



DEPARTMENT OF
ECOLOGY
State of Washington

Response Summary Chapter 173-303 WAC Dangerous Waste Regulations

Response to comments on preliminary draft rules

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Response Summary
Chapter 173-303 WAC Dangerous Waste Regulations

Response to comments on preliminary draft rules

Hazardous Waste and Toxics Reduction Program
Washington State Department of Ecology
Olympia, Washington

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Response to comments

Response to episodic waste generation

Introduction

Episodic waste is dangerous waste generated in larger quantities than a generator would normally generate. The proposed episodic waste generation regulations are a set of less stringent rules that both small quantity generators (SQG) and medium quantity generators (MQG) can take advantage of. This regulation lets SQGs and MQGs maintain their generator status for the year and for the management of their non-episodic waste they generate. This is an optional rule for generators to use, not mandatory.

Comment B-7-6: Reporting. The commenter stated the draft annual reporting requirement would require generators to produce detailed records for waste generated prior to the episodic event. Such records may or may not exist, since there is no requirement for a (Washington) SQG to record dangerous waste generated each month. The draft rule would create a recordkeeping requirement where none otherwise exists if an SQG might utilize the proposed episodic event provisions.

Response: The episodic generation rules require the generator to notify the Department of Ecology (Ecology) about planned or unplanned events, providing information that includes the type and quantity of waste, start and end date, the reason for the event and a facility contact. The commenter is correct that Washington episodic generation rules will require SQGs to submit an annual report for all dangerous wastes generated for the year. Further, it is true existing regulations do not require SQGs to submit annual reports with detailed waste generation information. Special wastes are the exception, requiring detailed reports.

Existing rules do require SQGs to designate their solid waste, count how much is generated per month and track total amount accumulated. Although not a regulation, SQGs should be keeping records about waste type and generation amounts in order to meet the designation and counting regulations. In most cases, disposal information should also be kept as part of normal business operations. To the extent the SQG has kept these records and any manifests, they will be able to comply with this episodic generation annual reporting rule. One reason Ecology is adding this annual reporting rule, and particularly for the larger volumes of waste generated from an episodic event, is to monitor and support pollution prevention efforts. Another reason is to align with the new generator improvement reporting rule at proposed WAC 173-303-220(b). This rule requires any generator who jumps up to an LQG or MQG status for at least one month out of the year to report all dangerous waste for the year.

Note that with the episodic waste generation regulations, there will be significantly less paperwork for generators using these rules compared to generators who do not. The ability to maintain SQG or MQG status means there are no requirements for formal written training plans or contingency plans, as examples.

Comment A-2-8, O-4-6: Academic lab setting. In an academic setting, it is not uncommon for laboratory cleanouts to occur as research faculty come and go. This does not necessarily provide the 30 days advance notice required by this regulation. Providing such notice does not appear to garner any particular benefit or increase protection of the environment, provided that wastes are properly disposed. This notice requirement should be eliminated.

Response: In an academic laboratory setting, if the episodic waste generation regulations are not feasible because a faculty may come and go or a 30-day notification is not achievable, consider using Section -235 of the Dangerous Waste Regulations. This set of less stringent regulations are designed to help with, for example, laboratory cleanouts. The definition of “episodic event” is being adopted from EPA’s definition. To replace the term “normally occurs” within the definition of “episodic event” with the terms “temporary” or “short term” is problematic. For example, then Ecology would have to define or place a time frame on those terms. As defined, an episodic event must be completed within 60 days from start to finish and with all episodic waste removed from the site. The notice requirement can be not be eliminated as the rule would be less stringent than the federal program.

Response to hazard labels

Comments I-4-3, B-6-11, B-7-3, A-3-16, A-3-30: Hazard systems. Several commenters (including repetitive comments from a single commenter) had concerns that by not adopting EPA’s note on hazard label systems (in the Generator Improvement Rule), compliance would be more difficult and may result in excessive hazard indications for emergency response purposes. Hazard marking should accurately identify the actual hazards exhibited within a particular container of waste. One of the commenters also stated that hazards associated with the F, K, U or P listed codes can be negligible.

Response: Since 1984, Washington State has required risk(s) labeling (now called hazard(s) labeling to match EPA’s language) on containers and tanks to indicate the hazard(s) of the materials being contained. This is to inform or alert employees, emergency response personnel, and the public. In the 1984 regulation, Ecology added a clarifying note stating that if there is already a system in use that performs this function in accordance with local, state, or federal regulations, then such system will be adequate. It is this note that has caused confusion. At times, “notes” and “comments” are added to a regulation to help the reader understand what an agency was envisioning, and help the reader comply with the rule.

However, this note has been used by generators as if it was the regulation. For example, this note has been used to label containers and tanks with risk labels understood only by emergency response persons, but employees and the public/visitors may have more frequent contact or near contact with containers of dangerous waste. These individuals should be given clear and adequate information in order to avoid containers or tanks of dangerous waste that could cause them harm.

Ecology realizes that this note should have been updated to keep up with regulatory changes to help with compliance. For example, in 1984 the Department of Transportation (DOT) Class 9 label did not exist, nor did the other classification systems such as OSHA’s globally harmonized

system (GHS) of labeling. These systems have some labels that do not clearly indicate the hazard of the materials being contained to inform or alert the public, employees, or all emergency personnel. Ecology is amending the hazard labeling requirements to make it clearer and easier to comply with.

Ecology is not omitting other agencies' labels as the commenter suggests, rather the new rules place a few performance standards on acceptable hazard labels. This will allow labels or markings to be used from any source.

Finally, if a listed dangerous waste no longer exhibits a hazard, Ecology would not expect to see a hazard label. For example, if an F003 solvent that also designates for a TCLP characteristic was treated to remove its ignitability (the reason for its listing), Ecology would not expect to see an ignitable label on the container.

P-listed wastes are acute hazardous wastes and state-only WT01 are extremely hazardous wastes. As such, a generator that generates more than 2.2 lbs. of either one, or in combination, in a calendar month is regulated as a large quantity generator. Many F-, K-, and U-listed wastes present more than one hazard (for example, some are corrosive and toxic). Ecology disagrees that the hazards associated with these waste codes are negligible as pointed out by a commenter.

Comments B-6-11, O-1-6, O-1-16, A-3-6, B-7-3, A-2-6, O-1-21, O-1-23, O-1-43, O-1-45, O-1-46, O-1-47, O-1-55, O-1-57, O-1-65, O-1-72: Use of DOT labels. Several commenters (including repetitive comments from a single commenter) had concerns about using DOT labels. One wrote that if Ecology required hazard labels that may contradict a DOT requirement, this could result in the hazard labels needing to be removed under certain circumstances. For instance, when the waste is shipped from one Hanford unit to another for storage, applicable DOT labels (like Radioactive or Class 9), are applied since Hanford complies with DOT or DOE shipping requirements, even for on-site transportation, in order to ship as safely as possible.

Response: According to EPA, and Ecology agrees, the hazard label requirement doesn't contradict US DOT labeling regulations. DOT does not regulate the management of hazardous waste while it is being accumulated or stored on site by the generator or TSD facility. DOT requirements only apply during transportation. There is no US DOT requirement to label dangerous waste accumulation containers with DOT labels. Also, OSHA's hazard communication labels or markings do not apply to hazardous wastes.

Some have wrongly interpreted US DOT regulations to mean that non-DOT labels (e.g. GHS labels) must be removed from that container and replaced with a DOT label for off-site dangerous waste shipments. This is not true. It may be possible, for example, for a generator to use an OSHA GHS label, or a handwritten label that meets the proposed labeling performance standards, on a container while dangerous waste is accumulating on site. According to EPA, when this container is shipped off site, the generator and transporters must only ensure that those non-DOT markings or labels are located away from and do not obscure the DOT marking or label. There is no contradiction or requirement to remove the non-DOT labels. Finally, the movement of hazardous (dangerous) waste on site is not regulated by DOT, so there is no conflict if hazardous waste containers are transported on site with both a hazard label and a US DOT label.

Comments B-6-11, O-1-18, B-7-3, O-1-23, O-1-34: Understandable. A term that is not clear.

Response. The proposed term “understandable” used in the draft hazard(s) label regulations will be revisited by Ecology.

Comments O-1-70, A-3-32: Underground storage tanks. A commenter noted Ecology proposes to add a requirement that underground tank systems have labels or signs above ground. Ecology has not explained how such signs would serve any useful purpose for a closed tank, pipe, or appurtenant equipment buried several feet below ground.

Response: Underground storage tanks holding product are regulated by the Underground Storage Tank (UST) regulations implemented by Ecology’s Toxics Control Program (TCP). Underground storage tanks holding dangerous waste are regulated by the Dangerous Waste Regulations.

The Dangerous Waste Regulations regulate above ground tanks, partially above ground tanks, partial underground tanks, and completely buried underground tanks accumulating or storing dangerous wastes. Ecology believes having a posting above each underground tank or tank system will bring attention to these underground dangerous waste storage units and systems. Tanks storing or accumulating dangerous waste all pose similar hazards or risks; underground tanks may carry a greater risk. For example, at the Hanford facility, ground subsidence or settling has been observed for numerous years at one of the 241-CX tanks, and signage indicating tank location and hazard is important for public safety. Another reason for aboveground signage is to ensure that heavy vehicle traffic is not running over underground tanks. If posting is not feasible, the proposal also allows for labels or markings (postings) at the aboveground entrance to the active portion where the underground tank or tank system is located. This option would work well for a tank system within a room or fenced off area, and will help alert employees to any hazards posed by these type of tanks.

Comment O-5-4: Stringent labeling. A commenter was concerned about why Washington State has proposed significantly more stringent labeling requirements, particularly banning the use of USDOT, OSHA, and NFPA labels as risk identification.

Response: Ecology is not banning the use of other agency’s labels. Under Ecology’s proposal, handwritten or handmade labels, or labels as prescribed in other agencies regulations, can be used as long as the labeling performance standards are met. The standards are simple and the vast majority of other agency’s labels will meet the performance standards being proposed.

Comments B-8-2, B-7-3: Class 9. A commenter stated that the DOT regulations specify marking, labeling, container specification, and shipping documents be substantively the same within state regulations. In past guidance, Ecology has used “major risk” as a standard to convey risk associated with certain hazard classes of materials, specifically under hazard Class 9. We are concerned that now this will be considered a “hazard” which could cause confusion. Having to classify certain materials as WT02 Toxic, for example, does not match hazard classifications under DOT. Another commenter had a similar comment.

Response: DOT regulations apply only to the shipment of hazardous waste and not to the on-site storage of materials. EPA has made it clear that while in transportation, other non-DOT labels

can be used. The only condition is that the non-DOT markings or labels are located away from and do not obscure the DOT marking or label. When dealing with an incident during shipment, it's the DOT markings or labels that emergency response personnel pay attention to. Emergency personnel will respond the same regardless if the wastes are transported within the state or across state borders.

Ecology does not believe the DOT Class 9 label relays the actual hazard of the dangerous waste container to employees or the public/visitors while on site. EPA uses the word "hazard" in their Generator Improvement Rule. To avoid confusion, Ecology is adopting that term to replace the word "risk" in the Dangerous Waste Regulations. The four hazards of concern are ignitability, corrosivity, reactivity, and toxicity.

Comment B-2-2: Radioactive hazards. One commenter would like Ecology to confirm that, in situations where radioactive hazards represent the predominant risk associated with a waste, radioactive hazard labels may be used to convey the hazard even though radionuclides are outside the scope of dangerous waste regulations. Another commenter stated the phrase "but not limited to" implies that additional labeling criteria exist, but to the draft rules don't identify what those additional criteria are.

Response: Ecology cannot make the confirmation as requested. The United States Nuclear Regulatory Commission regulates labeling requirements for radioactive materials. Although dangerous wastes may exhibit hazards in addition to being ignitable, corrosive, reactive, or toxic, the Dangerous Waste Regulations only recognize those four. If a generator has a dangerous waste exhibiting one or more of those four hazards that is also radioactive, or a biohazard, or contains nanoparticles, or contains sharp items, for example, then the generator is welcome to add those other descriptive labels to the container as well.

Comments B-7-3, B-6-11, A-3-19: 25 feet or ½ inch. A few commenters stated the draft Washington state requirement of legibility at 25 feet, or lettering size at least a half inch in height, serves little purpose for routine waste handling, but may be of some value in cases of leakage, fire, a container that has become pressurized due to chemical reaction, or other emergency situations.

Response: The letter size serves the purpose of informing people about waste hazards before they get close to the dangerous waste container, helping them better protect themselves. The proposed labeling criteria is a safety and exposure concern. It also promotes self-awareness and gives employees, visitors, or inspectors the information needed to choose whether to get closer or avoid that container of dangerous wastes.

Response to labeling legibility

Comments I-4-1, B-6-11, A-3-19: 25 feet or ½ inch. Several commenters had concerns about the requirement for labeling to be visible at a distance of 25' or with a lettering size of 1/2" high. In general, they felt that the risk with hazardous waste is not any higher than the risk of the same category of unused materials. They felt that the negligible increase to safety does not justify the added expense of printing new labels, training staff on the change, or having to re-package very

small containers so that the label will fit. They are concerned that providing labels which are visible from 25' away is not possible when they produce waste containers that are less than 10-25 ml in size.

Response: Ecology does not envision a new line of labels being marketed due to the proposed criteria. The common labels used by other agencies for hazard markings, such as OSHA's GIS system or DOT's system, meet the 25' distance or ½" height criteria. Additionally, labels can be handwritten or handmade and gives more flexibility to the generator to label their containers.

The proposed criteria is of value to handlers that routinely work with dangerous wastes. It is also of value to emergency responders in case of emergency situations such as container leakage, fire, pressurized containers due to chemical reaction, or other types of emergencies. The Dangerous Waste regulations are a set of regulations designed to prevent harm to human health and the environment and places great value on the safety of the employees, the public, the employer, visitors, emergency responders, and other waste handlers.

Regarding labeling of small containers, EPA's long-standing guidance is that they would expect the small containers to be placed in a properly labeled larger container, such as gallon sized container, a lab pack, or a bin. This also has the added benefit of secondary containment if a small container breaks. Ecology supports this and believes generators are able to achieve this labeling requirement. In addition, in relation to laboratories, the generator may consider using the alternative requirements for eligible academic laboratories rule for managing their dangerous wastes.

Comments I-4-1, B-3-2, O-1-15, A-1-3, A-2-5, O-4-4: Laboratory setting. A few commenters (many are repetitive comments from a single commenter) stated that the distances from which waste containers are visible to staff and emergency responders in laboratories are less than 25 feet. Another issue brought up is that Ecology advice to place small containers in larger containers is not practical, given the lack of storage in laboratories. Additionally, the majority of waste containers are kept in cabinets and cannot be viewed from a distance of 25 feet.

Response: Laboratories generally do not function as the central accumulation area where containers of dangerous waste are stored until off-site shipment. More often they accumulate waste under the satellite accumulation allowance. For consistency, satellite accumulation areas and central accumulation areas will have the same labeling performance standards.

When using cabinets for storing containers of dangerous waste to meet fire code or for secondary containment, Ecology would recommend the cabinet be properly labeled to identify it contains dangerous waste. Small vials may also be placed in bins and the bin labeled with the ½ inch lettering or visible from 25 feet. Ecology agrees with the comment that laboratories often do not have sufficient storage space to place smaller containers inside much larger containers to meet a marking requirement. Ecology does not suggest the larger container be a 55-gallon drum. A container about the size of a one gallon container should suffice to store vials and tubes. This allows easy access to view containers for leaks, takes minimal space, and allows for the proposed labeling amendments.

Comment O-1-15: Label criteria. One commenter stated that Ecology has not explained why the criteria that has been in place since 1984 to mark the container clearly with the words “hazardous waste” or “dangerous waste” needs to be revised in this manner.

Response: The term “clearly” can have many different interpretations, depending on a person’s perspective. The current regulatory language using the term “clearly” has been argued that a dangerous waste hazard label can be written in font 8 (font 8 is this size) since it can technically be read “clearly” from a certain distance.

This is not an adequate size for handlers, the public, visitors, first responders, or others to be made aware of a potential hazard since it requires someone to get quite close where “the font 8 size warning can be clearly read.” Since this is not the intent of the existing regulations, the proposed lettering criteria is proposed to help with ambiguity around the word “clearly” and the intent of the labeling requirements.

Comment O-1-71: Tanks. The same commenter had the following concern about the legibility of tank labels. The concern is that Ecology proposes to retain the requirement that the marking “Dangerous Waste” or “Hazardous Waste” be legible at a distance of 50 feet from the tank. This requirement is impractical for waste tanks located in vaults or basements where access is limited. Consider revising this requirement to read “...legible at a distance of at least fifty feet for outdoor tanks and twenty-five feet for indoor tanks, and for underground tank systems, the marking must be placed at each entrance to the active portion.”

Response: The location of tanks in vaults or basements is not the norm for tanks that store or accumulate dangerous (hazardous) wastes. The Dangerous Waste Regulations are written for all generators. It would be impractical to customize the Dangerous Waste Regulations for each generator in the State of Washington. Tanks have no size limit. They are found in small capacities and up to the tens or hundreds of thousands of gallons. The sheer size poses potential risks that an ordinary 30- or 50-gallon container does not. Ecology plans to retain this distance requirement. Ecology is proposing an additional option for aboveground postings for each underground tank and tank system. The additional proposed option allows labels or markings (postings) at the entrance to the active portion of the site where the underground tank or tank system is located. For example, the gate to the fenced-off area above the underground tank system can be posted.

Comment B-7-4: Other label systems. One commenter was concerned that if a generator uses DOT, OSHA, or NFPA hazard warnings, these warning systems have their own requirements of size, color, and contrast that are designed to ensure visibility. A state legibility requirement is therefore superfluous and could cause a potential conflict leading to federal preemption. Also, emergency responders and fire marshals often have their own local requirements that are more effective and safer than any label on a tank or container. First responders entering an area are better informed and far safer if they encounter NFPA diamonds at the entrance to a building with hazardous substances, rather than on a container or tank which may be obscured by smoke or mist. For all the reasons described above, the commenter recommends keeping the proposed language but adding an alternative which is basically the “note” in the existing labeling regulation that is a cause of the rule change.

Response: In cases of emergency most likely employees or site visitors will have first or near contact (and first chance to avoid such contact) with containers during an evacuation. Containers marked or labeled as proposed will help inform people of waste hazards during these emergency events. As explained earlier, many of the other agencies' hazard labels do adequately relay dangerous waste hazards to emergency response personnel, employees and the public, but not all labels in those systems clearly indicate the hazard. For example, the DOT's Class 9 label, which is half plain white with a number 9 and half white with black stripes, does not adequately relay the container or tank dangerous waste hazard(s) to emergency responders, employees, the public, government inspectors, and other visitors (such e.g. repair contractors). In addition, as explained earlier, the use of labels meeting the proposed criteria for the storage or accumulation of dangerous waste on site does not cause a potential conflict with federal DOT or OSHA labeling requirements.

Response to weekly inspection

Comments I-4-2, B-6-8, O-1-6, O-1-69, B-7-5 A-3-7, A-3-8, A-3-9, A-2-4, O-4-3: Weekly inspections. Commenters have concerns about rigidly defining a weekly inspection as seven consecutive calendar days. This could cause compliance difficulties because qualified inspection staff may be sick, on a holiday, or other reasons.

Response: Ecology acknowledges concerns with the draft weekly inspection definition and will consider revising it to make weekly inspection compliance easier.

Response to LQG consolidate SQG DW

Comments A-3-15, A-3-24: Reporting Wastes. A commenter requested clarity on this practice [of LQGs accepting and consolidating SQG waste] would be addressed in the Annual Dangerous Waste Report. Another commenter asked if this practice would require the LQG to report "waste received" on the WR form in the annual dangerous waste report. A third comment requested consideration for a phase-in period if new annual reporting approaches are needed.

Response: An LQG must report the dangerous waste it receives from SQGs on its annual report. Under the federal program, EPA included a new source code, G51, in their reporting instructions. LQGs will use it to identify the hazardous (dangerous) waste received from SQGs to differentiate from hazardous (dangerous) wastes the LQG generated on site. According to EPA this will enable states and EPA to better understand the additional volumes and types of hazardous (dangerous) wastes managed at an LQG, which will assist in prioritizing compliance assistance. Ecology will review EPA's reporting forms and make corresponding changes to the State's Annual Reporting forms and instructions where necessary. EPA defines the new source code G51 as "Received hazardous waste from VSQG that is under the control of the same person, defined in 40 CFR 260.10."

In reference to a phase-in approach for reporting, the current rule package is expected to be approved and final at the end of 2018. For wastes generated in 2018, where annual reports for that year are due in early 2019, the generators will complete their annual reports with the current instructions and forms. For the dangerous wastes generated in 2019, those reports will be due in

early 2020 and will need to be reported using new updated annual reporting forms and instructions. As mentioned, Ecology will review EPA's reporting forms and make corresponding changes to the State's Annual Reporting forms and instructions where necessary. This review will be completed in time for the 2019 annual waste reporting cycle (due early 2020).

Response to designation of unknowns

Introduction to unknowns.

Unknown materials fall into two groups:

1. *Unknown wastes generated by the "generator."*

This may occur for a number of reasons:

- a. The generator truly has no knowledge of their own process or of the materials they use on site to make an initial screening toward the designation status of waste generated.
- b. The waste cannot be designated without lab tests.
- c. The generator finds (discovers) a "forgotten" container of waste, or a container of product that has gone "bad."

In these scenarios the generator is expected to sample the waste, or have the waste sampled, at the first point of generation or discovery, not after the container is full or to wait weeks or months for a contractor to come on site to begin the designation process. While lab tests are pending the container must be managed appropriately under the Dangerous Waste Regulations. Generators tend to know they will be producing waste from their processes and can set in place screening protocols or testing tools prior to first generating wastes.

2. *Unknown wastes not generated by the generator, or person, but are abandoned on their property, later to be found (or discovered).*

- a. Also included in this group is a person who purchases a piece of property to later find (discover) a container of waste.

Ecology understands the generator, or person, did not produce that waste. However, they shoulder generator responsibilities for the proper on-site management, designation, and proper disposal of that waste. In this case, the generator, or person, may truly have no educated guess or simple screening tests or test data as to what is in the container. It's unknown.

In these scenarios, the generator, or person, must immediately begin the process of sampling and testing an unknown waste(s) to determine its dangerous waste status. For the purpose of these scenarios, Ecology has allowed the term "immediately" to be limited to "within 24 hours" after discovering or generating the unknown.

The generator, or person, must act in a diligent manner to acquire the necessary lab analyses. Waiting weeks or months for a contractor to come on site to begin the designation process is not diligent nor the intent of this allowance. While waiting for lab tests, the container must be managed appropriately under the Dangerous Waste Regulations.

The proposed amendment to the designation regulations is as follows:

173-303-070(1)(b): Designation of dangerous waste. "Any person who generates a solid waste or discovers an unknown material must make an accurate determination if that waste or unknown material is a dangerous waste in order to ensure wastes are properly managed according to applicable dangerous waste regulations."

Comments O-5-2, O-3-2, B-7-17, A-1-3: Who. There have been several comments on the term "person" being too vague. Does it mean an individual who discovers an unknown material when she/he is taking a walk (and the waste may not even be on her/his property)? Is it a repair person, or family member, or a government personnel who discovers an unknown material during an inspection or other type of visit? Do they become the "person" responsible for making the dangerous waste determination? Does it mean a person who finds an unknown material on an adjacent public right-of-way, at an adjacent property, or anywhere otherwise not under the control of the person or a nosy neighbor who sees a drum next door?

Response: The Dangerous Waste Regulations, and this designation requirement, don't apply to people taking walks, repair personnel, family members, government inspectors, etc. Ecology is not suggesting a passerby on a walk or neighbor is responsible to start the dangerous waste determination. The term "person" is defined in the Dangerous Waste Regulations in WAC 173-303-040 as "an individual, trust, firm, joint stock company, federal agency, corporation (including a government corporation), partnership, association, state, municipality, commission, political subdivision of a state or any interstate body."

Comment O-1-7: Evaluation. A commenter requested Ecology consider revising the wording about designating unknown wastes to allow for evaluation of unknown materials prior to beginning the designation process.

Response: The designation process is an evaluation process. Once a facility discovers an unknown waste, they are obligated to begin evaluating it to determine if it is a dangerous waste. Ecology is not expecting that a full designation be completed (including any test results) immediately upon finding an unknown waste.

Comment B-6-12: Discarded materials. The commenter stated that Ecology's regulatory authority does not include regulation of product materials.

Response: Ecology agrees that not all unknown materials are meant to be discarded or abandoned as solid waste. What Ecology has experienced is that products are valued as commodities. They are managed in such a way to prevent loss, managed to prevent contamination, amounts are tracked, containers and tanks of products are clearly labeled, in good condition, and not generally stored outside in the elements. Wastes on the other hand, tend not to attract such attention or value. It is not the norm for a business to have a drum of unknown material on hand that is a product. Ecology's regulatory authority does include regulation of product materials when it is clear those "products" are managed more as wastes than products.

Comment B-6-12: Abandoned waste. The commenter stated they are not in favor of proposed language assigning dangerous waste determination responsibility to any person that discovers an unknown material. The requirement to perform a dangerous waste determination is based on

generation, which is the act or process that produces dangerous waste or the act that first causes a dangerous waste to become subject to regulation. Discovery by an entity other than the generator (as defined by WAC 173-303-040) should not trigger any requirements, especially not those intended for persons engaged in waste generation. The commenter also asked for clarity on the intent of this requirement, and consider situations such as an unknown material found illegally dumped or abandoned on property owned by a person who did not generate the material.

Response: The term “person” is defined in the Dangerous Waste Regulations in section -040. When used in the context of the Dangerous Waste Regulations, a person who did not actually generate the waste becomes the “generator” and owner of the solid or dangerous waste when that waste is abandoned on their property (as well as the financial liabilities incurred) or even discovered later after a property purchase. This is unfortunate, however, the proposed rule is appropriate for the prompt and safe management of abandoned waste.

Comment B-7-17: Notify an agency. A commenter suggests the following clarifying language:

Any person who generates a solid waste or discovers an unknown material at a location that is under the control of that individual or entity must either make an accurate determination if that waste or unknown material is a dangerous waste, or promptly notify the Department of Ecology, the local fire department, or another person who is qualified to make this determination.

Response: A generator or property owner cannot pass their waste management responsibilities to the Department of Ecology, a county government, the local fire department, or another person. That suggestion may encourage generators to “discover” waste more often or on a routine basis with the expectation that Washington State tax payers or local authorities would pay for all expenses.

Comment B-9-2, A-3-12: Box store. A comment from a large box retail company indicated that outside services are required to assist the retailer in making waste determinations. Determining the hazard characteristics of an unknown waste requires time that is not provided for in the regulation as currently drafted. We believe the additional wording is not necessary to protect human health or the environment. The current programs in place at [our] stores are protective of human health and the environment by ensuring that potential dangerous waste is appropriately managed until characterized before shipment for disposal. Another commenter had a similar comment. This clarity is needed because individual(s) who discover unknown material may not have the training to designate waste.

Response: Manufacturers supply safety data sheets (SDS) for products to the retail stores. There is also access to online information on products and/or ingredients. Retailers have knowledge of the products they sell and many have systems in place to easily identify damaged products or product returns. In addition, EPCRA rules, local fire marshal regulations, and product label information enable retail stores to start the designation process and ascertain the hazards of the material in order to properly store the waste. The proposed rule does not preclude the use of outside assistance. However, waiting for weeks or months for outside services to assist the retailer is unreasonable and could put employees and the public at risk.

Comment O-5-2: Abandoned products. One commenter suggested that [the proposed rule] could encourage persons to abandon products or substances in public areas, or not clean them up, and then expose other members of the general public, any land owner, or public entities, like Seattle City Light, to the regulatory claim that they “discovered” and therefore must manage these materials as dangerous wastes under complex and stringent law and risk of penalty.

Response: Ecology has learned that when property owners are made aware of their potential liability for abandoned materials on their property, they tend to take appropriate legal measures to stop or lessen that activity or those who may abandon materials on their property.

Response to conditions for exemption

Comments B-6-3, B-6-7, B-6-10, A-3-14, A-3-22, A-2-2: Accumulation. In WAC 173-303-040, “accumulation” refers to the definition of “storage.” A few commenters voiced a concern that this definition of accumulation as storage would eliminate the distinction between generator and TSD owner/operator management of waste.

Response: In agreement with EPA, Ecology also considers accumulation and satellite accumulation as forms of storage, although we agree it is short-term storage. The terms “storage,” “accumulation,” and “satellite accumulation” are used in the field or otherwise in daily conversations with the regulated communities when providing regulatory assistance.

These terms are also used as a matter of convenience to automatically understand what rules or qualifiers will apply to the long- or short-term storage activities. EPA and Ecology does not intend to change the vocabulary or their intended use when providing assistance, conducting inspections, or citing violations on these forms of storage. For example, the term “satellite accumulation” will still be used for the short-term storage of dangerous waste at or near the point of generation. Knowing this, the inspector will use the less stringent satellite accumulation rules for this type of short-term storage (which remains an option for the generator).

Keep in mind, under the federal RCRA and dangerous waste regulations the forms of storage referred to as “accumulation” or “satellite accumulation” requires a permit unless the generator complies with the appropriate accumulation or satellite accumulation rules (aka conditions for exemption). When complied with, the accumulation regulations and the satellite accumulation regulations have always been a storage exemption from needing a TSD storage permit. Nothing on the federal or state level has changed with this application since 1980. Also, when the term “storage” is used, this predominantly brings up the storage requirements of permitted TSDs. In summary, the terms “storage,” “accumulation,” and “satellite accumulation” will continue to be used in the field or otherwise in daily conversations with the regulated communities when providing regulatory assistance as they are today.

Finally, EPA does support Ecology’s position when they state in rule ““a generator that accumulates hazardous waste on site is a person that stores hazardous waste...” (40 CFR 262.10(a)(2)).

Comment B-6-7: TSD Regs. A commenter had a concern based upon the description of “conditions for exemption” in lieu of “independent requirements” in Ecology’s draft amendments summary. If a generator exceeds the <90-day accumulation time limit, they will be in violation of dozens of permit or interim status requirements since the generator is no longer conditionally exempt from having a final status permit or interim status. Is this how Ecology intends to enforce this provision? This does not appear consistent with how the generator regulatory scheme and enforcement policy has operated over the last 30 years.

Response: The commenter’s statement is technically correct in that TSD requirements apply to a generator exceeding the 90-day time limit. Besides that, two current and long-standing dangerous waste regulations [WAC 173-303-170(3) and -600(3)(d)] supports the commenter’s statement. Today, if the generator is not in compliance with their accumulation standards at sections -170 and -200, technically they are subject to final facility standards, like obtaining a permit..

The federal RCRA program has the same rules and application. With that said, currently and in the future, Ecology and EPA do not and will not jump immediately to requiring a generator to obtain a TSD permit due to a container violation (which is a non-compliance issue with the accumulation standards of section -200). Keep in mind, meeting the accumulation standards (now appropriately called “conditions for exemption” from a TSD storage permit) is required only if the generator wants an exemption from a permit. This is very consistent with how the generator regulatory scheme and enforcement approach has operated over the last 30 years.

EPA’s final rule on this issue and Ecology’s draft rule does not mandate citing and penalizing every violation of regulatory requirements that legally may result when a generator loses its exemption from the storage permit and operations requirements. Such action would be disproportionate to the seriousness of the generator’s violation. Again, this is very consistent with how the generator regulatory scheme and enforcement policy has operated over the last 30 years.

Comment B-6-10: TBG. A commenter had a question about the generator treating their dangerous waste on site (referred to as TBG or “treatment by generator”) without a permit and if Ecology is retaining the allowance.

Response: Ecology is not removing the regulations that will allow LQGs or MQGs to treat their dangerous waste on site without a TSD permit when such treatment is conducted in compliance with their appropriate accumulation standards (i.e., their conditions for exemption).

Comment O-1-58: Sorbents. One commenter stated there is no apparent reason why Ecology should impose the entire suite of medium or large quantity generator requirements on the addition of sorbents during satellite accumulation or on small quantity generators. Consider revising this section to be more consistent with the GIR.

Response. The addition of absorbents to a generator’s container of dangerous waste is considered treatment (treatment by generator, or TBG). The satellite accumulation provisions are a less stringent set of accumulation standards that “exempts” a generator from the full regimen of central accumulation standards for MQGs and LQGs. Treatment is not an activity that is allowed under the less stringent satellite accumulation standards. For example, there are no training

requirements or other safeguards in place under satellite accumulation for the elevated management activity as compared to the TBG allowance under sections -170 and -200. This is very consistent with how the generator regulatory scheme and enforcement has operated over the last 30 years with Ecology and with EPA.

As for SQGs, under current federal and state regulations, the satellite accumulation standards are not, and have not, been available for SQGs to practice. To allow SQGs to practice satellite accumulation would be less stringent than the federal RCRA program. In addition, current regulations (which are not proposed to change) allow SQGs to treat their own waste if they are also a permitted final or interim status facility, or permitted to manage municipal solid waste, or permitted to manage moderate risk waste. Sections -170 and -200 allow LQGs and MQGs to practice TBG. SQGs can't take advantage of this set of regulations. To allow this by rule would be less stringent than the federal RCRA program.

Comment O-1-60: “Respectively.” In reference to the proposed amendments to WAC 173-303-600(3)(d). A commenter had a concern that Ecology uses the word “and” in this list, then attempts to clarify using the term “respectively.” This is not adequately clear as to what conditions must be met to be exempt.

Response: The term “respectively” is used many times successfully in the Dangerous Waste Regulations. Ecology however will look again into the use of that term.

Comments O-1-61, O-1-62, O-1-59: Absorbents and sorting. In reference to the proposed amendments to WAC 173-303-600(3)(k), -600(3)(l) and 400(2)(c)(vii), a commenter wondered why Ecology proposes to apply the accumulation standards for large quantity generators or medium quantity generators to generators compacting or sorting waste in containers. This is not entirely consistent with the GIR, which allows compliance with the “applicable conditions for exemption” for satellite accumulation and small quantity generator requirements as well as those for medium and large quantity generators. There is no apparent reason why Ecology should impose the entire suite of medium or large quantity generator requirements on compaction or sorting during satellite accumulation or on very small quantity generators. Consider revising this section to be more consistent with the GIR.

Response: Ecology is not making any regulatory amendments that will change the use, its applicability, or intent of WAC 173-303-600(3)(k) and -600(3)(l). The amendments to these rules are simply updating the citations mentioned in those regulations as a result of regulatory citation changes caused by the federal Generator Improvement Rule. Such amendment updates will help ensure the generators remain in compliance. The same response applies to sorting of waste allowed in section -400.

Comments A-3-2, A-3-22, A-2-2: Accumulation. A commenter is not in favor of this proposed change because the definition is not clear and understandable. Why has Ecology reversed their position from “accumulation is not storage” to “accumulation is storage”? What is the purpose of changing this long-standing language? This definition would eliminate the distinction between generator and TSD owner/operator management of waste. This proposed change only adds confusion since the inception of RCRA accumulation was a generators term, while storage was a permitted facility term, meaning if you want to “store” waste you need a permit.

Response: Ecology is not reversing our position. Ecology has always agreed with EPA that accumulation is a form of storage, granted, for a short period. Since the inception of RCRA, (May 19, 1980), EPA has always defined “storage” to mean the holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere. EPA and Ecology are not changing this long time definition. What Ecology had done in the past in the definition of “storage” in the Dangerous Waste Regulations was to emphasize and help the reader understand that if a generator stored (i.e. accumulated) its waste in compliance with the generator’s applicable accumulation standards (i.e. conditions for exemption), the generator’s “storage” activity will not be a permitted activity. It would basically be referred to as accumulation to make that distinction; and regulated appropriately. This is supported by WAC 173-303-170(3) and -600(3)(d).

As mentioned earlier, this definition would not eliminate the distinction between generator and TSD owner/operator management of waste. If the generator does not want a permit to store waste they may elect to comply with their applicable “conditions for exemption” (i.e. their accumulation standards). The accumulation standards (now appropriately called “conditions for exemption”) are required only if the generator wants an exemption from a permit. Ecology is adopting the more appropriate and self-evident term “conditions for exemption” rather than “accumulation standards” to emphasize the benefit available to the generator.

Response to LQG CAA closure

Comment B-1-1: Closure as RCRA landfill. The commenter is concerned that new LQG closure rules will impose unneeded landfill post-closure requirements on generator units unable to be clean closed. They believe that these cleanups should be done under Model Toxics Control Act (MTCA) regulations, not RCRA landfill regulations.

Response: Closure performance standards at draft WAC 173-303-200(12)(c)(iv) require LQG container, tank systems, and containment building waste accumulation units that are not able to clean-close to be closed under WAC 173-303-665(6) landfill closure and post-closure requirements (see WAC 173-303-200(1)(b)(ii) and 173-303-640(8)(b)). EPA requires states to adopt these new rules. In the preamble to the final GIR, EPA states that clean closure requirements should apply equally to all hazardous waste accumulation areas. This means that LQGs accumulating hazardous waste in central accumulation areas (CAA) should meet the same type of closure regulations that apply to LQGs accumulating hazardous waste in tanks, drip pads, and containment buildings. In the preamble to the proposed GIR, EPA demonstrated the need for closure requirements for LQGs accumulating waste in containers and referenced a list of Superfund damage cases to the environment caused by generators who accumulated hazardous waste in containers and abandoned these facilities. (See 80 FR 57955)

Consistent with EPA, Ecology believes that the clean closure requirements for LQGs accumulating waste in CAAs should be the same clean closure requirements as for accumulating waste in tanks, drip pads, or containment buildings. In the preamble to the final GIR, EPA states:

The inability to clean close would indicate major environmental problems have occurred at the generator’s facility. If so, the responsibility falls on the generator to address the

potential contamination just as a generator would address any problems that resulted from its accumulated hazardous waste in tanks, drip pads, or containment buildings. Whether a generator would actually have to meet all the requirements of closing as a landfill would be a site-specific decision, made in conjunction with EPA or the authorized state. (See 81 FR 85772).

Ecology expects it would be a rare situation for an LQG to close a CAA as a RCRA landfill. One reason is that Washington's closure and post-closure regulations allow alternative requirements to a post-closure landfill permit through enforceable documents. This means cleanups can potentially be performed under MTCA rules. Another reason is the facility can request additional time to clean close the unit. Ecology is not intending to change the proposed rules to meet the commenter's concern.

Comment B-7-9: Operating record. The commenter has concerns about the new GIR recordkeeping requirement for facilities closing CAA's to note the closure in the facility operating record.

Response: EPA requires states to adopt this rule. For most generators compliance should not be a difficulty because central accumulation area locations seldom move. A few large generator facilities may frequently open or close temporary CAA's due to demolition events or other non-routine dangerous waste generating activities. Ecology expects minimal recordkeeping is needed, noting locations of the accumulation areas and the closure date in an operations log viewable by an Ecology hazardous waste inspector.

Comments B-7-15, O-1-49: MTCA unrestricted use cleanup standards. Commenters suggest that it is inappropriate to require Method A or Method B unrestricted use standards to close CAA's located in industrial operations.

Response: In Washington State, unrestricted use exposure assumptions were adopted for consistency among state cleanup activities conducted under the authority of the MTCA, corrective action conducted at TSDs, and closure of dangerous waste management units. For dangerous waste management units, Ecology interprets clean closure as the point at which conditions at the unit no longer warrant regulatory control. The Dangerous Waste Regulations make a distinction between units that are closed to acceptable levels of risk (clean closure) and units which require further control and monitoring (post-closure care). Cleanups conducted with industrial cleanup levels calculated according to MTCA Method C are considered conditional and require further regulatory control (such as compliance monitoring under WAC 173-340-410, institutional controls under WAC 173-340-440, and periodic review under WAC 173-340-420). Consistent with EPA, Ecology believes that the clean closure requirements for LQGs accumulating waste in CAAs should be the same clean closure requirements as for accumulating waste in tanks, drip pads, or containment buildings.

Comment 0-1-50: Ecology review of closure standards - WAC 173-303-200(12)(c)(ii)(B). The commenter thinks that an Ecology case-by-case review of unit closure standards will delay closure of those units.

Response: Consistent with EPA, Ecology believes that the clean closure requirements for LQGs accumulating waste in CAAs should be the same clean closure requirements as for accumulating waste in tanks, drip pads, or containment buildings. Ecology does not believe that case-by-case review of closure standards for structures, equipment, bases, liners, etc. will cause a significant delay in closure of CAAs.

Response to point of generation

Comments B-6-6, B-3-1, A-2-3 O-4-2: Time Clock. A commenter had a concern with the proposed definition of “point of generation” including both time and place. They asked if the intent of this definition is to track and document the time of day according to a clock that a waste was generated. If it is not, they asked that Ecology make clear that the purpose of the point of generation concept is to perform the dangerous waste determination on a waste based on its properties and/or pedigree at the location in a process where it first becomes a material that no longer serves an intended purpose. Further, make clear that the requirement to physically perform the dangerous waste determination is not literally based on a “point in time.” The “time,” meaning the time on the clock, was an issue heard from several commenters.

Response: Ecology agrees with EPA’s position that from the beginning of the RCRA program, waste determination must be made at the point of generation (i.e. the point at which the material first becomes a solid waste under RCRA). This includes both the time and place the waste was first generated. Ecology reasonably believes EPA means the day (the date) the material first becomes a solid waste and not track the time of day down to the second when the waste first becomes a solid waste. Ecology will revisit “time” vs. “date” in the definition of “point of generation.”

Comments B-3-1, O-1-5, O-1-8, A-2-3, O-4-2: Laboratory/SAA Setting. A few comments from laboratory personnel had the following similar concern about the definition of point of generation to include the specific wording “including both time and place.” According to the commenters, a waste stream may normally vary in composition as it is generated, even in ways that render it non-dangerous part of the time. Examples would include laboratory analysis using a particular instrument where the instrument drains into a satellite accumulation container. The implication of this definition, as applied through proposed WAC 173-303-070(3)(a), is that a generator would have to designate wastes being continually accumulated in a satellite accumulation area (or CAA) to account for this variability. This would be impractical and imprecise at best. We recommend that the definition be limited to the “place” of generation, as was adopted under the Generator Improvements Rule.

Response: Currently, each time waste is to be placed into an accumulation container, the lab tech mentally does a “designation” of the waste based on his/her knowledge. Lab tech’s have a unique knowledge of the chemicals they use, which is necessary so that non-compatible chemicals and solutions are not put into the same container. Laboratory waste streams may vary somewhat in composition based on the specific analysis conducted, which may require close attention to “designation” of that waste stream. Ecology believes this point of generation definition should not cause lab personnel to change that “designation” practice.

It is advised to keep non-dangerous waste out of containers of dangerous waste. It is a compatibility issue, and there could also be an impermissible dilution activity. Plus, the generator may create a larger volume of dangerous waste from that addition, thereby possibly causing the lab to fall under a generator category with more stringent regulations. The addition may cause a higher cost of disposal. Ecology will revisit “time” vs. “date” in the definition of “point of generation.”

Comment A-3-13: Dilution/Mixing. A commenter had a concern with emergency situations where the draft revision requires designation be done “before any dilution, mixing, or alteration of the waste occurs.” How does this apply in an emergency situation, where perhaps enough information is known to compel an emergency action resulting in alteration of the waste, but before a complete designation can be performed? Would the emergency action be precluded? Language should be added to the text to clarify necessary dilution or alteration occurring in an emergency situation.

Response: Ecology is proposing to adopt EPA’s language without changes. The proposed rules would not preclude an emergency action and Ecology is not advocating a non-action. There are many rules in the Dangerous Waste Regulations that assist in emergency actions and addressing the waste. Ecology does not expect a change in how emergency responders respond to a spill, or change how designation is performed on clean up materials.

Comment B-9-3: Box Store. A comment from a retailer is that retailers do not have the ability to identify unknowns immediately. Retailers do not have on-site laboratories or analytical instruments to analyze an unknown to determine hazard characteristics. Therefore, outside services are required to assist the retailer in making waste determinations and determining the hazard characteristics of the unknown waste and this requires time. We believe this expectation is unrealistic and is largely unnecessary to protect human health and the environment.

Response: Upon discovery of a true unknown waste, knowledgeable personnel will need to begin an initial evaluation to determine the best way to handle it. If it is concluded the waste may be a dangerous waste, then the process must be started for full designation and testing, and the waste marked as “pending analysis”. To wait weeks or months for outside services to assist the retailer is unreasonable and could put employees and the public at risk. The rule, as proposed, does not preclude the use of outside assistance as one commenter suggested. Ecology disagrees that the expectation of the proposed rule is unrealistic and unnecessary to protect human health and the environment.

Comment O-4-2: Laboratory/SAA Setting. Another comment from a laboratory had a concern with the requirement that waste generation will be revised to both “time and place” causing an undue and unnecessary requirement on any research facility. Currently, satellite accumulation areas have proven to meet existing requirements. The additional requirement of “time and date” on each container may create undue burden with little benefit or enhancement of the satellite accumulation areas. This additional burden will decrease the availability of Environmental Health and Safety personnel to other tasks of greater benefit.

Response: Wastes placed in satellite accumulation areas are dangerous wastes and will already have been designated at the point of generation. No new designation requirement is intended for satellite accumulation. To clarify, ecology is not proposing a satellite accumulation container to be labeled with “time and date.”

Response to authorized representative

Introduction

The regulation at hand, WAC 173-303-040, defines “authorized representative” as the person responsible for the overall operation of a generator site, facility, or an operational unit (e.g., plant manager or superintendent).

Comments B-9-1, O-3-3, O-5-3: Various Comments. One commenter recommended Ecology clarify what internal personnel are expected to represent the company and, if higher level personnel are the representative, the process for delegating their authority to other internal employees. Another commenter said that a municipal agency superintendent may not have technical background in hazardous waste compliance. Please explain how Ecology intends to change the “authorized representative” to affect typical responsibilities under the rules. Finally, a comment from a large box store suggested including language that would permit a subject matter expert from a retailer's headquarters to act as the authorized representative because of how subject matter experts are often centralized.

Response: In the definition, ecology has given two examples of “job positions” who may have the responsibility for the overall operation of a generator site, facility, or an operational unit. Ecology realizes there may be others. Those examples give the reader the general intent about who can function as an authorized representative. This excludes outside vendors. Ecology does not see a need to further describe job positions for who can assume authorized representative responsibilities. Each organization will need to determine what staff are able to assume authorized representative duties.

Comment B-6-9: No change request. One commenter suggested the definition in 173-303-040 does not include the phrase “or person of equivalent responsibility,” which appears to limit the delegation authority of the authorized representative to appoint an equivalently responsible person to act as an alternate authorized representative. The commenter would support the authorized representative definition if it included the phrase, “or person of equivalent responsibility.”

Response: The phrase “or person of equivalent responsibility” causes annual reporting and other compliance issues. For example, some have argued that receiving TSD’s, transporters, consultants, or a national or international waste management company qualify as a “person of equivalent responsibility.” An authorized representative is meant to be an employee of that business, not the TSD or consultant. The intent is for an authorized representative to be someone with authority in the corporate structure. With this definition, ecology wants to avoid situations where hazardous waste service providers are representing themselves as their customer’s authorized representative and signing off on dangerous waste forms.

Response to PCB exclusion

Comments B-4-1, O-1-12: PCB Exclusion. The commenters state that the draft changes have in effect removed an existing exclusion for most state-only PCB wastes, such as PCB-containing building materials. They believe that Ecology is now causing state-only PCB wastes to be double regulated under both the Dangerous Waste Regulations and 40 CFR 761 Toxics Substance Control Act (TSCA).

Response: The existing PCB exclusion in the dangerous waste rules specifically references 40 CFR 761.60 TSCA. Only PCB wastes described within that section, including PCB liquids and articles, are currently excluded by the state exclusion. Other PCB wastes, such as bulk product wastes and remediation wastes, are not currently excluded because they are not described within 761.60. Because of this, the draft change to narrow the exclusion to “dielectric fluid and electric equipment containing such fluid” (and changing the reference to 40 CFR Part 761) does not substantially change what types of state-only PCB wastes that would be excluded.

Prior to a major revision and reorganization of TSCA regulations in 1998, the state PCB exclusion reference to 40 CFR 761.60 did include PCB soils and debris, now regulated as bulk product and remediation wastes. Prior to 1998, the relevant TSCA disposal rules required PCB waste soils and debris to be disposed at TSCA chemical waste incinerators. In the 1998 TSCA PCB MegaRule reorganization, soils and debris were folded into new sections and standards for disposal of PCB bulk product and remediation wastes. The revised TSCA regulations at 40 CFR 761.62 allow, under certain conditions, certain PCB bulk product wastes to be disposed to municipal solid waste landfills.

The solid waste landfill operating criteria at WAC 173-351-200 prohibit the disposal of TSCA regulated PCB wastes to solid waste landfills. As previously mentioned, at the same time TSCA PCB bulk product waste rules allow their disposal to a solid waste landfill. Because TSCA regulated PCB wastes can’t legally go to state solid waste landfills, Ecology will consider modifying the current draft rule to allow state-only PCB waste to be covered under the exclusion. This will prevent the situation of double regulating these wastes under both dangerous waste regulation and TSCA regulations.

Response to containers

Comments B-6-18, A-3-31, B-9-5: Severe. A few commenters were unsure as to whether the term “severe” in section -630(2) only referred to corrosion or if it also referred to rusting, flaking, and scaling. Another commenter agreed with the way the rule was written but suggested the qualifier be “...that could lead to imminent leakage.”

Response: Ecology intends for the term “severe” to apply to all examples of container deterioration. We will revisit the rule and make changes appropriately. “Imminent” conjures up an image or circumstance where a container is about to erupt, leak, or break apart any second. Section -630(2) is a preventative rule that would hopefully remove a container from use before there is “imminent” failure. Ecology is not planning to make this suggested change.

Comments O-1-19, O-1-29, O-1-39, O-1-63: Indicators. One commenter had repeated statements about Ecology’s proposal to add several indicators regarding when a container may not be “in good condition” and thus unsuitable for continued use. These include “severe corroding, rusting, flaking, scaling, and/or apparent structural defects.” The current regulation only cites “severe rusting” and “apparent structural defects” as examples. The commenter stated that because these indicators are cited as examples, it appears Ecology is attempting to broaden the basis on which an inspector may question the integrity of a container in storage. Another commenter felt the added examples are unneeded. We recommend Ecology not adopt the added examples.

Response: Ecology disagrees with the commenter that these changes are unneeded. This amendment is being proposed because of compliance issues with rusting containers, pieces of containers flaking off, and scaling issues affecting the integrity of a container. Generators have argued that containers are in “good condition” although piles of metal flakes are seen around severely flaking containers. These indicators will help prevent a potential threat and makes common sense.

Comments B-6-19, O-1-40, O-1-68, B-7-13, A-3-17: Complete inspection. Several commenters had a concern with the proposed term “complete” in section 630(5) as applied to conducting a container inspection. One felt the term “complete” could lead an inspector to conclude that the inability to directly examine the underside of a stored container renders the inspection incomplete, and therefore subject to a compliance violation. Another comment stated that the proposed wording for “complete inspections” is likely to result in varying interpretations by inspectors, resulting in unrealistic inspector instructions that would be difficult to implement. The same commenter further elaborates his concern stating the criterion of “complete inspection” is unclear and arbitrary. For instance, if four drums are placed on a pallet with sides touching, are they positioned in such a way to allow “complete inspection”? If drums are placed on the floor or in a secondary containment device so that the underside of the drum cannot be readily observed, does that placement impede “complete inspection”? Finally, another commenter stated the impossibility of complying with a literal application of this test, therefore rendering the requirement arbitrary and capricious.

Response: Ecology appreciates the commenters’ concerns about Ecology inspectors interpreting this rule differently and literally requiring the generator to expose the underside of a container for complete inspection. When new rules are finalized, Ecology staff are jointly trained how to use and implement new rules. Ecology inspectors will not be asking generators to tip a drum sideways for a complete inspection. The proposed language is not intended to require a change in how containers are inspected. The rule amendments to section -630(5) were meant to clarify the need to clearly see container problems during inspections. However, Ecology will revisit the term “completely” and use a word that will not be taken literally.

Comment A-1-2: SAA vs CAA. The commenter believes there is conflicting guidance regarding container lids. Under 173-303-174(1)(c)(i), a lid may be left partially open for safety if the contents have the potential to create pressure. However, 173-303-200(3)(c)(ii) and 173-303-630(5) state the lid must be closed when waste is not being added. The commenter proposes throughout WAC 173-303 the regulations allow lids to be left partially open if contents have the potential to create pressure.

Response: The regulations for closed container lids do not conflict, as the commenter suggests. The rules governing satellite accumulation (also known as temporary storage) were amended by EPA due to public requests, specifically from laboratories. The satellite accumulation regulations are a set of less stringent standards. They have a volume limit and the new federal rule allows for temporary venting of containers under specific conditions and for specific reasons. The central accumulation standards of section -200 (another form of short-term storage) and permitted storage standards of section -630, by comparison, are heavily regulated. The standards for the satellite accumulation rules (section 174) versus large quantity generator (section 200) and TSD container requirements (section 630) are meant to be different and allow for different activities to occur within each respective sets of regulations. For example, under section -200 an LQG generator may treat its waste so that it no longer creates pressure, but in a satellite accumulation area treatment is not allowed. To allow venting or partial opened containers in sections -200 and -630 would be considered less stringent than the RCRA program.

Response to contingency planning

Comments B-6-14 #4, O-1-51, O-1-52 and B-7-11: Contingency plan modifications. Several commenters questioned why contingency plans for permitted treatment, storage, and disposal units were included in the Large Quantity Generator contingency plan requirements in WAC 173-303-201(9)(a) and WAC 173-303-201(9)(b)(iv).

Response: Ecology agrees the following language in WAC 173-303-201(9)(a) is not applicable to large quantity generators:

When modifications are made to non-dangerous waste (non-Hazardous Waste Management Act or non-dangerous waste regulation) provisions in an integrated contingency plan, the changes do not trigger the need for a dangerous waste permit modification.

Ecology proposes striking this language from the proposed rule. Ecology also agrees the following language in WAC 173-303-201(9)(b)(iv) is not applicable to large quantity generators:

For new facilities only, this list may be provided to the department at the time of facility certification (as required by WAC 173-303-810 (14)(a)(i)), rather than as part of the permit application.

Ecology proposes striking this language as well from the proposed rule.

Comments B-6-14 #1, #2, #3: Generator facility. One commenter discussed the confusion over using the term “generator facility” in WAC 173-303-201(9)(b)(iv) compared to the definition of “facility” in WAC 173-303-040.

Response: Ecology will consider adding the words “large quantity” in front of “generator facility” as it is specified in WAC 173-303-201(2) in the contingency plan portion of the proposed rules.

Comments B-6-14 #3, B-7-10, and B-6-17: Hazardous substances. Several commenters asked that reference to the term “hazardous substances” be eliminated because it extends dangerous waste requirements to non-dangerous wastes and products, therefore requiring planning for activities beyond generation and management of dangerous wastes, plus extending to virtually any location on the property where the generator activities occur. One commenter stated, “Please eliminate the reference to hazardous substances in this provision to make it clear that the WAC 173-303 regulations only apply to dangerous waste activities.” Another commenter stated:

The draft addition of hazardous substance release is problematic, since this is a defined term under CERCLA and EPCRA rules, which have their own planning and response requirements. The dangerous waste rule should confine itself to dangerous wastes and dangerous waste constituents, and not purport to require the contingency plan to cover all hazardous substances, which under CERCLA and EPCRA may be fresh product, not waste.

Response: When hazardous substances are released into the environment, they are likely solid waste and potentially dangerous wastes. Generally they can no longer be used as products. In fact, many released products can pose a significant impact to human health and the environment. Spilled materials can designate as dangerous wastes.

When generators have not factored in spilled products becoming waste, Ecology has found that, historically, contingency plans have not been employed during emergency events at large quantity generators and permitted treatment, storage, and disposal facilities. Adding hazardous substances to the rule will clarify Ecology’s expectations that large quantity generators and permitted treatment, storage, and disposal facilities employ emergency procedures to protect human health and the environment during emergency events. The emergency coordinator will determine if the event is an emergency.

Ecology proposes retaining “hazardous substances” in the proposed rule.

Comments B-6-14 #6: Use of the word “guarantee” in WAC 173-303-201(9)(b)(iv). One commenter noted that use of the language, “an emergency telephone number that can be guaranteed to be answered at all times” is perplexing. The term “guarantee” is essentially a formal promise or assurance that certain conditions will be fulfilled. The commenter requested changing the language to simply make someone available at the number at all times, rather than providing a “guarantee.”

Response: In regard to the use of the term “guarantee” in WAC 173-303-201(9)(b)(iv), the Environmental Protection Agency Generator Improvement Rule uses the term “guarantee” in 40 CFR 262.261(d), so Ecology is using equivalent language. Ecology will leave this language as originally drafted.

Comment B-6-14 #7: Evacuation routes. One commenter explained in situations where security or exposure uncertainty is a concern during evacuation, evacuation routes should be determined by the emergency coordinator and provided at the time of evacuation, based on the current conditions. The commenter suggested specific language to provide this flexibility.

Response: The proposed rule states the contingency plan must describe both evacuation and alternate evacuation routes (for example, where the primary routes could be blocked by releases of materials or fires). All emergency and alternate routes must be included in the contingency plan. Considerations for these routes must be analyzed based on the specifics of each facility and potential emergency conditions for that facility. Specific emergency situations and evacuations for those situations should be included and noted in the contingency plan. There is no need for additional language as the emergency coordinator would make decisions based on the emergency event.

Comment B-6-14 #7: Use of the words “layman’s terms.” The commenter believes the quick reference guide should not require a description in “layman’s terms” of the types and names of dangerous wastes. It is unnecessary and possibly misleading for emergency responders. Further, there is no available list of proper layman’s terms.

Response: The term “layman’s terms” is used by EPA in the GIR rule. We will be proposing federal language, found at 40 CFR 262.262(b)(1)). Since EPA did not provide a list of layman’s terms, Ecology agrees that the term is appropriate.

Comment B-6-17, O-1-53, O-1-54, B-7-10, and B-7-11: Use of the words “any event” and removing the word “emergency.” Numerous commenters discussed the phrase used in WAC 173-303-350(1), “...in the event of any event or circumstance...” as being overly broad. Commenters discussed removing the term “emergency” from this language would remove the need to implement a contingency plan during an emergency.

Response: Ecology will consider revising the phrase in WAC 173-303-350(1), “...in the event of any event or circumstance....” Ecology proposes making similar changes to WAC 173-303-201.

Comment B-7-12: Quick reference guide. One commenter wants Ecology to include additional language to the quick reference guide in WAC 173-303-201(11)(b)(iv) for situations where generation and accumulation locations within a building are frequently moved (for example, to follow moving assembly lines or moving work stations). The quick reference guide map should indicate all general areas of the building where generation or accumulation may occur.

Response: Ecology feels the language in 173-303-201(11)(b)(iv) regarding the quick reference guide does not need additional language to adjust for generation and accumulation locations within a building that are frequently moved. According to the GIR federal register, the quick reference guide’s intent is to “be prepared in a format enabling first responders to quickly access key information in the event of an emergency.” It should be adequate for the quick reference guide to indicate the general areas of the building where generation or accumulation occur in cases with moving assembly lines or moving work stations.

Comment A-3-28: Clarification on contingency plan implementation. A commenter would like clarity about what constitutes contingency plan implementation.

Response: Ecology feels that it is the emergency coordinator’s responsibility to determine if the contingency plan should be implemented or not based on the criteria established in the Dangerous Waste Regulations. This is very specific to the given circumstance.

Comment A-3-29: References for contingency plan implementation. A commenter noted the proposed rules in WAC 173-303-360(2) reference all of WAC 173-303-350 which creates a circular reference in the regulations. The commenter noted if Ecology feels the reference is appropriate then a specific section of WAC 173-303-350 should be noted instead of the entire section of the regulation.

Response: Ecology proposes leaving the general reference to WAC 173-303-350 in WAC 173-303-360(2) since there are numerous sections of WAC 173-303-350 that discuss situations where implementation of a contingency plan is required. Most situations are noted in WAC 173-303-350(1), but there are also discussions of situations in WAC 173-303-350(2) and WAC 173-303-350(3).

Response to manifests

Comment B-6-22: Generator planning. A commenter made the following comment on WAC 173-303-180(10)(c); Restriction on use of electronic manifests:

A generator may prepare an electronic manifest for the tracking of dangerous waste shipments involving any dangerous waste only if it is known at the time the manifest is originated that all waste handlers named on the manifest participate in the electronic manifest system.

What will be the system for determining that all waste handlers named on the manifest participate in the e-Manifest system?

Response: It is commonly known that generators are responsible for their waste from cradle to the grave. Today, when generators set up transportation of their waste, they must ensure, for their own liability, both the transporter and final facility are “legitimate” and the paper manifest is used (when required Generators must do their due diligence to ensure the proper tracking mechanisms are used and transportation of their waste to the final facility (“the grave”) is legitimate.

Ecology anticipates no difference in a generator’s ability to determine what waste handler(s) to hire (i.e. named on the manifest) who will participate in the e-Manifest system. Ecology envisions a generator making this part of the normal every day conversation when hiring a transporter and seeking the service of a permitted TSD. Bear in mind that paper manifests are still allowed in lieu of e-manifesting.

Comment B-6-22, B-6-24, A-3-34: Fees and hardware. A commenter had the following concerns about e-Manifest system fees:

Does ECY have any ideas on the potential user fee amounts? EPA now intends to assess fees at final receiving facilities who in turn would pass those costs along to users. Are other methods of payment for user fees being considered? Please clarify whether Ecology intends to levy additional fees to implement the E-manifest system.

Response: Ecology does not intend to levy additional fees to implement the e-Manifest system. The January 3, 2018 Federal Register (83 FR 420) discusses any potential user fee amounts, forms of payment, and if any special hardware will be needed. Ecology will not collect fees.

Comment B-6-25: Changes on manifest. One commenter posed the question, if a change is needed to an e-manifest once it has been signed and the waste shipped or received by the TSDf, how will changes be made?

Response: Ecology is not proposing any changes to the manifest discrepancies regulations. Regarding correction of e-manifest errors, generators will be able to register in the e-manifest database system and make changes as needed.

Response to other issues

Comment I-3-1, O-1-41: Secondary Containment. One commenter stated the new secondary containment requirement proposed for medium and large quantity generators in WAC 173-303-172(5)(e) and -200(5)(e) will be expensive to implement and should be limited to as needed situations to match the current dangerous waste regulations. The language should be changed to read "...the department MAY REQUIRE..." Another commenter had a similar comment.

Response: Ecology is not proposing "new secondary containment" requirements. Section -200(b)(i) currently states, "Any [central] accumulation area built after September 30, 1986 is required to comply with the secondary containment requirements of section -630(7)." Because very few, if any, central accumulation areas date back pre 1986, in effect secondary containment is required.

Perhaps, due to the reorganization of the rules, this may have appeared as a new requirement to the commenters.

Comment B-6-4 and A-3-3: Central Accumulation Area. A commenter was concerned that the revised definition of "central accumulation area" leaves too much uncertainty about its meaning. Please add language to this definition in order to make it clear it is not intended to (1) denote a physical location, (2) require generators to establish a location that is centrally located within the site, or (3) limit the number of areas at a site. Another commenter had a similar comment.

Response: The commenter is referring to what is traditionally called the generator's accumulation area, or the 90/180-day accumulation area. Neither is actually defined in the rules. The term "central accumulation area" is being adopted from RCRA as is without any changes. Ecology feels it is clear a generator may have more than one central accumulation area on site. It does not have to be centrally located within a site, and all sites are not the same, therefore neither Ecology nor EPA can denote a physical location.

Comment B-6-13, B-9-4: The mixture rules. Two commenters request that Ecology update 173-303-070(2)(a) to align with the federal mixtures and derived-from rules that allow the mixing of solid waste with dangerous waste. It seems counterintuitive that Ecology does not want to render dangerous waste as non-dangerous waste.

Response: Ecology does not share the same opinion as the commenters. Ecology's mixture rule prevents dilution of waste under the guise of simple mixing. Ecology does recognize and supports the Federal Land Disposal Restrictions that says, in a very few limited and specific situations, dilution is permissible. However, not all mixing destroys or immobilizes contaminants the way a bona fide treatment activity is targeted to do.

Under the federal mixture rule, for example, some used oils can be mixed with hazardous waste. This mixture is then managed as used oil regardless of the ratio of hazardous waste to used oil. With today's recycling and treatment technologies, there is no reason used oils should be a dumping ground for solid and hazardous wastes. Ecology takes pride in the state's prohibition of mixing used oils with wastes and managing that mixture as fuel.

"Mixing" is a form of treatment. Small quantity generators are not allowed to treat their hazardous or dangerous waste according to federal and state rule, unless the SQG is also a permitted facility for the management of dangerous waste, solid wastes, or moderate risk wastes. To allow treatment under the guise of "mixing" is contrary to the federal and state rules for SQGs. "Mixing" dangerous waste to remove its characteristics is a loophole that allows mixtures to be improperly treated and wind up in solid waste landfills. Generators have the false impression that they have properly rendered their dangerous waste safe for public transportation and solid waste disposal.

The Dangerous Waste Regulations allow large and medium quantity generators to treat their dangerous waste without a permit, provided they use proper technologies to render the properties of their waste safe and contaminants destroyed or immobilized. Ecology sees no reason to allow for the simple mixing of dangerous wastes with solid wastes as it causes and or increases both environmental and human health risks. It also increases the potential for incompatibility issues. Finally, the commenter may not realize that by mixing a listed waste with a volume of solid wastes, this creates a larger volume of listed waste. The generator must then manage and dispose of that larger volume of listed waste, possibly increasing their financial responsibility and regulatory burden due to more stringent regulations for that larger volume.

Comment B-6-16: Inspection schedule. WAC 173-303-320(2)(c). CHPRC is not in favor of this proposed language change, "As part of the review, the Department may modify or amend the schedule as may be necessary." This language provides no basis for how and why the department would find it necessary to second-guess the facility owner/operator on adequacy of schedule. Any changes to the owner/operator determined schedule should be limited to evidence that the proposed permit schedule frequency needs changing to avoid problems. Without a firm basis for when schedules will be modified/amended, we cannot count on a consistent or accurate approach.

Response: The language requiring the inspection schedule be submitted with Part B of the permit application and have Ecology evaluate and modify or amend the schedule as necessary was in existence before EPA's Generator Improvement Rule at 264.15(b)(4). The changes in our state draft rule from the existing WAC 173-303-320(2)(c) were only made to conform to existing pre-Generator Improvement Rule and federal hazardous waste rules. Ecology needs to match the stringency of EPA's rules. See 40 CFR 264.15(b)(4):

... Part 270 of this chapter requires the inspection schedule to be submitted with part B of the permit application. EPA will evaluate the schedule along with the rest of the application to ensure that it adequately protects human health and the environment. As part of this review, EPA may modify or amend the schedule as may be necessary.

The adequacy of the schedule is assessed by understanding the history and configuration of the treatment, storage, and disposal unit; and, by submitting a complete, detailed Part B application that allows Ecology to make this determination. Ecology will leave the language as originally drafted.

(Note: One response is given after the following three comments)

Comment B-6-20: 173-303-830 Appendix I, Modification 5. CHPRC is not in favor of the following proposed changes to the training plan program, “a. That affect the type or decrease the amount of training given to employees.” The intent of this change is not presented in the change proposal. WAC 173-303-330(1) indicates that the training program must include those elements set forth in the training plan required in subsection (2) of this section. Therefore, this change appears to significantly broaden the requirement to modify the dangerous waste permit based on changes to the training plan (as currently required), and now the program (as proposed in WAC 173-303-330(1)).

A training program as described in WAC 173-303- 330(1) directs such functions as administration, participation, timely completion, and interim supervision, which are accountable requirements by the regulations. The more specific requirements of the training plan ensure that specific personnel are adequately trained based on their dangerous waste management-related tasks. Therefore, the need for increased permit accountability (as apparently represented by the proposed change) may have the unintended consequence of constricting positive change to the training program, absent enhancement of permit required plans to train dangerous waste workers. Please provide an explanation of the intent of this proposed change.

Comment A-3-33: Permit modifications 173-303-830, Appendix I, B.5 Permit Modification Classes. MSA Comment 9 states the following regarding the proposed change that would replace “plan” with “program”:

This change seems appropriate, as long as Ecology and permittees have a common understanding of what “program” means. Does “program” have the meaning conveyed in Ecology’s permit application guidance (Publication 95-402, pages 56-57, Nov 2013.....see excerpted text below)? Under the proposed rule change and Publication 95-402, it would seem that only actual changes to the training program information specified in the permit would trigger a permit modification. Does Ecology agree? Per Publication 95-402, the dangerous waste training plan is not included in the permit. Instead, the dangerous waste training plan is maintained in the operating record. Therefore, a change to the dangerous waste training plan would not trigger a permit modification. Does Ecology agree? The “Training Program” makes up only part of the “Training Plan.” The entire “Training Plan” must be maintained in the operating record, but not all aspects of the “Training Plan” are required in your permit application. The following two paragraphs highlight the content of and differences between the “Training Program” and “Training Plan.” The “Training Program” must

provide descriptions for each position or job title involved with aspects of dangerous waste management and permit compliance. It must also provide brief outlines of required training courses. It must ensure the facility commits to providing sufficient training to ensure safe and compliance operations. The “training program” does not include information that is expected to change frequently, such as employee names and specific details of course curricula. The “Training Plan” includes descriptions for each position or job title involved with aspects of dangerous waste management or permit compliance, and it specifies the name of the actual employee(s) filling each of those position description or job title. The Training Plan should have a complete curriculum for each required training course, not just their brief outlines. It also includes ongoing training records required by WAC 173-303-330(3).

Comment O-1-73: WAC 173-303-830, Appendix I, B.5. Ecology proposes to revise the term “training plan” to “training program,” consistent with usage of these terms in WAC 173-303-330(1) and (2). We do not support this change, as it fails to make the necessary clarification of what is subject to the permit modification procedures. WAC 173-303-330(1) describes the “training program” in very broad terms, and some of the prescribed content of the program (e.g. “...must be directed by a person knowledgeable in dangerous waste management procedures...”) is not consistent with the proposed permit modification requirement. The proposed change would apparently, in this case, require a permit modification if the identity of the training director were to change. Ecology should further bear in mind that the material submitted by permit applicants in accordance with WAC 173-303-806(4)(a)(xii) is only an “outline” of the training program and a “brief description” of training design.

Ecology usually makes this “outline” and “brief description” enforceable by attaching it to the permit and then calling it the “training program,” but this is not the “training program” described in WAC 173-303-330(1). The “outline” and “brief description” are the only documents typically affected by the modification requirement, not the entire “training program” described in WAC 173-303-330(1). Only the conditions of the permit (which may include attached material from the permittee's application) should be subject to the permit modification procedures of WAC 173-303-830(4) and Appendix I. Neither the “training program” nor the “training plan” are attached to the permit and should thus not be called out in Appendix I as subject to modification control.

Responses to comments B-6-20, A-3-33 and O-1-73: Training plan permit modifications: Ecology is considering leaving the language as originally drafted using the words “training plan.” Ecology had proposed changing “training plan” to “training program” in WAC 173-303-830 Appendix I because the written training plan (as required in WAC 173-303-330(2)) is not a part of a TSD permit that requires permit modification. The words “training program” are used to describe the portions of the written training plan that are incorporated into a TSD permit that would require modification according to Appendix I of WAC 173-303-830. Below are excerpts from Publication 95-402, *Ecology’s Dangerous Waste Permit Application Requirements*, dated November 2013:

The “Training Program” makes up only part of the “Training Plan.” The entire “Training Plan” must be maintained in the operating record, but not all aspects of the “Training Plan” are required in a TSD permit application. The following two

paragraphs highlight the content of and differences between the “Training Program” and “Training Plan.”

The “Training Program” must provide descriptions for each position or job title involved with aspects of dangerous waste management and permit compliance. It must also provide brief outlines of required training courses. It must ensure the facility commits to providing sufficient training to ensure safe and compliant operations. The “training program” does not include information that is expected to change frequently, such as employee names and specific details of course curricula.

The “Training Plan” includes descriptions for each position or job title involved with aspects of dangerous waste management or permit compliance, and it specifies the name of the actual employee(s) filling each of those position description or job title. The Training Plan should have a complete curriculum for each required training course, not just their brief outlines. It also includes ongoing training records required by WAC 173-303-330(3).

The federal equivalent language in Appendix I of 40 CFR 270.42 uses the words “training plan.” Ecology believes in using the words “training plan” in Appendix I of WAC 173-303-830 it means that when changes that affect the type of training, or decrease the amount of training given to employees, or when other changes affect the training plan, that a permit modification request needs to be submitted to reflect those changes to the training program in the permit. That is, changes identified in Appendix I of WAC 173-303-830 to the training plan that is outside of the permit, will trigger a need for permit modifications to the training program that is in the permit.

Comment B-6-21, A-3-23: Satellite Accumulation 173-303-174(1)(g). A commenter is not in favor of this proposed change because the term “met” is not consistent with other regulatory references to accumulation limits that use the term “exceeds,” which is consistent with federal satellite regulations 40 CFR 262.15(a)(6). “Met” could imply that once the 55-gallon or 1-quart limit is met, the satellite area can no longer accumulate any dangerous or hazardous waste until the full SAA is moved to a central accumulation area.

Response: The term “exceeds” has not been a part of the satellite accumulation regulations since its adoption in 1993. For the past 25 years, Ecology and EPA Region X have used the language in the Dangerous Waste Regulations for satellite accumulation in Washington State without issue. The intent is, as stated in the current regulations, “when” 55 gallons of dangerous waste or 1 quart of acutely hazardous waste is accumulated, the container(s) must be marked immediately with the accumulation date, then moved within 3 consecutive calendar days to a designated storage or accumulation area. In adopting the reorganization scheme of the federal Generator Improvement Rule, the wording of “when” was changed with “met” to maintain consistency in the regulation.

As explained to the public in 1993, each satellite accumulation area may have up to 55 gallons of non-acute dangerous waste. The advantages of using the satellite accumulation area conditions for exemption rules are that a generator can avoid a storage permit, have no strict time limits, no

specific training or comply with the Subpart CC regulations, and per a new proposal under specific conditions, a container can be vented; to name a few.

Comment A-3-23: SAA. One commenter made a comment on 173-303-174(2). On a case-by-case basis the department may require the satellite accumulation area to be managed in accordance with all or some of the requirements under WAC 173-303-172 or 200 and secondary containment requirements of 173-303-630(7). The SAA regulations were supposed to make life easier for generators, but this gives Ecology the ability to decide when additional regulations are required for SAAs.

Response: This is not a new requirement. This has been a requirement since 1993 and Ecology is only moving this requirement from section -200 to -174 in response to adopting the reorganization scheme of the Generator Improvement Rule. The SAA does make life easier for the generators because they can avoid a storage permit, avoid strict time limits, have no specific training or comply with the Subpart CC regulations, and per a new proposal under specific conditions, a container can be vented, to name a few.

Comment O-1-2: General comment. One commenter made a general comment about Ecology's proposal for numerous state-specific deviations from the EPA's Generator Improvements Rule (GIR) and other EPA programs throughout the pre-draft. Some of these changes are understandable based on existing state rules, such as use of terms "small quantity generators" and "medium quantity generators" versus EPA's "very small quantity generators" and "small quantity generators" to refer to generators of specified quantities of waste. However, in numerous cases, Ecology proposes deviations from EPA programs that are unexplained in the documents accompanying the pre-draft language. These deviations should be sufficiently explained to show why Ecology believes they are necessary to protect human health and the environment, justifying the additional burden placed on generators in Washington State.

Response: Without knowing the state-specific deviations the commenter is concerned about that are not otherwise discussed in this document, it is hard for Ecology to respond. That said, this document is also responding to comments and concerns about proposed regulations that are not exact copies of the federal language.

Comment O-1-3: Speculative accumulation. One commenter stated that Ecology proposes adding a requirement to place recyclable material in a "storage unit" and label that unit with "the first date that the material began to be accumulated." The terms "storage" and "unit" have specific meanings in the dangerous waste regulations that are not applicable to the holding of recyclable materials for reuse. Further, several "first date[s] that the material began to be accumulated" may apply to the "storage unit" when different types of recyclable materials are accumulated in the same location. The value of knowing "the first date" materials were accumulated is diminished once a single year passes since the 75% turnover rule is no longer relevant to the date marked on the "storage unit." We recommend that the accumulation be documented through an inventory log or other appropriate method.

Response: The proposed amendments are not part of the Generator Improvement Rule. They are part of the EPA's "definition of solid waste rules" (DSW) that all states are required to pick up. Therefore the language will remain the same as the federal mandate. In response to the

commenter's recommendation, perhaps the commenter misread the proposal because the proposed rule requires the accumulation of waste be documented through an inventory log or other appropriate method. This rule is one of just a few in the DSW rules that authorized states, like Washington, must adopt.

Comment O-1-4: Facility definition. The same commenter as above also had a concern with the definition of "facility." Ecology proposes to delete the word "or" from the phrase "...treatment, storage (or) disposing of dangerous waste...." The Generator Improvement Rule changes retain this word. The word "or" serves to complete the list of dangerous waste management activities and distinguishes these from management of hazardous secondary materials. We recommend it be restored.

Response: Ecology's proposal to remove the word "or" between the words "storage" and "disposal" is correct and consistent with EPA. This issue is not part of the Generator Improvement Rule as the commenter asserts. It is part of the EPA's Definition of Solid Waste Rule. Ecology is being consistent with EPA and moving the word "or" between the word "disposal" and the words "managing hazardous secondary materials prior to reclamation" within that regulation.

Comment O-1-10: State criteria designation. One commenter stated that Ecology proposes to replace the word "any" with the words "one or more" when determining if a waste exhibits any dangerous waste criteria. If our understanding of the priority for designation is correct, consider revising this requirement to read "... determine if the waste meets the dangerous waste criteria for toxicity or, if not toxic, persistence, WAC 173-303-100."

Response: The words "one or more" is correct. Using the word "any" has been misused. Some think the term "any" means they can choose to designate their dangerous waste as one or the other of the two state criteria. This is incorrect. There is no priority or "hierarchy" in determining state criteria. In other words, a solid waste must be evaluated against both criteria even if it fails for one. Also, if the generator chooses to evaluate its waste against the persistence criteria first and the toxic criteria second, there is no issue. The use of "one or more" will help clarify that both criteria need to be evaluated. It is also consistent with the language used in characteristic designations.

Comments O-1-11, B-7-8, A-3-25: Using knowledge. WAC 173-303-070(3)(e)(ii)(C). A commenter stated Ecology proposes adding a statement that, when knowledge is inadequate or absent to make an accurate designation, testing is required. This statement is largely redundant to existing (ii)(A), which states that knowledge can only be used when it can be "...demonstrated to be sufficient for determining whether or not it ... designated accurately." The addition of (ii)(C) appears to be out of context. Consider removing this proposed addition. A second commenter had a similar comment.

Response: Ecology acknowledges the commenter's concern. However, the two citations address separate issues and were a result of the federal Generator Improvement Rule to make the rules more user-friendly, readable, and to increase compliance. Ecology acknowledges and supports EPA being forthright on this issue and believes this will help compliance. Finally, the term

“explain” is a self-evident, ordinary term that Ecology feels does not warrant a regulatory definition, explanation, or example as it is used in context with Section -210(c).

Comments O-1-24, B-7-14, A-2-7, O-4-5: MQG’s inspection plan. A few commenters had a similar comment concerning WAC 173-303-172(13). Ecology proposes adding an MQG requirement to “...inspect the facility...” similar to that required for large quantity generators and TSD facilities. This requirement does not appear in the corresponding GIR requirements of 40 CFR 262.16. A second commenter had a similar comment.

Response: This is not a new rule or requirement. This is a current rule all MQGs are subject to. This requirement is found in section -320 as required by the MQG rule in section -201(2). This is a good example of why Ecology is adopting the reorganization scheme for the federal Generator Improvement Rule. Allowing generators to find those regulations that apply to their specific generator status can only improve compliance.

Comment O-1-30: Incompatible materials. The same commenter had a concern with WAC 173-303-174(1)(e)(iii). Ecology proposes adding a requirement to separate containers of incompatible materials in a satellite accumulation area, or protect them “by means of a dike, berm, wall, or other device. Containment systems for incompatible wastes must be separate.” This requirement is impractical for satellite accumulation areas, which are generally limited in both size and capacity.

Response: This is not a new rule or requirement. This is a current requirement for generators storing waste under the satellite accumulation provisions. Currently, this requirement is found in Section -200(2)(a)(i) and is simply being transferred to the generator improvement scheme. This is another good example as to why Ecology is adopting the reorganization scheme for the federal Generator Improvement Rule. Allowing generators to find those regulations that apply to their specific generator status should improve compliance.

Comment O-1-35: Waste codes. A commenter had a concern about waste codes on containers as a pre-transportation issue. WAC 173-303-190(3)(b). Ecology proposes to require the marking of dangerous waste number(s) on each package of dangerous waste. As a maximum number of waste codes is not specified, clarification that at least the first six applicable waste codes should appear on the marking would be helpful. To require each waste code to be written on the label, which is typically 6" x 6", would likely be difficult when a large number of waste codes apply to the contents.

Response: Ecology is adopting EPA’s pre-transportation requirement as is. Since EPA did not place a maximum or minimum number of waste codes on a container, neither will Ecology. Contrary to the commenter, EPA (and Ecology’s proposed regulations) specifically states that containers can either be marked with waste codes or identified through electronic means, such as a bar code system. Bar coding is a nationally recognized electronic system using scanners and an associated computer system to identify wastes. According to EPA, by marking containers with waste codes (electronically or written), the overall waste management burden would decrease because the TSDF would avoid the need to identify the hazardous waste or send the waste back to the generator for proper designation.

Comment O-1-36: Liquids in landfill. A commenter stated Ecology proposes to impose state-only LDRs found at WAC 173-303-140(4)(b) on liquids being disposed of. Imposition of state-only LDRs on waste not destined for land disposal in Washington State is not the intent of the state-only LDRs. The commenter suggests wording for a rule change.

Response: The comment is on the last sentence of WAC 173-303-190(9), which states that disposal of liquids must also meet the additional requirements at WAC 173-303-140(4)(b). WAC 173-303-140(4) is clear that this subsection applies to land disposal in Washington, so liquids disposed out-of-state are not subject to state-only LDRs. There is no need for a rule change.

Comment O-1-37: Shipments. WAC 173-303-200(1). This section is proposed to be titled “Off-site shipments” [sic]; however, it (correctly) allows for the placement of waste in a permitted on-site facility or treated or recycled on site. Consider revising the title to “Shipments” or some such.

Response: The focus of this rule is to highlight that off-site shipments must go to permitted facilities. The actual regulation has been in existence for over 25 years, and Ecology has not heard of any problems with people misinterpreting it. Ecology feels the title is appropriate.

Comment O-1-38: Start Date. WAC 173-303-200(2)(b)(iii). Ecology proposes to start the 90-day accumulation period when “the generator exceeds its satellite accumulation limits prescribed in WAC 173-303-174(1).” The wording implies that any SAA operated by the generator that exceeds the quantity limits then triggers the 90-day accumulation period for all waste being accumulated by the generator.

Response: A generator may have more than one satellite accumulation area (SAA) as the commenter correctly stated. Each SAA is regulated independently. For example, if one SAA has 40 gallons of waste and a second SAA also has 40 gallons of waste, neither one has hit their respective SAA limit of 55 gallons. The total of the two SAAs, in this case 80 gallons, does not trigger the need for waste from both SAAs be moved to a central accumulation area. The waste can still be accumulated at its respective SAA area. Once the volume limit is reached in one SAA, the 90-day clock starts for that waste. It does not imply that all waste generated on site also begin the same start date.

Comment O-1-48: Generator facility personnel. This comment is about Ecology's proposed rule that training follow the logic of the GIR. It also contains one of the errors in the GIR, i.e. using the term “facility personnel” to describe the people requiring training. Since the term “facility personnel” is specifically defined in WAC173-303-040 as personnel who “work at, or oversee the operations of, a dangerous waste facility...,” a generator may not have any “facility personnel” to train unless they operate a dangerous waste facility and one or more CAAs.

Response: Ecology acknowledges the commenter’s concern. When reading Section -200, the reader understands they are the generator and are reading generator-related regulations that apply to them. This rule, and the terminology, has not caused a compliance issue for over 30 years regarding the LQG understanding its training responsibility. At this time, Ecology will use the same language as EPA.

Comment B-7-2: Administrative Procedures Act compliance. The Washington Administrative Procedures Act (RCW 34.05.328) directs agencies to “coordinate the rule, to the maximum extent practicable, with other federal, state, and local laws applicable to the same activity or subject matter.” Some of the state-unique revisions in the draft dangerous waste revisions indicate that this statutory directive is not being observed. Specific examples are described below. The dangerous waste revisions are in draft stage, but prior to adoption, the Administrative Procedures Act (APA) requires the Department of Ecology to “determine that the probable benefits of the rule are greater than its probable costs,” [RCW and “that the rule being adopted is the least burdensome alternative for those required to comply with it that will achieve the general goals and specific objectives” [RCW 34.05.328.] In many of the cases described below, we believe that state-unique additions to the federal rule impose significant costs on dangerous waste generators without any demonstrated environmental benefit, and that the federal rules provide a less burdensome alternative than the corresponding provisions in the Washington draft rule. Simply put, Ecology has no basis to conclude that its state-unique changes provide a net benefit or that the federal approach is not the least burdensome alternative. Ecology has only provided speculative hypotheticals, instead of data or even real-world anecdotal incidents, to presume benefits arising from these provisions, and has absolutely no idea of the costs to generators.

Response: In drafting these changes to the Dangerous Waste Regulations, Ecology has carefully evaluated updates that are more stringent than EPA rules. The prime rulemaking consideration is to ensure the safety of human health and the environment. In general, the state is proposing some state-only preventative rules, such as hazard labeling and updates to contingency planning, with the expected outcome of preventing harm.

Direct benefits from preventative regulations can be difficult to quantify, since they are designed to stop problems from occurring. Given that difficulty, economic costs for facility compliance and health and environmental benefits were not fully determined at the draft rule development stage. At formal rule proposal, we will issue a set of regulatory analyses surrounding the impacts of the rule as proposed. The regulatory analyses will demonstrate compliance with the APA (including cost-benefit and least burdensome alternative determinations) and the Regulatory Fairness Act. Regarding the least burdensome alternative analysis, the regulatory analyses will list the goals and objectives of the authorizing statute, as well as alternative rule content considered (including federal rules). State hazardous waste programs can be more stringent than the federal hazardous waste program. Although state-only rules can impose more compliance costs for facilities than the related federal regulations (and be considered more burdensome than corresponding federal rules), the APA does not prevent the adoption of more stringent state regulations if they meet the goals and objectives of the authorizing statute where less burdensome alternatives do not.

All of the content of the regulatory analyses will be available for public comment during the official public comment period following rule proposal. We encourage public input on the regulatory analyses that can improve their accuracy or precision. In the meantime, we strongly encourage you to provide us with any specific cost information you can, to inform analysis of elements of the draft rule that are retained in the proposed rule.

Comment B-7-7: Mobile secondary containment. According to this commenter, at many waste generator locations, central accumulation areas consist of numerous mobile bulk containers of solid dangerous wastes (too large to meet the 55-gallon satellite limit) located indoors on the factory floor or staged temporarily for remediation work or construction/ demolition jobs. Construction of secondary containment to meet TSD design standards at each of these locations provides little or no additional environmental protection, but at significant cost. Rather than referencing the TSD secondary containment design standards for all central accumulation areas, the commenter suggests the following secondary containment language for MQG and LQG central accumulation areas:

Secondary containment. For container accumulation, freestanding dedicated central accumulation area(s) must meet the requirements of WAC 173-303-630(7). However, central accumulation areas located inside a building with intact roof, walls, and impermeable floors need only be located away from open floor drains or exterior doorways and only if accumulating wastes with free liquids.

Response: Ecology does not agree that central accumulation areas should be considered mobile, due to the resources involved in creating a central accumulation area for the storage and/or treatment of dangerous wastes. Due to various factors, central accumulation areas are regulated more heavily than shorter temporary waste storage, usually referred to as satellite accumulation. As such, central accumulation areas are regulated under the conditions for exemption. These conditions outline the regulations that must be met. These, for the most part, are mandated by EPA. It is possible that satellite accumulation areas could reasonably change location as the points of generation change. Ecology suggests the commenter take advantage of the satellite accumulation provisions for those more fluid work spaces.

Comment A-3-4: Contained. One commenter had a comment on land base units. The draft definition of “contained” omits the phrase “including land-based units” which appears in the corresponding federal regulation definition at 40 CFR 260.10. Is Ecology intending that land-based units not be eligible for containing hazardous secondary materials?

Response: That is correct. This issue is not part of the Generator Improvement Rule but rather EPA’s Definition of Solid Waste (DSW) rule. The rules associated with land-based units under the DSW rule are less stringent than current rules. They are not required to be adopted. “Land-based units” include unpermitted surface impoundments and waste piles. A dangerous waste poses no less hazard or risk to the public and environment just because it is going to be recycled. Ecology is opposed to use of dangerous waste land-based management facilities, which go against the principles of the State’s siting criteria. These facilities potentially could jeopardize the health of Washington State’s groundwater and drinking water, create environmental justice inequalities, and historically, have shifted the cleanup burden on to Washington State taxpayers

Ecology did not support EPA’s proposed alternative to the core RCRA subtitle C generator accumulation standards to include land-based units. There are well established practices and regulations of accumulating waste in non-land-based units that are easy to implement, easy to control and prevent releases, provide clear labeling requirements, etc. In addition, if a land-based unit, such as a surface impoundment, leaked, it would be very costly to control the leak, then clean up the aquifer and soils underneath.

Comments A-3-18, A-3-27: Hanford issue. A commenter stated that the phrase in WAC 173-303-172(6)(c)(i) to “remove all dangerous waste from tanks“ is inconsistent with the Hanford Site Consent Decree or TPA, which will allow some wastes to remain in place. The same commenter had an issue with general inspections at Hanford under Section -320(2)(c). The comment was “...as part of the review, the Department may modify or amend the schedule as may be necessary.” The commenter believes language should be expanded to clarify that the Department will provide a regulatory basis for amending the schedule.

Response: Issues dealing with the Hanford Site Consent Decree or TPA is not within the scope of this rulemaking. In terms of the general inspection requirements, this appears to be a permit issue and beyond the scope of the Generator Improvement Rule.

Comment A-3-27: General inspection schedule 173-303-320(2)(c) General Inspection. WTP Comment 3: WTP believes this statement, “As part of the review, the Department may modify or amend the schedule as may be necessary,” should be expanded to clarify that the Department will provide a regulatory basis for amending the schedule.

Response: The language requiring the inspection schedule be submitted with Part B of the permit application and have Ecology evaluate and modify or amend the schedule as necessary was in existence before EPA’s Generator Improvement Rule 264.15(b)(4). The changes in our state draft rule from the existing WAC 173-303-320(2)(c) were only made to conform to the current Generator Improvement Rule and federal hazardous waste rules. Ecology needs to match the stringency of the EPA’s rules. See 40 CFR 264.15(b)(4):

... Part 270 of this chapter requires the inspection schedule to be submitted with part B of the permit application. EPA will evaluate the schedule along with the rest of the application to ensure that it adequately protects human health and the environment. As part of this review, EPA may modify or amend the schedule as may be necessary.

The adequacy of the schedule is assessed by understanding the history and configuration of the treatment, storage, and disposal unit; and, by submitting a complete, detailed Part B application that allows Ecology to make this determination. Ecology will leave the language as originally drafted.

Comment A-3-21: MQG training. A commenter noted that the section title in 173-303-172(12) indicates training standards are presented. No training information is provided in -172(12). Hence, the section content conflicts with the title.

Response: MQGs do not have detailed formal training requirements as LQGs. MQGs training is outlined in -172(12)(c), hence ecology sees no conflict with the section title.

Comment A-3-26: General inspections. WAC 173-303-320. General inspection “...such as loading and unloading areas...” The commenter would like ecology to confirm that properly closed containers, in good condition, in static storage areas do not require daily inspections and are subject to the weekly inspections in WAC 173-303-630 or 40 CFR 265 Subpart I if the unit is under interim status.

Response: Sections -320 and -630 are separate rules. Section -320 (2)(c) clearly states that "...areas subject to spills, such as loading and unloading areas, must be inspected daily when in use." Therefore, Ecology cannot make the confirmation as suggested.

Comment 0-5-6: Ignitable and reactive (Seattle City Light): The commenter stated that the requirements for storage of ignitable or reactive waste do not incorporate the input of local fire departments, and require the use of the International Fire Code over local fire codes. City Light believes the regulation should rely first on local fire codes or decisions by local fire departments. Only in the unlikely absence of clear local fire codes or local fire jurisdiction decisions should ecology rely on the International Fire code, as written in the federal regulation.

Response: This comment appears to address draft rules WAC 173-303-172(5)(c)(f) and 173-303-200(3)(f). Ecology does not propose adopting GIR changes [see 40 CFR 262.17(a)(1)(vi)] that would allow waiving the RCRA requirement for ignitable and reactive wastes to be located 50 feet from the property line, if written approval is obtained from the local fire code authority. Ecology never adopted the RCRA 50-foot setback rule, instead referencing the 2003 International Fire Code (IFC) tables for separation distances for storage of explosives. This means adopting the GIR 50-foot waiver is not feasible. Due to the 2015 changes to the IFC, the draft rules update the references to the IFC separation distances for storage of explosives. Ecology acknowledges that WAC 173-303-630(8) and proposed draft MQG and LQG rules are more stringent than RCRA, since they require ignitable and reactive waste storage criteria adhere to the IFC, or NFPA #30 "Flammable and Combustible Liquids Code," if the IFC or local codes are unspecified.

The IFC has been accepted by the Washington State Association of Fire Marshalls and adopted by the Washington State Building Code. Local fire codes should meet those standards. Ecology does not want to impose on local fire code authorities to make waiver decisions on setback distances for reactive dangerous waste. Rather, the IFC provides a minimum standard for generator facilities and local authorities to ensure reactives are safely stored. Ecology does not intend to make changes as proposed by the commenter.

Response to generator categories

Comment O-5-5: Generators by accumulation. This commenter had a concern that in the definition section the medium quantity generation and small quantity generation definitions do not include the waste accumulation limits in addition to monthly generation limits. This could cause confusion as regards to generator status.

Response: The commenter is reading the definition correctly. Once adopted, generator status will only be determined by how much the generator generates in a month. The accumulation limits will remain the same as part of the conditions for exemption [from a permit] regulations. Ecology believes the rules, along with the generator categories outlined in a table placed within the regulations, are clearly defined, and will not cause confusion. On the contrary, the generator only needs to keep track of their waste generation rate to determine generator category, rather than a combination of generation rate, accumulation volumes, and time limits.

Comment B-5-1, B-7-16: Generator category terminology. There were several comments on nomenclature. Please standardize the WA Dangerous Waste Rule Generator Category names (SQG, MQG, & LQG) to be consistent with EPA’s Generator Category names. For transporters and TSD facilities that serve customers in many states, a common language will facilitate understanding of whether a customer’s site is subject to 90-day, 120-day, or 180-day storage time limits. Likewise, companies like Boeing that generate hazardous waste in multiple states would face one less employee training obstacle when employees relocate to other states if the Washington-unique nomenclature were replaced at the same time that other states align with the federal nomenclature. There is no valid reason why Ecology cannot coordinate this nomenclature with the federal rule.

Response: It is not appropriate to use the same terms as RCRA that are defined differently by Washington State. For example, a Washington generator who generates 500 lb. of state toxic WT02 waste in a month is a medium quantity generator under the State Dangerous Waste Regulations, while the same “generator” is not considered a dangerous (hazardous) waste generator under the federal definition. If that same generator is out-of-state and wants to bring that waste into Washington for treatment or disposal as a solid waste, that waste must be managed as MQG waste starting at the state border. For this generator, disposal in a solid waste landfill is not an option in Washington.

Ecology believes that maintaining different nomenclature will increase compliance and reduce financial costs. For example, waste is stopped or diverted at the WA State border due to that waste having to be managed as dangerous waste, while in the originating state the waste is only solid waste. Knowing ahead of time that in Washington State certain wastes are regulated as “hazardous”, out-of-state generators can decide if they should transport their waste into Washington for management.

Another example would be when an out-of-state “Very Small Quantity Generator” (VSQG) (operating under federal hazardous waste rules) adds unlimited volumes of bona fide hazardous wastes to used oil. More lenient RCRA rules allow the handling and burning of used oil mixed with (potentially) a large amount of dangerous waste. That VSQG may try to market this mixture as “used oil” in Washington, where it is prohibited under state regulations. Knowing upfront that Washington SQGs and federal VSQGs do not have the exact same regulations will prevent possible health and exposure issues to Washington citizens and businesses.

A final example would be the generation of 50 pounds of WT01 Extremely hazardous waste by a generator. If the Washington generator only followed the federal terminology and federal guidance, they would not be aware that they are a large quantity generator and could be subject to penalties. These are just a few of the valid reasons and examples as to why Ecology cannot coordinate their generator nomenclature with the federal rule. In addition, it should be noted that not all states are adopting the federal nomenclature with the same definitions, generation limits, etc. In summary, if WA uses the same generator status terminology as the federal RCRA program, then objections would still arise, since our definitions and regulations are not the same.

Comment A-3-5: 173-303-040 Definitions. Definitions of “large quantity generator,” “medium quantity generator,” “small quantity generator.” WRPS Comment 2: Ecology’s “Summary of 2017 Draft Amendments” states that the draft definition of “medium quantity generator” is

“equivalent to RCRA SQGs.” The summary documents do not discuss the draft definitions of “large quantity generator” or “small quantity generator,” but these nominally reflect the RCRA definitions of “large quantity generator” and “very small quantity generator.” It should be pointed out, however, that the draft definitions, by including “WT01 EHW” in the definition, are more stringent than those in the corresponding federal regulation. Thus, the draft definition of “medium quantity generator” is not actually “equivalent to RCRA SQGs,” but instead goes beyond the federal definition by including state-only WT01 EHW as a defining monthly generation criterion. The summary document should be revised to identify this more stringent provision for the definitions of large quantity generator, medium quantity generator, and small quantity generator, and public comment on inclusion of the state-only provision should be solicited.

Response: Ecology agrees that the RCRA definitions for generator categories are not directly equivalent to draft dangerous waste definitions, but are roughly the same. We will look at updating the summary document to reflect this. Generator status determination has always included WT01 EHW, so this is not a new regulation. These amendments provide definitions for the three generator categories, same as RCRA.

Response to solvent wipes

Comments B-6-5, A-3-6: No free liquids. 173-303-040. “No free liquids” “...and that there is no free liquid in the container holding the wipes.” The definition of “No free liquids” under this exclusion requires a paint filter test on wipes and then negates any benefit from the approach by requiring the container to remain free of residual liquid including liquid that may emanate during accumulation after the wipes have already passed the test. Liquids dripping from such wipes after successful testing for free liquids should not be subsequently considered a source of free liquids since the paint filter test is a 5-minute test as opposed to an ongoing test during weeks of accumulation. To avoid confusion, the commenter suggests addition of clarifying language that the exclusion is not compromised by placing absorbents in a container as a precaution to prevent accumulation of free liquids.

Response: The solvent wipes issue is not part of the Generator Improvement Rule but rather an exclusion regulation, “the solvent-contaminated wipes rule,” which creates less stringent standards for certain dangerous (hazardous) waste wipes. To clarify terminology, wipes are often commonly referred to as rags, shop towels, sorbents, and even adsorbents. Also, adding absorbents to a waste is a form of treatment by generator (TBG). If a generator chooses not to use the exclusion but prefers to treat their dangerous wastes under sections -172 for MQGs or -200 for LQGs, that remains an option. Practicing TBG is not an option under the wipes exclusion. Therefore, to allow this would cause confusion, invalidate (compromise) the use of the exclusion, and undermine the liquids-in-landfill ban. According to EPA, and Ecology agrees, the intent of the exclusion is to remove free liquids that accumulate in the container, manage those appropriately, then the remaining wipes (rags, sorbents, absorbents) can be managed under the exclusion. The intent is not to “hide” the free liquids accumulating in the container by adding more absorbent material. Finally, according to EPA the “no free liquids” ban applies at the point of disposal. Therefore, to consider an earlier point, as the commenter suggests, would be less stringent than the EPA.

Comment O-1-13: Wipes disposal option. WAC 173-303-071(3)(ss)(vi). Ecology proposes adopting only part of the federal solvent wipes rule. Ecology does not include disposal in a municipal waste landfill or incinerator as options for disposal, as does the corresponding federal rule. The impact of this omission is to curtail the relief provided by the federal rule for such wipes. Ecology has not advanced any rationale why Washington state municipal waste landfills or combustors are uniquely unsuitable for disposal of these wipes as opposed to similar facilities in other states. A possible impact of this rule is to shift the disposal burden for these wipes to neighboring states, where they will be non-regulated. The commenter recommends Ecology consider adopting the corresponding federal rule without the deletions noted.

Response: The “solvent contaminated wipes rule” is a less stringent rule that is not required for Washington, or other authorized states, to adopt. Ecology is not proposing to adopt the solvent wipes solid waste disposal option found at 40 CFR 261.4(b)(18). This is less stringent than the Dangerous Waste Regulations, and also less stringent than ecology’s current Shop Towel policy. This policy does not allow shop towels to be disposed to solid waste landfills or incinerators. The policy has been successful in promoting recycling of shop towels, rather than supporting landfilling or incineration of wipes. Contrary to the commenter’s belief, dangerous waste solvent wipes sent by WA generators to neighboring states for disposal to a municipal landfill remain regulated as dangerous waste, even if those states have adopted all of the RCRA solvent-contaminated wipes rule. Ecology doesn’t anticipate any impact of this rule to shift the disposal burden for these wipes to neighboring states. The disposal option does not encourage recycling or waste minimization, but rather reinforces the one-time use and disposal of a possible recyclable material into a solid waste landfill. The solid waste landfill disposal option (not proposed for adoption) allows the disposal of spent dangerous waste wipes into the dumpster with minimal requirements. Ecology also has concerns that wipes with ignitable solvents can be a serious fire hazard when disposed in this manner.

Adopting the solvent-contaminated wipes solid waste disposal option would also deteriorate the efforts ecology and the generators have invested over the past 23 years in preventing this waste stream from dangerous waste disposal. Finally, after having used the policy for many years, most generators understand the advantages of using recyclable wipes and have invested infrastructure resources towards this recycling practice.

Consolidated Comments

Episodic waste generation

Commenter: Steven Shestag - Comment B-7-6

Episodic Generation Event Annual Report, draft section 173-303-173(3)(d). While the federal generator improvements rule requires the Very Small Quantity Generator (SQG in Washington) to maintain records associated with the episodic event(s), the draft Washington rule adds a requirement for an annual report covering dangerous waste generated during the calendar year of the episodic event. The possibility of and timing of an episodic event will often not be known at the beginning of the year (especially those episodic events caused by a spill cleanup). This draft annual reporting requirement would require generators to produce detailed records for waste generated prior to the episodic event. Such records may or may not exist, since there is no requirement for a (Washington) SQG to record dangerous waste generated each month. The only requirement is that the generator ensure that the amounts generated or stored not exceed the SQG limits in WAC 173-303-171 (a) and for many SQGs, the processes that generate dangerous waste are inherently so small that the generator can maintain and demonstrate compliance with SQG limits without detailed recordkeeping. The draft rule would create a recordkeeping requirement where none otherwise exists, if there is any possibility that SQG might utilize the episodic event provisions. Furthermore, waste generated after an episodic event would also be subject to inclusion in the annual report. As for the more significant volume of waste generated during an episodic event, both the federal rule and the Washington draft require records and notifications to the Department of Ecology. In short, the annual report triggered by episodic generation at draft section 173-303-173(3)(d) would be an unnecessary Washington addition to the federal episodic generation rules, which are already complex and burdensome to both generators and the agency.

Commenter: Scott Tomren - Comment A-2-8

173-303-173: Ecology proposes to create a process for "episodic generation," defined as any "activity or activities, either planned or unplanned, that does not normally occur during generator operations, resulting in an increase in the generation of dangerous wastes that exceeds the calendar month quantity exclusion limits for the generator's usual category." Multiple concerns are associated with this definition: b. c. Academic research by its very nature is ever changing, so it is often difficult to define what activities "normally occur." Consider eliminating this reference, and perhaps replace it with criteria specifying a "temporary" and/or "short-term" event, which causes the generator to exceed the monthly quantity exclusion limit. The limitation of 1 episodic event annually will ensure that this remains infrequent. In an academic setting, it is not uncommon for laboratory cleanouts to be conducted as research faculty come and go, which does not necessarily provide the possibility of 30 days advance notice, as required by this regulation. Providing such notice does not appear to garner any particular benefit or increase protection of the environment, provided that wastes are properly disposed. This notice requirement should be eliminated. When materials are managed in accordance with 173-303, it seems unnecessarily burdensome to require specific labels identifying "Episodic Dangerous Waste," distinguishing those materials from other waste. If records of the activity are properly maintained, having distinct labels provides no benefit. This requirement should be eliminated.

Commenter: Joe Price - Comment O-4-6

Item #6: In reference to proposed change 173-303-173. This proposed change may be an enhancement to allow and enable the processing of wastes on an episodic basis. This proposed process for "episodic generation" present a few challenges. Episodic generation can be either "planned or unplanned" events that exceed the monthly quantity exclusion limits. The 30-day notification period to the Department of Ecology is unrealistic for an unplanned episode to be addressed through this process. It should be reduced to something like a seven day notification.

Comments on hazard labels

Commenter: Douglas Gallucci - Comment I-4-3

1) Requirement for labeling to be visible at a distance of 25 ft. or 1/2" in height. We do not feel that the risk with hazardous waste is any higher than the risk of the same category of unused materials. We feel that the negligible increase to safety does not justify the added expense of printing new labels, training staff on the change or having to re-package very small containers so that the label will fit. It does not appear that the potential cost of this change was considered in this proposed rule. Also this goes far beyond what is required for unused hazardous materials by other regulatory bodies such as OSHA/L&I, Fire Code or USDOT. In my many years as a first responder and assisting with chemical spills and releases I have not encountered any situations where this change would have helped the response. At my facility hazardous waste containers are such a small percentage of overall chemical spills I do not see this change improving the safety of workers or responders. Your assumption during the webinar and in person training for this change implies there are really only 4 hazard primary hazards (Ignitable, Corrosive, Reactive and Toxic) this not compatible with either OSHA's GHS or USDOT hazard classification. As these containers may be labeled per these other standards prior to becoming waste, this may lead to misleading or contrary labeling or confusion as to the actual exposure risk of materials handled by students and researchers.

Commenter: Paul Martin - Comment B-6-11

173-303-174(1) (f)(i-ii), And associated citations at: 173-303-200(6)(b), 173-303-200(7)(a) and b)(ii), 173-303-200(13)(a)(iv)(C), 173-303-240(6)(i) CHPRC is not in favor of this proposed change because Ecology's additional requirements and deletion of EPA's clarifying language has made the implementation unworkable and of little value to protection of human health or the environment. CHPRC does not favor the omission of DOT hazard labels as a means of compliant indication of container hazard as proposed by this change. Deletion of EPA's clarifying language makes compliance more difficult and may result in excessive hazard indications for emergency response purposes. Hazard marking should accurately identify the actual hazards exhibited with a particular container of waste. Overstating or simplifying the potential risks could adversely impact emergency response efforts and endanger emergency responders, workers and the public due to unnecessary evacuations based on incorrect hazard markings. Hazards associated with the F, K, U or P listed codes can be negligible. As is the case with debris waste, if the waste, on its own exhibits a characteristic or criteria, than it should be labeled with an appropriate DOT, OSHA or NFPA hazard. If the debris or soil is a listed hazardous waste only due to contact with some other waste that carried a listed hazardous waste code via the mixtures, derived from or contained-in rules, the debris itself may not exhibit any characteristics or WA State criteria for

dangerous waste. These wastes should not be identified with a nonexistent hazard that could mislead emergency responders, workers or even the public. As stated by EPA in the final GIR, "Examples of hazards include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the DOT requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the OSHA Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the NFPA code 704." One commenter stated that using this flexible approach will strengthen hazard communications and CHPRC agrees. Furthermore, the Hanford site is physically separate from the surrounding population and site access is controlled 24 hours per day and 7 days per week.

- Hanford has its own emergency response organization that leads any site emergency response action. The Hanford owner and operators are best suited to determine the appropriate hazard labels (e.g., DOT, OSHA, NFPA or use any other nationally recognized system) and train their emergency response organization in the meaning of those hazard labels.
- Hanford employees and vendors are required to complete specific training with regard to emergency response actions. The Hanford owner and operators are the most knowledgeable sources to determine the appropriate hazard labels for Hanford generated wastes and to train their employees and vendors in the meaning of those labels.
- Hanford access is restricted to authorized personnel. All visitors receive a safety briefing and are escorted at all times. Concerning DOT hazard labels and placards, if DOT hazard labels and placards are adequate to warn emergency response personnel, and the public of hazardous materials moving on public highways through cities and towns, these labels and placards should be more than adequate as hazard labels. If Ecology does not allow the use of DOT hazard labeling it will increase the cost of Hanford cleanup with no environmental benefit. For example, a generator at one part of the Hanford site would use Ecology hazard labels while accumulating waste such as "Ignitable", "Corrosive", "Reactive" or the generic catch-all hazard of "Toxic". However, if the Ecology required hazard labels contradict a DOT requirement, the hazard labels will have to be removed and applicable DOT labels e.g., Radioactive or Class 9, applied when the waste is shipped to another Hanford unit for storage since Hanford complies with DOT or DOE shipping requirements even for onsite transportation in order to ship as safely as possible. Once the waste is off-loaded at the receiving storage unit the DOT labels that Ecology considers not understandable to the general public will have to be removed and Ecology approved hazard labels reapplied. This whole process would be repeated as the waste is shipped to a treatment unit and then to a disposal unit, all on the Hanford site.
- Each time hazard labels are replaced, an opportunity for human error is introduced increasing compliance risks.
- Switching hazard labels depending on whether the container is in accumulation, storage or pre-transport increases opportunities for confusion of which labels are compliant.
- Applying hazard labels at one location, and then removing the hazard labels for transportation and then re-applying the hazard labels following receipt at another location is a forced misuse of taxpayer money and a diversion of resources that could be spent on cleanup activities that actually benefit human health and the environment. The equivalent federal requirement at 40 CFR 262.15(a)(5)(ii) stated: "An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard

statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704)." Ecology's proposed regulations do not include the references to DOT, OSHA, which includes the Global Harmonized System (GHS), or NFPA. However, Ecology's proposed regulations also do not prohibit the use of these commonly recognized systems, except that Ecology added that the hazard labels must be "understandable" to employees, emergency responders, waste handlers, i.e., "employees", the public and visitors. CHPRC is concerned that ensuring all members of the public or all visitors understand technical waste labels and markings is a significant compliance risk since not every member of the public or every visitor will understand technical hazards even such as ignitable, corrosive, reactive or toxic. PRC cannot guarantee that 100% of the public and 100% of visitors will retain the technical knowledge from their site training to differentiate between significant hazards like radioactivity and insignificant hazards like debris listed only for legal reasons, e.g., no hazards are present. It is expected that emergency responders and waste handlers understand hazard labels to ensure that appropriate actions are taken during emergency response or routine waste operations. And these types of workers need the technically appropriate hazard labels present on the waste containers whether it is a DOT, OSHA, NFPA or other commonly recognized systems as EPA promoted. However, the general public has no access to Hanford waste accumulation and storage areas which is probably the same case for any generator in Washington State since security requirements at WAC 173-303-310 apply to all generators and TSDFs. Also, visitors to the Hanford site are escorted at all times by CHPRC personnel that do understand hazard labels. And as stated by Ecology during the November 14, 2017, webinar on these proposed rules, the main goal of the hazard label is to make people aware of a danger. All dangerous and mixed waste containers are marked "Hazardous Waste" or "Dangerous Waste" and include a DOT hazard mark or label or equivalent wording. If the general public sees a container of debris marked "Hazardous Waste" with the additional hazard label "Toxic", the general public will make no distinction between the two terms "hazardous" and "toxic" and will still be aware of a danger. Hence if a dangerous waste container is marked "Hazardous Waste" and DOT hazard class 9 label (which means no other DOT hazards applied and is only regulated by DOT because it is regulated as a hazardous waste), the general public again is aware of the danger due to the presence of the term "Hazardous Waste" or "Dangerous Waste". The DOT Hazard Class 9 will greatly assist an emergency responder or worker since they understand that no other DOT hazards apply and the waste is relatively benign and emergency response in this case would be implemented accordingly. If the waste had to be marked "Toxic", the emergency responder would interpret the waste to be a DOT Hazard Class 6.1 Poison and respond as though the waste were an actual poisonous waste when in fact, it is not. More resources would be allocated for a perceived DOT Hazard Class 6.1 emergency than a DOT Hazard Class 9, plus evacuation protocols would be more extensive. All actions for a perceived hazard would be more costly and less safe for all involved, i.e., people can get hurt during a mandatory evacuation. The use of the EPA wording would help clarify acceptable markings and labels for hazard indications. Also the Generator Improvements Rule Federal Register stated that EPA "is providing flexibility to generators in how they identify hazardous of the hazardous waste in the container, and using DOT hazard communication such as hazard class labels (or placards, if appropriate) is one option for complying with this requirement. ..." CHPRC recommends adoption of the equivalent federal requirement wording at 40 CFR 262.15 and updating WAC 173-303-630(3) and all other sections referencing hazard labels to read as: "Clearly label or mark containers with an indication

of the actual hazards of the contents (examples include, but are not limited to, the exhibited dangerous waste characteristic(s) and criteria of ignitable, corrosive, reactive and toxic, and the exhibited characteristic hazard(s) for listed dangerous wastes; or applicable DOT, OSHA or NFPA labels, or any commonly recognized system that communicates the hazard(s)). The label or marking must be legible and/or recognizable from a distance of 25 feet or the lettering size is a minimum of ½ inch in height."

Commenter: Harold Tilden - Comment O-1-16

15. WAC 173-303-171(1)(e)(ix)(C). Ecology proposes to require that small quantity generators mark containers with "an indication of the hazards of the contents." Examples include, but are not limited to, the characteristics and criteria of the waste. This proposed rule deletes the provisions of the GIR that cite the use of Department of Transportation labeling or placarding, Occupational Safety and Health Administration hazard communication standard labels, or a chemical hazard label consistent with the National Fire Protection Association Code 704 as acceptable examples. We object to Ecology's omission of these examples. In its November 15 webinar to discuss the pre-draft regulations, Ecology representatives commented that "none of them" (DOT, OSHA, or NFPA) are adequate to meet Ecology's proposed standard for risk labeling. By deleting these examples, Ecology is in essence adopting a risk labeling system during waste accumulation and storage that directly conflicts with its own requirements [WAC 173-303-190(2)] to label waste with the appropriate DOT warning label prior to shipment. We have previously pointed out to Ecology that the word "toxic" conflicts with the DOT labeling requirement unless the waste is a DOT poison. As a result, any marking of the waste as "toxic" (or any other hazard label that conflicts with DOT labeling requirements), as is frequently required, must be removed from the accumulation container prior to shipment and replaced with the appropriate DOT label. The addition of a separate, conflicting labeling system is unduly burdensome and does not protect human health or the environment. Further, the term "is not limited to" indicates that Ecology may expect generators to provide some unspecified marking for certain types of waste. However, the proposal does not explain when such a marking would be required, or what it would consist of. The rule is thus unclear as to what type of marking is actually required and could be the subject of questions of implementation by inspectors. We strongly recommend that Ecology adopt the language of the GIR regarding marking with "an indication of the hazards of the contents" without modification.

Commenter: Harold Tilden - Comment O-1-18

17. WAC 173-303-171(1)(e)(ix)(C)(II). Ecology proposes to require that small quantity generators mark containers and tanks with "an indication of the hazards of the contents." Such marking must be "understandable to employees, emergency response personnel, the public, and visitors to the site." Ecology's proposal to limit hazard warnings to text descriptions as the only way to achieve "understandability" unnecessarily restricts generators from using established, well understood hazard warning systems. We believe that limiting the specific hazard warnings to text descriptions is not necessary or even beneficial. We recognize that untrained staff, visitors and the public may not fully understand symbolic hazard warnings (e.g., DOT, NFPA, and OSHA and hazard identification systems). However, text warnings such as "Ignitable", "Toxic" or "Reactive" may also provide little useful information to untrained people. The generic "Hazardous Waste" or "Dangerous Waste" statement is sufficient to warn untrained employees and the public to beware. Hazard-specific labeling is useful only to waste management

employees and emergency responders, who are trained to understand DOT, NFPA and OSHA hazard identification systems. In reality, DOT and other hazard identification systems are likely to be more useful to waste management employees and emergency responders than text warnings by virtue of having more specific meanings. As an example, Ecology has suggested that "Ignitable" is an appropriate hazard warning. In fact, "Ignitable" wastes could include flammable liquids, flammable gases, flammable solids or oxidizers, or even combustible liquids -- each of which would require distinctly different approaches to emergency response. In this case the DOT labels, for example, provide far more specific and useful information than Ecology's suggested text warning. The same is certainly true of the "Reactive" hazard description. We recommend Ecology allow utilization of the labeling systems referenced in the GIR, i.e. Department of Transportation, Occupational Safety and Health Administration hazard communication standard, or a chemical hazard label consistent with the National Fire Protection Association Code 704.

Commenter: Harold Tilden - Comment O-1-70

69. WAC 173-303-640(5)(d)(i). Ecology proposes to add a requirement that underground tank systems have labels or signs above ground. Ecology has not explained how such signs would serve any useful purpose for a closed tank, pipe or appurtenant equipment buried several feet below ground. The situation would be different if the tank system component has an aboveground component (e.g. a vent pipe or access way) that should warn personnel of the hazard(s) of the waste. Such above-ground structures would likely be considered part of the "active portion" of the TSD in any case. Consider deleting the phrase "aboveground postings above each underground tank system" from the proposed rule.

Commenter: Aurana Lewis - Comment O-5-4

General Comment: It is unclear why Washington State has proposed significantly more stringent labeling requirements, particularly banning the use of USDOT, OSHA, and NFPA labels as risk identification. The elimination of commonly used risk labeling systems that already perform the function in accordance with federal regulations generates a potential burden on facilities to change the labeling of containers at multiple points in the handling process. Additionally, commonly-used markings may perform the function better. Employees, first responders, and the public may be more familiar with the commonly used markings than risk words and gain more specific safety information from them than risk words, especially if English is not their first language.

Commenter: Selin Hoboy - Comment B-8-2

The main comment we have to make on the GIR proposed changes are related to waste containerization and identification. Previous guidance from Ecology regarding labeling has made it difficult to ensure compliance with the state regulations while also complying with the Federal Department of Transportation (DOT) Pipeline Hazardous Materials Safety Administration (PHMSA) regulations. DOT PHMSA has preemptive authority under section 49 CFR 107 Subpart C – Preemption. DOT regulations specify marking, labeling, container specification and shipping documents be substantively the same within state regulations. In the past guidance Ecology has used "major risk" as a standard to convey risk associated with certain hazard classes of materials, specifically under hazard class 9. We are concerned that now this will be considered a "hazard" which could cause confusion. Having to classify certain materials as WT02 Toxic, for example, does not match hazard classifications under DOT. While in the past Ecology has stated

this has to be done to properly communicate the hazard to anyone who may come upon it, it conflicts with Federal DOT regulations. EPA has provided options so that individuals authorized on the handling of hazardous waste can choose the one most appropriate for their conditions. We believe that this option should be retained in the regulations. Hazardous wastes should not be left in areas where there is unauthorized access so the idea that the hazard should be communicated to anyone who may come upon it is not reasonable to require. Lastly, considering much of the hazardous or dangerous waste generated in the state is shipped across state lines for treatment, it risks confusion in those other states as well as DOT compliance. In some instances, when we have encountered labeling as a problem, we were told that we would have to keep the labeling while in storage, prior to transport, and if we needed to, we could remove the labeling for transport; the containers must then be again labeled when in storage at another storage area (like a TSD). This becomes very confusing for the generator and the TSD. Additionally, this results in multiple parties handling the waste, risk of spillage, and still the risk for human error, risking compliance (either forgetting to remove the labeling or putting it back on, etc.) all without any true health and safety benefit. Proper marking and labeling of hazardous materials intended for transport should be marked/labeled at the time it is prepared and should remain as such throughout the transport process until final disposal per the Federal EPA and DOT PHMSA regulations.

Commenter: Steven Shestak - Comment B-7-3

Editor note: See original submission for footnotes.

Container and Tank Hazard Labeling.

Throughout the draft rule, the hazard/risk labeling language found in the existing Washington rule' has been modified in a manner which introduces new ambiguities and opportunities for varying interpretation by generators and inspectors. The federal Generator Improvements Rule hazard labeling requirements are more concise. The federal rule applies the following hazard labeling language for each category of waste generators: marks its container(s) of hazardous waste with (1) The words "Hazardous Waste" and (2) An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e. ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704)." Hazard marking instructions in the draft Washington rule incorporate the federal examples of "ignitable, corrosive, reactive, toxic" labels, but omit the other hazard communication options (DOT, OSHA, and NFPA) found in the federal rule. The draft also deletes a similar provision in the existing Washington rule which provides that "If there is already a system in use that performs this function in accordance with local, state, or federal regulations, then such system will be adequate." Thus, the draft hazard marking provisions are both potentially more restrictive than the corresponding federal provisions and the existing WAC provisions, and are less clear than either.

Hazard Label Understandable to the Public and Visitors

As drafted, whatever hazard marking is used (even "ignitable, corrosive, reactive, toxic"), the warning must also pass a new second regulatory test that the hazard label be "understandable" to

employees, first responders, the public, and (newly added) "visitors." It is by no means certain that the public or visitors understand the particular hazard posed by the four waste characteristic terms any more than they might comprehend the hazard indicated by some DOT placards and labels, OSHA pictograms, or the numbers on a NFPA warning diamond. As drafted, the proposed rule language would require the generator to guess which words or symbols might be universally understood by the general public, and which might not be, and face inevitable second-guessing by Ecology inspectors (who themselves might not agree). The draft requirement that hazard labels be "understandable" by the general public and visitors is far too overbroad and subjective to be a basis for a regulatory requirement. However, the words "dangerous waste" or "hazardous waste" are required to be on each container or tank. These words are sufficient to warn even the least knowledgeable English-speaking visitor or member of the public that he or she should not be approaching, touching, opening, or disturbing the container or tank. As for smoking nearby, a separate ruled addresses "no smoking" signage for ignitable and reactive wastes. Furthermore, RCW 70-160 makes it illegal to smoke in a workplace. At Boeing facilities, visitors are not allowed to wander unaccompanied through the plant, and we can hardly imagine that other dangerous waste generators in Washington allow the kind of open public access to dangerous waste that the draft hazard labeling rule seeks to address. Also, given the international nature of trade, Boeing and other Washington manufacturers frequently escort customers and dignitaries through manufacturing areas who do not understand the English language. Such visitors are escorted with a translator and by Boeing employees who are knowledgeable of the hazards present in that area. The draft Washington requirement that hazard labels (in English) be "understandable" to visitors cannot be met in this situation. Foreign visitors may speak any one of a host of languages, so the dual English/Spanish warnings common in the U.S. or English/French warnings required in Canada are of little help. As a result, the "understandable" test is not only subjective, but simply cannot be complied with if a variety international visitors are involved. The impossibility of compliance renders this requirement overbroad and arbitrary and capricious. The federal generator improvements rule requires hazard warnings in addition to the words "hazardous waste" or "dangerous waste," but the compliance options found in the federal rule indicate an understanding that these additional warnings are primarily intended to inform employees including site personnel who move waste containers, first responders, internal and agency inspectors, and TSD/transporter personnel who come onto the generator site. These are the people who require specific information on hazard type to perform their functions safely, and these are the people who are familiar with RCRA characteristic descriptions, DOT, OSHA, and NFPA systems. There is no expectation in the federal rule that visitors or the general public will always be familiar with these more detailed hazard warnings. In fact, the general public is far more likely to be at risk of exposure to a dangerous waste after a highway accident than at a generator site, yet the DOT labels and placards are all that are, or may permissibly be, required during such transport. For visitors and the public at a generator site, the simple phrases "hazardous waste" and "dangerous waste" are sufficient warning that they should not be physically interacting with the containers or tanks. The practice of using the DOT system, without modification, as a risk communication method is not only allowed by the federal rule, but is encouraged by EPA for its obvious benefit and streamlining of waste accumulation and shipping. As noted in the preamble to the final federal rule, as a matter of practicality, it would benefit many generators to consider the use of DOT hazard communication, since such a method would not only satisfy EPA's requirement, but it may also satisfy DOT requirements when the wastes are shipped off site.. .It is important to note that if generators choose to identify the

hazards of the contents of their containers using the DOT, OSHA or NFPA labeling methods, those methods must be used appropriately. Furthermore, if a method other than DOT hazard communication is used while the waste is accumulating on site, when the waste is shipped off site, generators and transporters must ensure that those markings and labels are located away from and do not obscure DOT marking and labeling. Department of Ecology staff have speculated that a DOT Class 9 label might not provide sufficient hazard warning. EPA addressed this issue in the preamble to the hazardous waste generator improvement proposal (BO FR 57949, Sept. 25, 2015). EPA correctly states that under DOT rule 49 CFR 172.301 general marking requirements, a generator using a DOT shipping name ending in NOS. (as is common for Class 9 wastes) must also provide the technical name of the hazardous material in association with the proper shipping name. It is this technical name that provides the hazard information needed by dangerous waste generator personnel, first responders, inspectors, and TSD contractors who must interact with the waste to perform their functions safely. As described above, the general public and visitors may or may not comprehend the specific hazard based on a Class 9 label and the technical name, but the words "hazardous waste" and "dangerous waste" provide sufficient hazard warning to the public and visitors. In EPA's final rule, the agency does not distinguish between DOT Class 9 and other DOT hazardous waste markings. In all cases, DOT markings (including Class 9 with required technical name) are an acceptable form of hazard warning, and this is the approach that should be implemented in the Washington regulations.

Hazard Label Legibility

The draft Washington requirement of legibility at 25 feet, or lettering size at least a half inch in height, serves little purpose for routine waste handling, but may be of some value in case of leakage, fire, a container that has become pressurized due to chemical reaction, or other emergency situations. If the generator opts to meet hazard warning requirements using only words (such as ignitable, reactive, corrosive, or toxic), a state legibility requirement is a reasonable addition to the federal rule. However, if the generator uses DOT, OSHA, or NFPA hazard warnings, these warning systems have their own requirements of size, color, and contrast that are designed to ensure visibility, and a state legibility requirement is superfluous and a potential conflict subject to federal preemption. Also, emergency responders and fire marshals often have their own local requirements that are more effective and safer than any label on a tank or container. First responders entering an area are better informed and far safer if they encounter NFPA diamonds at the entrance to a building with hazardous substances, rather than on a container or tank which may be obscured by smoke or mist. For all the reasons described above, Boeing recommends that the Washington dangerous waste rules use slightly modified federal hazard warning language below in lieu of the language found in multiple locations in the Oct. 10, 2017 draft: ..marks each container or tank of hazardous with (1) The words "Hazardous Waste" or "Dangerous Waste" and (2) An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e. ignitable, corrosive, reactive, toxic) that is legible and recognizable from a distance of 25 feet or the lettering size is a minimum of one half inch in height. Alternatively, in addition to the words "Hazardous Waste" or "Dangerous Waste." the generator may use a hazard warning system that provides hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29

CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704)."

Commenter: Anthony McKarns - Comment A-3-16

WAC 173-303-171(1)(e)(ix)(C)II;WAC 173-303-172(9)(a)(iii)(B);WAC 173-303-172(9)(b)(ii)(B);WAC 173-303-173(3)(f)(i)(C)(II);WAC 173-303-173(3)(f)(ii)(B)(II);WAC 173-303-173(4)(f)(i)(C)(II);WAC 173-303-173(4)(f)(ii)(B)(II);WAC 173-303-174(1)(f)(ii)(E);WAC 173-303-200(6)(b)(ii)(B);WAC 173-303-200(7)(a)(iii)(B);WAC 173-303-200(7)(b)(ii)(B);WAC 173-303-200(13)(a)(iv)(C)(III);WAC 173-303-395(6); WAC 173-303-630(3)(ii)(B);WAC 173-303-640(5)(d)(iii) WRPS Comment 6: The draft revisions in these sections require that hazard labelling be understandable to employees, emergency response personnel, the public, and visitors to the site. For purposes of clarity, consider revising the language to state that DOT labels may be used for this purpose, consistent with EPA guidance and regulation. As EPA explained in their responses to the generator improvements rule:

Comment: The EPA is proposing enhanced labeling and/or marking on hazardous waste containers and tanks. WRPS recommends that if a container is labeled to match DOT or HAZCOM requirements, it is considered acceptable for the EPA's proposed enhanced labeling (0089) EPA Response: The Agency agrees with the above comment. A SQG or LQG may label its containers with the applicable hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic) to match DOT or HAZCOM requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding). This is one method. The Agency is also providing flexibility to generators in that they also may use a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazardous Communication Standard at 29 CFR 1920.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704). [EPA's Hazardous Waste Generator Improvements Final Rule – Response to Comments Document– Summaries and Responses, October 4, 2016]

EPA issued similar language in the preamble to the final rule: Some commenters had the misperception that we are requiring the use of DOT hazard class labels on containers during onsite accumulation. In actuality, the Agency is providing the flexibility to generators in how they identify the hazards of the hazardous waste in the container, and using DOT hazard communication such as hazard class labels (or placards, if appropriate) is one option for complying with this requirement. In fact, one commenter supported EPA's approach of "giving generators options to accomplish this strengthened communication." However, as a matter of practicality, it would benefit many generators to consider the use of DOT hazard communication, since such a method would not only satisfy EPA's requirement, but it may also satisfy DOT requirements when the wastes are shipped offsite to a RCRA-designated facility, such as an interim status or permitted TSDF. [81 Federal Register 85758]The public commonly encounters DOT labels in a transportation context, and such labels are considered appropriate for conveying hazard information on public highways and other places with unrestricted public access. There is no reason for believing that use of such labels within dangerous waste generator or TSD facilities would be less protective, given the more restrictive access controls in place at such facilities.

Commenter: Anthony McKarns - Comment A-3-19

173-303-172(9)(a)(iii) Conditions for exemption for a medium quantity generator that accumulates dangerous waste. The proposed change requires generators to mark or label

containers with an indication of the hazards such that the mark/label is recognizable from a distance of 25 feet or is a minimum of one half inch in size. MSA Comment 4: For generators with very small waste containers (e.g., lab ampules), it may not be feasible to meet this requirement. Can clarity be provided on how to meet this requirement in such an instance? For example, an allowance to place small containers in a larger container that is appropriately labeled would provide a way to meet the requirement, as discussed in the 11/15/17 webinar. This comment also applies to the same requirement for small and large quantity generators.

Commenter: Anthony McKarns - Comment A-3-30

173-303-395(6) Other General Requirements" The owner or operator must label containers and tanks in a manner which adequately identifies the hazard of the contents (examples include, but not limited to, the applicable dangerous waste characteristic(s) and criteria or ignitable, corrosive, reactive and toxic and the applicable hazard(s) identified for listed dangerous waste). WTP Comment 4: The text of this section contains a typo, in addition WTP believes this text (also repeated in numerous other sections) should provide the same flexibility as the federal regulations which allow the use of other hazard recognition programs (DOT, OSHA) to meet the labeling requirements. Provide justification why more restrictive labeling requirements than allowed by federal regulation are warranted (why the labeling allowed by federal regulation is not protective of human health or the environment).

Commenter: Anthony McKarns - Comment A-3-32

173-303-640(5)(d)(i) Tank Systems "Marked with labels or signs to identify the waste contained in the tank legible at a distance of at least fifty feet. For underground tank system, labels or signs must be either placed on aboveground postings above each underground tank system or a teach entrance to the active portion (area where the underground tank system is located. WTP Comment 5: The text of this section contains a typo, in addition WTP requests that inaccessible aboveground tanks be included in this section so that labels or signs are only required at the entrance to the rooms holding such tanks. WTP will have many tanks located in areas with high radiation fields that will limit access to the tanks (making labeling of the tanks and inspecting the labels a physical hazard to employees).

Commenter: Jessica Joyner - Comment B-2-2

Sections: WAC 173-303-171(1)(e)(ix)(C); WAC 173-303-172(9)(a)(iii); WAC 173-303-172(9)(b)(ii); WAC 173-303-173(3)(f)(i)(C); WAC 173-303-173(3)(f)(ii)(B); WAC 173-303-173(4)(f)(i)(C); WAC 173-303-173(4)(f)(ii)(B); WAC 173-303-174(1)(f)(ii); WAC 173-303-200(6)(b)(ii); WAC 173-303-200(7)(a)(iii); WAC 173-303-200(7)(b)(ii); WAC 173-303-200(13)(a)(iv)(C)(III); WAC 173-303-395(6); WAC 173-303-630(3)(ii); WAC 173-303-640(5)(d)(iii) Comment: The draft regulations at these locations require labeling to identify the hazards of wastes stored or accumulated in containers, tanks, or containment buildings. Please confirm that, in situations where radioactive hazards represent the predominant risk associated with a waste, radioactive hazard labels may be used to convey the hazard even though radionuclides are outside the scope of dangerous waste regulations. Radioactive mixed waste (i.e., waste consisting of both radioactive and nonradioactive dangerous waste components) may carry dangerous waste codes in situations where, for example, the waste has contacted an F-listed dangerous waste and the waste hasn't been formally delisted, but where the concentration of F-listed constituent is very low or non-detectable. In such situations, the hazard associated with the

radionuclide content may far exceed any hazard resulting from F-listed constituents, and labeling the waste to imply a dangerous waste hazard as a "major risk" would be highly misleading to employees, emergency responders, waste handlers, the public, or visitors to the site. For the major risk labels to be meaningful the actual significant risks should be identified, and not minor or comparatively insignificant risks.

Commenter: Scott Tomren - Comment A-2-6

173-303-171(l)(e)(ix)(B) and several other locations: Ecology proposes to alter the requirement to identify each waste container's hazard "including, but not limited to, the applicable dangerous waste characteristic or criteria," but removes the reference to NFPA, DOT, and OSHA hazcom labeling. This change appears to be less communicative of hazards to the general public, and even to most emergency responders. Labeling containers with the DW characteristics Of "Ignitable" or "Reactive" do not provide clear information to untrained people, and are inconsistent with established hazards known to emergency responders. "Ignitable" could include several categories of DOT hazardous materials, with widely varying required responses. "Reactive" has no corresponding category in any labeling system, and provides little useful information to the lay observer. While the "Toxic" description appears in both the WAC and in DOT regulations, their definitions are not the same. DOT and NFPA systems are much more likely to communicate hazards to both emergency responders and the general public. Further, DOT labeling is still required during shipment (by both 49 CFR and by WAC 173-303), which implies a requirement to label containers according to one standard during accumulation, but re-labeling them for shipment. Also, the phrase "but not limited to" implies that additional labeling criteria exist, but makes no effort to identify what those may be. Reference to NFPA, DOT, and OSHA (GHS) hazard labeling should be restored, and should continue to be allowed under the regulations.

Comments on labeling legibility

Comment I-4-1. Douglas Gallucci: Generator Improvement Rules-We have concerns about 2 of the proposed changes that go beyond what the EPA rules require. 1) Requirement for labeling to be visible at a distance of 25 ft or 1/2" in height. We do not feel that the risk with hazardous waste is any higher than the risk of the same category of unused materials. We feel that the negligible increase to safety does not justify the added expense of printing new labels, training staff on the change or having to re-package very small containers so that the label will fit. It does not appear that the potential cost of this change was considered in this proposed rule. Also this goes far beyond what is required for unused hazardous materials by other regulatory bodies such as OSHA/L&I, Fire Code or USDOT. In my many years as a first responder and assisting with chemical spills and releases I have not encountered any situations where this change would have helped the response. At my facility hazardous waste containers are such a small percentage of overall chemical spills I do not see this change improving the safety of workers or responders. Your assumption during the webinar and in person training for this change implies there are really only 4 hazard primary hazards (Ignitable, Corrosive, Reactive and Toxic) this not compatible with either OSHA's GHS or USDOT hazard classification. As these containers may be labeled per these other standards prior to becoming waste, this may lead to misleading or

contrary labeling or confusion as to the actual exposure risk of materials handled by students and researchers.

Commenter: Lower Columbia College Skreen - Comment B-3-2

173-303-171(1)(e)(ix)(B): We are concerned that providing labels which are visible from 25' away is not possible when we produce waste containers that are a total of 10-25ml in size.

Commenter: Harold Tilden - Comment O-1-15

14. WAC 173-303-171(1)(e)(ix)(B). Ecology proposes to require that small quantity generators mark containers with the words "dangerous waste" or "hazardous waste" and that such marking be legible from a distance of 25 feet or the lettering size is a minimum of one half inch in height. We agree that the marking should be of sufficient size to provide reasonable warning to staff and emergency responders. However, Ecology's proposed standard of legibility at 25 feet or ½ inch lettering is unnecessarily restrictive and would be very difficult to implement, particularly in laboratory settings. As a large research institution, most of PNNL's dangerous waste is accumulated in laboratories using small containers, ranging from a few milliliters to 20 liters. In our context, waste must be accumulated in small containers because laboratory waste streams are naturally generated in small quantities and because accumulation of large quantities of waste may exceed fire code limits. Additionally, use of smaller containers is prudent in minimizing the quantity of dangerous waste in busy research laboratory spaces with active processes and equipment, especially for mixed waste. Accumulation containers that are not directly attached to analytical equipment are generally kept in chemical storage cabinets to meet fire code requirements. In the laboratory context, the size requirements proposed by Ecology are inappropriate for two reasons. First, it is not physically possible to mark many of our small containers with markings of the prescribed size (or readable from 25 feet). See the attached photo for an example of attempting to meet Ecology's proposed requirement for a one-liter container; the marking is larger than the container. It has been suggested that we could place the small container in a larger container to meet Ecology's proposed marking size; however, this practice precludes easy inspection of accumulation containers and could lead to a situation in which the primary container fails and the failure goes undetected for a period of time. Additionally, our laboratories simply do not have sufficient storage space to place containers in much larger containers just to meet a marking requirement. Second, the distances from which waste containers are visible to staff and emergency responders in laboratories are much shorter than 25 feet. In the typical case of containers stored in chemical storage cabinets, the hazard and dangerous waste markings are not visible until the storage cabinet door is opened. Effective identification of a dangerous waste and its specific hazards can be provided with more appropriately sized text. Ecology has not advanced any information to explain why the criteria that have been in place since 1984 to mark the container clearly with the words "hazardous waste" or "dangerous waste" need to be revised in this manner. The existing Federal and state criteria to "clearly" mark should be adequate, as used in the Dangerous Waste Regulations since 1984, in lieu of setting a minimum size.

Commenter: Harold Tilden - Comment O-1-71

70. WAC 173-303-640(5)(d)(ii). Ecology proposes to retain the requirement that the marking "Dangerous Waste" or "Hazardous Waste" be legible at a distance of 50 feet from the tank. This requirement is impractical for waste tanks located in vaults or basements where access is limited.

For instance, a tank may be in a closed room accessed only by a short hallway. Ecology's interpretation is that the sign must be visible (not "legible") 50 feet from the entrance to the room, which would necessitate placing the sign at such a distance that the location of the hazard is indistinguishable. This proposed requirement also is made for underground tank systems; see comment on WAC 173-303-640(5)(d)(i). Consider revising this requirement to read "...legible at a distance of at least fifty feet for outdoor tanks and twenty-five feet for indoor tanks, and for underground tank systems, the marking must be placed at each entrance to the active portion."

Commenter: Steven Shestag - Comment B-7-4

Hazard Label Legibility

The draft Washington requirement of legibility at 25 feet, or lettering size at least a half inch in height, serves little purpose for routine waste handling, but may be of some value in case of leakage, fire, a container that has become pressurized due to chemical reaction, or other emergency situations. If the generator opts to meet hazard warning requirements using only words (such as ignitable, reactive, corrosive, or toxic), a state legibility requirement is a reasonable addition to the federal rule. However, if the generator uses DOT, OSHA, or NFPA hazard warnings, these warning systems have their own requirements of size, color, and contrast that are designed to ensure visibility, and a state legibility requirement is superfluous and a potential conflict subject to federal preemption. Also, emergency responders and fire marshals often have their own local requirements that are more effective and safer than any label on a tank or container. First responders entering an area are better informed and far safer if they encounter NFPA diamonds at the entrance to a building with hazardous substances, rather than on a container or tank which may be obscured by smoke or mist. For all the reasons described above, Boeing recommends that the Washington dangerous waste rules use slightly modified federal hazard warning language below in lieu of the language found in multiple locations in the Oct. 10, 2017 draft: ..marks each container or tank of hazardous with (1) The words "Hazardous Waste" or "Dangerous Waste" and (2) An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e. ignitable, corrosive, reactive, toxic) that is legible and recognizable from a distance of 25 feet or the lettering size is a minimum of one half inch in height. Alternatively. in addition to the words "Hazardous Waste" or "Dangerous Waste." the generator may use a hazard warning system that provides hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704)."

Commenter: Jason Sampson - Comment A-1-3

WSU proposes regulations regarding labeling of Dangerous Waste at 173-303-171(e)(ix)(B), 173-303-174(f), and 173-303-630(3)(i) be changed from "legible at 25 feet" to "recognizable at 25 feet". WSU manages approximately 30,000 containers annually, many of them smaller due to micro-scale research. The containers are not big enough to have labels meeting these requirements as currently proposed.

Commenter: Scott Tomren - Comment A-2-5

173-303-174(0, and several other locations: Ecology proposes to revise container labeling requirements so that the words "Dangerous Waste" and the hazards must be legible from a distance of 25 feet, or lettering is a minimum of 1/2" in height. Academic research laboratories on the WSUTC campus, for the most part, conduct microscale experiments, utilizing small volumes of materials in an effort to reduce waste generation. As a result, wastes are produced in small containers, ranging from 5 grams to 20 liters, and averaging less than 1 gallon in size. It is impractical to label these small containers with such large label text. Additionally, the majority of waste containers are kept in cabinets, and cannot be viewed from a distance of 25 feet. While it may be practical to label bulk containers (55 gallons or more) with text 1/2" or larger, the requirement for small containers should remain that they be "clearly" labeled and marked, as appropriate to the container size.

Commenter: Joe Price - Comment O-4-4

Item #3: In reference to proposed change 173-303-171(1)(e)(ix)(B). Due to the on-going research projects conducted, I receive numerous dangerous waste containers of all sizes and dimension. A 25ml glass bottle is impractical to identify with a label that can be read from 25-foot and with a letter height of 1/2". It may cause the use of a larger container solely to support the size of the required label which would be wasteful and require irresponsible use of large containers solely for labeling purposes. This wasteful use of containers would by itself create more waste which is contrary to our practices to reduce, reuse and recycle. Being a research facility, many of the Dangerous Waste materials generated are mixtures versus pure materials. The sticker must identify all components contained within so in addition to the required lettering of the sticker, the internal components are hand written making a 25-foot visibility requirement very difficult to be a reality. WSUV maintains an internal Dangerous Waste manifest separate from the containers which identifies all components within the container. With such a manifest, a first responder would only have to review the manifest(s) to identify all material(s) within the CAA. Within the CAA at WSUV, all containers are maintained within a dedicated ventilation systems.

Comments on weekly inspection

Commenter: Douglas Gallucci - Comment I-4-2

2) Weekly inspection definition to be "...no more than 7 consecutive calendar days...". While we agree that allowing up to 13 days between weekly inspections is too long. We feel that the inflexibility of requiring it to be 7 days does not allow for holidays or occasional inclement weather. We feel that a simple modification to allow weekly inspections to "...not exceed 9 consecutive calendar days..." would allow some flexibility without adversely impacting safety or the intent of the Federal Rule.

Commenter: Paul Martin - Comment B-6-8

173-303-040 Definitions "Weekly inspections" means an inspection conducted no more than seven consecutive calendar days from the last inspection.

This comment is for WAC 173-303-040 but also applies to any other regulations in WAC 173-303 that reference the definition of weekly at WAC 173-303-040. CHPRC is not in favor of this proposed change. There are elements of this proposal that would cause unwarranted operational difficulties, increase noncompliance absent environmental harm, and increase the cost of cleanup at Hanford.

- Operational efficiency - Hanford has a treatment, storage and disposal (TSD) Operating Unit Group (OUG) that as of the date of this comment, manages 10,417 containers of dangerous, low-level, and mixed waste. Currently the TSD OUG (the Central Waste Complex – CWC, and the Waste Receiving and Processing Unit - WRAP) inspect all 10,000+ containers during the 4-day work week (Monday – Thursday), usually starting on a Tuesday or Wednesday, but depending on other operational needs may be conducted on any of the 4 days during that calendar week. Because a majority of the waste also contains radiological constituents a crew of two qualified personnel are required to safely conduct the inspections. It takes the two-man crew about 3 days (50 to 60 hours) to inspect all containers at just the CWC. It takes one person approximately 1 day (10 hours) to inspect all containers at WRAP. CWC and WRAP combined are the OUG referenced above. Note that this team of inspectors also have other duties including shipping, receiving, and performing license and permit compliance activities. PRC estimates that an additional nine (9) full time employees (4 laborers, 2 radiation control technicians, 2 supervisors and 1 work control resource for tracking) would be required to comply with the new definition of weekly, which would be a tremendous financial, personnel and tracking burden and with no added benefit to HH&E.

- Compliance with the regulations should be achievable - Inspections conducted Monday through Thursday allows Hanford to compensate for:
 - Adverse weather conditions - The Hanford site, like any other dangerous waste site, often experiences site closures due to snow, ice or high winds. As an actual example, during the 2016/2017 winter from December 14, 2016, to February 15, 2017, the Hanford Site North of the Wye Barricade was released early from work four (4) times, had delayed starts four (4) times and had work cancelled for the entire dayshift six (6) times. This represents a total of 14 work days impacted out of a grand total of 34 work days over that same period. Two work weeks (January 9th to 12th and January 16th to 19th) had only one full working day each week. With over 10,000 containers, completion of the inspections within an inflexible 7-day timeframe will not be possible. During that 9- week period, 7 weeks were impacted due to weather.

- Waste container deliveries (affected roads are closed and other unit operations are suspended during waste receipt),
- Other unexpected operational difficulties. Higher priority work could restrict the availability of specific workers on a given day. □ Ecology should either impose a less onerous definition of weekly, e.g., a calendar week like EPA's interpretation, or provide a mechanism for extensions or variances to the 7-day weekly inspection.

- Increased Number of Inspections to ensure Compliance - By requiring inspections to occur with no less than 7 days in between, if an inspection is conducted on a Tuesday of week 1, the second must be conducted on or before Tuesday of week 2. This means that if a TSD planned to conduct inspections on Thursday, but saw that weather impacts were likely and they moved their inspection up to say Tuesday, Eventually the TSD would have to conduct 2 inspections in a week to get back to a Thursday schedule. This could result in significantly more than 52 inspections in a year to avoid a non-compliant situation, with increased costs and employee exposure to radiation, and without providing added protection to human health or the environment (HH&E).

- Consistency with other regulations – At Hanford, the most significant risks are due to

radiological constituents. Nuclear safety regulations require weekly inspections be performed any time during the calendar week and allow for a 25 percent extension period which begins the first day of the following week (Technical Safety Requirement). This limits the timeframe between inspections to no more than 9 days if the 25% extension is needed. There is no added benefit to HH&E to inspect dangerous waste constituents more frequently than radioactive waste constituents.

- Additional inspections do not protect HH&E - These additional inspections provide no additional protection to HH&E and could result in the inspection team receiving increased radiation exposures despite the significant worker precautions exercised during all inspection activities.
- Additional inspections increase the cost of cleanup – As discussed previously it takes up to three specialized individuals to conduct waste container inspections at just the CWC and WRAP, i.e., one operating group. At the largest TSD OUG, inspection of all 10,000+ containers takes 3 full working days. Any funding spent on additional inspections reduces the funding available to accomplish cleanup which does protect human health and the environment. EPA provided guidance to the phrase "at least weekly in the Response to Comments Document on the Hazardous Waste Generator Improvements Final Rule, Docket # EPA-HQ-RCRA-2012-0121 stating that:

"The Agency believes the term "at least weekly" to mean "at least once each calendar week." Under this interpretation, while the calendar day an inspection could occur may change from week to week, one inspection would be required to occur within the calendar week as identified by the generator. Thus one generator could define their calendar week as Monday through Sunday while another generator could define their calendar week as Wednesday to Tuesday of the following week. Whatever the prescribed calendar week would dictate the days an inspection would be required to occur."

The EPA interpretation is reasonable at a large site like Hanford. The overall impact of Ecology's clarification of the term "weekly" would be the forced misuse taxpayer dollars performing activities that do not provide increased protection to HH&E. Those tax dollars should be directed at removing contaminants from the environment, an activity that would benefit HH&E. We understand that Ecology has the authority to be more restrictive than EPA, but those added restrictions should act to enhance protection of HH&E, not diminish it. Please explain how this onerous clarification is beneficial to the citizens of Washington in terms of human health and the environment. If Ecology persists on being more stringent than EPA's reasonable approach to weekly inspections, Ecology should define weekly as once each calendar week (or once each work week) with no less than 4 days and no more than 11 days between inspections. This ensures that a minimum number of inspections are performed, that they are spaced appropriately apart, yet provide the capability for the regulated community to adjust to unforeseen circumstances like last winter's weather.

Alternatively, Ecology should add provisions to allow a generator or permitted unit to request a variance from inspecting according to a rigid (i.e., exactly seven days) definition of weekly through demonstration that schedules allowing for some flexibility are protective based on waste type, storage conditions, inspection history, vicinity to the public and other relevant factors. Ecology should also provide for an extension to the weekly timeframe to allow more efficient calendar week inspections on a case-by-case basis for generators and owners/operators that only need flexibility periodically.

Suggested wording: "Weekly inspections" means an inspection conducted at least once per calendar week with no less than 4 and no more than 11 days between inspections unless the department has granted an extension or a variance to the weekly inspection period. Lastly, over the last 37 years since dangerous waste calendar week inspections have been implemented at Hanford, PRC cannot recall any specific instance where calendar week inspections were unable to identify and remedy container deterioration when the container was compatible with the stored waste.

Commenter: Harold Tilden - Comment O-1-6

5. WAC 173-303-040, definition of "Weekly inspection". Ecology proposes to add this definition requiring that such inspections be "conducted no more than seven consecutive calendar days from the last inspection". Ecology's proposed definition is drawn, in part, from a 1983 guidance document prepared by EPA that defines weekly inspections this way; Ecology has insisted that it must therefore define weekly inspections this way in order to be "consistent with the Federal program". However, EPA has more recently specifically addressed the timing of "at least weekly" in the Generator Improvements Rule Response to Comments document ("Hazardous Waste Generator Improvements Final Rule Response to Comments Document, Summaries and Responses, October 4, 2016, available at <https://www.regulations.gov/document?D=EPA-HQRCRA-2012-0121-0312>). In this document, EPA stated that "The Agency believes the term 'at least weekly' to mean 'at least once each calendar week.' Under this interpretation, while the calendar day an inspection could occur may change from week to week, one inspection would be required to occur within the calendar week as identified by the generator..." Ecology has not provided a reason why the flexibility to perform a weekly inspection once each calendar week should not be offered to the regulated public. The outcome is 52 weekly inspections per year, regardless of how the time period between inspections is calculated. Weekly inspections should be conducted once each calendar week, consistent with EPA's interpretation.

Commenter: Harold Tilden - Comment O-1-69 (duplicates comment above)

68. WAC 173-303-630(6). Ecology proposes to require that weekly inspections be "conducted no more than seven consecutive calendar days from the last inspection". Ecology's proposed requirement is drawn, in part, from a 1983 guidance document prepared by EPA that defines weekly inspections this way; Ecology has insisted that it must therefore define weekly inspections this way in order to be "consistent with the Federal program". However, EPA has more recently specifically addressed the timing of "at least weekly" in the Generator Improvements Rule Response to Comments document ("Hazardous Waste Generator Improvements Final Rule Response to Comments Document, Summaries and Responses, October 4, 2016, available at <https://www.regulations.gov/document?D=EPA-HQ-RCRA-2012-0121-0312>). In this document, EPA stated that "The Agency believes the term "at least weekly" to mean "at least once each calendar week." Under this interpretation, while the calendar day an inspection could occur may change from week to week, one inspection would be required to occur within the calendar week as identified by the generator..." Ecology has not provided a reason why the flexibility to perform a weekly inspection once each calendar week should not be offered to the regulated public. The outcome is 52 weekly inspections regardless of how the time period between inspections is calculated. Weekly inspections should be conducted once each calendar week, consistent with EPA's interpretation.

Commenter: Steven Shestak - Comment B-7-5

Definition of Weekly Inspections, draft section 173-303-040. The October 2017 draft would define weekly inspection as "no more than seven consecutive calendar days from the last inspection." This definition unnecessarily constrains scheduling of facility personnel who are assigned and trained to conduct these inspections. It also results in inspections moving forward in time repeatedly as the year progresses, due to holidays or absences. For example, if inspection of an area normally occurs on Monday, and Monday is a holiday, the generator would either need to conduct two inspections in the previous week or bring in labor on overtime during the Monday holiday. In a large aerospace manufacturing facility, as many as 90 weekly inspections may be required, so inspection scheduling is not a minor issue or an insignificant cost. As justification for the draft "seven consecutive calendar days from the last inspection," Department of Ecology staff cite an improbable worst case concern that a facility might inspect an area on a Monday, but not again until Sunday of the following week (13 days between inspections). Such a long time lag between inspections is more theoretical than real, since a weekend inspection is likely to require the employer to pay the inspecting employee overtime, a practice that the employer will not willingly repeat on a regular basis. Under a once per calendar week inspection scheme, an equally improbable occurrence would be an inspection on Friday and then again on the following Monday, leaving 3 days between inspections. Clearly, neither the 3 day nor the 13 day interval is likely to occur on a regular basis. Regardless, Ecology has no data to indicate that its no more than seven calendar days approach is any more protective, on average, than the once per calendar week approach, while the costs to generators in terms of decreased flexibility and increased labor costs are undeniable, and Ecology has no basis to conclude that its approach is the least burdensome alternative. If a definition of weekly inspection is needed, Boeing suggest the following language: "Weekly inspections" mean an inspection conducted at least once each calendar week.

Commenter: Anthony McKarns - Comment A-3-7

MSA Comment 1: The proposed definition creates a schedule burden. The EPA Response to Comments document for the Hazardous Waste Generator Improvements Rule (<https://www.regulations.gov/document?D=EPA-HQ-RCRA2012-0121-0312> states (page 275-276): The Agency believes the term "at least weekly" to mean "at least once each calendar week." Under this interpretation, while the calendar day an inspection could occur may change from week to week, one inspection would be required to occur within the calendar week as identified by the generator. Thus one generator could define their calendar week as Monday through Sunday while another generator could define their calendar week as Wednesday to Tuesday of the following week. Whatever the prescribed calendar week would dictate the days an inspection would be required to occur.

Under EPA's interpretation, the generator must initially define a 7-day inspection window. After defining the 7-day window, the generator must ensure an inspection takes place at some point during each subsequent 7-day interval. This approach provides multiple implementation advantages (i.e., EPA's approach favorable accommodates unanticipated worker absences, weather related work cancellations or delays, holidays, etc.) Under Ecology's proposed definition, generators would potentially be forced to conduct inspections more frequently than every 7th day. For example, if a worker had been routinely performing inspections each Wednesday, and then a holiday were to fall on a Wednesday, the employer would have to: Pay the employee

overtime to perform the inspection on Wednesday, or perform 3-4 inspections over a 14 day period to avoid an overtime scenario and allow future inspections to occur on Wednesdays, or conduct two inspections during the prior 7-day interval (e.g., Wednesday and then the following Tuesday) and then reschedule inspections to occur each Tuesday thereafter. A requirement to perform inspections every seven days could create jeopardy for the regulated community in situations where unforeseen circumstances (e.g., weather-related events) result in an inability to perform inspections on the scheduled day. Given the relatively slow rate of drum deterioration due to corrosion, inspections on a calendar week basis provide sufficient opportunity to identify and remedy container deterioration before a release occurs, particularly considering separate regulatory provisions requiring that containers be compatible with the dangerous waste to be stored. Is Ecology aware of specific instances where calendar week inspections were unable to identify and remedy container deterioration when the container was compatible with the stored waste?

Commenter: Anthony McKarns - Comment A-3-8

WRPS Comment 3: The draft definition would require that weekly inspections be conducted with no more than seven consecutive calendar days from the last inspection, as opposed to allowing for inspections on a calendar week basis. This is contrary to the interpretation provided by the EPA during their recent promulgation of the generator improvements rule (81 Federal Register 85732). In response to questions on the meaning of "at least weekly," EPA provided the following response: The Agency believes the term "at least weekly" to mean [sic] "at least once each calendar week." "Under this interpretation, while the calendar day an inspection could occur may change from week to week, one inspection would be required to occur within the calendar week as identified by the generator. Thus one generator could define the calendar week as Monday through Sunday while another generator could define their calendar week as Wednesday to Tuesday of the following week. Whatever the prescribed calendar week would dictate the days an inspection would be required to occur. [EPA's Hazardous Waste Generator Improvements Final Rule –Response to Comments Document – Summaries and Responses, October 4, 2016] Requiring inspections no more than seven calendar days apart could create jeopardy for generators in situations where the "scheduled" calendar day coincides with a holiday or when a facility is closed that day due to weather conditions. For example, if the inspection was routinely scheduled for every Wednesday, and a holiday occurred on that day (as the Independence Day holiday does in 2018), the generator would be faced with moving the inspection to an earlier day (e.g., Tuesday) from that point on (at least until a holiday occurs on a Tuesday), perform the inspection on the holiday, or miss the inspection date. Since Ecology's draft requirement is more stringent than that used by the EPA, Ecology bears the burden of showing that the more stringent requirement is necessary to protect human health and the environment. Given the relatively slow rate of drum deterioration due to corrosion, and considering the existing regulatory requirement that containers must be compatible with the dangerous waste stored (WAC 173-303-630(4)), inspections on a calendar week basis should be sufficient to identify and remedy container deterioration before a release occurs. Can Ecology identify any specific instances where calendar week inspections has proven to be inadequate when the container is compatible with the stored waste?

Commenter: Anthony McKarns - Comment A-3-9

WTP Comment 1: WTP is not in favor of this change. It is unclear if the definition of "weekly" only applies to the inspection of hazardous waste containers and not permitted equipment within the facility inspection plan per 173-303-320. If a facility inspection plan has a frequency of "weekly" must it meet this definition or can it be defined in the inspection plan? The inspection plan for WTP differentiates this frequency for what is being inspected, i.e. hazardous waste containers must be inspected every 7 calendar days, facility equipment must be inspected on a calendar week with the intent to be performed every 7 days. If this flexibility is not allowed for facility equipment, compliance will be difficult to maintain. To manage a changing frequency will become burdensome, create unnecessary confusion and increase the risk of non-compliance. WTP Comment 7: Recommend defining weekly to mean once in a calendar week. This will provide operating facilities flexibility in performing their inspections and prevent unnecessary processing shutdowns or delays in startup to conduct inspections.

Commenter: Scott Tomren - Comment A-2-4

173-303-040: Ecology has proposed to alter the definition of "Weekly inspection" to state that inspections must be "conducted no more than 7 consecutive calendar days from the last inspection." This alters previous application of the inspection requirement, and conflicts with current EPA guidance on this issue. The "Hazardous Waste Generator Improvements Final Rule, Response to Comments Document," Docket *EPA-HQ-RCRA-2012-0121, dated October 4, 2016 states (on pages 276-277) "The Agency believes the term 'at least weekly' to mean 'at least once each calendar week,' and 'the calendar day an inspection could occur may change from week to week.' Altering this requirement eliminates the flexibility allowed to generators, without providing an increase in inspection frequency or any apparent reduction in risk. The existing regulation should remain in effect.

Commenter: Joe Price - Comment O-4-3

Item #2:

In reference to proposed change 173-303-040, definition of "Weekly Inspection". The current lab management regulations require a weekly inspection of the waste Centralized Accumulation Area (CAA). A stringent requirement of a 7-day separation has minimal benefit or enhancement of safety while creating only marginal reduction in risk for the management of waste classified as dangerous. This would create undue burden on institutions with limited staff dedicated to dangerous waste management. Should a singular individual be sick or tasked with other duties other than the weekly inspection there exists no flexibility other than a singular day within the 7-day window. The requirement of a weekly inspection should be allowed to remain as is in the current regulations.

Comments on LQG consolidate SQG DW

Commenter: Anthony McKarns - Comment A-3-15

173-303-171(1)(e)(ix) Conditions for exemption for a small quantity generator. The rule change allows the SQG to transfer waste to an offsite LQG, under the control of the same person.

MSA Comment 3: Clarity on if/how this practice would be addressed in the Annual Dangerous Waste Report is desired. If new annual reporting approaches are needed, then consideration for a phase-in period is requested. At large facilities, databases are typically used to support waste management and reporting. Time may be needed to develop and implement software changes.

Commenter: Anthony McKarns - Comment A-3-24

173-303-200(15) Conditions for exemption for a large quantity generator that accumulates dangerous waste. The proposed rule change allows LQGs to receive dangerous waste from an offsite SQG under the control of the same person without a storage permit or interim status and without complying with the final facility standards of WAC 173-303-600. MSA Comment 6: Would this practice require the LQG to report "waste received" on the WR form in the annual dangerous waste report?

Comments on designation of unknowns

Commenter: Jesse McCullough - Comment I-2-1

Regarding the addition to WAC 173-303-070 of "[person] who discovers an unknown material" as an entity that is required complete designation: The area within which this requirement would apply to an entity is unclear. As is, it appears this could apply to a person who finds an unknown material on an adjacent public right-of-way, at an adjacent property, or anywhere otherwise not under the control of the person. It should be clarified with "who discovers an unknown material within or on property under their control" or similar language.

Commenter: Paul Martin - Comment B-6-12

173-303-070(1)(b) 173-303-070(3)(a). CHPRC is not in favor of this proposed change of adding the phrase, any person "...who discovers an unknown material", because not all unknown materials are to be discarded or abandoned as solid wastes. If an unknown material is discovered, it may only be unknown material to the initial discoverer and subsequent research and evaluation may determine that the material is a known useable product. Assuming that any discovered unknown material is a solid waste is counter to one of the corner stones of the Resource Conservation and Recovery Act (RCRA) which is to use materials for their intended purpose and not discard useful products as wastes. Furthermore, if an unknown material is to be discarded, it becomes a solid waste and the wording in 173-303-070(1)(b) and (3)(a) already addresses waste designation, so specifying "unknown material" that is determined to be a solid waste, is redundant. Also, Ecology's regulatory authority does not include regulation of product materials. Unknown materials will be evaluated and if product, will be used, and if waste, will be subject to WAC 173-303. CHPRC also disagrees with proposed language assigning dangerous waste determination responsibility to any person that discovers an unknown material. It is also inappropriate to expand WAC 173-303-040(5) and (5) to include "any person" except when that "person" is the generator of the waste. The requirement to perform a dangerous waste determination is based on generation, which is the act or process that produces dangerous waste or the act that first causes a dangerous waste to become subject to regulation. Discovery by an entity other than the generator (as defined by WAC 173-303-040) should not trigger any requirements, especially not those intended for persons engaged in waste generation. A requirement that assigns designation to "any person" who discovers an unknown material, yet

has no responsibility for its existence, is inappropriate. Even CERCLA, which is a remedial program, does not indiscriminately assign liability to a discoverer, but limits responsibility based on the nexus to the material's existence. It appears that the regulation is written to require the discoverer to perform a dangerous waste determination without technically calling such person a generator much less a person qualified to perform waste designations. Is the intent of these provisions to make a discoverer the generator of a dangerous waste based solely upon the act of discovery? CHPRC recommends deletion of the phrase "...or who discovers an unknown material" to align with the Resource Conservation and Recovery Act and 40 CFR 261.

Commenter: Harold Tilden - Comment O-1-7

6. WAC 173-303-070(1)(b). Ecology proposes to require any person "who discovers an unknown material" to "make an accurate determination if that ... unknown material is a dangerous waste". WAC 173-303-070(3)(a) goes on to propose that this person "must begin immediately" to designate such waste. The approach to, handling of, and designation of unknown material is a safety hazard to personnel and should be done only after careful evaluation and risk assessment. Further, unknown materials are overwhelmingly likely to require sampling and analysis in order to designate them, which takes time and effort to complete. Consider revising the wording of these two requirements to allow for evaluation of unknown materials prior to beginning the designation process.

Commenter: Aurana Lewis - Comment O-5-2

General Comment: Ecology's unprecedented change to make designation procedures apply to "any person... who discovers an unknown material" is unfairly vague and could be counterproductive for public spaces and rights of way. It could encourage persons to abandon products or substances in public areas, or not clean them up, and then expose other members of the general public, any land owner, or public entities, like Seattle City Light, to the regulatory claim that they "discovered" and therefore must manage these materials as dangerous wastes under complex and stringent law and risk of penalty. It is unclear what constitutes "discovery" under the proposal, or how or if it is related to the point of generation or the generation of waste; there seems to be no relation. City Light recommends the quoted section and all similar sections of the regulation be deleted. Examples for "unknown material": Ecology draft WAC 173-303-070(1)(b) and -070(3).

Commenter: Romy Freier-Coppinger - Comment O-3-2

173-303-070(1)(b) and 070(3) "Any person who generates a solid waste or discovers an unknown material must make a determination if that waste or unknown material is a dangerous waste in order to ensure wastes are properly managed according to applicable dangerous waste regulations." General Comment:

The phrase "or discovers an unknown material" makes the rule vague and overly broad. Furthermore, this addition is not required by RCRA and should be deleted from all parts of the draft.

Specific Comment:

-The term "any person" is vague. This implies that any member of the general public, passerby or property owner would be responsible for illegally dumped waste.

-The term "discover" is not defined. For example, the requirements for "discovers unknown materials" does not appear to be limited to properties within the person's jurisdiction.

-The term "unknown material" is not defined. As written, this requirement is not limited to solid waste, but appears to imply all unknown materials are wastes.

General Comment: 173-303-070 as it relates to the phrase "any person Who discovers an unknown material".

-Clarify the intent of the addition of "discovers an unknown material". If the intent of this comment is to transfer regulatory responsibility from the generator to discoverer, it may have the unintended effect of encouraging illegal dumping. Furthermore, it unfairly increases the potential liability of the discoverer (likely a representative of the property owner) and might provide an avenue for Ecology to penalize municipalities acting in good faith to protect the public.

-170-303-070(3)(c) "When available knowledge is inadequate or absent to make an accurate designation, the generator must test the waste according to the methods, or approved equivalent method set forth in WAC 173-303-110." Because it is likely that a person discovering "unknown material" will possess inadequate knowledge to make an accurate designation, the revision places significant cost and liability on municipalities and other government agencies, particularly Seattle Parks and Recreation with significant land holdings accessible to the public.

Commenter: Steven Shestag - Comment B-7-17

Persons Who Discover Unknown Materials, draft section 173-303-070(1) While "person" is defined broadly in the definition section to include entities other than natural persons (such as companies, government agencies, etc.), the wording of draft section suggests that the individual person who discovers an unknown material must also be the one to determine whether the material is a dangerous waste: "Any person who generates a solid waste or [emphasis added] discovers an unknown material must make an accurate determination if that waste or unknown material is a dangerous waste. In any organization (company or government entity), the [individual person who discovers an unknown material is unlikely to be qualified to determine whether it is a dangerous waste. Rather, organizational procedures or chain of command typically direct the discoverer to notify a supervisor or an environmental contact, who will engage a person who is qualified to make dangerous waste determinations. In small organizations, that person may be a consultant rather than an employee of the entity, so careful drafting is needed to avoid confusion. Also, the applicability language at the beginning of section 070 includes not only those who generate a solid waste but anyone who discovers an unknown material, regardless of its location. As drafted, if a person discovers an unknown material anywhere in the state (not necessarily at a generator site) then he or she would be subject to the requirement to determine dangerous waste status. For unknown materials discovered at a location other than a generator site, the average passerby would have no knowledge of Washington's dangerous waste classification rules. Ideally, that person would contact the Department of Ecology or local authority, rather than attempting to determine its dangerous waste status. To prevent this unintended reading of the rule, some limitation on the location of discovery is needed. Boeing suggests the following clarifying language: "Any person who generates a solid waste or discovers an unknown material at a location that is under the control of that individual or entity must either make an accurate determination if that waste or unknown material is a dangerous waste, or promptly notify the Department of Ecology, the local fire department, or another person who is qualified to make this determination."

Conditions for Exemption vs. Independent Requirements, draft section 173-303-170(1) This federal "clarification" is in litigation, due to its potential to convert minor generator violations into an enforcement action for failure to obtain a RCRA TSD permit, and meet the numerous

requirements placed on a TSO, but not on generators. The ACC v. EPA litigation is presently in the D.C. Circuit Court of Appeals, where motions have been filed, but the court has not yet ruled. While EPA states in the preamble that enforcement discretion lies with authorized states, if state rules incorporate the federal language as is, it opens generators to the risk of party suits or federal overfilling based on the state rule language. Based on Ecology's rulemaking schedule, the D.C. Circuit should rule on this matter prior to finalization of the Washington rule. The present draft Washington language should be considered a placeholder, subject to revision consistent with the court's opinion.

Commenter: Anthony McKarns - Comment A-3-12

173-303-070(1)(b) Designation of dangerous waste. The proposed rule change states: "Any person who generates a solid waste or discovers an unknown material must make an accurate determination if that waste or unknown material is a dangerous waste in order to ensure wastes are properly managed according to applicable dangerous waste regulations."

MSA Comment 2: The rule change should include clarification allowing the individual who discovers unknown material to contact trained waste designation personnel. This clarity is needed because individual(s) who discover unknown material may not have the training to designate waste. Allowing clarity to allow for multiple individuals to be involved seems to be consistent with the definition of "person." Does Ecology support using the guidelines in Ecology's Technical Information Memorandum (TIM 82-5, dated January, 2000)?

WRPS Comment 4: The draft revision requires "any person . . . who discovers an unknown material" to perform a dangerous waste determination, using the procedures specified in WAC 173-303-070. Does this mean that if an individual discovers an unknown material when she/he is taking a walk, that person must perform a dangerous waste determination for that material, even though the person is not the generator (and the waste may not even be on her/his property)? If Ecology personnel discover an unknown material during an inspection, do they become the "person" responsible for making the dangerous waste determination? Please clarify the intent of this requirement, and consider situations such as an unknown material found illegally dumped or abandoned on property owned by a person who did not generate the material.

WTP Comment 2: WTP suggests removing the requirement for a person who discovers an unknown material to make an accurate waste determination. A person (who may or may not be employed by the company who manages the land) cannot be expected to provide a waste determination on material discovered at the site since they most likely would not have the necessary training. The only thing an individual who discovers an unknown material can do is notify the facility owner/operator or management so the material can be evaluated.

Commenter: Myron Eng - Comment B-9-2

Waste Determinations – Walmart is opposed to the additional language proposing a clarification that any person who discovers an unknown material is also responsible for accurately designating that waste. It is important in developing this proposal that any solution must be applicable to, and implementable by, all kinds of retail businesses, both large and small. Retail businesses literally have no capability of making immediate dangerous waste determinations. Retailers do not have onsite laboratories or analytical instruments to determine hazard

characteristics. Therefore, outside services are required to assist the retailer in making waste determinations. Determining the hazard characteristics of an unknown waste requires time that is not provided for in the regulation as currently drafted. We believe the additional wording is not necessary to protect human health or the environment. The current programs in place at Walmart stores are protective of human health and the environment by ensuring that potential dangerous waste is appropriately managed until characterized before shipment for disposal.

Comments on conditions for exemption

Commenter: Paul Martin - Comment B-6-3

173-303-040 Accumulation "Accumulation" refers to the definition of "storage." In Ecology's Draft Amendments Summary, there is indication that EPA generation clarifications don't "change how the generator regulatory scheme and enforcement policy has operated over the last 30 years." However, CHPRC is concerned that this definition of accumulation as storage would eliminate the distinction between generator and TSD owner/operator management of waste.

Commenter: Paul Martin - Comment B-6-7

173-303-170(1)(a) Requirements for generators of hazardous waste "Condition for exemption" means any requirement in WAC 173-303-171 through 173-303-174, 173-303-200 through 173-303-201, 173-303-235 and also in WAC 173-303-160(2)(b) in reference to farmers, that states an event, action, or standard that must occur or be met in order to obtain an exemption from any applicable requirement in WAC 173-303-400, 173-303-600, 173-303-800 and from any requirement for notification under WAC 173-303-060.

CHPRC is concerned that the proposed change of the definition for "condition for exemption" implies that if any generator condition for an exemption from any interim status or final status requirements is not met, then the generator loses the conditional exemption and is subject to all interim status or final status permit requirements and in violation if those permit requirements are not being met. Based upon the description of "Conditions for exemption" in lieu of "Independent requirements" in Ecology's draft amendments summary, if a generator exceeds the <90-day accumulation time limit, they will be in violation of dozens of permit or interim status requirements since the generator is no longer conditionally exempt from having a final status permit or interim status. Is this how Ecology intends to enforce this provision? This does not appear consistent with how the generator regulatory scheme and enforcement policy has operated over the last 30 years.

Like the comments above state, this wording implies that if any satellite accumulation area (SAA) condition for an exemption from any interim status or final status requirements is not met, then the generator loses the conditional exemption and is subject to all interim status or final status permit requirements. If a generator exceeds the SAA volume limit, will the generator be in violation of just that particular SAA regulation or will the generator also be in violation of dozens of permit violations since the generator is no longer conditionally exempt from having a final status permit or interim status? If this is how Ecology intends to enforce this provision, it does not appear consistent with how the generator regulatory scheme and enforcement policy has operated over the last 30 years.

Commenter: Paul Martin - Comment B-6-10

173-303-040 Definitions "Accumulation" refers to the definition of "storage." "Storage" means the holding of dangerous waste for a temporary period. Accumulation" of dangerous waste, by the generator on the site of generation, is storage of dangerous waste and can be managed under the applicable conditions for exemption of WAC 173-303- 170(2)(b).

HPRC requests clarification that defining accumulation as storage will not affect generator onsite treatment in tanks, containers or containment buildings. EPA clarified in the March 24, 1986, Federal Register that "accumulation" allowed not only storage, but also treatment without a permit assuming the generator standards of 40 CFR 262.34 were being met. By defining accumulation as storage, CHPRC hopes that Ecology is not impacting treatment by generator. Excerpt from March 24, 1986 Federal Register, page 10168. "Of course, no permitting would be required if a generator chooses to treat their hazardous waste in the generator's accumulation tanks or containers in conformance with the requirements of § 262.34 and Subparts J or I of Part 265. Nothing in § 262.34 precludes a generator from treating waste when it is in an accumulation tank or container covered by that provision. Under the existing Subtitle C system. EPA has established standards for tanks and containers which apply to both the storage and treatment of hazardous waste. These requirements are designed to ensure that the integrity of the tank or container is not breached. Thus. The same standards apply to a tank or a container, regardless of whether treatment or storage is occurring. Since the same standards apply to treatment in tanks as applies to storage in tanks, and since EPA allows for limited on-site storage without the need for a permit or interim status (90 days for over 1000 kg/mo generators and 180/270 days for 100-1000 kg/mo generators), the Agency believes that treatment in accumulation tanks or containers is permissible under the existing rules, provided the tanks or containers are operated strictly in compliance with all applicable standards. Therefore, generators or 100-1000 kg/mo are not required to obtain interim status and a RCRA permit if the only on-site management which they perform is treatment-in an accumulation tank or container that is exempt from permitting during periods or accumulation (180 or 270 days)."

Commenter: Harold Tilden - Comment O-1-58

57. WAC 173-303-400(2)(c)(vi). Ecology proposes to apply the accumulation standards for large quantity generators or medium quantity generators to generators adding absorbents to waste at the time the waste is first placed into a new container. This is not entirely consistent with the GIR, which allows compliance with the "applicable conditions for exemption" for satellite accumulation and very small quantity generator requirements as well as those for medium and large quantity generators. There is no apparent reason why Ecology should impose the entire suite of medium or large quantity generator requirements on addition of sorbents during satellite accumulation or on small quantity generators. Consider revising this section to be more consistent with the GIR, e.g. "...and the generator complies with the applicable conditions for exemption in WAC 173-303-171, 173-303-172, 173-303-173, 173-303-174, 173-303-200 through -201, or 173-303-235, and with 173-303-395(1)(a) and (b)."

Commenter: Harold Tilden - Comment O-1-59

58. WAC 173-303-400(2)(c)(vii). Ecology proposes to apply the accumulation standards for large quantity generators or medium quantity generators to generators compacting or sorting

waste in containers. This is not entirely consistent with the GIR, which allows compliance with the "applicable conditions for exemption" for satellite accumulation and small quantity generator requirements as well as those for medium and large quantity generators. There is no apparent reason why Ecology should impose the entire suite of medium or large quantity generator requirements on compaction or sorting during satellite accumulation or on very small quantity generators. Consider revising this section to be more consistent with the GIR, e.g. "...and the generator complies with the applicable conditions for exemption in WAC 173-303-171, 173-303-172, 173-303-173, 173-303-174, 173-303-200 through -201, or 173-303-235, and with 173-303-395(1)(a) and (b)."

Commenter: Harold Tilden - Comment O-1-60

59. WAC 173-303-600(3)(d). Ecology proposes to list meeting the conditions for exemption for small quantity, medium quantity, satellite, and large quantity accumulation as exempt from the need to acquire a final status permit, which is appropriate. However, Ecology uses the word "and" in this list, then attempts to clarify using the term "respectively". This is not adequately clear as to what conditions must be met to be exempt. Consider using the term "or" as is used in the GIR, e.g., "A generator accumulating waste on site in compliance with WAC 173-303-171, 173-303-172, 173-303-174, or 173-303-200 through 173-303-201, as appropriate."

Commenter: Harold Tilden - Comment O-1-61

60. WAC 173-303-600(3)(k). Ecology proposes to apply the accumulation standards for large quantity generators or medium quantity generators to generators adding absorbents to waste at the time the waste is first placed into a new container. This is not entirely consistent with the GIR, which allows compliance with the "applicable conditions for exemption" for satellite accumulation and very small quantity generator requirements as well as those for medium and large quantity generators. There is no apparent reason why Ecology should impose the entire suite of medium or large quantity generator requirements on addition of sorbents during satellite accumulation or on small quantity generators. Consider revising this section to be more consistent with the GIR, e.g. "...and the generator complies with the applicable conditions for exemption in WAC 173-303-171, 173-303-172, 173-303-173, 173-303-174, 173-303-200 through-201, or 173-303-235, and with 173-303-395(1)(a) and (b)."

Commenter: Harold Tilden - Comment O-1-62

61. WAC 173-303-600(3)(l). Ecology proposes to apply the accumulation standards for large quantity generators or medium quantity generators to generators compacting or sorting waste in containers. This is not entirely consistent with the GIR, which allows compliance with the "applicable conditions for exemption" for satellite accumulation and small quantity generator requirements as well as those for medium and large quantity generators. There is no apparent reason why Ecology should impose the entire suite of medium or large quantity generator requirements on compaction or sorting during satellite accumulation or on very small quantity generators. Consider revising this section to be more consistent with the GIR, e.g. "...and the generator complies with the applicable conditions for exemption in WAC 173-303-171, 173-303-172, 173-303-173, 173-303-174, 173-303-200 through -201, or 173-303-235, and with 173-303-395(1)(a) and (b)."

Commenter: Anthony McKarns - Comment A-3-14

173-303-170(1)(a) Requirements for generators of hazardous waste. "Condition for exemption" means any requirement in WAC 173-303-171 through 173-303-174, 173-303-200 through 173-303-201, 173-303-235 and also in WAC 173-303-160(2)(b) in reference to farmers, that states an event, action, or standard that must occur or be met in order to obtain an exemption from any applicable requirement in WAC 173-303-400, 173-303-600, 173-303-800 and from any requirement for notification under WAC 173-303-060. CHPRC Comment 6: CHPRC is not in favor of this proposed change because the proposed definition of "condition for exemption" implies that if any generator condition for an exemption from any interim status or final status requirements is not met, then the generator loses the conditional exemption and is subject to all interim status or final status permit requirements and in violation if those permit requirements are not being met. If a generator exceeds the 90-day accumulation time limit, will the generator be in violation of just that particular generator regulation or will the generator also be in violation of dozens of permit or interim status violations since the generator is no longer conditionally exempt from having a final status permit or interim status?

Commenter: Anthony McKarns - Comment A-3-22

173-303-174(1) "A generator may accumulate waste without a permit, or without complying with WAC 173-303-400, 173-303-600, 173-303-800 and 173-303-692, provided that all the conditions for exemption in this section are met." CHPRC Comment 7: CHPRC is not in favor of this proposed change because, like the comments above state, this wording implies that if any satellite accumulation area (SAA) condition for an exemption from any interim status or final status requirements is not met, then the generator loses the conditional exemption and is subject to all interim status or final status permit requirements. If a generator exceeds the SAA volume limit, will the generator be in violation of just that particular SAA regulation or will the generator also be in violation of dozens of permit violations since the generator is no longer conditionally exempt from having a final status permit or interim status?

Commenter: Anthony McKarns - Comment A-3-2

173-303-040. Accumulation ... "refers to... "Accumulation" refers to the definition of "storage"

CHPRC Comment 2: CHPRC is not in favor of this proposed change because the definition is not clear and understandable. Why has Ecology reversed their position from "accumulation is not storage" to "accumulation is storage?" What is the purpose of changing this longstanding language? This definition would eliminate the distinction between generator and TSD owner/operator management of waste.

WTP Comment 6: The intent of the Generator Improvement Rule (GIR) is to make the rules more user-friendly and improve compliance. This proposed change only adds confusion since the inception of RCRA accumulation was a generators term, while storage was a permitted facility term, meaning if you want to "store" waste you need a permit. Accumulation is duration in time depending on your generator status. If the intent is to add additional requirements to generators, recommend listing the specific WAC citations for generators.

Commenter: Scott Tomren - Comment A-2-2

173-303-040: Ecology has proposed to alter the definition of "Accumulation," equating it to "storage" meeting certain conditions. This completely reverses the definition of "accumulation," which previously specified that it was "not storage." Equating these definitions, while continuing to refer in Other places to storage requiring a permit, and while using terminology referring to the activities as separate, is likely to create confusion. The definition of "accumulation" should remain unchanged.

Comments on LQG CAA closure

Commenter: Jesse McCullough - Comment B-1-1

Proposed changes at WAC 173-303-200(12)(c)(iv) would require LQG locations that cannot practicably remove or decontaminate some dangerous waste residual upon closure (e.g., leaks that impacted soil beneath a building slab that won't be demolished) to operate as if they were a landfill under WAC 173-303-665. The Washington MTCA rule already covers this scenario and an established industry of consultants/contractors and process of regulatory review is in place that could handle these situations more effectively.

The landfill requirements include, among other things, potentially installation of liners, run-on control systems, run-off management systems, wind dispersal control, and weekly inspections. In most situations I can foresee where a LQG cannot remove all residual contaminants, these landfill issues are not going to be relevant. Additionally, the practical and legal issues these requirements would present to the multitude of LQG facilities that operate in leased facilities where they would not be present, nor have access to, after closure are significant. Attempting to apply landfill regulations to what is currently a MTCA scenario does not appear to add value and does appear to increase confusion.

The proposed language should be changed to say that remaining contamination after closure of an LQG facility should be managed as a release per MTCA, not as a landfill.

Commenter: Harold Tilden - Comment O-1-49 Kaia and Jared will respond

48. WAC 173-303-200(12)(c)(ii)(A): Ecology's proposed rule setting the standards to be met for closure of a CAA quotes WAC 173-303-610(2)(b)(i), specifying that "primarily, these will be...calculated according to MTCA Method B, although MTCA Method A may be used as appropriate..." While this is reflective of the existing rule, it is still inappropriate for Ecology to suggest that unrestricted use standards (Method A and Method B) should be used to close individual CAAs in an industrial operation, which may (due to historic use, surrounding land uses, and/or zoning restrictions) be properly closed according to the Method C (industrial) standards. Consider removing the reference to Methods A and B.

Commenter: Harold Tilden - Comment O-1-50 Kaia and Jared will respond

49. WAC 173-303-200(12)(c)(ii)(B): Ecology proposes to set closure standards for structures, equipment, bases, liners, etc. "on a case-by-case basis..." The closure of CAAs, unlike the closure of TSD facilities from which this reference is drawn, is likely to be much more frequent

and will create a burden for both Ecology and the regulated community. In Ecology's case, it will need to review the conditions at each CAA being closed. For the regulated community, the closure of the CAA will be delayed by Ecology's site-specific standard-setting activity. Consider referencing the "clean debris" standards of 40 CFR 268.45, incorporated by reference at WAC 173-303-140(2) and utilized in Ecology's existing Clean Closure Guidance, as a standard to be followed not requiring Ecology case-by-case approval.

Commenter: Steven Shestag - Comment B-7-9 Rob will respond

Closure Records and Notifications for LOG Central Accumulation Areas, draft section 173-303-200(12) The draft Washington proposal appears to follow the federal generator improvements rule closely with regards to recording closures of individual central accumulation areas and agency notification for closures of entire facilities. However, we envision a significant new burden of documentation in maintaining an operating record" that captures the many accumulation area "closures" that are triggered by temporary construction or demolition, non-routine developmental manufacturing, assembly line rearrangements, and other dislocations that are a weekly occurrence in Boeing operations, We have no rule changes to suggest, but would be interested in exploring with Department of Ecology staff how to reasonably meet this record requirement.

Commenter: Steven Shestag - Comment B-7-15 Kaia and Jared to respond

Performance Standards for Closure of Waste Accumulation Units, draft section 173-303- The draft closure performance standards for waste accumulation units is similar to the federal requirements, with one significant difference. The Washington draft requires cleanup levels for soils, groundwater, surface water, and air based on "unrestricted use" exposure assumptions according to the Model Toxics Control Act regulations. While this degree of cleanup is desirable, it may not be achievable at some sites. We suggest that this possibility be accounted for in the rule, perhaps by defaulting to a case-by-case agency determination if MTCA unrestricted use cannot be achieved, especially if the generator is able to effectively restrict future uses.

Comments on point of generation

Commenter: Lower Columbia College Skreen - Comment B-3-1

173-303-040: We are concerned that by changing the definition of the "point of generation" to include time, our science labs that consistently produce very small quantities during analyses will need to dispose more frequently than is ideal from a resource and safety perspective. Every time we relocate waste from the point of generation to our central storage space we risk accidental release. By increasing the frequency of trips, we also put our employees at an increased risk of exposure.

Commenter: Paul Martin - Comment B-6-6

173-303-040: Point of generation. "including both time and place". Is the intent of this definition to track and document the time of day according to a clock that a waste was generated? If not, please make clear that the purpose of the point of generation concept is to perform the dangerous waste determination on a waste based on its properties and/or pedigree at the location in a

process where it first becomes a material that no longer serves an intended purpose. Please also make clear that the requirement to physically perform the dangerous waste determination is not literally based on a "point in time".

Commenter: Harold Tilden - Comment O-1-5

4. WAC 173-303-040, definition of "Point of generation". Ecology proposes to add this definition and include the specific wording "including both time and place". A waste stream may normally vary in composition as it is generated, even in ways that render it non-dangerous part of the time. Examples would include laboratory analysis using a particular instrument where the instrument drains into a satellite accumulation container. The implication of this definition, as applied through proposed WAC 173-303-070(3)(a), is that a generator would have to designate wastes being continually accumulated in a satellite accumulation area (or CAA) to account for this variability. This would be impractical and imprecise at best. We recommend that the definition be limited to the "place" of generation, as was adopted under the Generator Improvements Rule.

Commenter: Harold Tilden - Comment O-1-8

7. WAC 173-303-070(3)(a). Ecology proposes to require that the "dangerous waste designation for each solid waste must begin immediately at the point of waste generation..." This requirement, as noted under our comment on the definition of "point of generation", does not account for a waste stream that normally varies in composition as it is generated, even in ways that render it non-dangerous part of the time. Examples would include laboratory analysis using a particular instrument where the instrument drains into a satellite accumulation container. The implication of this definition is that a generator would have to designate wastes being continually accumulated in a satellite accumulation area (or CAA) to account for this variability. This would be impractical and imprecise at best. We recommend that the requirement be limited to the "place" of generation, as was adopted under the Generator Improvements Rule

Commenter: Anthony McKarns - Comment A-3-13

173-303-070(3)(a) Designation Procedures. "The dangerous waste designation for each solid waste must begin immediately at the point of waste generation or upon the discovery of an unknown material. This must be done before any dilution, mixing, or other alteration of the waste occurs..." WRPS Comment 5: The draft revision requires designation be done "before any dilution, mixing, or alteration of the waste occurs." How does this apply in an emergency situation, where perhaps enough information is known to compel an emergency action resulting in alteration of the waste, but before a complete designation can be performed? Would the emergency action be precluded? Language should be added to the text to clarify necessary dilution or alteration occurring in an emergency situation.

Commenter: Myron Eng - Comment B-9-3

Point of generation – During a webinar by WA, it was mentioned that the expectation will be to identify, label and characterize unknown waste as it is found including identifying the appropriate waste code. Retailers do not have the ability to identify unknowns immediately. Retailers do not have onsite laboratories or analytical instruments to analyze an unknown to determine hazard characteristics. Therefore, outside services are required to assist the retailer in

making waste determinations and determining the hazard characteristics of the unknown waste and this requires time. We believe this expectation is unrealistic and is largely unnecessary to protect human health and the environment.

Commenter: Scott Tomren - Comment A-2-3

173-303-040: Ecology has proposed to create a definition of "Point of Generation" which includes "both time and place." In an academic laboratory setting, it is common to operate analytical equipment which drains its waste to a satellite accumulation container. This waste stream may vary somewhat in composition, based on the specific analysis being conducted. This definition implies a need to continually designate the waste stream on a batch basis during operation of the equipment. Such wastes are typically produced in small volumes, so continual designation is impractical. This definition should be altered to allow for the one-time designation of compatible waste accumulated in a single location.

Commenter: Joe Price - Comment O-4-2

Item #1: In reference to proposed change 173-303-040, definition of "Point of Generation". WSU Vancouver (WSUV) is a four-year research facility. Research occurs daily and throughout the year and entails a large variety of instrumentation and a variety of what is classified as Dangerous Waste. The requirement that waste generation will be revised to both "time and place" places an undue and unnecessary requirement on any research facility. Currently, satellite accumulation areas have proven to meet existing requirements. The additional requirement of "time and date" on each container may create undue burden with little benefit or enhancement of the satellite accumulation areas. This additional burden will decrease the availability of Environmental Health and Safety personnel to other tasks of greater benefit.

Comments on authorized representative

Commenter: Paul Martin - Comment B-6-9

173-303-040 Definitions "Authorized representative" means the person responsible for the overall operation of a generator site, facility, or an operational unit (e.g., plant manager or superintendent).

CHPRC is not in favor of this proposed change because it appears to limit the delegation of authority of the authorized representative, and is therefore either less clear than the 40 CFR 261.10 equivalent wording or problematic for the regulated community. 40 CFR 261.10 defines an "Authorized representative" as "the person responsible for the overall operation of a facility or an operational unit (i.e., part of a facility), e.g., the plant manager, superintendent or person of equivalent responsibility." The suggested definition in 173-303-040 does not include the phrase "or person of equivalent responsibility" which appears to limit the delegation authority of the authorized representative to appoint an equivalently responsible person to act as an alternate authorized representative. CHPRC would support the authorized representative definition if it included the phrase, "or person of equivalent responsibility".

Commenter: Aurana Lewis - Comment O-5-3

General Comment: The newly added definition for "Authorized Representative" as taken from the updated federal regulations (but without the "person of equivalent responsibility" text) appears to limit the reporting and notification requirements solely to high level operations manager at individual facilities. For large operations that have internal environmental personnel, it is unclear whether trained environmental professionals can complete the reporting requirements for sites where they manage the waste. It is recommended that Ecology clarify what internal personnel they expect to represent the company and, if higher level personnel are the representative, the process for delegating their authority to other internal employees.

Commenter: Romy Freier-Coppinger - Comment O-3-3

General Comment "authorized representative" definition. The proposed definition of "authorized representative" is too restrictive to be practical at non-industrial sites. The draft regulation defines "authorized representative" as "the person responsible for the overall operation of a generator site, facility, or operational unit (e.g., plant manager or superintendent)." At a municipal agency, the superintendent may not have technical background in hazardous water compliance. Please explain how Ecology intends to change the "authorized representative" to affect typical responsibilities under the rules.

Commenter: Myron Eng - Comment B-9-1

Authorized representative. The current definition in 40 CFR Part 260.10 defines authorized representative as the person responsible for the overall operation of a facility or an operational unit (i.e., part of a facility), e.g., the plant manager, superintendent or person of equivalent responsibility. The revised definition for authorized representative removes "person of equivalent responsibility." Walmart is opposed to this deletion and believes it will cause an unnecessary burden on all retailers in the state of WA by limiting who can be an authorized representative for a facility. It is important in developing this proposal that any solution must be applicable to, and implementable by, all kinds of retail businesses, both large and small. According to the National Retail Federation, over 95% of retailers in the U.S. are single store operators.⁵ Many small retail businesses literally have no capability of making dangerous waste determinations for all of the consumer products they sell, manage, and occasionally discard and will not have an associate at the store with the knowledge or experience to interpret these complicated regulations. We believe the definition provided in RCRA is adequate and should be adopted without revision. In the alternative, Walmart suggests including language that would permit a subject matter expert from a retailer's headquarters to act as the authorized representative because of how subject matter experts are often centralized. Another alternative to the proposed authorized representative amendment could include, as part of the definition, a subject matter expert based in the State of Washington with responsibility for compliance throughout the state.

Comments on PCB exclusion

Commenter: Mack Malloch - Comment B-4-1

WAC 173-303-071 Excluded categories of waste
(k) Polychlorinated biphenyl (PCB) wastes:

(i) PCB wastes containing dielectric fluid and electric equipment containing such fluid whose disposal is regulated by EPA under 40 C.F.R. 761.60 (Toxic Substances Control Act) and that are dangerous either because:

(A) They fail the test for toxicity characteristic (WAC 173-303-090(8), Dangerous waste codes D018 through D043 only); or

(B) Because they are designated only by this chapter and not designated by 40 C.F.R. Part 261, are exempt from regulation under this chapter except for WAC 173-303-505 through 173-303-525, 173-303-960, those sections specified in subsection (3) of this section, and 40 C.F.R. Part 266;

(ii) Wastes that would be designated as dangerous waste under this chapter solely because they are listed as WPCB under WAC 173-303-9904 when such wastes are stored and disposed in a manner equivalent to the requirements of 40 C.F.R. Part 761 Subpart D for PCB concentrations of 50 ppm or greater.

This change makes this exclusion consistent with 40-CFR 261.8. As discussed on our phone call, there are TSCA regulated PCB waste that are not dielectric fluid or electric equipment containing such fluid that would be state only dangerous waste. For example, a waste containing 100 mg/kg PCBs that is not a hazardous under the federal rule would be regulated under TSCA (PCBs greater than 50 mg/kg) and would also be a WP02 waste under criteria. Is it Ecology's intent to regulate state only dangerous waste that are also regulated under TSCA? We are concern that in changing the regulation that Ecology may have unintentionally caused this waste to be double regulated. Examples of this type of TSCA waste are building materials like caulk and paint and hydraulic fluid.

Commenter: Harold Tilden - Comment O-1-12

11. WAC 173-303-071(3)(k)(i). Ecology proposes to narrow the exemption for PCB-containing wastes to those that contain "dielectric fluid and electric equipment containing such fluid". It isn't clear why Ecology proposes to subject most PCB wastes to the Dangerous Waste Regulations now. This adds administrative burdens to the interim management of such wastes (e.g. labeling, weekly vs. monthly inspection, can only accumulate for 90 days vs. nine months) but does not change the final disposal of such wastes and does not appear to have any significant benefit for human health or the environment. Recognizing that the corresponding exemption in 40 CFR 261.8 only applies to dielectric fluid and electric equipment containing such fluid, Ecology should be consistent in exempting only those materials from designation as toxic (waste codes D018-D043). However, the exemption from the Dangerous Waste Regulations when the waste is state-only [existing WAC 173-303-071(3)(k)(i)(B)] should be retained whether the waste is "dielectric fluid and electric equipment containing such fluid" or another PCB waste subject to 40 CFR 761. Consider retaining this portion of the exemption as in the current DW regulations.

Comments on containers

Commenter: Paul Martin - Comment B-6-18

173-303-630(2) (e.g., severe corroding, severe rusting, flaking, scaling, and/or apparent structural defects) CHPRC is not in favor of this proposed change because the word "severe"

does not appear to apply to each of the words in the parenthesis. This could lead to confusion in compliance and enforcement of the requirement. The abbreviation "e.g." or *exempli gratia*, when bracketed is generally interpreted to be a listing of independent examples (severe might not apply to all that follow in the applicable text as proposed). To eliminate confusion, the qualifier "severe" should remain in front of rusting as a standalone example within the list. Recommend the following: (e.g. severe corroding, severe rusting, severe flaking, severe scaling, apparent structural defects). This is consistent with the "State Rule Differences" articulated in Ecology's Draft Amendments Summary.

Commenter: Paul Martin - Comment B-6-19

173-303-630(5). "A row of containers must be no more than two wide and allow for complete inspection of each container. " CHPRC is not in favor of this proposed change, as the term "Complete" in the phrase "...and allow for complete inspection of each container" appears to introduce issues that are inconsistent with Ecology permitting principles of "implement ability" and "enforceability". Inspection of dangerous waste containers requires evaluation to assess condition, and to make a timely determination that a container is in good condition, or subject to repackaging and/or other WAC compliant management. Addition of the term "complete" could lead an inspector to conclude that the inability to directly examine the underside of a stored container renders the inspection incomplete, and therefore subject to a compliance violation. If containers (e.g., drums) are stored in another wise permit compliant two-wide configuration, inspectors could find that the inside walls of the drums are not "completely inspectable". The regulated community has no interest in retaining waste in containers that are incapable of constraining their contents. To this end, inspection of containers where, for example, the bottoms are on a solid surface, and cannot be visually inspected requires a qualitative evaluation of the container and its contents to determine compliance with WAC 173-303-630. This can be different depending upon whether the container stores liquid or non-liquid waste, as it could be stored on spill pallets or other devices capable of demonstrating base containment. EPA has addressed container storage arrangement precluding inspection by indicating that arrangement (strapping together) should not preclude accessibility of "significant portions of the containers" from inspection. Although the defining of "significant portions" presents some ambiguity, it does allow an inspector some latitude in determining whether or not containers can be adequately inspected. CHPRC also has very large containers (boxes ~10' X10' X 20') that preclude practical inspection of the top or the bottom of the containers. CHPRC also has containers stored in engineered racks that can be three tiers high. Current inspection protocols require CHPRC inspectors to view the visible portions of the containers and to note any evidence of leaks from the containers but the use of a man-lift, or mirrors on extension poles, or removing all containers from the 2nd and 3rd tiers of rack storage to conduct an inspection on the floor, etc., is a tremendous expenditure of time and money to achieve no added benefit to HH&E. CHPRC questions whether this language is intended to require a change in how container inspections are accomplished or is it intended to clarify existing language? If this is a change in expectations for inspections, please explain why this requirement needs to be made more stringent after being in place on a federal basis for over 37 years. Please provide specific information regarding Ecology's expectations for satisfying this requirement. It seems reasonable that a "complete inspection" should involve a graded approach based on the type of waste stored and could often be accomplished without necessarily observing every square inch of a container's external surface. For example, the inspection approach for highly reactive wastes might be different than

for soil with trace amounts of listed solvent that exhibits no characteristics of dangerous waste. It is not reasonable to establish a rigid standard for inspection that will be difficult to achieve and add no additional benefit to protection of HH&E. And, as stated by EPA in the May 19, 1980, Federal Register on page 33199, which promulgated the container inspection regulations: *"These regulations generally require nothing more than simple good practices in the management of containers of hazardous wastes – a level of care commensurate with the hazardous nature of the wastes stored. The Agency believes that these regulations should not be difficult to implement, and that they will provide a great improvement in the problems posed by current bad practices."* Ecology's proposed wording for "complete inspections" is likely to result in varying interpretations by inspectors that would be beyond simple good practices and would be difficult to implement, and again not provide added protection to HH&E.

Commenter: Harold Tilden - Comment O-1-19

18. WAC 173-303-172(5)(a). Ecology proposes to add several indicators of when a container may not be "in good condition" and thus unsuitable for continued use. These include "severe corroding, rusting, flaking, scaling, and/or apparent structural defects". The current regulation only cites "severe rusting" and "apparent structural defects" as examples. Since these are cited as examples, it appears Ecology is attempting to broaden the basis on which an inspector may question the integrity of a container in storage. It remains the responsibility of the generator (or TSD) to determine if the container is "in good condition" regardless of the defect that may render it otherwise; the added examples appear superfluous. We recommend Ecology not adopt the added examples.

Commenter: Harold Tilden - Comment O-1-29

28. WAC 173-303-174(1)(a). Ecology proposes to add several indicators of when a container may not be "in good condition" and thus unsuitable for continued use. These include "severe corroding, rusting, flaking, scaling, and/or apparent structural defects". The current regulation only cites "severe rusting" and "apparent structural defects" as examples. Since these are cited as examples, it appears Ecology is attempting to broaden the basis on which an inspector may question the integrity of a container in storage. It remains the responsibility of the generator (or TSD) to determine if the container is "in good condition" regardless of the defect that may render it otherwise; the added examples appear superfluous. We recommend Ecology not adopt the added examples.

Commenter: Harold Tilden - Comment O-1-39

Editor note: this comment is a duplicate except for the citation.

38. WAC 173-303-200(3)(a). Ecology proposes to add several indicators of when a container may not be "in good condition" and thus unsuitable for continued use. These include "severe corroding, rusting, flaking, scaling, and/or apparent structural defects". The current regulation only cites "severe rusting" and "apparent structural defects" as examples. Since these are cited as examples, it appears Ecology is attempting to broaden the basis on which an inspector may question the integrity of a container in storage. It remains the responsibility of the generator (or TSD) to determine if the container is "in good condition" regardless of the defect that may render it otherwise; the added examples appear superfluous. We recommend Ecology not adopt the added examples.

Commenter: Harold Tilden - Comment O-1-40

39. WAC 173-303-200(3)(c)(iii). Ecology proposes to add the criterion "...and allow for complete inspection of each container" to the definition of aisle space. The criterion of "complete inspection" is unclear and arbitrary. For instance, if four drums are placed on a pallet with sides touching, are they positioned in such a way to allow "complete inspection"? If drums are placed on the floor or in a secondary containment device so that the underside of the drum cannot be readily observed, does that placement impede "complete inspection"? When Ecology first adopted the thirty-inch aisle space requirement in 1991, it stated the reason was "primarily for the safety of departmental inspectors and to allow access to personnel and equipment to dangerous waste storage and accumulation areas."¹ "Complete inspection" was not cited as a purpose for aisle space. The proposed definition muddles the requirement for aisle space and the requirement to look for "leaking containers and for deterioration of containers" as given in proposed WAC 173-303-200(3)(d). Ecology can evaluate the adequacy of container inspections (e.g. when a two-container-wide row is adjacent to a wall) without adding vague criteria for aisle space. Consider deleting the word "complete" from the proposed paragraph. ¹ Ecology, "Responsiveness Summary: Amendments to the Dangerous Waste Regulations", 2/5/1991, p. 29, response 65.

Commenter: Harold Tilden - Comment O-1-63

62. WAC 173-303-630(2). Ecology proposes to add several indicators of when a container may not be "in good condition" and thus unsuitable for continued use. These include "severe corroding, rusting, flaking, scaling, and/or apparent structural defects". The current regulation only cites "severe rusting" and "apparent structural defects" as examples. Since these are cited as examples, it appears Ecology is attempting to broaden the basis on which an inspector may question the integrity of a container in storage. It remains the responsibility of the generator (or TSD) to determine if the container is "in good condition" regardless of the defect that may render it otherwise; the added examples appear superfluous. We recommend Ecology not adopt the added examples.

Commenter: Harold Tilden - Comment O-1-68

67. WAC 173-303-630(5)(c). Ecology proposes to add the criterion "...and allow for complete inspection of each container" to the definition of aisle space. The criterion of "complete inspection" is unclear and arbitrary. For instance, if four drums are placed on a pallet with sides touching, are they positioned in such a way to allow "complete inspection"? If drums are placed on the floor or in a secondary containment device so that the underside of the drum cannot be readily observed, does that placement impede "complete inspection"? When Ecology first adopted the thirty-inch aisle space requirement in 1991, it stated the reason was "primarily for the safety of departmental inspectors and to allow access to personnel and equipment to dangerous waste storage and accumulation areas."² "Complete inspection" was not cited as a purpose for aisle space. The proposed definition muddles the requirement for aisle space and the requirement to look for "leaking containers and for deterioration of containers" as given in existing WAC 173-303-630(6). Ecology can evaluate the adequacy of container inspections (e.g. when a two-container-wide row is adjacent to a wall) without adding vague criteria for aisle space. Consider deleting the word "complete" from the proposed paragraph; possible substitutes might be "adequate" or "sufficient" inspections..

Commenter: Steven Shestag - Comment B-7-13

LOG Management of Containers, draft section The Washington requirement for a minimum of thirty inch aisle space separation between rows of containers, and the limit that a row of containers must be no more than two wide, has been in the dangerous waste rules for some time. However, the draft addition that the container configuration must also allow for inspection of each container introduces a new, overbroad and burdensome test. This test could only be met if each container were completely separated from every other container, so that the inspector can see the entire circumference of the container. Four drums placed on a pallet with sides touching will obscure a portion of the circumference and fail this test. Furthermore, if a container is sitting on the floor or in a secondary containment device, the bottom of the container is not visible. We strongly recommend that the words "...and allow for complete inspection of each container" be removed. The impossibility of complying with a literal application of this test renders the requirement arbitrary and capricious.

Commenter: Anthony McKarns - Comment A-3-17

173-303-172 and others. Conditions for exemption for a medium quantity generator that accumulates dangerous waste and others "...allow for complete inspection of each container..."
CHPRC Comment 18: Is this language intended to require a change in how container inspections are accomplished or is it intended to clarify existing language? If this is a change in expectations for inspections, please explain why this requirement needs to be made more stringent after being in place on a federal basis for over 37 years. Please provide specific information regarding Ecology's expectations for satisfying this requirement. It seems reasonable that a "complete inspection" should involve a graded approach based on the type of waste stored and could often be accomplished without necessarily observing every square inch of a container's external surface. For example, the inspection approach for highly reactive wastes might be different than for soil with trace amounts of listed solvent that exhibits no characteristics of dangerous waste. It is not reasonable to establish a rigid standard for inspection that will be difficult to achieve and add no additional benefit to protection of HH&E.

Commenter: Anthony McKarns - Comment A-3-31

173-303-630 Use and management of containers. (2)Condition of containers (e.g., severe corroding, severe rusting, flaking, scaling, and/or apparent structural defects)
CHPRC Comment 19: CHPRC is not in favor of this proposed change because the abbreviation "e.g." or *exempli gratia*, when bracketed is generally interpreted to be a listing of independent examples (severe might not apply to all that follow in the applicable text). To eliminate confusion, the qualifier "severe" should remain in front of rusting as a standalone example within the list. It is also commonly understood that *exempli gratia* is not a comprehensive list. Therefore, and/or is does not make sense as it could lead to structural defects. Recommend the following: (e.g. severe corroding, severe rusting, severe flaking, severe scaling, apparent structural defects)

Commenter: Myron Eng - Comment B-9-5

Condition of dangerous waste containers – WA is proposing to expand the examples of dangerous waste containers that are "not in good condition" such as "severe rusting" to now include the following severe conditions:
-Corroding

-Rusting
-Flaking
-Scaling

Walmart recommends including qualifying language such as, "severe corroding, rusting, flaking, scaling, and/or apparent structural defects that could lead to imminent leakage" of the container.

Commenter: Jason Sampson - Comment A-1-2

It appears there is conflicting guidance regarding container lids. Under 173-303-174(1)(c)(i) a lid may be left partially open for safety if the contents have the potential to create pressure. However, 173-303-200(3)(c)(ii) and 173-303-630(5) state the lid must be closed when waste is not being added. WSU proposes throughout WAC 173-303 the regulations allow lids to be left partially open if contents have the potential to create pressure.

Comments on contingency planning

Commenter: Paul Martin - Comment B-6-14 Tom and Jared response

WAC 173-303-201 Preparedness, prevention, emergency procedures and contingency plans for large quantity generators. Various texts throughout the subsection.

CHPRC is not in favor of this proposed change because there are several concerns with text in this subsection:

1. The lack of denoting ownership to the generator (i.e., generator facility versus generator's facility) makes this term different than others that are intended to mean the same thing.

Notwithstanding, neither of these terms are clear. See next comment.

2. There is no concept of a "generator facility" defined in WAC 173-303-040. Facility is defined with two meanings: one for treatment, storage and disposal units and another for corrective action. The definition does not extend to generator activities. Hanford has many generator locations on the Hanford Facility. Creating a term like "generator facility" may imply that Hanford has multiple facilities on one site and that each facility needs a separate EPA identification number. Please eliminate mention of a "generator facility" and keep generator activities simple and understandable.

3. The language used implies that contingency planning in Washington State must extend beyond what EPA said in response to comments. Of particular concern is the addition of "hazardous substance" to the scope because this would require planning for activities beyond generation and management of dangerous wastes and would extend to virtually any location on the property where the generator activities occur. Such an approach is an overreach of Ecology's authority and goes way beyond the EPA changes, which are limited to accumulation areas and locations where waste is generated. Please make clear that this language is not intended to regulate activities that do not involve dangerous waste generation or dangerous waste management. This is particularly troublesome when coupled with the dubbing of the term "generator facility" and the apparent requirement to design, construct, and operate structures and equipment for product and non-dangerous waste management under potential enforcement of the dangerous waste regulations. Please eliminate the reference to hazardous substances in this

provision to make it clear that the WAC 173-303 regulations only apply to dangerous waste activities.

4. Language in WAC 173-303-201(9)(a) that states "When modifications are made to non-dangerous waste...provisions in an integrated contingency plan, the changes do not trigger the need for a dangerous waste permit modification" is troublesome and confusing because changes to generator provisions should never require a permit modification and therefore this provision is unjustified as a generator requirement; and the statement that non dangerous waste provisions are not subject to permit modifications could be read to imply that when the "One Plan" is used, then changes to dangerous waste provisions for generators would require a permit modification. Please make clear that generator activities are not subject to permit modifications.

5. WAC 173-303-145 is referenced for inclusion in the contingency plan "description of actions." What purpose is this seemingly redundant provision intended to serve? Please remove it because it could be interpreted as having the effect of unlawfully expanding the scope of the contingency plan to products, including products that have no association with dangerous waste management activities.

6. Use of the language "an emergency telephone number that can be guaranteed to be answered at all times" is perplexing. Guarantees are essentially formal promises or assurances that certain conditions will be fulfilled. Please change the language to simply making someone available at the number at all times, rather than providing a "guarantee." The requirement should be similar to other requirements without confusion.

7. For evacuation scenarios at Hanford, security and uncertainty are potential issues. Please add language indicating that for situations where security or exposure uncertainty is a concern during evacuation, the evacuation routes can be determined by the emergency coordinator and provided at the time of evacuation based on the current conditions. What good is it to describe types and names of dangerous waste in layman's terms to emergency responders who are highly trained and need specific information as opposed to layman terms to properly respond to emergencies? CHPRC cannot find a list of "proper" layman's terms for use to minimize error or misunderstanding.

Commenter: Paul Martin - Comment B-6-17

WAC 173-303-350(1). "...in the event of any event or circumstance..." CHPRC is not in favor of this proposed change because this language is confusing and overly broad. Contingency plans and emergency procedures should be for emergencies and potential emergencies such as fires or explosion at a dangerous waste facility or are lease of dangerous waste that could threaten human health and the environment, not for "events," which could subjectively include almost anything. Please change the subjective term "event" back to "emergency." Please eliminate the reference to hazardous substances because it would unlawfully extend dangerous waste requirements to non-dangerous wastes and products.

Commenter: Harold Tilden - Comment O-1-51

50. WAC 173-303-201(9)(a). Ecology's draft requirement contains the statement that when modifications are made to non-dangerous waste provisions in an integrated contingency plan, "the changes do not trigger the need for a dangerous waste permit modification." This reference (copied from WAC 173-303-350(2) standards for TSD facilities) is superfluous here, as permits are not required for generator accumulation. Consider deleting the last sentence of this section.

Commenter: Harold Tilden - Comment O-1-52

51. WAC 173-303-201(9)(b)(iv). Ecology's draft requirement contains the statement that when new facilities are established, "this list [of emergency coordinators] may be provided at the time of facility certification...rather than as part of the permit application." This sentence (copied from WAC 173-303-350(3)(d) standards for TSD facilities) is superfluous here, as permits are not required for generator accumulation. Consider deleting this sentence.

Commenter: Harold Tilden - Comment O-1-53

52. WAC 173-303-350(1). Ecology proposes to expand the scope of the contingency plan to "...any event or circumstance..." and removes the term "emergency". This proposed change appears to broaden the requirements for a contingency plan well beyond the scope envisioned in the comparable Federal rule, i.e. "fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water." Since the terms "event" and "circumstance" are not defined, the proper scope of a contingency plan is vague and subject to interpretation by individual field inspectors. The scope given in this section should be consistent with the scope anticipated by the requirements in proposed WAC 173-303-350(2), i.e. "emergencies or any sudden or non-sudden releases which threaten human health and the environment." The conflict causes confusion.

Commenter: Harold Tilden - Comment O-1-54

53. WAC 173-303-360(2). Ecology proposes to broaden the "emergency procedures" of this section to be implemented whenever "any event or circumstance identified in WAC 173-303-350" occurs. This proposed requirement conflicts with proposed WAC 173-303-350(2) as to the scope of the contingency plan and makes it unclear as to when emergency procedures are to be used to respond to non-emergency situations, as proposed WAC 173-303-350(1) deletes the reference to "emergencies". Emergency procedures should be utilized only in the event of a true emergency. The added vagueness proposed here does not support the timely, skillful response to an emergency, only the reference to some sort of decision tree (perhaps) that determines the proper scope and timing of a response. Consider deleting the proposed addition.

Commenter: Steven Shestag - Comment B-7-10

Contingency Plan scope, draft section 173-303-350(1). The contingency plan needs to show that the facility is prepared to respond to a range of incidents. Subsection (1) attempts to describe the scope of these events or incidents, but the draft revision is overbroad. The corresponding federal rule 40 CFR 262.260 has a well-defined list of such events:

"The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water."

The federal rule lacks two trigger events, natural disasters and releases to groundwater, which the draft Washington rule would include, and this addition is appropriate.

The draft addition of "hazardous substance" release is problematic, since this is a defined term under CERCLA and EPCRA rules, which have their own planning and response requirements. The dangerous waste rule should confine itself to dangerous wastes and dangerous waste constituents, and not purport to require the contingency plan to cover all "hazardous substances," which under CERCLA and EPCRA may be fresh product, not waste. The Washington definition

of "hazardous substances" at WAC 173-303-040 reinforces that this definition includes non-wastes, by including the terms "product" and "commodity." While a dangerous waste generator may opt to maintain a single unified plan that covers dangerous waste, CWA, SPCC, CERCLA, and EPCRA requirements, such a unified plan is an option, not a requirement.

The federal rule does not use the term "emergency" in the context of contingency plan scope. The draft Washington deletion of "emergency" from WAC 173-303-350(1) is understandable, since "emergency" is undefined and implies a level of site-wide involvement or mobilization that would not be needed for some events triggering the contingency plan, such as a localized non-sudden release of hazardous constituents. If "emergency" is to be deleted from WAC 173-303-350(1), however, it should also be deleted from the next paragraph, WAC 173-303-350(2). In fact, the first sentence of WAC 173-303-350(2) should be modified, since it repeats some of the trigger circumstances described in subsection (1), but does so in an incomplete manner. To avoid this inconsistency, the first sentence of subsection (2) could be truncated to: "Each owner or operator must have a contingency plan at his facility." This would be followed by the remainder of this paragraph regarding inclusion in a SPCC Plan or One Plan.

The draft substitution of "any event or circumstance" for "emergency," along with the term "including, but not limited to" results in a scope that has no boundaries and is subject to varying interpretation. This can be remedied by patterning WAC 173-303-350(1) after the federal rule that names specific trigger events that the contingency plan must account for as regulatory minimum. We suggest the following rewrite of WAC 173-303-350(1):

Purpose. The purpose of this section and WAC 173-303-360 is to lessen the potential impact on the public health and the environment from fire, explosion, natural disaster, or unplanned sudden or non-sudden release of dangerous waste or dangerous waste constituents to air, soil, surface water, or groundwater by a facility. A contingency plan must be developed to lessen the potential impacts of these events, and the plan must be implemented immediately whenever such an event occurs."

Commenter: Steven Shestak - Comment B-7-11

Emergency Procedures, draft section 173-303-360(2)

While the draft rule would remove the term "emergency" from the contingency plan Scope in WAC 173.303-350(1), both the federal and Washington rules use the term in the context of "emergency coordinator," "emergency equipment," "imminent or actual emergency situation," "emergency response contractor," "emergency procedures," etc. "Emergency" is not a defined term in WAC 173-303-040, so it is generally interpreted as an event more urgent than some of the contingency plan triggers (such as a non-sudden release of dangerous waste).

Draft section 173-303-360(2) would modify existing language as follows:

(2)Emergency procedures. The following procedures must be implemented in the event of an emergency or any event or circumstance in WAC 173-303-350,"

The procedures that follow this heading, in (2)(a) through (2)(k) provide a context to interpret "emergency" as an urgent matter. Some of these urgent matters would be included in WAC 173-303-350, whether modified per Boeing suggestion above or left as shown in the October 2017 draft. Other events or circumstances in WAC 173-303-350 would not be the kind of "emergency" that would trigger the actions described in (2)(a) through (2)(k). Our recommendation is to delete

the draft additional reference to events and circumstances identified in WAC 173-303-350, because it is over-inclusive.

LQG Contingency Plan Emergency Coordinator List, draft section 173-303-201(9)(b)(iv) The draft proposal requires the Contingency Plan to include a current list of names and emergency telephone numbers for all persons qualified to act as emergency coordinators. However, this section, which pertains to Large Quantity Generators, has the following language that seems to be out of place: "For new facilities only, this list may be provided to the department at the time of facility certification (as required by WAC rather than as part of the permit application." The facility certification is part of TSD permitting, and is not a large quantity generator requirement, but the notation above may confuse LQGs who may wonder whether some type of facility certification is required of them.

Commenter: Steven Shestag - Comment B-7-12

Quick Reference Guide for LOG Contingency Plans, draft section 173-303-201(11)(b)(iv) The draft Washington proposal and the federal generator improvements rule have the same requirement for a Quick Reference Guide that includes: "A map of the facility showing where dangerous wastes are generated, accumulated, recycled and treated and routes for accessing these wastes." A map showing all the points of generation at a Boeing manufacturing facility would include every workbench and work station where solvent wipes are used, sealant applied, or touch-up paint is hand applied, hardly a "quick reference guide." Also, the precise locations where these activities occur on the shop floor are in constant flux, making a detailed map obsolete before it can be printed and distributed to emergency responders. This is one instance where some Washington language is needed to interpret the federal rule. We suggest adding the following:

"For situations where generation and accumulation locations within a building are frequently moved (for example, to follow moving assembly lines or moving work stations), the map shall indicate those general areas of the building where generation or accumulation may occur."

Commenter: Anthony McKarns - Comment A-3-28

173-303-360(2) Emergencies - MSA Comment 7:

Clarity is desired for what constitutes contingency plan implementation. Clarity would be helpful, because there are follow-on actions if/when the contingency plan is implemented [e.g. - 360(2)(j) and -360(2)(k)]. Some possible options are shown below:

- The emergency coordinator makes notifications required under -360(2)(d)
- The emergency coordinator determines
 - o An imminent or actual emergency situation exists, or
 - o A sudden or non-sudden release occurred and threatens human health and the environment, or
 - o The facility has had a release, fire, or explosion which could threaten human health or the environment, or
 - o A facility received dangerous waste shipment, which is damaged or otherwise presents a hazard to the public health and the environment, and is not acceptable to the owner or operator, but cannot be transported, pursuant to the requirements of WAC 173-303, or
 - o An event or circumstance occurred that threatens human health and the environment (including but not limited to, a fire, natural disaster, explosion, or unplanned sudden or non-sudden release of dangerous waste, hazardous substance or dangerous waste constituents to air, soil, surface water, or groundwater).

In the early stages of an event, workers may engage in discovery and evaluation processes. Also, precautionary measures might be taken such as activating an alarm or evacuating a work area while the emergency coordinator collects information. Some of these initial activities may be called-out in the contingency plan. However, it seem illogical to declare contingency plan "implementation," simply because some initial event response activities described in the contingency plan are executed. Instead, contingency plan "implementation" should be coupled with an emergency coordinator determination that a "threat" to human health and the environment exists. NOTE, at Hanford, the permittee and Ecology have devoted considerable effort to defining criteria to determine if/when the contingency plan is "implemented." The criteria were developed for incorporation into the Hanford's Dangerous Waste permit and are consistent with the logic above, whereby, "implementation" is based on an emergency coordinator determination that a "threat" exists and not mere execution of initial response activities and/or precautionary measures. Below is draft language collaboratively developed by Ecology and the Department of Energy for use in an upcoming Class 3 permit modification to revise Hanford's Dangerous Waste permit.

The BED/BW/IC must use the following criteria to determine if an emergency event is subject to contingency plan implementation and notifications requirements of WAC-173-303-350 and WAC-173-303-360:

- (1) The event involved an unplanned spill, release, fire, or explosion; AND*
- (2a) The unplanned spill or release involved a dangerous waste, or the material involved became a dangerous waste as a result of the event, or*
- (2b) The unplanned fire or explosion occurred at a facility or transportation activity subject to the dangerous waste contingency plan requirements; AND*
- (3) The emergency circumstance could pose a threat to human health or the environment.*

Commenter: Anthony McKarns - Comment A-3-29

173-303-360(2) Emergencies - MSA Comment 8: The proposed rule states: The following procedures must be implemented in the event of an emergency or any event or circumstance identified in WAC 173-303-350. Please consider not referencing -350. The proposed reference to -350 creates a bit of a circular reference problem. The first sentence in section -350 refers the reader to -360. Perhaps a better approach might be to state the events that require implementation of the steps under -360(2) (i.e., fire, release, or explosion that threaten human health or the environment.). If Ecology decides a reference to -350 is appropriate, could clarity be added to specify which portion(s) of -350 are being referenced. Does the reference relate to: • -350(1)? -350(2)? • -350(3)? • Some combination of the above?

Comments on manifests

Commenter: Paul Martin - Comment B-6-22

173-303-180(9). Use of electronic manifest. Will generators need to procure any special hardware or software in order to use the e-manifest system?

Commenter: Paul Martin - Comment B-6-23

173-303-180(10)(c). Restriction on use of electronic manifests. "A generator may prepare an electronic manifest for the tracking of dangerous waste shipments involving any dangerous waste only if it is known at the time the manifest is originated that all waste handlers named on the manifest participate in the electronic manifest system." What will be the system for determining that all waste handlers named on the manifest participate in the emanifest system?

Commenter: Paul Martin - Comment B-6-24

173-303-180(10)(g) Imposition of user fee. "A generator who is a user of the electronic manifest maybe assessed a user fee by EPA for the origination of each electronic manifest." The proposed wording states that a user fee "may" be assessed. Ecology's Summary of 2017 Draft Amendments identifies EPA as having "chief responsibility for implementing the uniform hazardous waste management regulations as far as collecting user fees and manifests". Does ECY have any ideas on the potential user fee amounts? Also, based on information presented in Ecology hosted public meetings, EPA now intends to assess fees at final receiving facilities who in turn would pass those costs along to users. Are other methods of payment for user fees being considered? Please clarify whether Ecology intends to levy additional fees to implement the E-manifest system.

Commenter: Paul Martin - Comment B-6-25

173-303-180(9) Use of electronic manifest. If a change is needed to an e-manifest once it has been signed and the waste shipped or received by the TSDF, how will changes be made?

Commenter: Anthony McKarns - Comment A-3-34

173-303-180(10)(g) Imposition of user fee. "A generator who is a user of the electronic manifest may be assessed a user fee by EPA for the origination of each electronic manifest." CHPRC Comment 25: The proposed wording states that a user fee "may" be assessed. Does ECY have any ideas on the potential user fee amounts? Also, what will be the method of payment for user fees?

Comments on other issues

Commenter: Jesse McCullough - Comment I-3-1

Secondary containment topic

The new secondary containment requirement proposed for medium and large quantity generators in WAC 173-303-172(5)(e) and -200(5)(e) will be expensive to implement and should be limited to as needed situations as is the case with the current Dangerous Waste Regulations. The language should be changed to read "...the department MAY REQUIRE that the central...". This will allow generators who safely manage containers to avoid expensive purchases and still allow Ecology to require containment at facilities where containers are not being managed safely.

Commenter: Paul Martin - Comment B-6-4

173-303-040 "Central accumulation area." Ecology's Draft Amendments Summary indicates that EPA's generation clarifications don't "change how the generator regulatory scheme and

enforcement policy has operated over the last 30 years." CHPRC is concerned that the revised definition of "central accumulation area" leaves too much uncertainty about its meaning. Please add language to this definition making clear that it is not intended to (1) denote a physical location, (2) require generators to establish a location that is centrally located within the site; or (3) limit the number of areas at a site.

Commenter: Paul Martin - Comment B-6-13

173-303-070(2)(a) Designation of dangerous waste. (2)(a) Except as provided at WAC 173-303-070 (2)(c), once a material has been determined to be a dangerous waste, then any solid waste generated from the recycling, treatment, storage, or disposal of that dangerous waste is a dangerous waste unless and until:...

CHPRC requests that Ecology update (2)(a) to align with the Federal mixtures and derived from rules by allow mixing of solid waste with dangerous waste. Ecology's rationale in the Draft Amendments Summary states: "We are not proposing to adopt these updates to the mixture rule. This aligns with current dangerous waste regulations intended to avoid diluting dangerous waste to create a non-dangerous waste." CHPRC understands that dilution is impermissible when attempting to meet a land disposal restrictions (LDR) treatment standard in 40 CFR 268, however, dilution should be permissible to merely remove a dangerous waste characteristic that renders a material non dangerous. In those cases, the material would no longer be a dangerous waste but would still be subject to the applicable LDR treatment standard. See 40 CFR 268.9 for the Federal rationale on rendering hazardous waste nonhazardous. It seems counter-intuitive that Ecology does not want to render dangerous wastes as non-dangerous waste. Management of a non-dangerous waste pending LDR treatment is much less of a threat to human health and the environment than management of a dangerous waste.

Commenter: Paul Martin - Comment B-6-16

WAC 173-303-320(2)(c). "As part of the review, the Department may modify or amend the schedule as may be necessary; " CHPRC is not in favor of this proposed change because this language provides no basis for how and why the department would find it necessary to second guess the facility owner/operator on adequacy of schedule. Any changes to the o/o determined schedule should be limited in basis to evidence that the proposed permit schedule frequency needs changing to avoid problems. Without a firm basis for when schedules will be modified/amended, we cannot count on a consistent or accurate approach.

Commenter: Paul Martin - Comment B-6-20

173-303-830 Appendix I. Modifications 5. Changes in the training plan program: a. That affect the type or decrease the amount of training given to employees.

CHPRC is not in favor of this proposed change because the intent of this change is not presented in the change proposal. WAC 173-303-330(1) indicates that the training program must include those elements set forth in the training plan required in subsection (2) of this section. Therefore, this change appears to significantly broaden the requirement to modify the Dangerous Waste permit based on changes to the Training Plan (as currently required), and now the Program (as proposed in WAC 173-303-330(1)). A Training Program as described at WAC 173-303- 330(1) directs such functions as administration, participation, timely completion, and interim

supervision, which are accountable requirements via regulation. Whereas, the more specific requirements of the Training Plan ensure that specific personnel are adequately trained based on their Dangerous Waste Management related tasks. Therefore, the need for increased permit accountability (as apparently represented by the proposed change) may have the unintended consequence of constricting positive change to the training program, absent enhancement of permit required plans to train dangerous waste workers. Please provide an explanation of the intent of this proposed change.

Commenter: Paul Martin - Comment B-6-21

173-303-174(1)(g). Satellite accumulation area regulations for medium quantity generators and large quantity generators. Accumulation limits met.

When the accumulation limits listed in paragraph (1) of this section are met: CHPRC is not in favor of this proposed change because the term "met" is not consistent with other regulatory references to accumulation limits that use the term "exceeds" which would also be consistent with Federal satellite regulations 40 CFR 262.15(a)(6) uses the phrase "...in excess of the amounts listed..." which clearly conveys that an SAA container can be filled to its applicable limit (55 gallons for non-acutely dangerous waste or 1 quart for acutely liquid hazardous waste or 2.2 lbs. of solid acutely hazardous waste) and another SAA can be started while the full SAA is marked with an accumulation date and moved within 3 days to the central accumulation area. The proposed wording with "met" could imply that once the 55-gallon or 1 quart limit is met, the satellite area can no longer accumulate any dangerous or hazardous waste until the full SAA is moved to a central accumulation area. Also, WAC 173-303 has other accumulation time limit references for small quantity and large quantity generators, laboratory clean-outs, and empty containers that uses the term "exceeds", which is appropriate and would be consistent with 40 CFR 262. Please amend the proposed wording in (1)(g) to read: "Accumulation limits exceeded. When the accumulation limits listed in paragraph (1) of the section are exceeded:"

Commenter: Harold Tilden - Comment O-1-2

1. General Comment: Ecology proposes numerous state-specific deviations from the EPA Generator Improvements Rule (GIR) and other EPA programs throughout the pre-draft. Some of these changes are understandable based on existing State rules, e.g. use of terms "small quantity generators" and "medium quantity generators" versus EPA's "very small quantity generators" and "small quantity generators" to refer to generators of specified quantities of waste. However, in numerous cases, Ecology proposes deviations from EPA programs that are unexplained in the documents accompanying the pre-draft language. These deviations should be sufficiently explained to show why Ecology believes they are necessary to protect human health and the environment, justifying the additional burden placed on generators in Washington State.

Commenter: Harold Tilden - Comment O-1-4

3. WAC 173-303-040, definition of "Facility". Ecology proposes to delete the word "or" from the phrase "...treatment, storage (or) disposing of dangerous waste..." The Generator Improvements Rule changes retain this word. The word "or" serves to complete the list of dangerous waste management activities and distinguishes these from management of hazardous secondary materials. We recommend it be restored.

Commenter: Harold Tilden - Comment O-1-10

9. WAC 173-303-070(3)(d)(iv). Ecology proposes to replace the word "any" with the words "one or more" when determining if a waste exhibits any dangerous waste criteria. The word substitution appears to conflict with Ecology's current waste designation guidance (see "Chemical Test Methods for Designating Dangerous Waste, Ecology Publication 97-407, December 2014, and "Designating Dangerous Waste", Ecology Publication 96-436, October 2004) which allows not designating for persistence if the waste is state toxic. If our understanding of the priority for designation is correct, consider revising this requirement to read "... determine if the waste meets the dangerous waste criteria for toxicity or, if not toxic, persistence, WAC 173-303-100."

Commenter: Harold Tilden - Comment O-1-11

10. WAC 173-303-070(3)(e)(ii)(C). Ecology proposes to add a statement that when knowledge is inadequate or absent to make an accurate designation, testing is required. This statement is largely redundant to existing (ii)(A), which states that knowledge can only be used when it can be "...demonstrated to be sufficient for determining whether or not it ... designated accurately". The addition as (ii)(C) appears to be out of context. Consider removing this proposed addition.

Commenter: Harold Tilden - Comment O-1-14

13. WAC 173-303-170(2)(b)(iv): Ecology proposes to require that persons treating their dangerous waste on site comply with the generator standards for both WAC 173-303-170(b)(ii) (for medium quantity generators) and (b)(iii) (for large quantity generators). A word also appears to be missing, possibly "persons". Consider revising this paragraph to read "In addition to complying with the requirements of (b)(ii) of this subsection for medium quantity generators, or (b)(iii) of this subsection for large quantity generators, as appropriate, persons who treat their dangerous waste on site must: ..."

Commenter: Harold Tilden - Comment O-1-24

23. WAC 173-303-172(13). Ecology proposes to add an MQG requirement to "...inspect the facility..." similar to that required for large-quantity generators and TSD facilities. This requirement does not appear in the corresponding GIR requirements of 40 CFR 262.16. Imposition of a requirement to prepare an inspection plan, when weekly inspection of MQGCAAs is already required by proposed WAC 173-303-172(5)(d) and testing and maintenance of equipment is already required by proposed WAC 173-303-172(11)(c), seems unnecessary for MQGs. Ecology has not explained why a written inspection plan is necessary for MQGs to protect human health or the environment. We recommend this section be deleted.

Commenter: Harold Tilden - Comment O-1-30

29. WAC 173-303-174(1)(e)(iii). Ecology proposes to add a requirement to separate containers of incompatible materials in a satellite accumulation area, or protect them "by means of a dike, berm, wall, or other device. Containment systems for incompatible wastes must be separate." This requirement is impractical for satellite accumulation areas, which are generally limited in both size and capacity. Use of dikes, berms, or walls in a SAA is generally not feasible. Further, the draft rule implies that secondary containment is required for SAAs by saying that

"containment systems...must be separate." Other portions of WAC 173-303-174 do not make reference to a requirement for containment systems in SAAs, and such a requirement does not appear in the GIR. We recommend that the simple language of the GIR be adopted here, viz., "...must be separated from the other materials or protected from them by any practical means."

Commenter: Harold Tilden - Comment O-1-35

34. WAC 173-303-190(3)(b). Ecology proposes to require the marking of dangerous waste number(s) on each package of dangerous waste. As a maximum number of waste codes is not specified, clarification that at least the first six applicable waste codes should appear on the marking would be helpful. See EPA's comment response document to the GIR, p. 466, where this EPA policy is reaffirmed. To require each waste code to be written on the label, which is typically 6"x6", would likely be difficult when a large number of waste codes apply to the contents.

Commenter: Harold Tilden - Comment O-1-36

35. WAC 173-303-190(9). Ecology proposes to impose state-only LDRs found at WAC 173-303-140(4)(b) on liquids being disposed of. Imposition of state-only LDRs on waste not destined for land disposal in Washington State is not the intent of the state-only LDRs. Consider substituting the requirements of 40 CFR 268 (incorporated by reference at WAC 173-303-140(2)) for this requirement, or clarify the applicability, e.g. "Prior to disposal in the state of Washington, liquids must meet additional requirements of WAC 173-303-140(4)(b)."

Commenter: Harold Tilden - Comment O-1-37

36. WAC 173-303-200(1). This section is proposed to be titled "Off-site shipments" [sic]; however, it (correctly) allows for the placement of waste in a permitted on-site facility or treated or recycled on-site. Consider revising the title to "Shipments" or some such.

Commenter: Harold Tilden - Comment O-1-38

37. WAC 173-303-200(2)(b)(iii). Ecology proposes to start the 90-day accumulation period when "The generator exceeds its satellite accumulation limits prescribed in WAC 173-303-174(1)." The wording implies that any SAA operated by the generator that exceeds the quantity limits triggers the 90-day accumulation period for all waste being accumulated by the generator. Since a generator may have numerous satellite accumulation areas, the 90-day accumulation period should apply when an individual SAA has reached the satellite accumulation limits. Consider rewording this paragraph to clarify the applicability to the excess accumulation in an individual SAA, for example: "The quantity of dangerous waste being accumulated in a satellite accumulation area exceeds the limits prescribed in WAC 173-303-174(1)."

Commenter: Harold Tilden - Comment O-1-41

40. WAC 173-303-200(3)(e). Ecology proposes to require that "the central accumulation area(s) include secondary containment in accordance with WAC 173-303-630(7)." This implies that containers not containing free liquids (e.g. used sorbents, dry solids, and lab packs filled with absorbent material) require secondary containment. Consider rewording this requirement,

e.g. "...the department requires that the central accumulation area(s) comply with the secondary containment requirements of WAC 173-303-630(7)."

Commenter: Harold Tilden - Comment O-1-48

47. WAC 173-303-200(9)(a). Ecology's proposed rule regarding training follows the logic of the GIR. It also contains one of the errors in the GIR, i.e. using the term "facility personnel" to describe the people requiring training. Since the term "facility personnel" is specifically defined in WAC 173-303-040 as personnel who "work at, or oversee the operations of, a dangerous waste facility...", a generator may not have any "facility personnel" to train unless they operate a dangerous waste facility as well as one or more CAAs. Consider clarifying the applicability of the training requirements to persons that are responsible for the operation of CAAs.

Commenter: Harold Tilden - Comment O-1-73

72. WAC 173-303-830, Appendix I, B.5. Ecology proposes to revise the term "training plan" to "training program", consistent with usage of these terms in WAC 173-303-330(1) and (2). We do not support this change, as it fails to make the necessary clarification of what is subject to the permit modification procedures. WAC 173-303-330(1) describes the "training program" in very broad terms, and some of the prescribed content of the program (e.g. "...must be directed by a person knowledgeable in dangerous waste management procedures..." is not consistent with the proposed permit modification requirement. The proposed change would apparently, in this case, require a permit modification if the identity of the training director were to change. Ecology should further bear in mind that the material submitted by permit applicants in accordance with WAC 173-303-806(4)(a)(xii) is only an "outline" of the training program and a "brief description" of training design. Ecology usually makes this "outline" and "brief description" enforceable by attaching it to the permit and then calling it the "training program", but this is not the "training program" described in WAC 173-303-330(1). The "outline" and "brief description" are the only documents typically affected by the modification requirement, not the entire "training program" described in WAC 173-303-330(1). Only the conditions of the permit (which may include attached material from the permittee's application) should be subject to the permit modification procedures of WAC 173-303-830(4) and Appendix I. Neither the "training program" nor the "training plan" are attached to the permit and should thus not be called out in Appendix I as subject to modification control.

Commenter: Aurana Lewis - Comment O-5-6

General Comment: The requirements for storage of ignitable or reactive waste do not incorporate the input of local fire departments and require the use of the International Fire Code in preference to local fire codes. City Light believes the regulation should rely first on local fire codes or decisions by local fire departments. Only in the unlikely absence of clear local fire codes or local fire jurisdiction decisions should Ecology rely on the International Fire code, as written in the federal regulation.

Commenter: Steven Shestag - Comment B-7-2

The Boeing Company has reviewed the draft dangerous waste rule revisions dated Oct. 10, 2017, and offers comments and suggestions below. Boeing operates multiple dangerous waste generator locations in Washington, including some small quantity generator sites. For this

reason, we support the adoption of the federal Episodic Generation rules and Waste Consolidation rules. However, we have concerns with some of the Washington-unique additions to these and other provisions in the latest draft. Boeing generates hazardous waste in other authorized states that have already adopted or are in the process of adopting the federal Hazardous Waste Generator Improvements Rule. Boeing-host states of Utah and Pennsylvania have adopted the federal generator rule without state-unique additions. Oklahoma and Illinois intend to do the same. Other Boeing-host states are in the process of reviewing federal rule revisions and determining next steps. In all states where we generate hazardous wastes, Boeing is encouraging as much alignment with federal requirements as possible to contain compliance costs. State-unique requirements complicate and increase the costs of developing and updating employee training. Boeing sites in states that deviate significantly from federal rules must develop unique training, rather than using a common RCRA training package with brief state supplements for minor deviations. Boeing employees who move or are temporarily assigned to a site in another state must "unlearn" state-unique requirements that were correct in their prior assignment and learn anew any state-unique requirements applicable to their new assignments. Compliance auditing is also complicated and more costly when authorized states have significantly different rules in Boeing locations that a RCRA auditor must evaluate. The Washington Administrative Procedures Act (RCW 34.05.328) directs agencies to "coordinate the rule, to the maximum extent practicable, with other federal, state, and local laws applicable to the same activity or subject matter." Some of the state-unique revisions in the draft dangerous waste revisions indicate that this statutory directive is not being observed. Specific examples are described below. The dangerous waste revisions are in draft stage, but prior to adoption, the Administrative Procedures Act requires the Department of Ecology to "determine that the probable benefits of the rule are greater than its probable costs," [RCW and "that the rule being adopted is the least burdensome alternative for those required to comply with it that will achieve the general goals and specific objectives" [RCW 34.05.328(1 In many of the cases described below, we believe that state-unique additions to the federal rule impose significant costs on dangerous waste generators without any demonstrated environmental benefit, and that the federal rules provide a less burdensome alternative than the corresponding provisions in the Washington draft rule. Simply put, Ecology has no basis to conclude that its state-unique changes provide a net benefit or that the federal approach is not the least burdensome alternative. Ecology has only provided speculative hypotheticals, instead of data or even real-world anecdotal incidents, to presume benefits arising from these provisions, and has absolutely no idea of the costs to generators.

Commenter: Steven Shestag - Comment B-7-7

Secondary Containment for MQG and LOG Central Accumulation Areas, draft sections 173-303-172(5)(e) and 173-303—200(3)(e). Given the broad definition of Central Accumulation Areas ⁶ (excluding only satellite accumulation), the draft requirement for such areas to meet TSD design standards ("in accordance with WAC 173-303- 630(7)") indicates that the Department has a certain subset of accumulation areas in mind. Specifically, the TSD design standards presume that a Central Accumulation Area is a relatively permanent dedicated area "constructed" to hold multiple waste containers until shipment. At many waste generator locations, Central Accumulation Areas consist of numerous mobile bulk containers of solid dangerous wastes (too large to meet the 55 gallon satellite limit) located indoors on the factory floor or staged temporarily for remediation work or construction/demolition jobs. Construction of secondary

containment to meet TSD design standards at each of these locations provides little or no additional environmental protection, but at significant cost. Rather than referencing the TSD secondary containment design standards for all Central Accumulation Areas. Boeing suggests the following secondary containment language for MQG and LOG Central Accumulation Areas:

"Secondary containment. For container accumulation, freestanding dedicated central accumulation area(s) must meet the requirements of WAC 173-303-630(7). However, central accumulation areas located inside a building with intact roof, walls, and impermeable floors need only be located away from open floor drains or exterior doorways and only if accumulating wastes with free liquids."

⁶Draft WAC 173-303-040

Commenter: Steven Shestag - Comment B-7-8

Redundant Waste Characterization Instructions, draft section 173-303-070(3)(e). The existing rule sets forth the choice of either testing the waste according to approved test methods or applying knowledge of the waste in light of the materials or process used (3)(e)(ii). The existing and draft rule constrains the use of the process knowledge option, however, by requiring that 'Such knowledge can be demonstrated to be sufficient for determining whether or not it designated and/or designated accurately properly.' [(3)(e)(ii)(A)]. The latter part of this sentence, "it designated and/or designated" appears to be grammatically defective in the existing WAC and the October 2017 draft. Perhaps what was intended is "Such knowledge can be demonstrated to be sufficient for determining whether or not it is determined to be a dangerous waste and/or designated accurately." The draft addition of "When available knowledge is inadequate or absent to make an accurate determination, the generator must test the waste according to the methods, or an approved equivalent method, set forth in WAC 173-303-110" is simply a restatement of the existing requirements that process knowledge be sufficient to make the determination and that allowable test methods are set forth in WAC 173-303-110. The only substantive difference in the existing rule and the draft addition is the "can be demonstrated" phrase in the existing rule (3)(e)(ii)(A). Rather than have redundant language that may be read as independent and somehow different, we recommend that the two be merged into a single requirement at (3)(e)(ii)(A) as follows: "Such knowledge can be demonstrated to be sufficient to make an accurate dangerous waste determination and/or designation." This also provides a way to correct the defective language in the existing (3)(e)(ii)(A), described above.

Commenter: Steven Shestag - Comment B-7-14

MOG General Facility Inspection, draft section 173-303-172(13). The draft requirement for a written facility inspection schedule would impose another layer of paperwork on the two existing major inspection requirements, the weekly recorded inspection of central accumulation areas and tanks [WAC 173-303-172(5)(d) and (6)(b)(v)] and the testing and maintenance of alarm systems, fire protection equipment, spill control equipment, and decontamination equipment [WAC 173-303-172(11)(c)]. In a large facility, the latter equipment testing and maintenance is likely to be performed by security and fire prevention personnel, different from environmental staff who perform weekly accumulation area inspections. A consolidated inspection schedule and consolidated records of inspections and maintenance is an unnecessary burden on medium quantity generators. This section should be deleted.

Commenter: Anthony McKarns - Comment A-3-3

173-303-040 "Central accumulation area". CHPRC Comment 3: CHPRC is not in favor of this proposed change because the term as defined leaves too much uncertainty about its meaning. Please add language to this definition making clear that it is not intended to (1) denote a physical location, (2) require generators to establish a location that is centrally located within the site; or (3) limit the number of areas at a site

Commenter: Anthony McKarns - Comment A-3-4

Editor note: This comment pertains to draft rule changes made per EPA's DSW rule.

173-303-040 Definitions. Definition of "Contained"

WRPS Comment 1: The draft definition of "contained" omits the phrase "including land-based units" which appears in the corresponding federal regulation definition at 40 CFR 260.10. Is Ecology intending that land-based units not be eligible for containing hazardous secondary materials? If so, merely leaving the phrase out doesn't appear to limit the scope: A land-based unit could still meet the stipulated criteria for containing a hazardous secondary material, and the draft text would not preclude use of land-based units. Ecology should clarify the intended scope and, if it differs from the federal regulation, request input during public comment. The definition requires the unit to be in "good condition with no leaks..." While this definition follows the definition found in 40 CFR 260.10, the term good condition is not defined until a later time in the Definitions section. Is it Ecology's intent that the later term applies in this instance? If so, please clarify, but adding a reference, such as: "as defined in this Section." Same comment with "properly labeled."

Commenter: Anthony McKarns - Comment A-3-18

173-303-172(6)(c)(1) "remove all dangerous waste from tanks" This is inconsistency with the Hanford Site Consent Decree or TPA that will allow some wastes to remain in place.

Commenter: Anthony McKarns - Comment A-3-21

173-303-172(12) MQGs - Emergency procedures and training. The section title indicates training standards are presented.

MSA Comment 5: No training information is provided in - 172(12). Hence, the section content conflicts with the title.

Commenter: Anthony McKarns - Comment A-3-23

173-303-174(2) On a case-by case basis the department may require the satellite accumulation area to be managed in accordance with all or some of the requirements under WAC 173-303-172 or 200 and secondary containment requirements of 173-303-630(7). The SAA regulations were supposed to make life easier for generators, but this gives Ecology the ability to decide when additional regulations are required for SAAs.

Commenter: Anthony McKarns - Comment A-3-25

173-303-210(c) For knowledge based designations, records must explain the knowledge basis for the generator's designation. While this mirrors the federal rules, it seems appropriate to call out examples for the term "explain." Also, "base" should be "based" with a "d".

Commenter: Anthony McKarns - Comment A-3-26

WAC 173-303-320 General Inspection "...such as loading and unloading areas..." CHPRC Comment 15: CHPRC is in favor of adopting this language which is also present in 40 CFR. However, please confirm that properly closed containers, in good condition, in static storage areas do not require daily inspections and are subject to the weekly inspections at WAC173-303-630 or 40 CFR 265 Subpart I if the unit is under interim status.

Commenter: Anthony McKarns - Comment A-3-27

173-303-320(2)(c) General Inspection "As part of the review, the Department may modify or amend the schedule as may be necessary" WTP Comment 3: WTP believes language should be expanded to clarify that the Department will provide a regulatory basis for amending the schedule.

Commenter: Anthony McKarns - Comment A-3-33 - Jared Respond

173-303-830, Appendix I, B.5 Permit Modification Classes. Proposed change replaces "plan" with "program" MSA Comment 9: This change seems appropriate, as long as Ecology and permittees have a common understanding of what "program" means. Does "program" have the meaning conveyed in Ecology's permit application guidance (Publication 95-402, pages 56-57, Nov 2013.....see excerpted text below)? Under the proposed rule change and Publication 95-402, it would seem that only actual changes to the training program information specified in the permit would trigger a permit modification. Does Ecology agree? Per Publication 95-402, the dangerous waste training plan is not included in the permit. Instead, the dangerous waste training plan is maintained in the operating record. Therefore, a change to the dangerous waste training plan would not trigger a permit modification. Does Ecology agree? 95-402 Excerpt The "Training Program" makes up only part of the "Training Plan." The entire "Training Plan" must be maintained in the operating record, but not all aspects of the "Training Plan" are required in your permit application. The following two paragraphs highlight the content of and differences between the "Training Program" and "Training Plan." The "Training Program" must provide descriptions for each position or job title involved with aspects of dangerous waste management and permit compliance. It must also provide brief outlines of required training courses. It must ensure the facility commits to providing sufficient training to ensure safe and compliance operations. The "training program" does not include information that is expected to change frequently, such as employee names and specific details of course curricula. The "Training Plan" includes descriptions for each position or job title involved with aspects of dangerous waste management or permit compliance, and it specifies the name of the actual employee(s) filling each of those position description or job title. The Training Plan should have a complete curriculum for each required training course, not just their brief outlines. It also includes ongoing training records required by WAC 173-303-330(3).

Commenter: Myron Eng - Comment B-9-4

□ The mixture rule – Walmart believes that the Mixture Rule should be implemented in the regulations for WA as they are done under the federal regulations. This would avoid impacting such areas as the management of spill cleanups that would not be considered dangerous waste but for the original characterization of the product as dangerous.

Commenter: Scott Tomren - Comment A-2-7

173-303-172(3): Ecology proposes to create a requirement for medium quantity generators (MQGs) to perform a "general inspection" of the facility, similar to the requirement for large quantity generators, including the requirement to complete a written inspection plan. Requirements for MQGs to inspect central accumulation areas and emergency equipment already exist under the proposed 173-303-172(5)(d) and -172(11)(c), respectively. The added requirement for a general facility inspection seems unnecessary for MQGs, does not appear to provide any additional protection of human health or the environment, and should be eliminated.

Commenter: Joe Price - Comment O-4-5

Item #5: In reference to proposed change 173-303-172(13), WSUV will be required to identify all facility operations which generate Dangerous Waste with the capability of endangering the environment and/or public. WSUV fully operates in practice with its Medium Quantity Generator (MQG) permit requirements and has not experienced a spill or release in recent history. These new rules would require WSUV to formulate an inspection schedule (outside the on-going required weekly CAA inspection) and both post and maintain the schedule. WSUV feels this is a redundancy in regulatory compliance and places an undue burden with minimal benefit or risk reduction for a small facilities like ours if an additional scheduled inspection is required.

Comments on solvent wipes

Commenter: Paul Martin - Comment B-6-5

173-303-040 "No free liquids" "...and that there is no free liquid in the container holding the wipes." The definition of "No free liquids" under this exclusion requires a paint filter test on wipes and then negates any benefit from the approach by requiring the container to remain free of residual liquid including liquid that may emanate during accumulation after the wipes have already passed the test. Liquids dripping from such wipes after successful testing for free liquids should not be subsequently considered a source of free liquids since the paint filter test is a 5-minute test as opposed to an ongoing test during weeks of accumulation. To avoid confusion, CHPRC suggests addition of clarifying language that the exclusion is not compromised by placing absorbent in a container as a precaution to prevent accumulation of free liquids.

Commenter: Harold Tilden - Comment O-1-13

12. WAC 173-303-071(3)(ss)(vi). Ecology proposes to adopt only part of the Federal solvent wipers rule. Ecology does not include disposal in a municipal waste landfill or incinerator as options for disposal, as does the corresponding Federal rule. The impact of this omission is to curtail the relief provided by the Federal rule for such wipers. Under Ecology's proposal,

disposable wipers must be accumulated, containerized and labeled under modestly relaxed standards, but must still be disposed of at permitted RCRA treatment or disposal facilities. Ecology has not advanced any rationale why Washington state municipal waste landfills or combustors are uniquely unsuitable for disposal of these wipers as opposed to similar facilities in other states. A possible impact of this rule is to shift the disposal burden for these wipers to neighboring states, where they will be non-regulated. We recommend Ecology consider adopting the corresponding Federal rule without the deletions noted.

Commenter: Anthony McKarns - Comment A-3-6

173-303-040 "No free liquids" "...and that there is no free liquid in the container holding the wipers." CHPRC Comment 4: CHPRC is not in favor of this proposed change because the definition of "No free liquids" under this exclusion imposes a paint filter test on wipes but negates any benefit from the approach by requiring the container must remain free of residual liquid including liquid that may emanate during the accumulation time after the wipes that have passed the test. Liquids dripping from such wipes after successful testing for free liquids should not be subsequently considered a source of free liquids. Alternatively, add language or a note that clarifies that the exclusion is not compromised by placing absorbent in a container to prevent accumulation of liquid.