to employees during operations, no runoff or air quality risks, no construction crew risks during development of a facility, no risks to users of products generated by recycling facilities, and no risks left after closure. This wording must be changed to reflect a reasonable standard of acceptable risk or removed entirely and restated to come closer to the intended meaning. In most other sections the word "threaten" is used instead of "present risk" and should be considered in this performance standard.

WAC 173-350-100 Definitions.
"Incompatible waste" means a waste that is unsuitable for mixing with another waste or material because the mixture might produce heat or pressure, fire or explosion, violent reaction, toxic dust, fumes, mists, or gases, or flammable fumes or gases.

Please consider inserting the word "excessive" between the words "produce" and "heat". Other wise this definition could easily be applied to the moderate level of heat that is produced when wastewater and organic wastes are mixed during composting as being incompatible wastes when indeed they are beneficial to the process. This would also be problematic for those applying lime stabilization techniques to organic wastes for treatment.

"**Soil amendment**" means any substance that is intended to improve the physical characteristics of soil, except composted material, commercial fertilizers, agricultural liming agents, unmanipulated animal manures, unmanipulated vegetable manures, food wastes, food processing wastes, and materials exempted by rule of the department, such as biosolids as defined in chapter 70.95J RCW, Municipal sewage sludge--Biosolids and wastewater, as regulated in chapter 90.48 RCW, Water pollution control.

Please consider that all of the exceptions listed above are commonly referred to as soil amendments. It is difficult to so limit the concept in solid waste rules for these items as many producers of these products generated form solid waste claim them as soil amendments and indeed do amend a soil's physical characteristics beneficially. There should be a good regulatory reason to exclude these materials, and not just a convenience for the ease of wording for this regulation.

There seems to be some discrepancies in two definitions, that of "**Wood derived fuel**" and "**Wood waste**" in regards to Creosote and paint. I applaud the Wood derived fuel definition as it reflects the low risk involved in binders, unleaded paint, and creosote and it's general usefulness or degradability in recycling reuse and composting systems. Could the Wood waste definition be adjusted in the same way and not effect the intent of the pertinent portions of the regulation?

WAC 173-350-220 (b)(iv) Composting of food waste generated on-site and composted in containers designed to prohibit vector attraction and prevent odor generation. Total volume of the containers shall be limited to ten cubic yards or less;

It is unclear whether this means 10 cubic yards per container or 10 cubic yards maximum for the total of all containers on site. If the latter, this exemption of composting of food waste generated on-site is limited to those generators of food waste of less volume than 34 gallons of food waste per day. This is based the ten cubic yard limit, and a calculation of 30 days detention in the compost container and bulking of 50% of the volume with other materials to allow for airflow. This only describes very small generators and may not meet the intent of the regulators. For instance the Evergreen State College has developed an on-site composting system for food waste that would meet the above standard for everything but the volume restriction. It was clear to the Health Department that this operation, which is three times the size listed above, was not large enough to warrant the need for a permit if the above conditions were met. Please consider the need for bulking agents in a food waste composting system and reconsider the size issue and determine if you mean per container or per site for the maximum allowed amount.

WAC 173-350-220 4(a)(viii) (D) Biological stability as outlined in United States Department of Agriculture's Test Methods for the Examination of Composting and Compost;

There is no such document that I am aware of. I would imagine that this intended to refer to the U.S. Composting Council's Test Methods for the Examination of Composting and Compost Published in 2002. This document and its updated methods as adapted for compost should be referenced for biological stability testing.

WAC 173-350-220 4(a)(viii) (A,B,C,E,) all;

These sections all refer to testing of varying parameters that require defining reasonable testing methods for composted organic wastes. Most all of these parameters are described in the U.S. Composting Council's Test Methods for the Examination of Composting and Compost. This document and its updates should be referred to for identifying the appropriate laboratory and field-testing methods. These methods have been peer reviewed and are adaptations from soil and water testing methods to more appropriately apply to organic materials and their constituents.

WAC 173-350-220 4(b) Inspect the facility to prevent malfunctions and deterioration, operator errors and discharges, which may cause or lead to the release of waste to the environment or a threat to human health. Inspections shall be conducted at least weekly, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process. For compost facilities with leachate holding ponds, conduct regular liner inspections at least once every five years, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process. The frequency of inspections shall be specified in the operations plan and shall be based on the type of liner, expected service life of the material, and the site-specific service conditions. The jurisdictional health department shall be given sufficient notice and have the opportunity to be present during liner inspections. An inspection log or summary shall be kept at the facility or other convenient location if permanent office facilities are not on-site, for at least five years from the date of inspection. Inspection records shall be available to the jurisdictional health department upon request.

This section should be adjusted to more reasonably reflect the usefulness of the inspections. Deterioration of facilities is not generally something that occurs quickly but rather over time stretching over a period of years. Such inspections of facility features would normally include buildings, tanks, pipes and catch basins, air collection devices, and odor filtration systems. Usually quarterly inspections would be adequate to identify any progressive deterioration of these facility features before they cause any release of waste to the environment or a threat to human health. These inspections are extremely time consuming to do well, and to be useful should be done with diligence. I agree that weekly inspections for preventing malfunctions in machinery, recording instruments, pumps and the like are appropriate prevent problems with such moving parts and operational features.

WAC 173-350-220 4 (a) viii Table A – These heavy metal limits as stated in this proposed regulation provide a significant public confidence problem for those processors who will make a compost using biosolids and biosolids blended with the wastes covered by this rule. Biosolids derived composts are subject to more lenient or in other words more contaminated standards than Table A in the WAC 173-350-220. This is likely to, and rightly so, call into question the validity of the heavy metal limits set for biosolids compost listed in 173-308. Arguments have been made in the past by WDOE biosolids staff that the Zinc and Iron levels inherent in most biosolids is the mechanism that binds and reduces the availability of heavy metals such as cadmium. The research in plant uptake for cadmium for composts created from mixed municipal solid waste and yard wastes have shown no elevated risks to the most highly exposed individual scenarios than for biosolids. There has been no research provided that has shown likelihood for higher risk for equivalent levels in other feedstock composts done in the past 10 years since this became an issue brought forth to WDOE during the development of the Compost Use Guidelines to validate a lowering of these standards for other feedstocks. At that time, the WDOE made commitments to review any such research prior to implementing into rule a lower standard for non-biosolids composts. To my knowledge WDOE has not done so. The WDOE has not put forth any evidence that substantiates the necessity for lowering of these metal limits for composts made from feedstocks other than biosolids. Unless and until such reasonable evidence is provided, these 173-350 regulation's metal levels should be set at the same levels listed for those products made with biosolids in WAC 173-308.

WAC 173-350-220 4 (a) viii Table B – There is no unit of measure listed for Sharps to indicate the testing method. Is there a laboratory method for this? Furthermore sharps themselves are not defined. What is intended by this test? Wood slivers, glass, nails, and hard plastic pieces should not be included in sharps. Usually sharps are considered to be needles and pins that do not lose their ability to easily pierce the skin under casual contact.

WAC 173-350-220 10 Composting facilities - Designation of composted materials. Composted materials meeting the limits for metals in Table A and the parameters of Table B of this section, and having a stability rating of very stable or stable, shall no longer be considered a solid waste and shall no longer be subject to this chapter. Composted materials that do not meet these limits are still considered solid waste and are subject to management under chapter 70.95 RCW, Solid waste management-- Reduction and recycling. -
The U.S. Composting Council Test Methods for the Examination of Composting and Compost, Published in 2002 has three ratings for products that are considered stable. This section should be consistent with this publication in determining the acceptable levels of a compost material's stability to no longer be subject to this chapter.

Thank you for this opportunity to provide testimony regarding the proposed rule for solid waste.

Sincerely,

Jeff Gage
President

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STATE OF WASHINGTON
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September 3, 2002

MEMORANDUM

To: **Mike Hibbler (ERO/SWFA)**

From: **Tom Gries (HQ-TCP/Sediment Management Unit)**

Subject: **Comments on Proposed Solid Waste Handling Standards (Chapter 173-350 WAC)**

Mike;

Please accept my apology for my rather limited and admittedly "last minute" comments. I was on leave for much of the time you were working on this project and other priorities since my return have kept me from paying much attention to the new proposed regulation until recently. The comments are my own, but may very well reflect those of the entire Sediment Management Unit. Please feel free to contact me for any needed clarification (360-407-7536).

MAIN COMMENTS

Please replace all instances of "dredge spoils" with "dredged material" or "sediment". The term "dredge spoils" has not been commonly used within the industry or by regional regulators for more than 15 years. For example, the interagency Dredged Material Management Program (DMMP), of which Ecology is a founding member and active participant, does not recognize this term.

A little background. Dredged material that is not considered suitable for open water disposal (see below) may be suitable for beneficial use in an upland setting, e.g., capping or construction fill, or it may be disposed of at an appropriate solid waste management facility. However, it has never been the intent of the DMMP to exempt such material from subsequent regulation. Rather, it has always been the DMMP's expectation that "jurisdictional health departments" would at least help to determine suitable uses or

disposal locations. Similarly, sediment that meets the Sediment Management Standards (Chapter 173-204 WAC) may still pose unacceptable risk to upland receptors and, thus, should not necessarily be excluded from regulation under Chapter 173-350.

SOME DETAILED COMMENTS

Section 020 (7). Exclusion of **clean dredged ~~spoils~~ material** or **clean sediment** from regulation under his Chapter may or may not be appropriate. Please see comments below on the proposed definition.

Section 020 (8). Exclusion of **dredged ~~spoils~~ material** "regulated under section 404 of the Federal Clean Water Act" may or may not be appropriate, depending on what is meant by the quoted phrase. Material determined by the DMMP to be unsuitable for open water disposal remains subject to a section 404 permit (and section 401 water quality certification). Would such unsuitable dredged material be excluded from the proposed regulations? It is currently common practice in this region for such material to be taken to a solid waste facility for disposal, e.g., the Allied/Rabanco regional landfill, which may or may not have required a section 404 permit itself. Thus, it may not be appropriate for unsuitable dredged material that is regulated under section 404 to be excluded from regulation under this Chapter.

Section 100.

Page 6. Please reconsider defining **clean dredged material** or **clean sediment** to include language such as "sediment determined by the DMMP agencies to be suitable for unconfined, open water disposal" and/or "sediment that meets the chemical and biological standards established in Chapter 173-204 WAC".

Page 7. Please reconsider defining **contaminated dredged material** or **contaminated sediment** as those "where contaminants are present at concentrations or biological effects are such that the DMMP agencies determine them not suitable for ..." and/or as "sediment that exceeds the chemical and biological standards established in Chapter 173-204 WAC".

Page 9. FYI: It is my experience, and probably that of the entire Sediment Management Unit, that exceedingly little (even clean) dredged material/sediment meets the criteria for being an "Inert Waste" (Section 990).

Page 10. It is appropriate for this chapter to recognize "limited purpose landfills" as a reasonable method of managing contaminated dredged material/sediment.

Page 11. It is also probably appropriate for this chapter to segregate most contaminated dredged material/sediment, commonly a result of either CERCLA or MTCA actions, from "municipal solid waste".

Elsewhere in section. It is appropriate that such terms such as "beneficial use",

"disposal", "free liquids", "piles", "recycling", "storage", "treatment", etc. apply to dredged material/sediment in addition to more "traditional" materials.

Section 200. I have only briefly reviewed this section, but it appears to provide adequate permit exemptions for many potential beneficial uses of dredged material. However, without more careful review, I am concerned that some common beneficial uses of dredged material, e.g., as clean cap material or for beach nourishment, may effectively be inhibited by what appear might be somewhat cumbersome requirements specified herein. There may be the need to define a streamlined process or set of requirements for specific beneficial uses of DM/sediment.

Section 210. I am pleased to see that this section potentially applies to dredged material, as treatment of such may become more feasible in the future.

Section 220. Please consider excluding dredged material from that handled by composing facilities. DM contains relatively low organic matter "composting" it to dilute contaminants should not be acceptable.

Section 230. Without careful review, it is not clear how "land application" standards would apply and/or impede such practices as beach nourishment using clean dredged material.

Section 320. Requirements for "piles used for storage or treatment" appear to address major concerns stemming from the likely scenarios for storage of dredged material/sediment.

Section 400. This section appears to provide adequate protection/requirements for any dredged material/sediment likely to be placed therein.

Cc:
Kathryn Carlin, Supervisor (Sediment Management Unit)
Staff (Sediment Management Unit)

SOLID WASTE SYSTEM

Spokane Regional Solid Waste Sys
808 W. Spokane Falls Blvd.
Spokane, WA 99201-3333
(509) 625-6580
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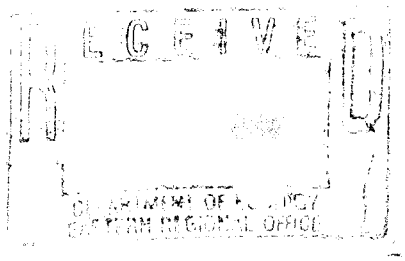
http://www.solidwaste.org



August 29, 2002

Mr. Mike Hibbler
WA Department of Ecology
4601 N. Monroe
Spokane, WA 99205-1295

RE: Comments on 173-350 WAC

Dear Mr. Hibbler:

The draft regulations have been reviewed by City of Spokane staff, and I am submitting the following comments on behalf of the Spokane Regional Solid Waste System and the City of Spokane Solid Waste Management Department.

General comment:

Overall, the content of the document is user-friendly, but the numbering system is somewhat confusing and hard to follow. At various times < i > is used both as a lower case letter and as a small Roman numeral.

Recycling Facilities [173-350-210]:

We appreciate the language [173-350-210 (2) (b) (ii)] stating that facilities are not exempt if over 5% of their material is residuals. This prevents "dump and pick" operations from claiming the exemption and avoiding the stricter regulations.

Compost Standards [173-350-220]:

Design standards for facilities do not take into account the climate differences within the state [173-350-220 (3)]. The amount of rainfall should affect the requirements for paved surfaces, leachate collection and pond design. Facilities in eastern Washington or central Washington are unlikely to need ponds designed to prevent wave action [173-350-220 (3) (c) (ii) (C)]. Many of these standards are not necessary for an Eastern WA site and are a disincentive to composting.

Schedule for metals testing [173-350-220 (4) (a) (viii) (A) & (B), page 29] requires that all the listed tests be performed every 10,000 yards or 6 months, whichever is sooner. A medium-sized facility like Spokane's would have to test at least quarterly, and a very large compost operation might have to take

Comments on 173-350 WAC, cont.

samples every 10 days to two weeks. These tests are quite expensive, and in all the years that Spokane's compost was tested there were no problems with metals. The number of yards processed before a test is required should be raised. After a period of time, such as a year, testing should be reviewed for cost effectiveness.

Waste Tires [173-350-350]:

Whole waste tires stored outside cause environmental and human health problems. Allowing storage of 50,000 cubic feet of whole tires is excessive [173-350-350 (5) (a)]. In addition to being a fire danger, they can become breeding grounds for mosquitoes. With new insect-borne diseases (i.e. West Nile virus, etc.) spreading throughout the country, this is a legitimate health concern. Ecology should require shredding or other processing of all tires stored outdoors. All whole tires for recapping, manufacturing of products, and/or reuse should be stored within a building with appropriate weather and fire protection. The number of tires stored should only be sufficient to allow for annual fluctuations in supply and demand.

Inert Landfills/Special Purpose Landfills [173-350-400]:

We agree with the concept of separating inert wastes from demolition materials, and requiring liners for the limited purpose landfills. A comment received at the public hearing indicated that demolition waste regulations would increase costs to businesses. That may be true in some areas, because unlined "holes in the ground" are very cheap, but inappropriate waste management methods should not be allowed to continue just because they are less costly. Future public costs for environmental damage and cleanup need to be accounted for.

Thank you for the opportunity to provide comments on these regulations.

Sincerely,

SPOKANE REGIONAL SOLID WASTE SYSTEM

Jessie A. Lang
Recycling Coordinator

pc: Roger Flint
Dennis Hein

August 28, 2002 Washington State Dairy Federation

To: Mike Hibbler, Department of Ecology

From: Wm. Jay Gordon
Executive Director

RE: DOE Solid Waste Handling Standards, 173-350 WAC comments

The proposed WAC 173-350 is extensively outside the scope and intent of what the Washington State Legislature intended for the Department of Ecology to oversee solid waste handling. The dairy industry has made numerous requests to be exempt from solid waste handling, all to no avail. The Department of Ecology's exemptions are as burdensome as permit coverage. The intent of RCW 70.95 states as priorities in descending order as applicable:

(a) Waste reduction;
(b) Recycling, with source separation of recyclable materials as the preferred method;
(c) Energy recovery, incineration, or landfill of separated waste;
(d) Energy recovery, incineration, or land filling of mixed wastes.

The Department of Ecology's purpose in WAC 173-350 was to consolidate two previous WACs (173-304 and 173-314) into one comprehensive one. Unfortunately, the Department of Ecology extensively expanded on the previous two WACs instead of simplifying them. No one from agriculture was on the advisory panel for this WAC. No economic impact statement is included on composting facilities. The Department implies that these new regulations **will not** create a hardship or expense for farms that are already certified with farm plans approved by their local conservation district using NRCS standards. The dairy industry does not agree with the Department.

On page 1 of DOE's proposed WAC 173-350-010 **Purpose** under (1) DOE states that setting minimum functional performance standards for the proper handling and disposal of solid waste originating from residences, commercial, agricultural and industrial operations and other sources. These standards will cost time and money to implement, track and for businesses to administer.

On page 2 under WAC 173-350-020 **Applicability** it says "this chapter does not apply to the following: ....(2) Wood waste used for ornamental, animal bedding etc. further stating in Section (4) land application of manures and crop residues at agronomic rates. However, under WAC 173-350-100 **Definitions** it lists

"**Agricultural composting,**" "**Agricultural wastes**" and "**Agronomic rates**" "**Composting,**" and "**Crop residues.**" All of these definitions can be interpreted as agricultural, which the Legislature did not list in its intent of regulations for solid waste.

Also under the definition for "**Soil amendment**" means any substance that is intended to improve the physical characteristics of soil, except composted material, commercial fertilizers, agricultural liming agents, unmanipulated animal manures, unmanipulated vegetable manures, food wastes, food processing wastes, and materials exempted by rule of the department ... Why are these even listed if they are going to be exempted? This would seem to make it more confusing than it needs to be. It would be clearer to the average lay reader to not have any of this listed at all.

Most dairy farms, if not all, have farm plans, which describe an agronomic rate for land application manure may be applied to the land. Why would this need to be listed in this WAC for solid waste? Dairy farms are covered under the Dairy Nutrient Act RCW 90.64.

Any and all references that deal with agriculture, especially dairy farming should not be listed in this WAC at all. Anything to do with agricultural composting should not be listed. The Department of Ecology is outside its scope of direction mandated by the Legislature in including any of this in a proposed WAC. Listing exemptions and then putting provisions on them is not in the best interest of agriculture or the Department of Ecology. By putting overbearing requirements and regulations on farmers you will not be encouraging recycling or composting.

Under WAC 173-350-200 **Beneficial use permit exemptions** this section says that if you are exempt you have to apply for a permit, then DOE will decide if you get to have one, adding to the regulatory burden on DOE and farmers. Again DOE starts talking about agronomic rates land application etc. All of these specifications are covered under farm plans prepared by the local conservation district and NRCS. The Department of Ecology is duplicating a regulation that is already in place and which is covered by RCW 90.64 the Dairy Nutrient Management Act. Again, agriculture is not listed in RCW 70.95.300 so the Department of Ecology has strayed outside the Legislature's intent for this WAC.

New Section **WAC 173-350 220 Composting facilities.** This section states it is not applicable to those exempt from a handling permit, but lists agricultural composting throughout this section stating that registered dairies will need to be inspected by the local health department or DOE. Registered dairies with farm plans are following NRCS standards on their farms and should not be subject to these inspections. Dairy farms are already inspected under RCW 90.64 the Dairy Nutrient Management Act and should not be listed under solid waste handling at all!

References to regulation of agriculture, specifically dairy farms under this WAC are far outreaching the Department of Ecology's jurisdiction. Again, dairy farms are regulated under RCW 90.64 the Dairy Nutrient Act and should not be listed under your new WAC for solid waste handling WAC 173-350.

The end result of this regulation will be a **reduction** in composting, an increase in the regulatory burden on our farms and businesses all to provide a solution to a problem that doesn't exist. In the end this regulation fails in both goals. It does not simplify anything and it will not encourage composting.

cc: Senator Bob Morton
Senator Marilyn Rasmussen
Senator Dan Swecker
Representative Bruce Chandler
Representative Kelli Linville

A-125

Submitted via FAX

September 4, 2002

Washington State Department of Ecology
Attn: Michael A. Hibbler
Eastern Regional Office
4601 N. Monroe
Spokane, WA 99205-1295

Dear Michael Hibbler:

Emerald Services Inc and Cedar Grove Composting are submitting comments on the Solid Waste Handling Standards, Chapter 173-350 WAC. We have participated in the workshops on many of the issues and want to commend the Department of Ecology for the effort and perseverance in developing these rules. We realize there were many stakeholders with often conflicting goals.

Provided below is a review by sections that we feel need clarification.

WAC 173-350-220 (4) a (viii) C and D

There are multiple tests within each of these categories under the cited test methods. Is it Ecology's position that as long as any one of the approved tests are selected that this complies with this section? In addition testing for nitrogen content seems to be out of line with the other requirements. The other testing parameters are primarily contaminate driven rather than compost quality. The nitrogen content has no numerical standard to achieve and is normally seen in product quality testing. Having low or high nitrogen is not really an issue, it depends on usage. We believe nitrogen parameter should be deleted from the rule unless a reason for inclusion can be justified in relationship to the other testing requirements.

WAC 173-350-360 Moderate risk waste handling

Moderate risk waste that is handled in permitted Dangerous Waste Units should be exempt from further permitting. Under 360(b) i. Persons transporting MRW managed in accordance with requirements for shipments of manifested hazardous waste should be expanded to include management of MRW in Dangerous Waste permitted units.

360-(6) a (viii) Uniform hazardous waste manifest may not be allowed by other states. If the intent is to track the waste a non-hazardous waste manifest could be used and will provide all the same information. Another option would be to require a tracking mechanism that complies with the intent of a uniform hazardous waste manifest.

We would like to thank Ecology for the opportunity to comment on the proposed rules and look forward to working with the Department. If further information on these comments is required please call me at 206-832-3005.

Sincerely,

Jerry Bartlett

Jerry Bartlett
V.P. Environmental Affairs

BAILEY COMPOST

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August 6, 2002

AUG 12 2002

Michael Hibbler
Washington State Department of Ecology
Eastern Regional Office
4601 N. Monroe, Suite 202
Spokane, WA 99205-1295

Dear Michael,

On behalf of our farm and compost operation, I would like to further comment on a specific section of the WAC 173-350-220 proposed new section for leachate pond requirements at composting facilities. Please find enclosed a copy of our earlier comments on the revision as of January 2001.

Presently we are still a registered dairy, however we plan to change our operation to raising dairy replacement heifers which would take us out of the dairy registration program. Under the present draft on page 25 (c)(i)(ii) our farm would lose it's exemption for pond liner materials by not being a registered dairy.

We feel the NRCS designed lagoon would function equally well for dairy heifers therefore we are requesting the exemption to include other types of livestock operations. We support WORC's and Snohomish County Solid Waste Management Division's comments on January 18, 2001 on 173-350-220 (3)(A)(iii) which would exempt farm ponds that are designed to NRCS standards and are operating under an approved farm plan.

Sincerely,

Don Bailey

Don Bailey
Bailey Compost

cc: Holly Wescott
WA State Dept. of Ecology
Olympia, WA 98504

January 13, 2001

Brian Farmer
Washington State Department of Ecology
Eastern Regional Office
4601 N. Monroe, Suite 202
Spokane, WA 99205-1295

Dear Brian,

On behalf of our farm and compost operation, I would like to comment on a specific section of Chapter 173-304 WAC proposed revisions.

Bailey Compost is part of a dairy farm and yard trimmings operation that holds a solid waste-handling permit.

The animal waste holding pond on the farm serves as leachate storage for the compost facility and manure storage for the dairy. It was designed and built to NRCS and DOE dam safety specifications. We feel it is a good dual-purpose solution to our manure and compost runoff.

It would place our operation in jeopardy if the proposed regulations for surface impoundment were not amended. Therefore we support WORC's proposed language on 173-350-220 (3)(a)(iii) which would exempt farm ponds that are designed to NRCS standards.

Sincerely,

Don Bailey
Bailey Compost

August 6, 2002

Thank you for the opportunity to comment today. I'm Marsha Beery with Fluor Hanford and I'm here on behalf of the Department of Energy and contractors at the Hanford Facility. I have a few comments to make today. The Department of Energy will also be submitting written comments by the comment due date. The concerns are that:

1. Ecology currently has a process in progress to address the recommendations of the Washington Competitiveness Council which was appointed by the Governor to look at ways Washington could remain competitive with other states and nations. By adopting more stringent standards for demolition waste and including additional reporting requirements plus other provisions of the new rule, Ecology would be putting an increased economic burden on businesses thus making them less competitive which seems contrary to the Washington Competitiveness Council goals.

2. The proposal would eliminate flexibility allowed under the current rule by eliminating standardized provisions in favor of case-by-case approvals. For example, the current rule at WAC 173-304-460(3)(c) includes provisions for landfill liners in arid climates. The arid landfill design is not included in the proposed rule, although the concept could apparently be used as an alternative design. This approach places a much higher burden on the landfill owner/operator and eliminates the straightforward flexibility present in the existing rule.

3. The proposal does not allow the flexibility as provided by the Federal Rules. For instance, under 40 CFR 761.62(b), certain regulated PCB wastes can be disposed of in State-permitted non-hazardous waste landfills. The proposed rule appears to prohibit the disposal of any waste regulated by 40 CFR 761 in either

limited purpose or moderate risk waste landfills, despite the allowance of the Federal regulations.

These are the comments I have for this hearing. As noted above, the Department of Energy will be submitting written comments. Again, thank you for the opportunity to comment.

Comments on Chapter 173-350 WAC Draft
Submitted by Pierce County Recycling, Composting and Disposal, LLC dba LRI

August 6, 2002

Thank you for the opportunity to submit oral testimony in regards to Chapter 173-350 draft that has been circulated for review. My name is Jody Snyder. I am the Director of Regulatory Services for LRI located in Pierce County, Washington.

I have one area of concern that relates to several sections that I would like to address this afternoon.

Exemptions clauses: Sections 200, 210, 220 and 320 refer to exemptions from the solid waste handling permitting process. As a fully compliant permitted solid waste composter and recycler, this causes our company some concerns. The draft regulation sets design and operating standards, requiring the operator to make certain notifications to the JHD prior to commencing operations and to make annual reports to the JHD. The sections also "allow" the JHD to inspect the facility. However, because no solid waste permit is required there appears to be no mechanism for the JHD to review the notifications or enforce any non-compliant activity.

Issue 1: The enforcement becomes an after-the-fact activity.

Issue 2: Typically solid waste permit fees pay for staff review time and oversight functions. How will this activity be funded?

VAAGEN BROS. LUMBER, INC.
16391 N. Hwy. 21 – Republic, WA 99166-9623
(509) 775-3346 FAX (509) 775-3461

Micheal A. Hibbler
Washington Department of Ecology
Dear Sir,

Thank you very much for the opportunity to comment on the proposed rule changes for solid waste handling practices. As Vaagen Bros. Lumber prides itself on its commitment and utmost concern for the protection of human health and the environment, involvement in the movement to develop a more nature-friendly industrial ethic is welcomed. An industrial ecology based on sustainability can, and will be, accomplished through co-operation and communication between industry, government, and local communities.

We appreciate the department providing permit exemption opportunities that encourage the use, reuse, and recycling of solid waste. The planning requires a mind set that encompasses the entire universe of solid waste, one that realizes what is considered waste today has the potential to be valuable resource tomorrow. The possibility for materials to be of value rather than considered a problem needs to be thoroughly researched and evaluated. This shift from waste to product carries major regulatory and economic ramifications, which should be carefully considered and addressed. Ample time and resources are needed to conduct research on new processing methods and technology for organic materials, along with an organic waste characterization study. For a saw mill company such as Vaagen Bros. that produces large volumes of wood by-products, this would be of tremendous help in developing strategies and implement changes that not only minimize environmental impacts but that enhance product efficiency and profitability. It is imperative that agencies not react to a perception of threat to drinking water or air quality regardless of the actual level of threat. Materials stockpiled for future beneficial use, for instance, should be given consideration based on factors unique to the particular character, circumstances and environment of that pile, not a generic judgement.. In order for beneficial use to contribute to a more sustainable system, it must be economically feasible. Application of a rule by the regulating agency needs to be sensitive to the entire spectrum of natural systems thinking. Industry must fully understand and accept responsibility for the handling of materials. In this way, an approach to waste management that is sustainable environmentally and economically can be achieved.

John Brucklier
Environmental Coordinator
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ENERGY NORTHWEST

P.O. Box 968 ■ Richland, Washington 99352-0968

August 29, 2002
GO2-02-137

Michael A. Hibbler
Department of Ecology
Eastern Regional Office
N. 4601 Monroe, Suite 202
Spokane, WA 99205-1295

Dear Mr. Hibbler:

Subject: **COMMENTS ON PROPOSED SOLID WASTE HANDLING STANDARDS (CHAPTER 173-350 WAC)**

Reference: Letter dated January 17, 2001, D.W. Coleman (Energy Northwest) to L. Kuehl (WDOE), "Comments on Informal Draft of Chapter 173-50 WAC"

We have reviewed the Department's proposed standards for design and operation of solid waste handling facilities and offer comments below. Several of our comments were provided previously following a review of the draft version (see referenced letter). They are repeated here because we feel they merit consideration in the final regulations.

Proposed WAC 173-350 is intended to be a phased-in replacement for WAC 173-304. The rulemaking is incomplete inasmuch as it does not include complementary changes to other regulations that reference WAC 173-304 as the state's solid waste management standards.

We are specifically interested in what the Department intends with respect to operator certification requirements in WAC 173-300. The level of certification should be commensurate with the risks to the environment and the complexity of facility design and operation. Unfortunately, the Department's current program does not make those distinctions. While state law (RCW 70.95D.030) provides for a classification-based certification program, WAC 173-300 requires all landfill operators to be certified to standards applicable to municipal solid waste landfills (MSWLFs). That the Department's expectations are unclear is suggested by the lack of any reference to operator certification in the proposed rule, whereas the MSWLF rules specifically include certification (WAC 173-351-220(4)(b)). It is our opinion that, with the narrowed definition of inert wastes, operation of an inert waste landfill should not require operator certification. In any event, the current rulemaking should include appropriate changes to the certification requirements.

In comments on the draft version, we noted that the regulation made no mention of problem wastes (defined in WAC 173-304-100) and that, more specifically, management of petroleum-contaminated soil (PCS) waste seemed to be outside the scope of the solid waste handling standards. An exclusion inserted in the applicability statement for the composting standard (proposed §220(1)(a)(ii)), now infers that land treatment of PCS is regulated under the solid waste pile standard (proposed §320). It appears that if such treatment took longer than three months, the activity would require a permit. Whereas onsite treatment and reuse of this waste is to be encouraged, and since these cleanups will often be one-time events related to a remedial action, we do not believe full permitting should be required.

The general performance standard in proposed §040(5) imposes "all other applicable local, state, and federal laws and regulations" on solid waste facility owners/operators. This "umbrella" regulation is fairly common in Department rules (see, for example, WAC 173-303-395(2)), but the application here is more curious. A reference to §040(5) has been inserted in the proposed regulations wherever a facility has been exempted from location standards, design standards, groundwater monitoring, or financial assurance requirements. The cross-reference usually appears in the form of: "There are no specific [_____] requirements for [_____] facilities subject to this chapter; however, [_____] facilities must meet the requirements provided under WAC 173-350-040(5)." Contrary to what is implied, §040(5) does not provide requirements. Perhaps the Department believes facility owners will assert unwarranted liberties without the twenty-five or more poorly crafted references to all other laws and regulations. We believe the regulation would be enhanced if each exemption was allowed to stand on its own.

The proposed definition of "contaminate" differs from the definitions in WAC 173-304-100 and WAC 173-351-100. The definition proposed for WAC 173-350-100 strikes us as more subjective than the existing definitions which incorporate references to numerical standards. For consistency with its other solid waste regulations, the Department should use the exiting definition or at least explain the reason for the departure.

The Department needs to incorporate a definition of "decontaminate" to minimize future misunderstandings regarding facility decommissioning. The simple phrase "[t]he site shall be decontaminated" is included in several places as a standard closure requirement. A "contaminant" is any non-natural occurrence of a chemical, physical, biological, or radiological substance (proposed definition in §100). Facility owers/operators might believe they have to remove all contaminants at closure, when, in fact, they must remove contaminants to the extent that the site is not contaminated (which implies application of the numerical standards or the "threat to human health and the environment" standard).

The Department's proposal specifies frequencies for inspections and recordkeeping in most of the operating standards. This appears to have been done somewhat inconsistently (compare proposed §310(4)(c) and §320(4)(c)). We recommend these types of operating details be omitted from the regulation. They can be incorporated in the plan of operations that, presumably, would be

reviewed and finalized in the permit development process. It would include specifications (for such things as recordkeeping frequency) that are appropriate to the facility being permitted.

Proposed §350(2)(b) requires that "[a]ll waste tires that are being transported shall be delivered to a facility that meets WAC 173-350-040(5)." The effect is to require the tire transporter to know the compliance status of the receiving facility with respect to each of the numerous local, state, and federal laws and regulations that may be applicable a business engaged in solid waste management. This is an unreasonable expectation. It should be sufficient to verify that the facility conforms to any applicable permit and license requirements (§§350(10) and 350(11)).

The proposed rule includes some very prescriptive requirements for limited purpose landfills (§400). The limited purpose landfill definition (proposed §100) says it is a landfill "that receives solid wastes limited by type or source." The same definition goes on to list some types of wastes intended for these landfills: segregated industrial solid waste, construction and demolition debris, landclearing debris, wood waste, ash (other than special incinerator ash), and dredge spoils. One might reasonably conclude that these types of facilities will pose less environmental risk than municipal solid waste landfills, and yet, it appears the Department has drafted standards that are as demanding as those in WAC 173-351. Proposed §400(3)(a) implies that the jurisdictional health department will consider the nature of the waste material and the site characteristics when reviewing the design. However, the proposed regulation seems to impose such features as liners, impermeable caps, gas removal systems, and groundwater monitoring without regard to these factors. Since limited purpose landfills are intended to receive specific types of wastes, it would make more sense to leave most of the design and operational details to be determined in the permit process. The specification of a minimum set of groundwater parameters to be monitored (through §400(5) and §500(4)(h)) is an example of the standards being overly prescriptive.

One requirement for final closure for limited purpose landfills is that the design must account for anticipated settling "with a goal of achieving no less than two to five percent slope after settlement" (§400(3)(e)(i)(E)). This is confusing. We do not know if the Department is specifying an upper slope limit (five percent) or if it is saying that the final cover configuration must be sloped in the range of two to five percent. If it is consistent with the Department's intent, we recommend that this section be reworded to specify a slope no greater than five percent.

Proposed §410(8)(c) requires applicants for inert waste landfill permits to document notification to adjoining landowners that the facility may affect their ability to construct water supply wells. This suggests another area for the Department to consider amending related rules. The water well construction standards establish a minimum one-thousand foot setback from all solid waste landfills (WAC 173-160-171(3)(b)). We recommend that the Department revisit this requirement given that inert waste landfills and some limited purpose landfills will not pose risks for groundwater contamination.

Definitions for public and private facilities are provided in §600(2). These duplicate the definitions in §100. Furthermore, it appears that the only place the term "private facility" is used is in the two definitions. The categorization of facility types should consider publicly-owned facilities that receive only wastes generated onsite. Given that substantial land is in the public domain and that land management activities could require the development of a limited purpose landfill (for wood ash and other landclearing debris), the proposed breakdown into two types of owners may be inadequate.

Proposed §§710 and 715 cover the same subject area (permit applications and processing) and offer opportunities for consolidation. We note that, once a permit application is received, the facility is assessed by both the local health department (§710(1)(c)(ii)) and the Department of Ecology (§710(1)(d)(i)) for conformance to "all applicable laws and regulations." That sounds like a broad-scope, duplicative review. In fact, the departments will probably look at the site and proposed facility from the perspective of zoning conformance and solid waste handling standards. The proposed language includes those aspects and would be enhanced if the unspecified requirements were deleted.

We also note that §§710(8)(d)(v) and 715(1)(e) require the applicant to demonstrate compliance with WAC 197-11, SEPA rules. This is inappropriate since SEPA compliance is the responsibility of the lead agency. The agencies themselves, and particularly, the Department of Ecology, are best positioned to assess compliance with SEPA. On this subject, we request that the Department consider appropriate amendments to WAC 197-11-855 to exempt some of these solid waste permit activities from the SEPA process (as has been done for wastewater permits).

The criteria for inert waste should include an allowance for incidental wood embedded in concrete (§990(2)(a)). As proposed, a wood fence post foundation would not be allowed in an inert waste landfill.

We appreciate the opportunity comment on the subject proposal. Despite the aforementioned problems, it is still an improvement over the WAC 173-304 standards.

Respectfully,

for D.W. Coleman, Manager
Performance Assessment & Regulatory Programs
(Mail Drop PE20)

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Michael A. Hibbler
Washington Department of Ecology

Dear Mr. Hibbler,
Thank you for accepting an additional comment on the proposed rule making on Solid Waste Handling Standards, chapter 173-350 WAC. It is our hope that the relationship between the Department of Ecology, the jurisdictional health department, and the applicant be clearly defined, and all decisions made are based on the same ideals and philosophy proclaimed as the vision for the future of solid waste handling. We are willing and eager to pursue all avenues to discover beneficial uses for our by-products. The knowledge that the lines of communication between the parties of interest are open and unrestricted would assure us that our time, energy, and expense would be directed appropriately. The key for future development and approval of beneficial uses is for open dialogue, co-operation, and clearly defined guidelines for industrial ecology. We ask that decisions made by the jurisdictional health department adhere to the same principles set forth by the Department of Ecology and embraced by industries such as Vaagen Bros. Lumber.
Thank you very much for your time and consideration.

John Brucklier
Environmental Coordinator
509/775/3346 ext. 247
jbrucklier@vaagenbros.com

Hibbler, Michael A.

From: Penor, Jim [JPenor@CI.RICHLAND.WA.US]
Sent: Wednesday, September 04, 2002 9:26 AM
To: Hibbler, Michael A.
Cc: Matthews, Chuck; Delvin, Jerome; 'mccann_ja@leg.wa.gov'; Eagles, Kip Phillip
Subject: 173-350 Comments (solid waste rule)

WAC 173-350-350 Waste Tire Storage and Transportation

Section (2) (b) All waste tires that are being transported shall be delivered to a facility that meets Wac 173-350-040 (5).

Comment: With out any record reporting by licensed haulers the only volume reports documented are by storage facilities. Tires are being hauled by licensed tire haulers that are not being taken to facilities that have to keep and report records. This makes the reporting that does get documented annotated from the true waste tire volume being hauled in Washington State.

Section (3). Waste tire carrier license requirements

Comment: Should have a section that states if a waste tire carrier handles tires in any other way needed other than for transporting purposes waste tires (processing/recycling) a solid waste handling permit would be required.

Section (1) (a) Applicability

Comment: This section exempts waste tire stored in enclosed buildings or mobile containers. There should be some sort of finality with waste tires stored or housed in enclosed building or containers. These waste tire volumes should be reported to the local health department so it could be forwarded on to the Local fire department.

The revisions to Wac 173-314 Waste Tire carrier and storage site licenses

Comment: All the revision in this section have been made to the waste tire storage section and any changes to the waste tire hauler have been minimal. If no more regulated emphasis is put on waste tire carriers Washington states tire problem will increase as the waste stream volume increases. If you have not checked out EPA State scrap tire programs that is a quick reference guide to all states scrap tire management please do. For your convenience here is the link http://www.epa.gov/oswrcra/non-hw/tires/scrapti.pdf

Hibbler, Michael A.

From: PriceMoon@aol.com
Sent: Wednesday, August 07, 2002 9:26 AM
To: Hibbler, Michael A.
Cc: Karen.May@METROKC.GOV; info@compostwashington.org; Josh.Marx@METROKC.GOV
Subject: 173-350 Comments

Mike Hibbler -

Regarding my review of the proposed solid waste regulations, Holly suggested that I pass my comments and questions on to you. I forwarded them yesterday but I wanted to make sure that you received them so I am sending them directly as two attachments.

In reviewing the -220 section, I prepared a table that attempts to summarize each of the exempt facility categories. This has lead to some questions, as indicated by ?'s, and some comments.

One question that I neglected to ask concerns "Manure-Share" programs that are promoted by the counties and NRCS / CD offices. This is where a waste generator is put together with an end user, and the transfer of materials is made without government oversight. While it seems to be covered under Exemption #3, it also seems to be a bit in the gray zone. I know that the staff at King County will want it stated explicitly, either in the regs. or as a letter in their file.

Also, there are many people who express an interest in receiving, composting and then selling a finished product in the "up to 40 cy" category. Others express an interest in assisting waste generators to compost manure and bedding on their sites and then market the materials for off-site distribution. Given that there are no provisions for quality control (i.e., annual testing) it is not clear which exemption category these situations fall under.

Much of this sounds like splitting hairs, however when the JHD's are tasked with interpreting and implementing the regulations, it is amazing the differences and consequent limitations that result.

In addition to my comments, I will be forwarding on a set of comments and questions from Jim Jensen.

Thanks for your help with this,

Peter Moon, P.E.
Price-Moon Enterprises, Inc.
127 Avenue A - Suite 2D
Snohomish, WA 98290
360/563-6709

WAC 173-350-220 Proposed Composting Regulations / Permit Exempt Facilities

Type 1 Feedstocks - Source separated yard and garden wastes, wood wastes, agricultural crop residues, wax-coated cardboard, preconsumer meat-free food wastes, other similar source-separated materials that the JHD determines to have comparable low levels of risk in hazardous substances, human pathogens, and physical contaminants.

Type 2 Feedstocks - Manure and bedding from herbivorous animals that the JHD determines to have a comparable low level of risk in hazardous substances and physical contaminants.

Type 3 Feedstocks - meat and post consumer source-separated food wastes or other similar materials that the JHD determines to have a comparable low level of risk in hazardous substances and physical contaminants, **but are likely to have high levels of human pathogens**.

Type 4 Feedstocks - mixed municipal solid wastes, postcollection separated or processed solid wastes, industrial solid wastes, industrial biological treatment sludges, or other similar compostable materials that the JHD determines to have a comparable **high level of risk in hazardous substances, human pathogens and physical contaminants.**

								Section -220 (1)							
								c. i.	c. ii.	c. iii.	c. iv.	c. v.	c. vi.	c. vii.	c. viii.
Exempt from Solid Waste Handling Permits	Section -220 (1)	Feedstock	Vol. (CY) All Mtl's	Prod. On-Site	Prod. Off-Site	Used On-Site	Dist. Off-Site	Perform Stands.	SW/GW BMP's	Odor Control	VAR	An. Test (4.a.viii)	Annual Report	JHD Access	JHD Notify
1. Production of Mushroom Substrate	b. i.	?	No Limits	Yes	No	Yes	?	Yes	Yes	Yes	Yes	No	No	Yes	No
2. Vermicomposting	b. ii.	Type 1 ,2, 3	No Limits	Yes	No	Yes	?	Yes	Yes	Yes	Yes	No	No	Yes	No
3. Composting: "Landscapers, Golf Courses, Nurseries, Small Farms, etc."	b. iii.	Type 1, 2	up to 40	Yes	Yes	Yes	?	Yes	Yes	Yes	Yes	No	No	Yes	No
4. Food waste in containers for VAR and odor control	b. iv.	Type 1, 3	up to 10	Yes	No	Yes	?	Yes	Yes	Yes	Yes	No	No	Yes	No
5. Agricultural Composting	b. v.	Type 1 ,2, (3)	No Limits	Yes	No	Yes	No	Yes	Yes	Yes	Yes	No	No	Yes	No
6. Agricultural Composting	b. vi.	Type 1 ,2, (3)	up to 1,000	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	No	Yes	No
7. Agricultural Composting / NRCS Dairy Nutrient Management Plan	b. vii.	Type 1 ,2, (3)	Plan Limits	Yes	?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8. Composting: "Landscapers, Golf Courses, Nurseries, Small Farms, etc."	b. viii.	Type 1, 2	40 - 250	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9. Agricultural Composting w/ Farm Management Plan	b. ix.	Type 1 ,2, (3)	40 - 1,000	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
10. Vermicomposting	b. x.	Type 1, 2	up to 1,001	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes

Price-Moon
ASP Composting
Environmental Engineering

August 6, 2002

MEMORANDUM

Attn: Holly Westcott, Washington State Department of Ecology

Copy: Karen May, Josh Marx, King County DNR, Solid Waste
Jim Jensen

From: Peter Moon, P.E., Price-Moon Enterprises, Inc.

Re: Questions Concerning the Proposed Composting Regulations (WAC 173-350-220)

Dear Holly –

As part of the King County On-Farm Composting Project, I have accepted the task of updating the County's Municipal Solid Waste Permit Guidance Manual to reflect proposed changes to the State's solid waste handling regulations. I have completed my initial review of the proposed regulations and have prepared a summary table for Permit Exempt Facilities (see Attachment A).

I submit this summary table to you for your review and comment. You will notice that I have included six question marks within the table. These indicate criteria that are not clearly defined in the text of the proposed regulations and which I feel warrant further clarification.

In reviewing the proposed regulations, I have also come up with several questions and comments, as follows:

1. Ref: WAC 173-350-100 Definitions: Type 2 Feedstocks and Type 3 Feedstocks

   Most manure is considered to be high in human pathogens, hence the criteria for pathogen reduction under Section (4) Operating Standards. Given this, is herbivorous animal manure and bedding considered a Type 2 or Type 3 Feedstock? If they are Type 3 Feedstocks, should they be included under sections –220 (1) (b) (v), (vi), (vii) and (ix)? (Note that I have shown these in parentheses on the attached table).

2. Given that animal manure is known to contain human pathogens, these regulations do not address topsoil operations that do not claim to compost these wastes. There are numerous facilities located throughout Washington that simply mix raw materials together into various retail blends and distribute to residential and commercial end-users without the need for any permits or quality controls. How can these facilities be brought under these regulations?

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3. You will note that under Exempt Facility Types #3 and #8, I have included the words "Landscapers, Golf Courses, Nurseries, Small Farms, etc." I did this for my benefit and not to suggest that these should be listed out in the regulations.

4. The proposed regulations discuss run-on control but they do not address flood plain issues. Is this to be left up to the Counties as a land use and/or flood hazard issue? Snohomish and King Counties, for example, view this issue very differently. Where this is pertinent is with on-farm composting, which in Western Washington is mostly located in flood prone areas. Specifically, can a 40 – 1,000 cy agricultural compost facility, that meets the permit exemption criteria, be located in a flood plain?

5. Under Section 220 (c) (ii), the regulations state that the facility operator must "Protect surface water and ground water through the use of best management practices and all known available and reasonable methods of prevention, control, and treatment as appropriate". Is there a set of published BMP's that we can refer to for guidance? Also, it seems that the phrase "all known available and reasonable" leaves it wide open to interpretation. In other words, what is the criteria for "reasonable"?

6. Under Section 220 (e) (i), "Design calculations shall be based upon the volume of water resulting from a twenty-five-year storm event as defined in Section –100". Most facilities have compost piles on the pad at any given point in time, and this material has the ability to absorb a considerable amount of precipitation. A simple "parking lot" analysis may be overly conservative in terms of sizing the leachate collection and holding facilities. Also, roof cover needs to be taken into consideration if much of the water can be controlled as run-on.

7. Under Section 220 (4) (v), "Ensure facility employees are trained in appropriate facility operations, maintenance procedures, and safety and emergency procedures ..." Should this be included in the WORC Certification Class or is the operator required to provide this training on his / her own?

8. Under Section 220 (4) (d) (iii) & (iv), "Annual quantity of feedstocks received / composted material sold or distributed reported in tons. Many facilities operate on a volume (cubic yard) basis. Would it be possible to give them the option of 1) reporting in tons or cubic yards or 2) providing a reasonable conversion factor for them to use?

9. Under Section 220 (6) (a), "The site shall be decontaminated". How is this to be measured?

I appreciate your taking time to review the table that I prepared along with my questions and comments, and I look forward to your response.

Best regards,

Peter Moon

Appendix B

Public Hearing

Public Hearing
Chapter 173-350 WAC
Solid Waste Handling Standards

August 6, 2002

In accordance with the Administrative Procedures Act, chapter 34.05 RCW a Public Hearing was held on August 6, 2002. The purpose of the hearing was to receive comments from interested persons on the proposed chapter 173-350 WAC, *Solid Waste Handling Standards*. The Public Hearing was conducted simultaneously in four locations in the state using video-conferencing technology provided by the Washington Department of Information Systems. The locations included Spokane, Yakima, Lacey, and Renton. The hearings officer (Jerry Thielen) conducted the meeting from the Spokane location. The following persons provided oral testimony at the hearing:

Jody Snyder
Land Recovery, Inc.
6219 View Street NE
Tacoma, WA 98422

Don Bailey
Bailey Farms and Bailey Compost
12711 Springhetti Road
Snohomish, WA 98296

Andy Comstock
Tacoma-Pierce County Health Department
3629 South D Street
Tacoma, WA 98418-6813

Marsha Beery
Flour Hanford
P.O. Box 1000 H8-65
Richland, WA 99352

The following is a transcript of the Public Hearing:

My name is Jerry Thielen and I am the hearings officer for today's hearing. Let the record show that it is approximately 1:17 PM on August 6, 2002 and the purpose of today's hearing is to receive comments on the proposed adoption of solid waste handling standards Chapter 173-350 of the Washington Administrative Code. Notice of this hearing was filed with the State Office of the Code Reviser as Washington State Register #0214061 on June 27th of this year with publication in the state register on July 17th. In addition direct mailings were sent on or about July 8th to approximately 700 individuals. Today's hearing is being conducted simultaneously in the following locations using video conference technology provided by the Department of Information Services: the Spokane site is located at 1101 N. Argonne, Suite 109, in Spokane, WA; the Lacey site is at 710 Sleater Kinney Rd SE, Suite Q, Lacey, WA; the Seattle site is at 1107 SW Grady Way, Suite 112, Renton, WA; and the Yakima site is located at Yesterday's Village, the 15 West Yakima Ave. Bldg, Suite 220 in Yakima, WA. Each site has a proctor who has by now identified themselves to you and has probably assisted you in the sign-in. The order of the testimony will move from site to site until everyone has had a chance to testify of those who have signed up to testify. Once we have exhausted that list I will ask if there are any other individuals who have changed their mind and would like to testify at that time. We'll go in the order of sites and this is especially important to the proctors because I will ask the proctors to kind of cue up the commenter as we go. We'll start in Spokane and take one

comment from each location as we go. Then we'll go to Lacey then back to the east side to Yakima then to Renton, taking one comment from each site as we go. Just a few ground rules, again, we'll ask you to come forward to the podium to provide your testimony. We'll ask that there is no background noise so we can get a good clear record of today's testimony. We'll ask that you provide your name and affiliation, if any, for the record. And we ask that you keep your testimony to about 5 minutes. OK…I think that is about it. Can I get our sign-up sheets?

Spokane:
I only have one individual from the Spokane site who has identified that they would like to provide testimony. And would ask that Laurie Blau ….{"I don't need to testify now"} you don't need to testify now?

We'll then move to the Lacey site. Is there anyone there who is signed in, the proctor could assist them to the podium for testimony?

We have two individuals.

The first person, could you identify yourself for the record please?

Lacey:
For the record I'm Jody Snyder. First of all I would like to thank Mr. Hibbler and the Dept. of Ecology staff for allowing us to submit oral testimony today in regards to chapter 173-350 draft that has been circulated for review. My name is Jody Snyder, I'm the Director of Regulatory Services for a company named Land Recovery Incorporated in Pierce County, Washington. I have just one concern that relates to several sections that I would like to address this afternoon then we will submit written testimony or written comments at a later date. Today I would just like to talk about the exemption clauses, sections 200, 210, 220 and 320 refer to exemptions from the solid waste handling permit process. As a fully compliant, permitted solid waste composter and recycler this causes our company some concerns. The draft regulation sets design and operation standards requiring the operator to certain notifications to the health department prior to the commencing operations and to make annual reports to the JHD. The section also allows the health department to inspect the facility, however, because there is no solid waste permit required there appears to be no real mechanism for the health department to review the notifications or enforce any non-compliant activity. So we have two basic issues, one is that we feel that possibly the enforcement becomes an after the fact activity and then typically solid waste permit fees pay for the staff review time and oversite functions and so we're curious as to how this activity will be funded. And we thank you for the opportunity to comment today.

Thank you, Is there anyone from the Yakima site who wishes to testify. Kip, do we have anyone there who is signed up to testify?

Seattle – Pete Christianson, do we have anyone signed up to testify?

Yeah, we have one, Don Bailey.

OK, again, would you state your name for the record?

Seattle:
My name is Don Bailey and we have a dairy farm and a solid waste permit for yard trimmings in Snohomish so I guess I represent Bailey Farms and Bailey Compost. Presently, and the rule I'm referring to is on page 25, c1(ii), we're finding ourselves on the farm maybe caught in a potential catch 22 in that the new rule would exempt registered dairy farms or impoundments requiring a plastic liner. Presently what we have, we're still a registered dairy and we have an NRCS design and improved manure lagoon that works for the dairy and also works to catch

the leachate from the compost site. We're afraid that the rules as written could knock us out of the exemption because we're kind of planning on moving from raising, having a dairy farm, which is registered with the Dept. of Ecology to still having a livestock operation, but raising dairy replacement livestock heffers, which would knock us out of the dairy registration program. So I guess to cover ourselves under that exemption we would ask that and support Washington Organic Research Council's comments of January 2001 and also Snohomish County Solid Waste Management comments on this rule which would exempt farm ponds that are designed to natural resource conservation service district standards and are operating under an approved farm plan. We believe this is something that could work for our farm and compost operation if we were to make these livestock changes in the future. So that's why I'm here to testify. Are there any questions?

Well the format of the hearing won't allow us to engage in or answer any questions at this time but again we have staff available at your location and Mr. Hibbler is available by phone to make direct contact with him at that time. Thank you. OK, there is no one else who has indicated yes on the testimony sheet from Spokane. Chuck, we'll go back to Lacey, I think you said you had an additional individual there at the Lacey site.

We have one more.

Lacey:
Hello, my name is Andy Comstock and I'm with the Tacoma-Pierce County Health Department. First off, I would like to thank team members of the Dept of Ecology for all their hard work in putting this proposed rule together. I know it's been a long, long process and a lot of hard work for the people. I think what we have before us is a very significant improvement to the rule that we've been working with for a number of years. Specifically now we have compost facility standards that are going to serve as a great tool for all the regulators and I think the regulating folks will like. Land application standards greatly improved, beneficial use, a whole new system set up for that type of application and significant improvements to the limited purpose landfill standards as well. Many, many, many improved tools. A few of the issues that our jurisdiction still has some difficulty with that I anticipate we'll be doing things a little bit differently, in Pierce County are related to, actually, some of the points Miss Snyder from Land Incorporated touched on earlier, and that's with respect to some permitting exemptions for some material recovery facilities…..we have had problems in the past with some types of recycling facilities and I anticipate that we will be putting forth some sort of proposal to our board of health for consideration to have a more structured permit system for those types of facilities. Another issue, I don't know that we'll be able to make any great strides on, that has been a problem for us in the past is the definition of inert waste. We've come a long way with that, it is certainly much more refined than what we had in the past but it still leaves a lot of room for interpretation, both for the jurisdictional health department staff as well as the regulated community. It's still something difficult to comprehend and to understand. My hunch is that it's just something we're going to have to learn to live with and deal with but I do think we've come a long ways there. Other areas that we have commented on greatly in the past have been financial assurance. We think there is room for a greater application of financial assurance to other types of solid waste facilities, more than just to landfills. We have various recycling facilities who have been, I'll say, burned in the past by owners and operators walking away from their sites, leaving great piles of waste in place that have been quite a burden for us and I think having some type of financial assurance mechanism in place for those facilities, under a permit, I might add, adds a lot of value, at least in our agency's eyes. And then on the last issue that I'll hit on, which is the contaminated soils treatment facilities. That was a type of facility that we were greatly hoping we would see separate facility standards for in this rule. That got tied in with the pile standards. Our view is that we kind of lost some of the strength or value of the rule with those being tied in with the pile standards. Maybe next time we go around we'll be able to get those separated out and have a real strong specific rule for standards for that. Again I would just like to thank the Dept. of Ecology team. A lot of us….I sat and participated in the external advisory committee, so I know first hand how much work it has been for everybody at the Dept. of Ecology and I greatly appreciate all you've done.

I'm going to now come back to the Spokane site. We have one individual with a question mark, Jim Matsuyama is it?

No.

OK, is there anyone else here at the Spokane site who would like to share their thoughts with us?
No one here at the Spokane site. Anyone at the Lacey site?

Yes, one more.

One more at the Lacey site. OK.

Lacey:
First of all, thank you for the opportunity to make comments today. I'm Marsha Beery with Hanford. I'm here on behalf of the Dept of energy and the contractors of the Hanford facility. I just have a few comments to make today and the Dept of Energy will be submitting written comments before the comment due date. The concerns that we have are that Ecology currently has a process in progress to address the recommendations of the WA competitiveness council and that council, as you know, is appointed by the governor to look at ways Washington can remain competitive with other states and nations, and by adopting the more stringent standards for demolition waste and including additional reporting requirements, plus some other provisions of the new rule, ecology would be putting an increased economic burden on businesses thus making them less competitive, which does seem a bit contrary to the WA competitiveness council goals. And comment #2 is that the proposal would eliminate flexibility allowed under the current rule by eliminating standardized provisions in favor of a case by case approvals. For example the current rule at WAC 173.304.463c includes provisions for landfill liners in arid climates, the arid landfill design is not included in the proposed rule, although the concept could be apparently used as an alternative design. This approach places a much higher burden on the landfill owner/operator. This approach eliminates the straightforward flexibility present in the current rule. Comment 3, and this will be my last comment. This proposal does not allow the flexibility as provided by the federal rules either. For instance, under 40 CFR 761.62b, certain regulated PCB waste can be disposed of in state permitted non hazardous waste landfills. The proposed rule appears to prohibit the disposal of any waste regulated by 40 CFR 761 in either limited purpose or moderate risk waste landfills despite the allowance of the federal regs. So those are the few comments I have. As I said before, the dept of energy will be submitting more extensive written comments. I just want to thank you again for this opportunity to comment.

Kip, the Yakima site, once last chance for anyone there who may have indicated that they would like to testify…

Yakima: Doesn't look like it.

OK, one last chance at the Seattle site?

Seattle: No one else. We're done.

OK. One last chance at Spokane. OK. I want to thank you all for coming and participating in this simultaneous public hearing process. We'd like to remind you that written comments must be received by 5:00 PM on September, 4 2002, sent to the following address. Department of Ecology, N. 4601 Monroe, Suite 200, Spokane, WA 99205-1295. Your comments may also be submitted by e-mail to mhib461@ecy.wa.gov or FAX (509) 456-5056 as long as those comments are received by 5:00 PM on September 4th. We'll leave that information up for a few more seconds as you frantically jot those numbers and addresses down. Again on behalf of the Department of Ecology and Director Fitzsimmons we'd like to thank you for coming today and submitting your comments to us. Let the record show that it is now 1:36 PM and this hearing is closed.

Appendix C

Mailings and Press Releases

WASHINGTON STATE DEPARTMENT OF ECOLOGY

Focus

Revising the Minimum Functional Standards for Solid Waste Handling (Ch. 173-304 WAC)

Purpose of Revisions

Chapter 173-304 of the Washington Administrative Code (WAC) was promulgated in 1985 and was primarily focused on development and operation of environmentally safe solid waste disposal facilities. Revising the regulations at this time is necessary to reflect the societal and technological changes that have occurred in solid waste management during the past 13 years. The Department of Ecology Solid Waste and Financial Assistance Program has identified three areas of focus for the rule revision:

- Improve rule organization
- Update facility standards and definitions
- Meet legislative objectives

Ecology will also be soliciting opinions of solid waste professionals, local government and the environmental community regarding rule improvement through state-wide scoping meetings.

Improve Rule Organization

Reading and interpreting the rule will be simplified. Cross-referencing sections within the rule will be minimized. Outdated references to municipal solid waste landfills will be removed and guidance documents, such as Technical Information Memoranda (TIM), will be incorporated as appropriate.

Update Facility Standards and Definitions

Unclear definitions, such as the term "inert"will be revised and updated. Opportunities for application of more universal landfill standards will be identified. Permitting requirements for moderate risk waste (MRW) facilities that collect household hazardous waste will also be included. Specific facility requirements targeted for review include those for wastewater impoundments not subject to water quality permits and waste material piles.

Meet Legislative Objectives

The substantive requirements of Engrossed Substitute Senate Bill (ESSB) 6203 will be addressed. This legislation directs the Department of Ecology to develop a process to exempt from permit requirements activities that beneficially use solid waste and pose no, or limited, threat to human and environmental health. The legislation also directs the agency to explore methods for deferring solid waste permits to other environmental permits.

September 1998

Ecology is an Equal Opportunity and Affirmative Action Employer

Publication No. 98-1568-SWFAP

printed on recycled paper

What Is Next?

Following state-wide scoping meetings, Ecology will convene an external advisory committee. This committee will be comprised of a core group from the State Solid Waste Advisory Committee (SWAC) and include representatives from environmental interests, the recycling community, the solid waste industry, local government, and jurisdictional health departments. This committee will advise Ecology on more specific strategies to accomplish the previously described purpose , as well as address any major issues identified in the scoping process. Several drafts will be distributed for review and comment throughout the revision process. Final rule adoption is expected in the summer of 2000.

For More Information

Ongoing information regarding this project will be available on our website at:

http://www.wa.gov/ecology/swfa/swhome.html

Additional information can also be obtained by contacting:

Mike Hibbler, Section Manager
Solid Waste & Financial Assistance Program,
Department of Ecology,
Spokane, WA 99205
Phone: (509) 456-3270 – E-Mail: Mhib461@ecy.wa.gov

OR

Brian Farmer, A.I.C.P., Environmental Planner
Solid Waste & Financial Assistance Program,
Department of Ecology
Spokane, WA 99205,
Phone: (509) 456-6386 – E-mail: Bfar461@ecy.wa.gov

WASHINGTON STATE DEPARTMENT OF ECOLOGY

Solid Waste Regulation Scoping Meetings

What is the Purpose of the Meetings?

Scoping meetings will be conducted throughout the state September 14 - 23, 1998 to kick-off an effort to revise Ch. 173-304 of the Washington Administrative Code (WAC), otherwise known as the *Minimum Functional Standards for Solid Waste Handling*. Department of Ecology's Solid Waste & Finan cial Assistance program will be gathering suggestions for streamlining solid waste regulations. The goal is to produce a final product that removes impediments to waste recycling and re-use, guards against questionable activities conducted under the guise of recycling, and simplifies the permit process. Currently, the rule governs the design and operation of recycling facilities, non-municipal waste landfills, surface impoundments and piles. Ecology is also interested in hearing your suggestions for improving the rule.

Why is the Rule Being Revised?

Revising the regulation is necessary to promote conistency with Ch. 173-351, *Criteria for Municipal Solid Waste Landfills*, and is in response to Senate Bill 6203. This legislation directs Ecology to consider exempting from permit requirements activities that beneficially use solid waste. It also directs Ecology to explore methods for deferring solid waste permits to other environmental permits. Changes are also needed to remove outdated references to mixed municipal solid waste landfills now governed by Ch. 173-351 WAC, which was adopted in response to Federal Subtitle D requirements. Ecology also will consider applying municipal waste landfill standards to non-municipal waste facilities in an effort to improve environmental protection and promote rule clarity. Municipal waste landfill standards established in Ch. 173-351 WAC include location restrictions, operational issues, and groundwater monitoring. Additional changes may include the incorporation of risk-based criteria for determining the level of regulatory oversight needed for particular waste management activities, and permitting requirements for Moderate Risk Waste (MRW) facilities.

Where are the Meetings?

- *Bellingham - Dept. of Ecology Nooksack Office, 1616 Cornwall, Sept. 14th, 9:00 - 11:00 am,*
- *Bellevue - Dept. of Ecology Northwest Regional Office, 3190 160th Avenue S.E., Sept. 14th, 3:00 - 5:00 pm*
- *Lacey - Dept. of Ecology Headquarters Building, 300 Desmond Drive, Conference room #17, Sept. 15th, 9:00 - 11:00 am*
- *Vancouver - Dept. of Fish & Wildlife Office, 2108 Grand Blvd Office, Sept. 15th, 3:30 - 5:30 pm*
- *Spokane - Dept. of Ecology Eastern Regional Office, N 4601 Monroe, Sept. 21st, 3:00 - 5:00 pm, 1st Floor Conference Room*
- *East Wenatchee - Douglas County Fire District No. 2, 377 N Eastmont Ave., Sept. 22nd, 3:00 pm - 5:00 pm*
- *Kennewick - Dept. of Ecology Nuclear Waste Program Office, 1315 West 4th, Conference rooms #5 & #6 Sept. 23rd, 1:30-3:30 pm*

Questions?

If you have any questions or would like further information please contact Mike Hibbler (509) 456-3270, or Brian Farmer (509) 456-6386, of Ecology's Soli d Waste and Financial Assistance Program in Spokane.

WASHINGTON STATE DEPARTMENT OF ECOLOGY

News Release

FOR IMMEDIATE RELEASE: Sept. 8, 1998
98-157

Contact: Jani Gilbert, Public Information Officer, (509) 456-4464; pager, (509) 622-1289

Public asked to comment on changing solid-waste regulations

SPOKANE--The public will be asked this month to comment on proposed regulatory changes that would make it easier to recycle and re-use solid wastes in Washington state.

Seven meetings will be held throughout the state to gather suggestions from the public for streamlining and improving solid-waste regulations.

The meetings will kick off an effort to revise Chapters 173-304 of the Washington Administrative Code (WAC), otherwise known as the *Minimum Functional Standards for Solid-Waste Handling.*

"Our goal is to update the regulations to make it easier to recycle and re-use waste, while making sure that questionable activities aren't being conducted under the guise of recycling," said Michael Hibbler of the Department of Ecology (Ecology). "We hope to simplify the permitting process for activities that pose limited risk to public health and the environment."

The meetings will be held in the following cities:

- **Bellingham - Sept. 14, Dept. of Ecology Nooksack Office, 1616 Cornwall, 9 - 11 a.m.**
- **Bellevue - Sept. 14, Dept. of Ecology Northwest Regional Office, 3190 160th Ave. S.E., 3 - 5 p.m.**
- **Lacey - Sept. 15, Dept. of Ecology Headquarters Building, 300 Desmond Dr., Conference Room #17, 9– 11 a.m.**
- **Vancouver - Sept. 15, Dept. of Fish & Wildlife Office, 2108 Grand Blvd Office, 3:30 - 5:30 p.m.**

-more-

- **Spokane - Sept. 21, Dept. of Ecology Eastern Regional Office, 4601 N. Monroe, 1st Floor Conference Room, 3 – 5 p.m.,**
- **East Wenatchee - Sept. 22, Douglas County Fire District No. 2, 377 N. Eastmont Ave., 3 - 5 p.m.**
- **Kennewick - Sept. 23, Dept. of Ecology Nuclear Waste Program Office, 1315 W. 4th, Conference rooms #5 & #6, 1:30 - 3:30 p.m.**

Currently, the rule governs the design and operation of recycling facilities, non-municipal-waste landfills, liquid-waste lagoons not subject to other regulation, and storage piles such as those used for wood waste. Ecology hopes to improve environmental protection by making the solid-waste regulations consistent with the existing requirements that apply to municipal landfills. Those requirements apply to where landfills may be located, how they are operated, and how and when groundwater monitoring is conducted.

"We want to make the regulations more understandable and consistent," explained Hibbler. "This is essential to get people to comply with the law."

During the 1998 legislative session, Senate Bill 6203 directed Ecology to consider exempting from permit requirements activities that beneficially use solid waste, such as applying material to land to improve soil conditions. The bill also directed Ecology to explore other ways to streamline the regulations.

Additional changes may include methods for determining the level of regulatory oversight needed for particular waste-management activities and permitting requirements for facilities that handle household hazardous wastes.

###

PREPROPOSAL STATEMENT OF INQUIRY

(RCW 34.05.310)

CR-101 (7/10/97) C-6

Do **NOT** use for expedited repeal or adopt

Agency: Department of Ecology A.O. # 99-24

Subject of possible rule making: Revise ch. 173-304 WAC, *Minimum Functional Standards for Solid Waste Handling,* which establishes standards and requirements for the management and disposal of solid waste, other than the design, construction and operation of municipal solid waste landfills addressed by ch. 173-351 WAC.

(a) Statutes authorizing the agency to adopt rules on this subject: ch. 70.95 RCW

(b) Reasons why rules on this subject may be needed and what they might accomplish: The rule was originally adopted in 1985. New approaches to waste management and related technologies have been developed in the last 14 years. In response to federal requirements, new municipal solid waste landfill regulations have also been promulgated in a separate rule. However, references to these activities remain in ch. 173-304 WAC, creating regulatory confusion. Engrossed Substitute Senate Bill 6203 passed by the Washington State Legislature in 1998 directed Dept. of Ecology to develop a rule that takes specific actions to remove impediments to recycling.

(c) Identify other federal and state agencies that regulate this subject and the process coordinating the rule with these agencies: Although no federal or state agencies have similar regulatory authority, the Washington State Department of Transportation, Washington State Department of Natural Resources and the U.S. Environmental Protection Agency will be targeted on the draft rule notification list.

(d) Process for developing new rule (check all that apply):

☐ Negotiated rule making

☐ Pilot rule making

x Agency study

x Other (describe): The State legislature originally directed Ecology to undertake a study (ESHB 1419) of the solid waste permit system. ESSB 6203 was a direct result of study recommendations. Scoping meetings have been conducted to identify potential areas for rule revision. An external advisory committee with 20 members has been convened to provide technical staff with specific direction. A web page has been established on the internet. Both an internal agency, stakeholder and public review period will be conducted. Possibly a usability testing procedure will be incorporated. Public workshops will also be conducted in the latter stages of rule development.

(e) How interested parties can participate in the decision to adopt the new rule and formulation of the proposed rule before publication:

(list names, addresses, telephone, fax numbers of persons to contact; describe meetings, other exchanges of information, etc.)

For more information contact:

Mike Hibbler, Project Manager, Washington State Dept. of Ecology, N 4601 Monroe, Spokane, WA 99205, (509) 456-2947, Mhib461@ecy.wa.gov.

Brian Farmer, Rule Coordinator, Washington State Dept. of Ecology, N 4601 Monroe, Spokane, WA 99205, (509) 456-2947, Bfar461@ecy.wa.gov.

To be added to a notification mailing list, please contact Lynette Kuehl, Washington State Dept. of Ecology, N 4601 Monroe, Spokane, WA 99205, (509) 456-2947, lkue461@ecy.wa.gov.

For information on the process to date and stakeholders involved, please visit http://www.wa.gov/ecology/swfa/304revisions/index.html

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WSR 99-22-079

NAME (TYPE OR PRINT) Cullen Stephenson

SIGNATURE

TITLE Program Manager

DATE 10/27/99

Solid Waste Rule Revision

Publication No. 00-07-011

Draft of New Regulation Nears Completion

The first draft of the revised *Minimum Functional Standards for Solid Waste Handling*, (MFS) chapter 173-304 WAC, is nearing completion and a draft version is expected to be available for your review in late April or early May. If you received this newsletter, you will automatically receive a notification card when a draft is available. When the draft is completed, you will be able to obtain copies of the proposed regulation several ways:

- Access the web site (http://www.wa.gov/ecology/swfa/304revisions/index.html) and download a copy.
- E-mail your request to lkue461@ecy.wa.gov.
- Call Lynette Kuehl of Department of Ecology, at (509) 456–2947 and request a hard copy.
- Mail a request to Lynette Kuehl at N 4601 Monroe, Spokane, WA 99205.

This 45-day comment period will be followed by a broader public review and comment period.

After receiving a draft of the regulation, you may submit comments and suggested changes using an online comment form if you have access to the internet, or by mailing or

(See Draft Rule on page 2)

Open Houses

Department of Ecology and External Advisory Committee members will be hosting four informal open houses throughout the State. The purpose of the meetings is to familiarize stakeholders, as well as agency staff, with the direction of the rule revision, and the up-coming review and comment process.

Spokane
4/10, 1 pm—4 pm
Spokane Intercollegiate Research & Technology Institute (SIRTI), 665 N. Riverpoint Blvd.

Yakima
4/12, 1 pm—4 pm
Dept. of Labor & Industries conference room, 15 W. Yakima Ave., Suite 100

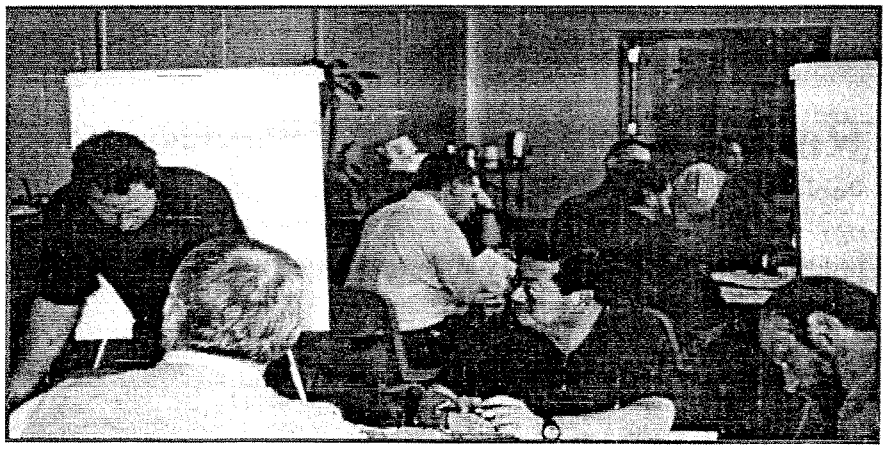
Bellevue
4/13, 1 pm– 4 pm
Dept. of Ecology Northwest Regional Office, 3190 160th Ave.

Lacey
4/14, 9 am—12 noon
Dept. of Ecology Headquarters, 300 Desmond Drive

For more information contact Brian Farmer (509) 456-6386

External Advisory Committee Wraps-Up Work

A 20-member External Advisory Committee was formed in the fall of 1998. Comprised of representatives of the State Solid Waste Advisory Committee (SWAC), local government, jurisdictional health departments, private industry and environmental interests, the committee's charge was to advise Department of Ecology as the new rule began to take shape. The committee met a total of eight times in addition to participating on technical advisory groups fo-



Clockwise from flipchart: Jim Matsuyama (Northeast Tri-County Health District), Jay Dehner (CH^2M Hill) and Rod Hanson (King County Solid Waste) ponder the subject of waste tires with help from Chuck Matthews (Department of Ecology) at the 1-4-00 meeting in Spokane.

External Advisory Committee from page 1—

cusing on specific topics within the rule. Department of Ecology would like to thank those that dedicated their time and effort to this project. Committee members include:

Name	Representing
Sego Jackson	Snohomish County Solid Waste/State SWAC
Bob Shille	Waste Management/State SWAC
Bonnie Maeger	Washington Environmental Council
Dale Arnold	Spokane Regional Disposal Project
Jay Dehner	CH^{2}M Hill
Dot Vali/Janet Nazy	Washington State Recycling Association/State SWAC
J.P. Jones/Rick Jensen	Washington Refuse & Recycling Assoc./State SWAC
Cal Palmer	Weyerhaeuser/State SWAC
Ron Pepper	Yakima County Solid Waste/State SWAC
Robert Thode	Fire Mountain Farms
Steve Wamback	Pierce County Solid Waste
Andy Comstock	Tacoma-Pierce County Health
Jim Matsuyama	Northeast Tri-County Health/State SWAC
Larry Faye	Jefferson County Health
Helen Matekel/Rod Hansen	King County Solid Waste/State SWAC
Jeff Gage	Land Recovery Inc.

What is the focus of the New Rule?

Several driving forces are behind the proposed improvements and changes to ch. 173-304 WAC.

- Legislation allowing solid waste permit exemptions/deferrals (ESSB 6203).
- Governor Locke's Executive Order 97-02 on regulation reform.
- Scoping workshop responses.

More specifically, changes being proposed include:

- A process for applying for a statewide exemption for the beneficial use of certain wastes.
- Categorical permit exemptions of certain recycling facilities/activities.
- Removal of municipal solid waste landfill references.
- Incorporation of Moderate Risk Waste (MRW) and Compost guidelines.
- Regulations specifically addressing:
  - Waste tires
  - Contaminated soils treatment
  - Inert waste

Draft Rule from page 1

e-mailing written comments on the form provided.

Informal open houses will be held throughout the state (see schedule and locations on page 1) in order to familiarize stakeholders with the proposed changes to the rule as compared to the existing rule. The open houses will be conducted prior to a draft version of the rule being released. The intent is to introduce permit holders and regulators to the general concepts and changes before getting deep into discussions on specific content. Department of Ecology staff and members of the External Advisory Committee (EAC) (see related story on page 1) are expected to be on hand to answer questions on major issues and the rule review and comment process. Hope to see you there!

Remaining Revision Process

Public participation early and often has been a priority for Ecology's Solid Waste and Financial Assistance program. The review process has yet to begin and ample opportunity remains to comment on the proposal.

April	Internal Review
May	Stakeholder Review
May	SEPA process initiated
Summer 2000	Public Workshops
Winter 2000	Public Hearings/Formal Review

For more information, contact Brian Farmer at (509) 456-6386

The Department of Ecology is an equal opportunity agency. If you have special accommodation needs or require this document in alternative format, please contact Carol Brown at (509) 456-2929 or TDD (509) 458-2055.

Publication No. 00-07-011

June 2000

Notification of availability of stakeholder review draft
sent to mailing list

Chapter 173-304 WAC (Minimum Functional Standards for Solid Waste Handling) Revisions *Working* Draft Is Now Available For Review and Comment

You can obtain a copy of both the rule and comment form using one of the following options:

- In the spirit of waste reduction, an electronic version is available at the following web address:
  http://www.wa.gov/ecology/leg/wac173304/comments.html
- You can also obtain a copy by contacting:

  Lynette Kuehl
  Department of Ecology
  N. 4601 Monroe, Ste 202
  Spokane, WA 99205-1295
  Phone: 509/456-2947
  Fax: 509/456-5056
  E-mail: lkue461@ecy.wa.gov

THE SPOKESMAN-REVIEW

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FAX (509) 459-5083

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Fax:	**456-5056**	**Fax:**	
Phone:		**Phone:**	
Date:	**November 22, 2000**	**Pages:**	**(including cover sheet) 2**
Re:	**ad proof**	**CC:**	

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Thank you,

Mary Jane Willard

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OPERATOR: trishm

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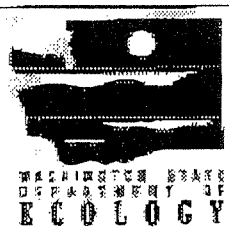
TEAM:

Public Meetings



Proposed Solid Waste Rule Changes
Revision of chapter 173-304 WAC,
Minimum Functional Standards for Solid Waste Handling

The purpose of these meetings is to inform the public about proposed changes to the regulation and methods for commenting on those changes. These meetings will include a question and answer period. However, testimony regarding the rule will not be accepted at the meeting. An informal review period is scheduled to begin in December and Ecology will accept written comments at that time. A formal public comment period will be conducted in the winter 2001.

Chapter 173-304 of the Washington Administrative Code (WAC) governs all solid waste activities other than municipal solid waste landfill design and operation. Facilities regulated by chapter 173-304 WAC include non-municipal waste landfills, recycling, compost, surface impoundments, waste tire storage and moderate risk waste storage. Ecology is revising the rule because of technological changes since its adoption in 1985 and recent legislation passed in 1998 aimed at removing impediments to recycling and streamlining the permit process.

Meetings will be conducted 6:30 pm to 8:30 pm and refreshments will be provided.

Location	Date
Ellensburg – Hal Holmes Community Center, 201 N. Ruby	12/5/00
Mount Vernon – Skagit County Admin Bldg, 700 S. Second	12/6/00
Spokane – Spokane Comm College, Student Lair, N 1810 Greene St	12/7/00
Pasco – PUD Auditorium, 1411 West Clark	12/12/00
Renton – Renton Community Center, 1715 Maple Valley Highway	12/14/00
Lacey – Worthington Conference Center, 5300 Pacific Ave SE	12/19/00

For further information, please contact Brian Farmer at (509) 456-6386. Bfur-161@ecywa.gov. Brenda Pozega at (509) 456-2947, bpoz461@ecywa.gov; or visit our web site at http//www.ecy.wagov/programs/swfa/304revisions/index.html

C-12

Yakima Herald-Republic
a daily part of your life

P.O. BOX 9668, YAKIMA, WASHINGTON 98909 (509) 248-1251

FAX COVER

Date 11-24-00

TO Brian Farmer

CO. Dept. of Ecology

FAX 1-509 456-5056

FROM: JIM ROSSEAU
Account Executive

PHONE: (509) 577-7664
FAX: (509) 577-7765

COMMENTS:

Please give this to Brian!

Brian copy of your Ad that runs Sun 11-26 in the Yakima Herald.

Thanks

Jim

PROOF

JIM for TERI, PROOF TO SALES, rop (no color)
48.647713.sun11/26.2x5R.MMB - Page 1 - Composite

Public Meetings

Proposed Solid Waste Rule Changes
Revision of chapter 173-304 WAC
Mountain Functional Standards
for Solid Waste Handling

WASHINGTON STATE DEPARTMENT OF ECOLOGY

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Lacey-Worthington Conference Center, 5300 Pacific Ave. SE	12/19/00

For further information, please contact Brian Farmer at (509) 456-6386 ofar461@ecywa.gov Brenda Pacego at (509) 456-2947 opoz461@ecywa.gov or visit our web site at http//www.ecywagov/programs/swfa/304revisions/index htrd.

48 047713 R 1B

at the group, without shooting, and then pulled back to the jeers of the youngsters.

Friday's deaths brought the overall toll in two months of fighting to 271. The vast majority of those killed have been Palestinians.

Israeli Prime Minister Ehud Barak and Palestinian leader Yasser Arafat had not spoken for more than three weeks before their Friday phone exchange. The conversation was arranged by Russian President Vladimir Putin, who was meeting with Arafat in Moscow. Barak and Putin were speaking by phone while Arafat was in the room. At one point, the Russian leader, after asking Barak's permission, handed the phone to Arafat.

Arafat promised to make efforts to stop the violence, Barak's office said.

The two leaders also agreed to renew low-level security cooperation and the work of 10 liaison offices that Israel ordered closed Thursday after an Israeli soldier was killed in a bombing at one of

Still, the fighting persisted.

Two Palestinians — Ghassan Karaan, 20, and Ayfar Hasis, 15 — were killed by Israeli fire in rock-throwing clashes in the West Bank towns of Qalqilya and Jenin. In the Gaza town of Rafah, Ziad Abu Jeser, 20, was found dead after being shot more than a dozen times, Palestinian doctors said, blaming Israeli fire. An Israeli motorist, Ariel Jerafi, was killed in a West Bank shooting ambush.

Near the Gaza town of Khan Yunis, a two-hour gun battle broke out between Israeli and Palestinian security forces. Israelis shot an anti-tank missile toward Palestinian police offices when another missile was fired from the spot, the army said. Palestinians said the Israeli soldiers shot five missiles and that five Palestinians were injured.

In the West Bank town of Nablus, thousands of Palestinians attended the funeral of Ibrahim Bani Odeh, an Islamic militant bombmaker who Palestinians say was assassinated by Israel. Bani

Public Meetings

Proposed Solid Waste Rule Changes
Revision of chapter 173-304 WAC.
Minimum Functional Standards
for Solid Waste Handling

WASHINGTON STATE DEPARTMENT OF ECOLOGY

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Pasco—PUD Auditorium, 1411 West Clark	12/12/00
Renton—Renton Community Center, 1715 Maple Valley Highway	12/14/00
Lacey—Worthington Conference Center, 5300 Pacific Ave. SE	12/19/00

For further information, please contact Brian Farmer at (509)456-6386, bfar461@ecywagov. Brenda Fazega at (509)458-2947, bfaz461@ecywagov, or visit our website at http://www.ecy.wa.gov/programs/swfa/80/revisions/index.html.

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TO Brenda Insertion Date 11/26/00
Dept. of Ecology # 263.50 The Wenatchee World

attn: Brenda
From Kathy
Tri-City Herald
509-582-1464

530 HELP WANTED

Caregiver Needed, Connell, Early PM, 10-16 hrs/wk, for bedridden adult, call (509)234-6645 after 6 pm.

CARE GIVER needed in exchange for rm & board, sm wage. Must be healthy & strong. 794-6519

Carpenter Foreman/ Leadman
Structural concrete exp req. Prevailing wage plus. Fax resume in confidence to Regional General Contractor (509)466-0189

Cashier. Espresso deli experience preferred but will train. Full-time or part-time. Apply in person at Neighbors Conoco Espresso Bar, 780 Stevens Dr, Rhld.

CASHIER NEEDED
Amoco Station in East Pasco, Apply at: 1309 E. Lewis St., Pasco.

Chenoweth House Assisted Living. Now accepting applications for **NAR Caregiver and Cook.** Apply in person at: **1108 W. 6th Ave., Kenn.**

EXPERIENCED AG MECHANIC
Familiar w/diesel, hydraulics, & elec. Own tools req. Salary DOE, benefits included. Send resume listing previous work experience & salary history. Call for address & info: (509)946-2888

530 HELP WANTED

Central Pre-Mix Concrete Company has an opening for a dispatcher. Duties include receiving concrete and aggregate orders, scheduling deliveries and dispatching equipment to job sites. Must have good written and verbal communication skills. Computer proficient. Central Pre-Mix offers a competitive wage and excellent benefits. Send resume and salary requirements to Central Pre-Mix Concrete Co., 11919 Harris Road, Pasco, WA 99301. Substance abuse screening required. Equal Opportunity employer.

Childcare Center is looking for a dependable experienced Teacher for our busy toddler room. If you love toddlers & have exp. & education or training. Pls Call 946-4609. Must be 18, High School Grad, GED.

CHOIR ACCOMPANIST
Needed for a great choir. Salaried Position. **Call Anita at 545-0830 or Send resume to 4620 W. Court St., Pasco.**

Concrete workers wanted, experienced only. Wage DOE. Office hours 8-5pm Mon-Fri. Call 509-529-4898 or fax a resume 509-627-0390

530 HELP WANTED

CPA/CPA candidate for Sunnyside, WA CPA firm seeking an individual with a commitment to quality service and a desire to live in Eastern Washington. Resumes to Box 553, Sunnyside WA 98944

Daughters, sons, friends and retirees are wanted for rewarding positions on projects serving human needs and education.
One year, full-time commitment.
- $600 monthly stipend
- Paid training
- Medical insurance
- $4,725 educ. award for each year of service

RYSC-AmeriCorps 545-0160

DJ WANTED, PT at Evolution & mobile events. 117 W Kennewick Ave.

DO IT FOR YOURSELF
Do it for your community.
RYSC-AmeriCorps 545-0160
www.tcfn.org/rysc

Emanuel Baptist Daycare seeking PT child care worker, experience preferred approx 28hrs/wk, Mon-Fri 547-8277

Public Meetings

Proposed Solid Waste Rule Changes
Revision of chapter 173-304 WAC,
Minimum Functional Standards for Solid waste Handling

The purpose of these meetings is to inform the public about proposed changes to the regulation and methods for commenting on those changes. These meetings will include a question and answer period; however, testimony regarding the rule will not be accepted at the meeting. An informal review period is scheduled to begin in December and Ecology will accept written comments at that time. A formal public comment period will be conducted in the winter 2001.

Chapter 173-304 of the Washington Administrative Code (WAC) governs all solid waste activities other than municipal solid waste landfill design and operation. Facilities regulated by chapter 173-304 WAC include non-municipal waste landfills, recycling, compost, surface impoundments, waste tire storage and moderate risk waste storage. Ecology is revising the rule because of technological changes since it's adoption in 1985 and recent legislation passed in 1998 aimed at removing impediments to recycling and streamlining the permit process.

Meetings will be conducted 6:30 pm to 8:30 pm and refreshments will be provided.

Location	Date
Ellensburg - Hal Holmes Community Center, 210 N. Ruby	12/5/00
Mount Vernon - Skagit County Admin Bldg., 700 S. Second	12/6/00
Spokane - Spokane Comm College, student Lair, N. 1810 Greene St.	12/7/00
Pasco - PUD Auditorium, 1411 West Clark	12/12/00
Renton - Renton Community Center, 1715 Maple Valley Highway	12/14/00
Lacey - Worthington Conference Center, 5300 Pacific Ave SE	12/19/00

For further information, please contact Brian Farmer at (509) 456-6386, bfar401@ecywa.gov, Brenda Pozegu at (509) 456-2947, bpoz461@ecy.wa.gov, or visit our web site at http://www.ecy.wa.gov/programs/swfa/304revisions/index.html

JAN 04 '01 (THU) 11:08 TRI-CITY HERALD AD 1 509 582 1455 PAGE 1

300-115-2

R00853 1126 2x5 public meetings 11/22/00 5:46 PM Page 1

Public Meetings

Proposed Solid Waste Rule Changes
Revision of Chapter 173-304 WAC
Minimum Functional Standards for Solid Waste Handling

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Pasco - PUD Auditorium, 1411 West Clark	12/12/00
Renton - Renton Community Center, 1715 Maple Valley Highway	12/14/00
Lacey - Worthington Conference Center, 5300 Pacific Ave SE	12/19/00

For further information please contact Brian Parmer at (509) 456-6336, bfar101@ecywa.gov, Brenda Pozuga at (509) 456-2947, bpoz461@ecywa.gov or visit our web site at http://www.wa.ecy.wa.gov/programs/swmfa/304revisions/index.html.

THE BELLINGHAM HERALD

NOV. 24 2000 10:28AM P1 FAX NO. : 360-715-2225 20M : THE BELLINGHAM HERALD

Public Meetings

Proposed Solid Waste Rate Changes
Revision of chapter 173-304 WAC
Minimum Functional Standards for Solid Waste Handling

WASHINGTON STATE DEPARTMENT OF ECOLOGY

The purpose of these meetings is to inform the public about proposed changes to the regulation and methods for commenting on those changes. These meetings will include a question and answer period, however, testimony regarding the rule will not be accepted at the meeting. An informal review period is scheduled to begin in December and Ecology will accept written comments at that time. A formal public comment period will be conducted in the winter 2001.

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Renton - Renton Community Center, 1715 Maple Valley Highway	12/14/00
Lacey - Worthington Conference Center, 5300 Pacific Ave SE	12/19/00

For further information, please contact Brian Farmer at (509) 456-6386, bfar461@cywa.gov. Brenda Pozega at (509) 456-2947, bpoz4461@cywagov. or visit our web site at http://www.ccy.wa.gov/programs/swfa/304revisions/index.html

Brian

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11/24/2000 09:37 3603570725 THE OLYMPIAN AD SERV PAGE 01

PROPOSED RULE MAKING
(RCW 34.05.320)

CR-102 (7/22/01)
Do NOT use for expedited rule making

Agency: Department of Ecology A.O. 99-24

☒ Original Notice
C-18
☐ Supplemental Notice
to WSR _____
☐ Continuance of WSR _____

☒ Preproposal Statement of Inquiry was filed as WSR 99-22-079 ; or
☐ Expedited Rule Making -- Proposed notice was filed as WSR _____; or
☐ Proposal is exempt under RCW 34.05.310(4).

(a) Title of rule: (Describe Subject) Solid Waste Handling Standards, chapter 173-350 WAC

Purpose: To adopt comprehensive standards for solid waste handling practices and facilities, and to provide permit exemption opportunities that encourage the use, reuse, and recycling of solid waste.

Other identifying information: N/A

(b) Statutory authority for adoption: Chapter 70.95 RCW

Statute being implemented: Chapter 70.95 RCW

(c) Summary: The proposed rule provides standards for solid waste handling practices and facilities that protect human health and the environment, and implement legislation intended to streamline the permitting system and encourage the reuse and recycling of solid waste. These solid waste handling practices and facilities are currently subject to chapters 173-304 WAC and 173-314 WAC. Once effective the proposed rule will immediately apply to all new facilities. Existing facilities will be required to meet the new regulation in phases. The proposed rule will apply to all solid waste handling facilities except municipal solid waste landfills subject to chapter 173-351 WAC and special incinerator ash subject to chapter 173-306 WAC.

Reasons supporting proposal: N/A

(d) Name of Agency Personnel Responsible for:		Office Location	Telephone
1. Drafting.....	Michael A. Hibbler	Spokane, WA	(509) 456-3270
2. Implementation....	Cullen Stephenson	Lacey, WA	(360) 407-6103
3. Enforcement.....	Cullen Stephenson	Lacey, WA	(360) 407-6103

(e) Name of proponent (person or organization): Department of Ecology
☐ Private ☐ Public ☒ Governmental

(f) Agency comments or recommendations, if any, as to statutory language, implementation, enforcement and fiscal matters: N/A

(g) Is rule necessary because of:

Federal Law?	☐ Yes	☒ No	If yes, ATTACH COPY OF TEXT
Federal Court Decision?	☐ Yes	☒ No	Citation:
State Court Decision?	☐ Yes	☒ No	

(h) HEARING LOCATION:
The Public Hearing will be conducted simultaneously at the following Washington Department of Information Systems video-conferencing centers.

See attached for site information.

Date: August 6, 2002 Time: 1:00 p.m

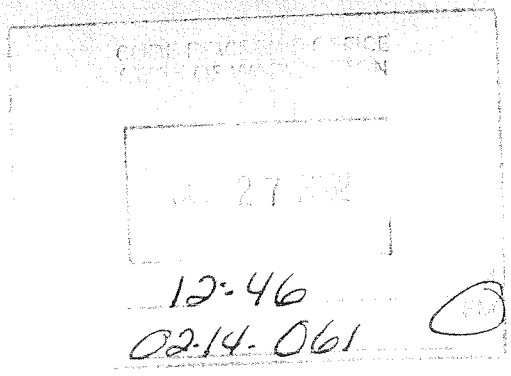
Assistance for persons with disabilities: Contact Lynette Kuehl or Brenda Pozega by July 30, 2002

TDD (509) 458-2055 or (509) 456-2947

Submit written comments to:
Michael A. Hibbler – mhib461@ecy.wa.gov
Washington Department of Ecology
Eastern Regional Office
4601 N. Monroe
Spokane, WA 99205-1295
FAX (509) 456-5056 By 5:00 P.M. on September 4, 2002

DATE OF INTENDED ADOPTION: November 20, 2002

CODE REVISER USE ONLY



NAME (TYPE OR PRINT) Linda Hoffman

SIGNATURE Linda Hoffman

TITLE Deputy Director

DATE 6/27/02

(COMPLETE REVERSE SIDE)

(j) Short explanation of rule, its purpose, and anticipated effects:
Although proposed as a new rule, Chapter 173-350 WAC is a rewritten version of the existing rule (Chapter 173-304 W dealing with this subject. This approach has been taken in pursuit of the following goals:

- Improvement of organization, readability, and usability by eliminating the extensive cross-referencing characterizing the existing rule;
- Incorporation of guidelines applicable to composting and moderate risk waste facilities into the rule (see proposed WAC 173-350-220 and WAC 173-350-360);
- Updating facility standards and definitions, including consistency with other rules – in particular Chapter 173-308 WAC (Biosolids Management), and Chapter 173-351 (Criteria for Municipal Solid Waste Landfills); and
- Incorporation of the content contained in Chapter 173-314 WAC (Waste Tire Carrier and Storage Site Licenses), which will be repealed once this rule is adopted.
- Incorporation of recent legislative changes, including a five year life for permits, provisions for beneficial use permit exemptions, and deferral to other environmental permits.

Does proposal change existing rules? ☐ YES ☒ NO If yes, describe changes:

(k) Has a small business economic impact statement been prepared under chapter 19.85 RCW?

☒ Yes. Attach copy of small business economic impact statement.
A copy of the statement may be obtained by writing to:
Michael A. Hibbler
Department of Ecology
Eastern Regional Office
4601 N. Monroe
Spokane. WA 99205-1295
telephoning: (509) 456-3270
faxing: (509) 456-5056

☐ No. Explain why no statement was prepared

(l) Does RCW 34.05.328 apply to this rule adoption? ☒ Yes ☐ No
Please explain: Pursuant to RCW 34.05.328 (5) the proposed rule has been determined to be a significant legislative rule. The applicable requirements of RCW 34.05.328 are being complied with.

Attachment:

To attend the public hearing video conferences you must go to one of the following location

* **SPOKANE SITE**
  1101 N. Argonne, Suite 109, Spokane, WA

* **LACEY SITE**
  Sleater Kinney Road S.E., Suite Q, Lacey, WA

* **SEATTLE SITE**
  1107 SW Grady Way, Suite 112, Renton, WA

* **YAKIMA SITE**
  Yesterday's Village
  The 15 West Yakima Ave. Building
  15 W. Yakima Ave., Suite 220, Yakima, WA

Notification of Public Meetings sent to mailing list

Public Meetings

Proposed Solid Waste Rule Changes
Revision of chapter 173-304 WAC
Minimum Functional Standards for Solid Waste Handling

The purpose of these meetings is to inform the public about proposed changes to the regulation and methods for commenting on those changes. These meetings will include a question and answer period. However, testimony regarding the rule will not be accepted at this time. An informal review and comment period is scheduled to begin in December.

A draft of the rule will be available after December 1st.

Location	Date
Ellensburg - Hal Holmes Community Center, 201 N Ruby	12/5/00
Mount Vernon - Skagit County Admin. Bldg., 700 S Second	12/6/00
Spokane - Spokane Comm. College, Student Lair, 1810 N Greene St.	12/7/00
Pasco - PUD Auditorium, 1411 West Clark	12/12/00
Renton - Renton Community Center, 1715 Maple Valley Highway	12/14/00
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For further information, please contact Brian Farmer at (509) 456-6386, bfar461@ecywa.gov; Brenda Pozega at (509) 456-2947, bpoz461@ecy.wa.gov; or visit our web site at http://www.ecy.wa.gov/programs/swfa/304revisions/index.htm

WASHINGTON STATE DEPARTMENT OF ECOLOGY

News Release

FOR IMMEDIATE RELEASE – July 15, 2002
02-138

New rule for handling solid waste calls for re-use and recycling

OLYMPIA – The public is being asked to review a proposed rule that will replace outdated regulations for collecting and disposing of solid wastes – also known as garbage.

The state's existing regulations are 14 years old and, according to Department of Ecology officials, need to be updated to make the rule language easier to understand, to take into account new technology, and to implement legislation intended to streamline the system for permitting waste-handling facilities. An advisory group helped with the overhaul, which also will do more to encourage people to re-use and recycle wastes.

"We've listened to the people at the facilities that are actually using the rule and made some changes that will help them work better with their customers and the state," said Mike Hibbler, a solid-waste manager for Ecology. "Our target was to cut back on red tape for those that use the rule every day and make it easier for them to reduce the amount of garbage going into landfills."

Public comments on the proposed rule are being accepted until 5 p.m. on Wednesday, Sept. 4. Verbal comments may be provided at a video-conference public hearing on Aug. 6, and written comments may be submitted via mail, fax or e-mail.

To attend the video-conference hearing at 1 p.m. on Aug. 6, people must go to one of the following locations:

- **SPOKANE** -- 1101 N. Argonne, Ste. 109.
- **LACEY** -- 710 Sleater Kinney Rd. S.E., Ste. Q.
- **RENTON** -- 1107 S.W. Grady Way, Ste. 112.
- **YAKIMA** -- Yesterday's Village, 15 W. Yakima Ave., Ste. 220.

For more information about the new solid-waste handling standards, the public hearings or the rule-adoption process, call Mike Hibbler at 509-456-3270 or Wayne Krafft at 509-456-2995, or visit Ecology's Web site at http://www.ecy.wa.gov/programs/swfa/304revisions/.

Written comments about the proposed rule may be e-mailed to mhib461@ecy.wa.gov, faxed to 509-456-5056, or mailed to Mike Hibbler, Dept. of Ecology, Eastern Regional Office, 4601 N. Monroe, Spokane, Wash., 99205-1295.

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-- more --

Media contact: Caitlin Cormier, public information manager, 360-407-6149; pager, 360-971-5536

Ecology's solid-waste program Web site: http://www.ecy.wa.gov/programs/swfa/
Ecology's Web site: www.ecy.wa.gov

Broadcast version
The state Department of Ecology is accepting public comment on a proposed rule that will replace outdated regulations that govern how garbage is collected and disposed of in the state of Washington.

One of the central themes of the new regulation involves encouraging the re-use and recycling of wastes.

Comments on the proposed rule will be accepted through Sept. 4.

For more information, contact the Department of Ecology.

Notification of Public Hearing sent to entire mailing list

Public Hearing
Chapter 173-350 WAC
Solid Waste Handling Standards

The Washington Department of Ecology (Ecology) is proposing to adopt a new solid waste regulation, ch.173-350 WAC, *Solid Waste Handling Standards*. The proposed rule provides standards for solid waste handling practices and facilities that protect human health and the environment, and implement legislation intended to streamline the permitting system and encourage the reuse and recycling of solid waste. These solid waste handling practices and facilities are currently subject to ch.173-304 WAC and ch.173-314 WAC. Once effective, the proposed rule will immediately apply to all new facilities. Existing facilities will be required to meet the new regulation through a phased transition. The proposed rule will apply to all solid waste handling facilities except municipal solid waste landfills subject to ch.173-351 WAC and special incinerator ash subject to ch.173-306 WAC. Additionally, Ecology has issued a Determination of Non-Significance (DNS) under the State Environmental Policy Act (SEPA) for the proposed rule. The DNS and checklist, and a draft of the rule are available on-line at: http://www.ecy.wa.gov/laws-rules/activity/wac173350.html.

Ecology will be accepting written comments between July 17, 2002 and September 4, 2002. Testimony regarding the proposed rule will be accepted at a Public Hearing on August 6, 2002 beginning at 1:00 p.m. The Public Hearing will be conducted simultaneously at the following four Washington Department of Information Systems video conferencing centers:
Spokane site - 1101 N. Argonne, Suite 109, Spokane WA
Lacey Site - 710 Sleater Kinney Road SE, Suite Q, Lacey, WA
Seattle Site - 1107 SW Grady Way, Suite 112, Renton, WA
Yakima Site - Yesterday's Village, The 15 West Yakima Ave. Building, Suite 220, Yakima, WA
For further information regarding comment opportunities, or for printed copies of the proposed rule and associated documents please contact Michael Hibbler (mhib461@ecywa.gov) at (509) 456-3270; Lynette Kuehl (lkue461@ecy.wa.gov) or Brenda Pozega (bpoz461@ecy.wa.gov) at (509) 456-2947; or visit our web site at http://www.ecy.wa.gov/programs/swfa/304revisions/index.htm

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