



DEPARTMENT OF  
**ECOLOGY**  
State of Washington

# **Differences Between Washington State and Federal Rules — Highlights**

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## **Discussion Paper**

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# **Differences Between Washington State and Federal Rule Differences — Highlights**

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## **Discussion Paper**

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

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This discussion paper describes important differences between the Washington State dangerous waste regulations and Federal Resource Conservation and Recovery Act (RCRA) regulations. This paper does not describe every regulatory difference between the two programs. Refer to the dangerous waste regulations, Chapter 173-303 WAC for more detail.



# Designation

## Federal

Any waste that is ignitable, corrosive, reactive, or toxic is considered hazardous. The U.S. Environmental Protection Agency (EPA) regulates waste based on properties exhibited by the waste. They developed four lists of hazardous wastes based on a combination of these criteria:

1. The waste is ignitable, corrosive, reactive, and/or toxic.
2. A. The waste is lethal to humans in low doses. In the absence of human toxicity data, EPA uses these criteria to assess the toxicity of wastes:
  - An oral LD<sub>50</sub> (rat) less than 50 mg/kg. (*LD<sub>50</sub>=median lethal dose*)
  - An inhalation LC<sub>50</sub> (rat) less than 2 mg/l. (*LC<sub>50</sub>=median lethal concentration*)
  - A dermal LD<sub>50</sub> (rabbit) less than 200 mg/kg.

B. Or, the waste causes or contributes to serious irreversible or incapacitating illness. These wastes are acutely hazardous wastes, and are regulated at smaller amounts than other hazardous waste. (The state follows EPA's intent to regulate the more hazardous wastes at smaller amounts through the system of Extremely Hazardous Waste (EHW)).
3. The waste contains one or more hazardous constituents as listed in Appendix VIII of 40 Code of Federal Regulations (CFR) Part 261. Many of these constituents have been shown to cause cancer, genetic mutation, or embryonic damage in humans and animals.

Using these criteria, EPA produced four lists of hazardous wastes. Two lists (Non-specific Sources and Specific Sources) are based primarily on the third criterion above. A third ("P") and fourth ("U") list (both termed Discarded Commercial Chemical Products) are based on all three criteria.

## State

The Department of Ecology (Ecology) regulates the same characteristic and listed wastes that EPA regulates, plus some additional ones. These additional wastes are regulated based on:

- 1) The characteristic of solid corrosivity.
- 2) State listed waste - WPCB (certain polychlorinated biphenyl wastes).
- 3) Two state criteria - toxicity and persistence.

One state criterion, acute toxicity, is the same criterion EPA uses for listing wastes. However, waste *mixtures* that exhibit the criteria, but are not listed, are not federally regulated **even though they pose the same risks as listed wastes**. The state system catches all toxic wastes that the federal system intended to regulate, based on their criteria for listing, but did not specifically list.

Chapter 70.105 Revised code of Washington (RCW) Hazardous Waste Management, requires Ecology to use the designation of “Extremely Hazardous” for wastes that are persistent and pose significant hazards because they are either highly toxic or bioaccumulate in living organisms through the food chain. In response to this, Ecology developed a method for determining which wastes are "highly toxic" by the acute toxicity criteria.

Ecology also regulates two classes of organic compounds as bioaccumulative under the persistence criteria: halogenated organic compounds (HOC) and polycyclic aromatic hydrocarbons (PAH).

EPA’s basis for regulating wastes includes genetic mutation and embryonic damage as criteria for producing their lists. Washington’s Hazardous Waste Management Act defines dangerous waste to include mutagenic and teratogenic wastes. Ecology has not yet written rules to regulate wastes on the basis of these specific properties. However, many wastes that have these properties are captured under the federal lists and characteristics, and the state criteria of toxicity and persistence.

## Excluded Categories of Waste

### Federal

EPA uses the term *hazardous waste* to identify solid wastes that could pose a danger to human health and the environment. Acute hazardous wastes include listed hazardous wastes and discarded chemical products that are very dangerous and strictly regulated in amounts over 2.2 pounds.

### State

The term "dangerous waste" refers to all wastes regulated under state and federal rules. There are two categories of dangerous waste, identified as “DW” or “EHW.” DW includes federal hazardous waste and state-only wastes, except for Extremely Hazardous Wastes (EHW). EHW is especially dangerous to human health and the environment, and requires additional control.

### Exclusions

The federal Resource Conservation and Recovery Act (RCRA) regulations provide two types of exclusions: 1) specific materials from being solid waste and 2) specific solid wastes from being hazardous waste. Generally, dangerous wastes excluded by the state dangerous waste regulations remain solid waste, but are subject to only a few cleanup requirements. Both categories of waste are excluded because they are generally not dangerous waste. They are recycled or disposed of in ways that do not threaten public health or the environment, or they are regulated under another environmental law or program.

Many of the state dangerous waste exclusions are the same as federal exclusions, but the state rules do not include all of the federal exclusions. More wastes (by volume and type) are regulated under the state rules.



## Generators

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Wastes excluded under the state rules remain subject to the requirements of three sections in the dangerous waste regulations:

1. Department of Ecology cleanup authority,
2. Spills and discharges into the environment,
3. Special powers and authorities of the department.

A comparison of state and federal exclusions follows.

### **Federal exclusions**

Significant federal exclusions not included in the Dangerous waste regulations include:

- Fly ash/bottom ash/slag waste/flue gas from combustion of coal and fossil fuels.
- Wastes produced from certain ore extraction/exploration procedures (drilling fluids, waters, and other wastes).
- Certain mining extraction/beneficiation/processing wastes (commonly known as the “Bevill Exclusion”).
- Mineral processing secondary materials.
- Cement kiln dust waste.
- Injected groundwater exclusion.
- De minimus wastewater exclusions.
- Source special nuclear and by-product material as defined by the Atomic Energy Act.
- Comparable or syngas fuels.
- Hazardous secondary materials used to make zinc fertilizers.
- Listed by-products, listed sludges, and spent materials being reclaimed.

### **2. State and federal exclusions that are the same**

These exclusions are either the same, or have been modified by the state to be consistent with the federal RCRA exclusions:

- Industrial wastewater discharges.
- Arsenical-treated wood waste and wood products having waste codes D004 through D017.
- Irrigation return flows.
- Mining overburden.
- Lab samples.
- Dangerous waste generated in product or raw material tanks.
- Petroleum-contaminated media and debris.
- Spent wood-preserving solutions that have been reclaimed.

## Generators

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- Non-wastewater splash condenser dross residue.
- Used oil re-refining distillation bottoms.
- Specific waste from the leather tanning and finishing industry that fails the toxicity characteristic (only for trivalent chromium).
- Non-wastewater residues such as slag that result from high temperatures metals recovery processing of K061, K062, or F006.
- Pulping liquors (section -017), if reclaimed.
- Spent sulfuric acid used to produce virgin sulfuric acid (section -017).
- Oil-bearing hazardous secondary materials that are inserted into the petroleum refining process.
- Excluded scrap metal.
- Shredded circuit boards.
- Petrochemical recovered oil.
- Spent caustic solutions from petroleum refining.
- Catalyst inert support media.
- Leachate or gas condensate.
- Dredged material.
- Condensates from overhead gases from Kraft mill stream strippers.
- Zinc fertilizers made from hazardous waste.

### 3. State and federal exclusions that are similar

There are many exclusions that are similar, yet have been tailored to address Ecology's concerns:

- Domestic sewage exclusion (see next section for more information).
- Household waste.
- Agricultural crops and animal manures.
- Waste pickle liquor sludge.
- "Closed loop" exclusion.
- Coke and coal tar used as fuels (the state version is more stringent).
- Used oil filters that are recycled as used oil and scrap metal.
- Chlorofluorocarbon (CFC) refrigerants (state rules have a conditional exemption).
- Treatability study samples.
- Samples undergoing treatability studies at lab and testing facilities.
- PCB waste regulated under the Toxic Substances Control Act (TSCA).
- Cathode ray tubes (CRTs) destined for recycling.

### 4. State exclusions only

The following exclusions are state only because either 1) the waste is regulated under an authority other than RCRA (PCB and asbestos under TSCA), or 2) the waste is usually not a federal hazardous waste because it does not fail a designation. State exclusions include:

- Asphalt materials.
- Roofing tars and shingles.
- PCBs with the waste code WPCB.
- Special incinerator ash.
- State-only wastes that are recycled, provided the recycling facility meets standards defined in rule and generators ship it in a timely manner.
- Controlled substances, legend drugs<sup>1</sup>, and over-the-counter drugs that are state-only waste.
- Wood treated with preservatives other than arsenic-based chemicals and not regulated as a federal hazardous waste.
- Wood ash that designates only for corrosivity.
- Pharmaceutical controlled substances, legend drugs, and over-the-counter drugs that are state-only dangerous wastes.

## Domestic Sewage Exclusion

"Domestic sewage" means untreated sanitary wastes from residences that pass through a sewer system to a publicly-owned treatment works (POTW) for treatment. This exclusion does not apply to the generation, treatment, storage, recycling, or other management of dangerous wastes prior to discharge into the sanitary sewage system.

### Federal

Federal regulations broadly exclude domestic sewage from the definition of a "solid waste." The entire waste stream, including mixtures of domestic sewage and "other wastes..." is excluded unconditionally. *"Domestic sewage; and any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly-owned treatment works for treatment. 'Domestic sewage' means untreated sanitary wastes that pass through a sewer system."* (40 CFR 261.4(a)(1))

### State

The state regulation is narrower. It excludes domestic sewage and any mixture of domestic sewage and other wastes that pass through a sewer system to a POTW. The generator or owner/operator must obtain a state waste discharge permit, or pretreatment permit from a sewage utility with a delegated pretreatment program.

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<sup>1</sup> A "legend drug" is any drug that requires a prescription.

The waste discharge must be specifically authorized in the permit and approved under national pretreatment standards. Waste discharges must be free of any dangerous waste characteristics or criteria prior to mixing with domestic sewage, unless it is treatable at the receiving POTW.

## Universal Waste

### Federal

Universal wastes are common wastes created by different types of generators. They can be safely managed under less stringent requirements than other hazardous wastes. Under the federal rule batteries, mercury-containing equipment, pesticides, and lamps are considered universal waste.

### State

The state rule includes universal waste categories for batteries, mercury-containing equipment, and lamps. Basic differences from the federal rule include:

1. Pesticides are not universal wastes under the state rule. They are fully regulated wastes.
2. The state has a lower accumulation limit for lamps. Accumulation of lamps by a small quantity handler is limited to 2,200 pounds.

## Used Oil

The state incorporated most of the federal used oil rules by reference in the Dangerous waste regulations. There are several differences between the state and federal rules:

**Mixing dangerous waste with used oil.** The federal rule prohibits mixing listed waste with used oil, but allows certain mixing of characteristic waste and conditionally exempt small quantity generator waste (CESQG) with used oil. Ecology did not adopt 40 CFR 279.10(b)(2) and (3), which allows mixing characteristic waste and CESQG waste with used oil. Intentional mixing of other material into used oil, or used oil into other material is not allowed; therefore those wastes cannot be managed as used oil under the state's rules.

**Metal-working fluids with chlorinated paraffins.** Under the state rules, metal-working fluids formulated with chlorinated compounds (commonly referred to as chlorinated paraffins or chlorinated alkene polymers) cannot be managed as used oil if they are burned for energy recovery. Dioxin might be formed if chlorinated metal-working fluids are burned in an inappropriate combustion unit. If metal-working fluids are reclaimed or re-refined, they may be managed as used oil.

**Standards for used oil generators.** In addition to the federal standards for generators in 40 CFR Part 279 Subpart C under the state rules, generators must make sure that containers are closed at all times except when adding or removing materials. The containers must be managed and handled in a manner that avoids leaks or ruptures. Another difference between the state and federal

## Generators

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regulations is that when specific conditions are met, the state allows generators to transport their own oil in amounts over 55 gallons in their own vehicle without a transporter ID number. The oil must be taken to a collection center that meets the requirements of a used oil transfer facility.

**Standards for used oil collection centers and aggregation points.** In addition to the federal requirements for collection centers and aggregation points (a place that takes used oil from multiple facilities all under the same ownership), the state rule allows collection centers to receive more than 55 gallons of oil from a generator if the center meets the requirements of a transfer facility. The collection center must record the generator's name, address, telephone number, date of delivery, and amount of used oil received.

**Standards for used oil transporters and transfer facilities.** In addition to the requirements in Part 279 Subpart D, the state rule has a provision for additional reports on integrity of used oil equipment. This contingency provision gives dangerous waste inspectors a way to ensure the integrity of containers and tanks at transfer facilities, processors, and re-refiners. If an inspector determines that a container or tank poses a threat to human health or the environment they can require an integrity assessment of the tank or container by a professional engineer. The inspector may also not allow the tank or container to be used again until repairs are made.

**Standards for used oil processors and re-refiners.** In addition to the requirements in Part 270 Subpart F, the state rule limits processors and re-refiners to no more than 90-days before used oil and oily water waste must be entered into an active recycling process. This time limit prevents problems associated with extended storage of oily wastes from becoming a threat to the surrounding area due to neglect and mismanagement. The additional reports described above for transfer facilities are also required of processors and re-refiners.

## Military Munitions

The state and federal versions of the Military Munitions rule are nearly identical except:

- a. The state rule does not include an exemption from manifesting for military munitions that are transported between military installations. The federal exemption from manifesting applies to both military and commercial transporters of military munitions.
- b. The state modified the second federal exclusion from manifesting- to allow transport along a public right of way within or along the border of contiguous property. This allows a facility to use an alternative tracking mechanism that serves the purpose of the manifest. However, Ecology must approve its use. This way, documentation will continue to be required for all shipments of dangerous waste, yet large facilities such as military installations and universities will be able to use existing documentation that also accompanies these shipments.
- c. The state adopted one provision that EPA proposed, but did not include it in the final federal rule. Munitions left on a closed range meet the definition of solid waste. By including this in the state rule, Washington clarified its authority to require that these wastes be cleaned up under its corrective action program.

### Special Waste

#### State

"Special waste" is any state-only dangerous waste (not regulated by EPA as a hazardous waste) that is solid (non-liquid, non-aqueous, non-gaseous), and:

- Corrosive waste,
- Toxic waste with a Category D toxicity,
- Listed PCB waste (WPCB), or
- Persistent waste that is not EHW.

Special wastes pose less risk to public health and the environment than do other dangerous wastes, therefore they do not require as high a level of regulation. They can be safely managed with a level of protection between dangerous wastes and non-dangerous solid wastes.

Special waste may be legitimately recycled, sent off-site for treatment, treated on-site consistent with the treatment by generator standards, or disposed in solid waste landfills permitted in accordance with Chapter 173-351 Washington Administrative Code (WAC). Information on appropriate types of permitted landfill units and additional on-site management requirements can be found in the Dangerous waste regulations at WAC 173-303-073.

### Certificate of Designation

#### State

The state rules include a provision for Ecology to "certify" that a particular generator's waste does or does not designate as dangerous waste for specific reasons. This option assures generators that they correctly designated their waste.

After the generator tests their waste and determines whether or not it is dangerous, they should submit an application for certification to Ecology. Ecology will review the application to verify that the generator performed all of the appropriate tests, and the test results are valid. If Ecology agrees with the findings, a Certificate of Designation may be issued for the waste. The certificate is essentially Ecology's agreement that the generator has properly designated the waste.

### Generator Status

#### Less than 220 pounds

The federal and state regulations use different terms for identifying generator status. At the federal level, generators of less than 220 pounds are called "conditionally exempt small quantity generators" (CESQG). The state calls them "small quantity generators" (SQG). Generators of less

than 220 pounds per month may accumulate up to 2,200 pounds of non-acute hazardous waste.

## **220 – 2,200 pounds**

Under the federal regulations, generators of between 220-2,200 pounds of waste per month are identified as "small quantity generators" (SQGs). In the state regulations they are referred to as "generators of 220-2,200 pounds" (or medium quantity generators (MQGs)). Federal SQGs may accumulate up to 13,200 pounds of non-acute hazardous waste. State MQGs are limited to 2,200 pounds. As a result of the lower accumulation limit, the state dangerous waste regulations may regulate more generators at a higher generator "status" than under federal regulations.

## **2,200 pounds and more**

Both the state and federal regulations refer to those that generate 2,200 or more pounds per month as large quantity generators (LQG).

### **Generation and Accumulation Amount Table**

<b>Pounds Generated</b>	<b>State Term</b>	<b>Federal Term</b>	<b>Accumulation: State Limit</b>	<b>Accumulation: Federal Limit</b>
220 or less	SQG	CESQG	2,200	2,200
Between 220 and 2,200	MQG	SQG	2,200	13,200
2,200 and more	LQG	LQG	No limit	No limit

## **Accumulation**

The basic accumulation requirements are the same under the state and federal regulations. Generators of between 220 and 2,200 pounds per month may accumulate dangerous waste on site without a permit for 180 days. Generators of 2,200 pounds per month or more are allowed to accumulate dangerous waste on site without a permit for 90 days, if these requirements are met:

- All waste must be shipped offsite to a designated facility or placed in an on-site permitted facility within the accumulation time.
- The generator must comply with tank and container standards.
- Containers and tanks must be labeled clearly.
- The accumulation date must be marked and clearly visible.
- Other requirements as necessary.

When wastes must be transported 200 miles or more, Ecology requires a case-by-case review of generator requests for an extension of the 180-day accumulation period (for generators of 220-2,200 pounds per month). The federal regulations do not require such a review.

# Treatment by Generator

## State

The state allows generators to treat their own waste in containers, tanks, and containment buildings without a RCRA permit. Publication #96-412, *Treatment by Generator*, describes how treatment by generator may be accomplished for many wastes and treatment methods without prior approval from Ecology.

## Federal

Under federal regulations, an allowance exists for generators who treat their own waste using treatment methods that do not use direct flame combustion or heat to drive off hazardous constituents.

# Land Disposal Restrictions

## Federal

A major impact of the 1984 Hazardous and Solid Waste Amendments (HSWA) on the hazardous waste program was the restriction of land disposal for hazardous wastes.

The federal land disposal restrictions (LDR) apply to all listed and characteristic waste. The LDR prohibits land disposal of hazardous waste unless it meets treatment standards or concentration levels that substantially reduce the toxicity of the waste or the likelihood that hazardous constituents will migrate from the disposal site.

## State

The state Dangerous waste regulations incorporate the federal land disposal restrictions (LDR) by reference. The federal rules contain the incorporated LDR requirements. In addition to federal requirements, there are some state land disposal restrictions that apply to state-only wastes. Federally regulated wastes must meet federal LDR only, while state-only wastes must meet state land disposal restrictions.

The state land disposal restrictions resulted from the 1986 Priority Waste Management Study. The purpose of the state LDR is to encourage best management practices for managing dangerous wastes. In order of priority they include:

1. Reduction
2. Recycling
3. Physical, chemical, and biological treatment
4. Incineration



5. Stabilization
6. Solidification treatment
7. Landfilling

Land disposal of Extremely Hazardous Waste (EHW) in Washington State is prohibited unless specific conditions are met.

## Recycling Requirements

Dangerous wastes that are recycled are subject to generator, transporter, and storage facility requirements up to and including storage, prior to recycling. There are some exceptions for specific materials and wastes that are listed in the state regulations at WAC 173-303-120(2) and (3) and in the federal regulations at 40 CFR 261.6(a)(2) and (3). Recycled dangerous wastes are known as "recyclable materials."

There are several major differences between the state's recycling requirements and the federal recycling requirements including:

1. "Exempt" recyclable materials remain subject to the requirements of three sections in the Dangerous waste regulations: Department of Ecology cleanup authority, spills and discharges into the environment, and special powers and authorities of the department. The federal rules have no similar requirements.
2. Requirements for recycling state-only wastes.
3. Recyclable materials must be moved into an active recycling process immediately unless the owner or operator received permission from Ecology for more time to stage wastes prior to recycling. Up to 72 hours is allowed on a case-by-case basis. Under the federal regulations, recyclable materials must enter the process immediately; no accumulation prior to recycling is allowed.
4. Beginning in 2005, state rules require owners and operators of recycling facilities to prepare a closure plan, develop a cost estimate to cover the cost of closure, and obtain financial assurance. EPA does not have similar closure and financial assurance requirements for recyclers.

## Spills

### Federal

Federal regulations do not include a section for spill requirements. The EPA Spill Table (developed under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund) lists reportable quantities for hazardous substances.

### State

The state's rule requires that spills of dangerous waste or hazardous substances that are a threat to human health or the environment must be reported to the appropriate Ecology regional office and to local authorities in accordance with the local emergency plan. Cleanup of the spill is also required.

Spill reporting requirements for tanks were modified in 2005 to be consistent with the state's rule for spills at WAC 173-303-145. Tank spill requirements were previously identical to the federal rules.

## Contained-in Policy

### Federal

EPA's contained-in policy states that environmental media, such as soils and groundwater, contaminated with a RCRA-listed hazardous waste must be managed as hazardous waste until it no longer contains the hazardous waste or is delisted. Contaminated environmental media may be determined to no longer contain hazardous waste when the hazardous constituents that caused the waste to be listed fall below site-specific, risk-based levels and the media does not exhibit a characteristic hazard.

All contained-in determinations must be based on statistically adequate site-specific data and must, at a minimum, consider the concentration and risk of each constituent for which the hazardous waste was listed and any possible breakdown products. EPA decided that contained-in determinations should be left to the discretion of the EPA region or authorized state and has not published national guidance on the policy. EPA Region 10 implements the contained-in policy conservatively and in some cases, contingent management strategies to ensure adequate environmental protection.

***Contingent management*** means allowing an exemption under the contained-in policy as long as the media is managed in a specific manner that further reduces risk to human health or the environment.

### State

The state policy establishes risk-based action levels using unrestricted use standards calculated under the Model Toxics Control Act. Contingent management will be considered when appropriate. The contained-in policy is not a waiver from the requirement to designate material to determine if it is dangerous waste.

# Permit By Rule

This provision allows certain types of units to manage dangerous wastes under their existing water quality permits rather than going through the process of obtaining a separate dangerous waste permit.

## Federal

A person is deemed to have a RCRA permit if certain conditions are met. This includes ocean disposal barges or vessels, injection wells, and POTWs that accept hazardous waste from off site (via truck, rail, or dedicated pipe) for treatment. The owner or operator of a POTW must have a **National Pollutant Discharge Elimination System (NPDES)** permit, meet the permit conditions, and comply with the following regulations:

- Have a current EPA identification number.
- Use the manifest system.
- Reconcile manifest discrepancies.
- Keep a written operating record.
- Submit a biennial report.
- Prepare and submit unmanifested waste reports.
- Institute corrective action for solid waste management units if necessary.

The waste must meet all federal, state, and local pretreatment requirements applicable to the waste as if it were being discharged into the POTW through a sewer, pipe, or similar conveyance.

Under the federal rules, units meeting the definitions for totally-enclosed treatment facility (TETF), elementary neutralization unit (ENU), or wastewater treatment unit (WWTU) do not require a permit.

## State

State regulations include similar permit by rule provisions for ocean disposal barges and vessels and underground injection wells. EHW cannot be disposed in underground injection wells. State permit by rule provisions for POTW and other treatment units are more comprehensive than the federal rules. The state rules provide several options:

### 1. POTWs

The owner or operator of a POTW that accepts dangerous waste for treatment has a permit by rule if the owner or operator has an NPDES permit and complies with the permit conditions and the following regulations:

- Notify the department on a dangerous waste site identification form and have a current site identification number.
- Follow generator requirements when initiating shipments of dangerous waste.

## Generators

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- Follow dangerous waste facility general performance standards.
- Use the manifest system.
- Keep a written operating record.
- Submit an annual report.
- Prepare and submit unmanifested waste reports.
- Initiate corrective action for solid waste management units as necessary.

The waste must meet all federal, state, and local pretreatment requirements applicable to the waste as if it were being discharged into the POTW through a sewer, pipe, or similar conveyance. No EHW can be accepted for disposal at a POTW.

### **2. TETF, ENU, and WWTUs**

The owner or operator of a totally enclosed treatment facility (TETF), elementary neutralization unit (ENU), or wastewater treatment unit (WWTU) that treats dangerous wastes has a permit by rule if the owner or operator has one of the following permits that covers the waste stream and constituents being discharged, and meets the conditions of that permit:

- NPDES permit.
- State waste discharge permit.
- Pretreatment permit (or written discharge authorization) from the local sewage authority.
- Pretreatment permit (or written discharge authorization) from a local sewage utility-delegated pretreatment program.

They are also required to comply with the following regulations:

- Notify and have a current identification number.
- Designate dangerous waste.
- Follow dangerous waste facility performance standards.
- Perform and obtain general waste analysis.
- Follow security requirements.
- Have a contingency plan and emergency procedures.
- Have an emergency coordinator and follow emergency procedures.
- Use the manifest system.
- Keep a written operating record.
- Prepare and submit facility reports.

Dangerous wastewater from off site may be treated, provided it is generated within the same industry and the wastewaters will be effectively treated by the wastewater treatment unit.

# Treatment, Storage, Disposal Facility Permitting

## Federal

The federal rules establish standards for acceptable management of hazardous waste. These standards apply to owners and operators of all facilities that treat, store, or dispose (TSD) of hazardous waste. Facilities must submit permit applications and go through the permitting process. There are some exemptions to permitting requirements such as activities covered under another authority and emergency responses.

There are two categories of rules for facilities: interim status and final status. Interim status facilities were already operating when regulatory or statutory requirements went into place that required them to have a permit. They are allowed to continue operating, but must apply for a final facility permit. New facilities must follow the final facility requirements and cannot operate until they are permitted.

## State

Many of the state's dangerous waste facility requirements are the same as the federal regulations for final status and for interim status facilities. Most interim status requirements are incorporated by reference from the federal rule. For the content of the incorporated requirements, you must read the federal regulations. There are some differences and they are listed in the Dangerous waste regulations. The state has its own final facility requirements and most of them are identical to the federal rules. Some of the more significant differences are highlighted below.

## EHW Management Standards

For final facility (not interim status) permits, tanks containing EHW that is acutely or chronically toxic by inhalation must prevent the escape of vapors, fumes, or other emissions into the air. The federal rules contain air emission requirements for tanks, but do not specifically address inhalation risk.

## Notice of Intent/Siting Criteria

A person who intends to obtain a permit to construct a new facility or to expand an existing facility must give prior notice and submit:

- A description of the project.
- Compliance history of the proponent.
- A demonstration that the facility complies with siting criteria (siting criteria include restrictions and setback distances from natural and human-built land features).

State rules have several more siting requirements than the federal rules.

### **Expanded public participation**

The state has different requirements for meetings. For example, the applicant's meeting date must be coordinated with and approved by Ecology.

### **Performance standards**

Owners and operators must meet the general performance requirements for designing, constructing, operating, and maintaining their permitted facility.

### **Contingent Groundwater Monitoring Plan**

The permit applicant must prepare a plan to address potential releases from land-based units. The inability to demonstrate that the release can be remediated is grounds for permit denial. A plan is not required under federal rules, but EPA staff considers this when reviewing permit applications.

### **Post-closure**

The state rule does not include the federal provision for an alternative administrative process to permit facilities where only dangerous remediation waste is treated, stored, or disposed. These types of facilities are cleaned up under rules found in the Model Toxics Control Act (Chapter 70.105D RCW). According to RCW 70.105D.090, people who conduct remedial actions under a consent decree, order, or agreed order are exempt from the procedural permitting requirements.

The federal regulations require less information in a post-closure permit application than the state regulations. WAC 173-303-840(b) and guidance on implementation of the federal hazardous waste program allow EPA and the state to determine that a post-closure permit is complete even if the application does not contain all of the elements that would be necessary in a permit application for an operating facility.

### **Ambient monitoring plan**

Under the state rule for quantifying potential releases from incinerators, the permit applicant must prepare a plan to measure baseline environmental information characterizing on- and off-site conditions before and after incinerator operation.

### **Environmental review procedures**

This state requirement allows the public to review incinerator operation and monitoring data. The permit applicant must coordinate this effort with the public and interested local organizations.

### **Impact mitigation plan**

The state requires a plan for mitigating all probable significant adverse impacts due to operation of incinerators. The permit applicant must identify all of these impacts, plan to reduce the impacts, and have the financial capability to implement mitigative measures, including financial compensation to the affected parties.

### Citizen/proponent negotiation

The state requires preempted facility operators (where there are local zoning issues) to negotiate additional measures with local governments and citizens that will ensure protection of human health and the environment. This is required only if the lead local government and citizens want it. The local government and citizens may obtain other concessions and compensation during the negotiations. Citizen/Proponent Negotiation can also occur for other (non-preempted) hazardous waste facilities if the local government in which the facility will be located and the owner/operator want it. The federal rules have no such requirement for negotiations.

### EHW disposal facility

According to state regulations, EHW can be legally disposed in Washington State only at a facility at Hanford, which has not yet been built. Until then, EHW must be shipped out of state for disposal at a permitted hazardous waste facility. The federal rules do not have requirements for wastes to be directed to a specific facility.

## HSWA Corrective Action

### Federal

Corrective action requires facilities that have or should have interim status, or are seeking or required to have a final facility permit, to conduct corrective action that is needed to protect human health and the environment from all releases of hazardous wastes or hazardous constituents from all solid waste management units (SWMU) at the facility. The definition of “facility” for the purpose of corrective action includes all contiguous property under the control of an owner/operator seeking or required to have a permit.

*Corrective action was one of the main programs to result from the Hazardous and Solid Waste Amendments (HSWA). Statutory authority for HSWA corrective action was given in RCRA 3008(h) and 3004(u) and (v). EPA determined that Congress intended the agency to interpret the term hazardous waste to include material that, although it does not meet the RCRA regulatory definition of hazardous waste, contains hazardous constituents at levels that could pose a threat to human health or the environment.*

### State

The state’s corrective action program is implemented using Chapter 70.105D RCW, the Model Toxics Control Act, and its regulations. Under the state’s program, dangerous waste management facilities are required to conduct whatever corrective action is needed to protect human health and the environment for all releases of dangerous waste and dangerous constituents at or from the facility, *regardless of the source of the release*. EPA uses a combination of authorities to ensure all releases are addressed, regardless of the source.

Washington's program is not meant to increase cleanup obligation, but to decrease duplication of effort and the potential for overlapping activities. All releases must already be addressed under MTCA. Another difference between the state and federal program is that under the state program, facilities are limited to the rights of appeal allowed under MTCA.

# Closure Standards

## Federal

Federal closure performance standards require RCRA-regulated units to be closed in a manner that minimizes risk to human health and the environment, including removal of all wastes and decontamination to risk-based health levels.

## State

For interim status facilities, the federal closure performance standard applies. For final status facilities, the levels of dangerous waste or dangerous waste constituents or residues may not exceed either:

1. The numeric cleanup levels calculated using unrestricted use exposure assumptions according to the Model Toxics Control Act Regulations Chapter 173-340 WAC for soils, ground water, surface water, and air, or
2. Clean closure standards set by Ecology on a case-by-case basis to minimize or eliminate post closure escape of dangerous waste constituents for all structures, equipment, bases, liners, etc.

# Recycling and Used Oil Facilities

## State

The state requires owners and operators of used oil and recycling facilities to plan for closure of their facilities. EPA does not have similar requirements for used oil and recycling facilities.

These closure and financial responsibility requirements are similar to the requirements for TSDs. Owners and operators must develop closure plans and estimates to cover the cost of closing their facilities. They must also obtain financial assurance for closure and liability coverage. Financial responsibility requirements are being phased in. When the rules went into effect in 2005, an owner of an existing facility who used a partially funded trust fund was given 5 years to fully fund it.