



# Report to the Legislature on Rule Amendments to Chapter 173-350 WAC, Solid Waste Handling Standards

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# Report to the Legislature on Rule Amendments to Chapter 173-350 WAC, Solid Waste Handling Standards

Waste 2 Resources Program
Washington State Department of Ecology
Olympia, Washington

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# **Executive Summary**

Substitute Senate Bill 5883, Chapter 1, laws of 2017, requires that by September 1, 2017, the Washington Department of Ecology (Ecology) report to the Washington State Legislature on the revision of Chapter 173-350 Washington Administrative Code (WAC):

"(5) Within existing resources, the department of ecology must engage stakeholders in a revision of WSR 13-22-073, rule amendments to chapter 173-350 WAC, to revise the proposed rule and submit a report to the senate local government and energy, environment, and telecommunications committees and the house of representatives local government and environment committees by September 1, 2017. The report must include a summary of areas of consensus and dispute, proposed resolution of disputes, a list of engaged stakeholders, a proposed timeline for potential rule adoption, and the most recent draft of proposed amendment language, if any."

This report provides brief information about Chapter 173-350 WAC, Solid Waste Handling Standards and the process to develop amendments to the rule. It details stakeholder workgroups that were formed to participate in the process, including lists of stakeholders involved and summaries of the issues explored. It identifies areas of consensus and dispute for three key topics. The report concludes with a recommendation to continue the rule process, and a proposed timeline for next steps to propose and adopt rule amendments. The most recent draft rule amendment language is in Appendix A-1.

Chapter 173-350 WAC addresses waste management issues as diverse as used tires, surface impoundments, and incineration. These rules govern how individuals, businesses, and governments can handle solid waste, what materials can be recycled, when permits are required, and many other technical details. The rule was initially adopted in 2003 and most requirements have never been updated. Feedback from regulated entities, local governments, and Ecology staff indicated that a comprehensive review and update was necessary.

Ecology began rulemaking in 2013 with the intention of adopting an amended rule in 2016. Ecology began working with stakeholders to identify issues, evaluate solutions, and craft draft rule language to improve requirements and increase clarity. Due to the complexity of the rule and the significant interest of stakeholders, Ecology extended the informal public involvement time for the draft rule and delayed its adoption until 2018.

In addition to stakeholder meetings held to address specific areas, Ecology conducted two informal comment periods on a comprehensive draft, seeking review and comments beyond what the Administrative Procedure Act requires. Ecology carefully reviewed feedback on each draft and continued to work with stakeholders to craft language responsive to their comments and concerns, recognizing that not all of them would be satisfied with the resulting language.

Throughout this process, Ecology relied on cooperative relationships to develop rule amendments that protect Washington's environment while promoting a strong economy. Ecology has and will continue to implement an open, transparent rule development process.

Ecology will continue to meet with stakeholders to listen, discuss, and problem solve before formally proposing the rule for public review and comment in November 2017.

The most significant areas of proposed changes to the rule are:

- A new section that provides a tool to help determine if something is a solid waste and therefore regulated under this rule;
- Changes to how solid waste is managed in piles; and
- Management of contaminated soil and contaminated dredged material.

## Introduction

In 2013, the Washington State Department of Ecology (Ecology) initiated rulemaking to update Chapter 173-350 of the Washington Administrative Code (WAC), Solid Waste Handling Standards. This regulation was originally adopted in 2003. With the exception of changes to sections pertaining to management of organic wastes in 2013, the rule has not been updated, even though the amount and type of solid waste generated in Washington have dramatically changed.

After three years of working with a broad array of stakeholders, including holding two informal comment periods, Ecology is now working on a formal rule proposal for release in November 2017. This report provides the Legislature a summary of the rulemaking process, a list of engaged stakeholders, areas of consensus and dispute, a proposed timeline for rule adoption, and the most recent draft of proposed rule language.

#### **Background**

In Washington State, local governments have the primary authority to manage and regulate solid waste. Ecology's responsibility is to review and approve local comprehensive solid waste management plans and to adopt regulations that govern these plans, including solid waste collection and permitting solid waste facilities.

The primary state regulation governing solid waste in Washington is Chapter 173-350 WAC, Solid Waste Handling Standards. Chapter 173-350 WAC was originally adopted in 2003, repealing earlier versions of solid waste management rules dating back to the late 1960s. Over the last 14 years, the nature and character of the solid waste stream have changed as products and consumer behaviors have evolved. Materials that are disposed today often contain higher levels of toxic chemicals than materials disposed in the 1970s and 1980s. In addition, solid waste handling and disposal facilities have evolved to better manage new waste streams. Based on the changes in the solid waste system, Ecology, with the advice and encouragement of stakeholders, initiated a process to update the solid waste regulations.

#### **The Rulemaking Process**

On November 5, 2013, Ecology initiated rulemaking to update Chapter 173-350 WAC, the Solid Waste Handling Standards, by filing a CR-101 form with the Code Reviser's Office. The CR-101 identified the authorizing statute and section(s) of the rule under consideration for revision. Ecology proposed to revise all sections of the rule except -220, -225, and -250. Those sections pertain to management of organic wastes and were amended earlier in 2013.

Ecology assigned lead technical staff to the various sections of the rule and organized stakeholder workgroups to advise Ecology on policy issues and rule language. The workgroups held meetings for two years before Ecology released the first public draft of the rule in June 2016. Following the release of the preliminary draft, three public workshops were held in July

2016 in Lacey, Ellensburg, and Spokane. Comments on the preliminary draft were accepted until September 2016. A second public draft was developed incorporating comments received on the first draft. The second draft was released in December 2016 and available for public comment until February 2017.

Ecology is currently developing a formal rule proposal based on stakeholder comments on the first two drafts of the rule. This will signal the formal public comment period, with adoption scheduled for spring 2018.

# Stakeholder Engagement

At the onset of rulemaking, Ecology organized stakeholder workgroups around various sections of the rule. The committees advised Ecology on policy issues and rule language. Ecology created a webpage for the rule process, and has maintained a Listserv of several hundred stakeholders and organizations that are interested in the rule. Messages were sent out via the Listserv to update stakeholders throughout the process. In addition to hosting rule process documents such as the CR-101, the webpage identifies stakeholder workgroups, shares summaries of discussions, and includes focus sheets for the major sections of the rule identifying issues and proposed changes.

In June 2016, Ecology notified interested parties that a draft rule was available for review and announced upcoming public workshops. Three public workshops were held around the state in July 2016 to share draft rule changes to help stakeholders prepare for submitting comments. Written comments were accepted until September 2016 and individual meetings were held with stakeholders upon request.

Ecology revised the draft rule based on comments received and issued a second draft rule for public comment in December 2016. Comments were accepted until February 2017. All stakeholders were offered the opportunity to review the second draft rule before Ecology began working on the formal rule proposal. In addition, the Senate Energy, Environment and Telecommunications Committee held a work session on the rule in March 2017. Ecology held additional meetings with stakeholders including the Associated General Contractors of Washington, the Washington Aggregates and Concrete Association, the Ports Association, the Building Industry Association of Washington, the Institute of Scrap Recycling Industries, the Washington State Association of Counties, and environmental health directors.

Ecology is currently revising the draft rule language based on comments stakeholders provided on the second draft and from other discussions. Following review by Ecology's economist, Ecology plans to formally propose amendments in November 2017 by filing a CR-102 as the Administrative Procedure Act requires.

### Stakeholder Workgroups, Sections of the Rule, and Issues

Following is a list of the sections of the rule and members of the stakeholder workgroups that were formed early in the rulemaking process. Representatives changed over time for some organizations. Over the course of the project, representatives may have changed organizations, and in some cases members attended multiple workgroup meetings.

#### WAC 173-350-100 - Definitions and Determination of Solid Waste

Ecology Staff Leads: Gary Bleeker, Allison Kingfisher, Dawn Marie Maurer

#### Workgroup Members:

- Bruce Chattin, Washington Aggregates & Concrete Association
- Jennifer Hill, Washington State Department of Transportation
- Penny Ingram and Pam Smith, Washington Utilities and Transportation Commission
- Sego Jackson, Local Government Snohomish County
- Andrew Kenefick, Waste Management
- Troy Lautenbach, Washington State Recycling Association
- Suellen Mele, Zero Waste Washington
- Ted Silvestri, Jurisdictional Health Authorities
- Jody Snyder, Waste Connections
- Art Starry, Jurisdictional Health Authorities
- Rod Whittaker, Washington Refuse and Recycling Association (WRRA)
- Scott Windsor, Local Government City of Spokane

#### Others who attended meetings include:

- Jerry Bartlett, Cedar Grove
- Holly Chisa, Institute of Scrap Recycling Industries, Inc.
- Kinley Deller, King County Solid Waste
- Bart Kale, Bart Kale & Associates/Nucor Steel
- JR Myers, Snohomish County
- Jim Sells, Washington Refuse and Recycling Association
- Susan Thoman, Cedar Grove
- Matt Zybas, Snohomish County

<u>Workgroup Focus</u>: The definitions of "solid waste," "recyclable materials," and "recycling" are the basis for all solid waste handling activities. These terms are defined in statute, but subject to some interpretation. The workgroup met to determine if these terms could be clarified or improved within the limits of existing statutes.

The workgroup concluded there needs to be a new section: WAC 173-350-021, Determination of Solid Waste. This new section helps industry determine if materials they generate are solid waste, and provides a tool to provide clarity and consistency in enforcement of the regulation. This section of the rule attracted significant interest.

#### **WAC 173-350-230 - Land Application**

Ecology Staff Lead: Marni Solheim

#### Workgroup Members:

- Pam Barrow, Northwest Food Processors Association
- Rick Dawson, Jurisdictional Health Authority Benton-Franklin County Health
- Samantha Fleischner, Washington Organics Recycling Council
- Jeff Hegedus, Jurisdictional Health Authority Whatcom County Health

<u>Workgroup Focus</u>: This section concerns the land application of wastes for beneficial purposes. The workgroup met twice and agreed that not many changes were needed to this section. They agreed that exclusions from the rule for agronomic land application of manure and crop residue should be expanded to include on-farm vegetative waste.

#### WAC 173-350-240 - Energy Recovery and Incineration Facilities

Ecology Staff Lead: Gary Bleeker

#### Workgroup Members:

- Kevin Barry, Klickitat County Public Health
- Michael LaScuola, Spokane Regional Health District
- Art Mains, Roosevelt Regional Landfill
- Jeff Martin, Klickitat County Public Health

<u>Workgroup Focus</u>: Facilities that burn solid waste to produce energy can earn exemptions from some solid waste management regulations. The workgroup looked at clarifying applicability of this section, especially if this section should regulate facilities that burn wood or wood derived fuel. The workgroup also looked at streamlining and simplifying the process to determine if an energy recovery facility or incinerator is required to obtain a solid waste handling permit, or eligible for an exemption from obtaining one.

#### WAC 173-350-320 - Piles Used for Storage or Treatment

Ecology Staff Lead: Al Salvi

#### Workgroup Members:

- Jan Brower, Jurisdictional Health Authority Kitsap County Health
- Bruce Chattin, Washington Aggregates & Concrete Association
- Rebecca Craig, Small business/contractors
- Andrew Kenefick, Waste Management
- Chris Martin, Ecology Water Quality Program

- Jeff Rudolph, Pierce County Public Works Road Shop
- Dan Watts, Jurisdictional Health Authority Tacoma-Pierce County Health Department
- Rod Whittaker (replaced Jody Snyder), Washington Refuse and Recycling Association
- Ben Wilkinson (replaced Jennifer Hill), Washington State Department of Transportation

<u>Workgroup Focus</u>: This section includes applicability and requirements associated with the storage and treatment of solid waste in piles. The workgroup looked at clarifying requirements for the throughput of certain materials. For exempt piles facilities, the workgroup evaluated the requirements to meet for piles to remain exempt. They discussed adding requirements such as notification, reporting, and an operations plan. For permitted piles facilities, the workgroup wanted to clarify existing requirements and discussed the need for any new ones, including financial assurance. The workgroup met twice and members voiced opposing views on certain requirements. Further discussion is included later in this report.

#### WAC 173-350-330 - Surface Impoundments and Tanks

Ecology Staff Lead: Bill Harris

#### Workgroup Members:

- Jan Brower, Kitsap Public Health District
- David Lowe, Waste Management
- Chris Martin, Ecology Water Quality Program
- Wendy Mifflin, Yakima County Solid Waste Division
- Ted Silvestri, Yakima Health District
- Jody Snyder, Waste Connections
- Rod Whittaker, Washington Refuse and Recycling Association

<u>Workgroup Focus</u>: This section's primary application is to systems for handling leachate at landfills. It also regulates activities ancillary to primary functions of the solid waste system, including surface impoundments associated with solid waste recycling and piles activities. The workgroup focused on clarifying the section's applicability and aspects of the operating standards. The workgroup identified a few concerns regarding the applicability to manure lagoons, financial assurance, and the relationship between facility siting and groundwater protection.

The proposed changes clarify when an impoundment or tank should be regulated under a solid waste or water quality permit, and add piping systems that connect impoundments and tanks permitted under the rule into the scope of this section. Language also clarifies operating requirements for detecting leaks, maintaining and cleaning impoundments and tanks, how new facilities must be located in relation to existing water wells, and how nearby property owners must be notified of possible impacts on future well placement.

# WAC 173-350-350 - Waste Tire Storage; WAC 173-350-355 - Waste Tire Transport (New Section)

Ecology Staff Lead: Isaac Standen

#### Workgroup Members:

- Nina Baston, Walla Walla County Code Enforcement
- Rick Dawson, Benton-Franklin Health District
- Pat Dunn, Les Schwab
- Trooper T. Giddings, Washington State Patrol
- Mark Hope, Tire disposal and recycling
- Chris Kitchen, Ash Grove Cement
- Dean Large, Washington Refuse and Recycling Association
- Dick Nordness, Northwest Tire Dealers Association
- Christopher Piercy, Kitsap County Public Works Solid Waste Division and Northwest Product Stewardship Council
- Jim Sells, Washington Refuse and Recycling Association
- John Sheerin, Rubber Manufacturers Association
- Steve Skinner, Lewis County Public Works
- Gary Smith, Automotive Recyclers of Washington
- Robert Vantuyl, Ash Grove Cement
- Dan Watts, Tacoma-Pierce County Health Department

<u>Workgroup Focus</u>: Currently, only waste tire storage that occurs outdoors is regulated under this section. The proposed changes would add facilities that store waste tires indoors to be regulated as waste tire storage facilities. Tires stored in mobile containers used for transport would still be exempt from regulation as tire storage facilities, provided they move tires offsite annually.

Updates are proposed to facility design requirements to reflect changes to the fire code. Various parts of this section were modified to make it consistent with other parts of the rule. Waste tire storage will still be regulated under WAC 173-350-350, but waste tire transport will be regulated under a new section (WAC 173-350-355).

#### WAC 173-350-360 - Moderate Risk Waste Handling

Ecology Staff Leads: Al Salvi and Megan Warfield

#### Workgroup Members:

- Cheryl Christian, Washington Department of Labor & Industries
- Alan DenAdel, Pend Oreille County Public Works
- Rick Gilbert, Kitsap County Public Works
- Bryan Hunt, Jurisdictional Health Authority Northeast Tri-County Health District
- Patti Johnson, Kittitas County Solid Waste

- Keith Lund, Stericycle
- Jon Napier, Washington State Association of Fire Marshals
- Rob Rieck, Ecology Hazardous Waste and Toxics Reduction Program
- Gerald Tousley, Jurisdictional Health Authority Thurston County Public Health and Social Services Department

Workgroup Focus: This section outlines requirements for managing moderate risk waste (MRW). Proposed changes focus on clarifying current design and operational standards for MRW facilities, and improving consistency with other regulations such as the Dangerous Waste Regulations (Chapter 173-303 WAC) and requirements of the Washington State Department of Labor & Industries. Proposed language modifies conditional exemption requirements to ensure proper management of materials and provide stronger worker and environmental protections. Proposed language also adds a new exemption for management of waste pharmaceuticals in certain programs. The workgroup also evaluated the definition of limited MRW to see if expansion of the limited MRW category was warranted. No changes were made.

#### WAC 173-350-400 - Limited Purpose Landfills

Ecology Staff Lead: Bill Harris

#### Workgroup Members:

- Rod Whittaker, Washington Refuse and Recycling Association
- Jody Snyder, Waste Connections
- Ted Silvestri, Yakima Health District
- David Lowe, Waste Management
- Chris Martin, Ecology Water Quality Program
- Jana McDonald, Central Pre-mix Concrete Company
- John Bromley, Washington Department of Natural Resources
- Kathy Pierson, Snohomish Health District
- Kevin Scott, Port Townsend Paper

<u>Workgroup Focus</u>: This section establishes standards, criteria, and requirements for landfills receiving a wide range of solid wastes. Only dangerous waste, municipal solid waste, and inert waste disposed in inert waste landfills are excluded from this section. The workgroup discussed how the rule explains alternative design options for liners and covers, requirements for environmental monitoring and reporting, the end points for post-closure care, and how financial assurance requirements relate to those end points.

Proposed language highlights the flexibility already available for liner and cover designs to better describe what data needs to be collected and how to report it; align the post-closure framework with the framework for municipal solid waste landfills; and clarify how new facilities must be located in relation to existing water wells, and how nearby property owners must be notified of possible impacts on future well placement.

#### WAC 173-350-410 - Inert Waste Landfills

Ecology Staff Lead: Bill Harris

#### Workgroup Members:

- John Bromley, Washington Department of Natural Resources
- David Lowe, Waste Management
- Chris Martin, Ecology Water Quality Program
- Jana McDonald, Central Pre-mix Concrete Company
- Kathy Pierson, Snohomish Health District
- Kevin Scott, Port Townsend Paper
- Ted Silvestri, Yakima County Health District
- Jody Snyder, Waste Connections
- Rod Whittaker, Washington Refuse and Recycling Association

Workgroup Focus: This section establishes standards, criteria, and requirements for landfills receiving inert wastes as they are defined in WAC 173-350-990. The workgroup discussed the volume limit for exemption from solid waste permitting, the interplay between inert waste landfilling and gravel mine reclamation under Washington Department of Natural Resources permits, and a conflict in setback requirements with the well construction standards in Chapter 173-160 WAC. The workgroup raised a few additional concerns about inert waste landfills in current practice, notably the varying interpretations of what wastes may be disposed in inert waste landfills and the existing requirement for notification to nearby property owners when proposing a new facility.

Proposed language raises the limit on the volume of inert waste that can be disposed without a permit under a conditional exemption from 250 cubic yards to 2,000 cubic yards. New language also clarifies how new facilities must be located in relation to existing water wells, and how nearby property owners must be notified of possible impacts on future well placement.

#### WAC 173-350-500 - Groundwater Monitoring

Ecology Staff Leads: Tom Culhane, Cole Carter

#### Workgroup Members:

- Brian Butler, Port Townsend Paper
- Jennifer Garcelon, Clallam County Environmental Health Services
- Bryan Hunt, Northeast Tri-County Health District
- Patti Johnson, Kittitas County Solid Waste
- Dennis Moore, Trans-Alta USA
- James Obereiner, Waste Management
- Pat Shanley, Ecology Waste 2 Resources Program

<u>Workgroup Focus</u>: Groundwater monitoring is a key to protecting the environment. This section addresses groundwater protection and sets monitoring standards for two types of facilities identified in the rule: limited purpose landfills and certain surface impoundments. The workgroup considered several issues including requiring submittal of quarterly monitoring reports, requiring electronic submission of quarterly monitoring data through Ecology's Environmental Information Management System, determining if analyses for metals must be conducted for dissolved or total constituents, and clarifying what happens if monitoring indicates that corrective action steps need to be taken.

Most changes to -500 in the latest draft are minimal, and are for clarification and simplification. However, there are two significant changes:

- 1. All groundwater monitoring data must be submitted in an electronic format by April 1 of each year.
- 2. For metals analyses, since groundwater standards refer to "total metals," but ion analyses require "dissolved metals," both types of analyses will be required for some constituents.

#### WAC 173-350-990 - Criteria for Inert Waste

Ecology Staff Lead: Dawn Marie Maurer

#### Workgroup Members:

- Bruce Chattin, Washington Aggregates & Concrete Association
- Andy Comstock, Jurisdictional Health Authorities West Side
- Chris Martin, Ecology Water Quality Program
- John Bromley, Washington Department of Natural Resources
- Jennifer Hill, Washington Department of Transportation
- Zachary Fiorito, Inert Waste Landfill Operators

<u>Workgroup Focus</u>: This section provides criteria for determining if a solid waste is an inert waste. Jurisdictional health authorities use the criteria for inert waste to determine if a waste qualifies for less stringent management standards. While this section lists some specific wastes (cured structural concrete, brick, glass, aluminum, and stainless steel) non-listed wastes should have comparable physical characteristics and risks as the listed wastes. The waste must demonstrate a threshold of low risk and physical durability.

The Washington Department of Natural Resources uses different criteria for its surface mining reclamation program. In some cases, both sets of standards may apply. The workgroup had the goal of improving efficiency and clarity of the classification process, while continuing to provide adequate levels of health and environmental protection. After consideration of alternatives, the workgroup recommended eliminating this section instead relying on statutory provisions and revised definitions in the rule.

#### Soil and Sediment Criteria and Use (New Section)

Ecology Staff Lead: Marni Solheim

#### Workgroup Members:

- Janusz Bajsarowicz, Pacific Topsoils
- John Bromley, Washington Department of Natural Resources
- Andy Comstock, Jurisdictional Health Authority Tacoma-Pierce County Health Department
- Jake Finlinson, King County
- Matt Hinck, Cal Portland
- Chris Martin, Ecology Water Quality Program
- Adrianne Pearson, City of Spokane Wastewater Management
- Rob Bonnett (replaced Michael Shaw), J.R. Hayes (on behalf of Association of General Contractors)
- Alex Smith, Port of Olympia
- Stuart Whitford (replaced Jared Keefer), Jurisdictional Health Authority Jefferson County Health
- Ben Wilkinson (replaced Jennifer Hill), Washington Department of Transportation

#### Others who attended meetings include:

- Jimmy Blais, Gary Merlino Construction
- Rod Whitaker, Washington Refuse and Recycling Association

<u>Workgroup Focus</u>: This section of the rule attracted significant interest. The proposed new section would address use and disposal options for soils and sediments containing substances such as industrial chemicals and petroleum materials. Examples are street waste, petroleum-contaminated soil, engineered soil, and dredged material from water containing contaminants.

The draft section lists test parameters, sets contaminant limits, and focuses on characterization and use of soils. Other sections in the rule address standards related to storage, treatment, and disposal. In response to comments, Ecology is not including this section. Instead, Ecology proposes to revise definitions for "clean" versus "contaminated" soil and dredged material to clarify what types of soil and dredged material containing contaminants can be managed as "clean" materials not subject to solid waste regulation, and what must be managed as "contaminated" material in accordance with applicable sections in the rule, such as those for limited purpose landfills or treatment.

# **Areas of Consensus/Disputes**

At the conclusion of the second public review and comment of the draft rule, consensus was reached on most sections of the rule. Three sections of the rule needed further work and discussion with stakeholders, which are identified below.

#### WAC 173-350-320 - Piles Used for Storage or Treatment

After the second public review of the draft rule, Ecology revised this section and went back to stakeholders for their review and input. The following proposed changes were shared by e-mail and discussed with two members of the piles workgroup who participated in a meeting by conference call. Ecology will reach out to the stakeholder workgroup again to gauge agreement on the areas of consensus since most of them were not able to participate in the conference call.

#### **Areas of Consensus**

Reference to Proposed Section -995, Soil and Sediment Criteria and Use

When the new section was proposed, impacted soils and impacted sediment managed under -995 was removed from the applicability subsection of the piles section. When Ecology decided not to include -995 in the next draft, this exclusion was removed.

Reference to "Impacted Soil" and "Impacted Sediment"

The proposed language removes all references in the piles section to "impacted soils" and "impacted sediments." These terms were originally added in conjunction with a new section (-995) of the rule that addressed management of impacted soils and impacted sediment. When Ecology decided to not add section -995, all references to it were removed and language reverted back to "contaminated soils" and "contaminated dredged material."

Reference to Proposed Section -995

The piles section changed quite a bit in an earlier draft to correlate with the proposed new section -995 on impacted soils and impacted sediments. References to -995 were removed from the piles section with the decision not to include the new section. Therefore, all requirements for permitted sites handling contaminated soils and contaminated dredged materials reverted back to the original language in the existing regulation.

#### Combining Exemptions

The requirements for conditional exemptions for cured concrete and asphaltic materials were the same, so they were combined into one exemption.

#### Clarifying Volume Limits

Proposed language adds a new requirement clarifying limits for the volume of waste that may be stored at one permit exempt site. For example, the limit for waste allowed to be stored at a site is 2,000 cubic yards of total material, not 2,000 yards of each material stored in a pile onsite. WRRA and the health departments supported this change, but suggested further clarification. Additional changes are under consideration.

#### Compliance with Fire Code

Proposed language adds a new requirement that all exempt piles must comply with the International Fire Code as implemented through the local fire control agency.

#### Safety and Emergency Plans

The workgroup members discussed clarification on what safety and emergency plans are required to be included in the plan of operation. It was decided to incorporate language from other sections of the rule into this section to help clarify the safety and emergency plan requirements. Items like emergency safety equipment location maps and incident protocols will be added.

#### **Areas Still Under Dispute**

#### Title

The title of the section is changed back to "Piles used for storage or treatment" from "Piles used for storage, treatment, or recycling." Some think that removing "recycling" could lead to sham recycling.

#### Addition of "Documented Date"

Proposed language adds "documented date" regarding throughput requirements for contaminated soils and dredged material. The current draft language is "All piles removed within 90 days from the first documented date storage began." While some stakeholders support this change, others do not. They would rather require notification to clearly identify when the resident time for a material to be stored or treated in a pile begins.

Notification, Reporting, and Resident Times for Waste Stored Treated or Recycled in a Pile

Some stakeholders want notification and reporting requirements included in all pile exemptions. Others believe notification, reporting, and throughput requirements are burdensome and could be impediments to recycling certain materials.

#### Ongoing Piles

Some expressed concerns about how long a pile could be allowed to grow and still be exempt from permitting. One suggestion is to increase the yearly percentage requirement of materials recycled to minimize the potential for piles to increase in size over time.

#### Piles Used for Recycling Solid Wastes

Several stakeholders commented on expansion of this section to include piles that are used for recycling and impacted soil, including inert materials such as concrete and asphalt. Recycling these types of materials in facilities that handle significant volumes of material that are constantly processed could be an issue for operators at these sites. The piles by nature are large and difficult to move or deplete. By including these recycling activities in this provision, facilities will be subject to rigorous standards such as having to place all of the piles on sealed surfaces.

Some stakeholders commented it is impractical to completely deplete these piles, and pave or seal the surfaces beneath them, and the cost of such sealing would be in the millions of dollars per site. Some believe these provisions could force the closure of numerous recycling facilities, deplete valuable landfill space, and reduce the state's total recycling tonnage by more than 20 percent.

#### Contaminated Soils Managed in Piles

Many stakeholders believe the storage of contaminated soils from construction projects needs further evaluation. Construction projects with a large earthwork component may last for six months to several years, requiring soil and other materials to be staged. Requiring facilities to meet the exemption criteria for storage in piles will make staging and handling of all construction "fill" soil more expensive and increase administrative requirements. If impacted soils are included in staged materials, the proposed revisions to this section would require solid waste facility permits (with supporting engineering, compliance, reporting, and closure plans).

Source Separated Recyclable Materials is Problematic for Concrete and Asphalt Recyclers

The source separation requirement for permit exemption is problematic because asphalt and concrete hauled for recycling does not always arrive at the facility source separated due to the nature of the material. The requirement to obtain a permit for these activities will likely increase the cost of recycling and the amount of material disposed rather than recycled. It would be a disincentive to increase recycling and reuse.

#### Exemption for Non-Putrescible Solid Waste

The first exemption in Table 320-A regarding non-putrescible solid wastes is still under review.

#### **Contaminated Soil and Contaminated Dredged Material Management**

The areas of consensus and dispute listed below are based on a stakeholder meeting following review and comment on the second draft. Six of the original committee members attended the meeting and two additional organizations participated. Completely revised draft language was presented for discussion.

Ecology received a substantial number of comments from multiple entities on draft language for management of "impacted soil and impacted sediment." The second informal draft included a new section, WAC 173-350-995, focused on the use of "impacted soil and impacted sediment" and set contaminant concentrations (soil/sediment screening levels or SSLs) based on land use where materials would be placed. Contaminant concentrations were primarily based on state and federal cleanup levels, protection of groundwater under the state's groundwater quality and drinking water protection standards, and the most current natural background concentrations.

Commenters overwhelmingly found the rule too complex, subjective, and difficult to follow, and asserted it would lead to delays and increase costs for management of soil and sediment from project and construction sites. Many suggested Ecology reference MTCA cleanup levels (Chapter 173-340 WAC, Model Toxics Control Act - Cleanup) for managing these materials, which they believe is currently practiced by most in the industry.

To address comments and improve the rule to provide a framework for contaminated soil and dredged material management, Ecology simplified how the rule will apply to management of soil and sediment containing contaminants from a release. In the latest draft, -995 is removed in its entirety including all cross references in other sections of the rule. Instead, existing definitions for "clean" versus "contaminated" soil and sediment were revised.

New definitions will allow soil or sediment containing contaminants to be placed at any location provided it would not exceed MTCA cleanup levels that would apply to that location. Since MTCA does not address pH, Ecology has also set a pH standard that must be met for soil or sediment where the pH has been altered. Uses that do not meet MTCA or pH standards are subject to regulation and permitting as solid waste management, similar to the standards under sections of the rule for limited purpose landfills or treatment in piles.

New proposed language provides clarity to operators in deciding where they can place materials in a manner that has protective concentrations that have already been assessed by a regulatory body. The language also provides authority to jurisdictional health departments to stop an entity from placing contaminated materials where they should not be placed.

#### **Areas of Consensus**

Need for Statewide Standard

There is need for a statewide standard to ensure consistency among jurisdictions.

#### **Areas of Dispute**

Removal of the Detailed Section of the Rule

Removal of details drafted in -995 is a disappointing setback to some. Some who attended the meeting expressed their disappointment, but did not provide comments in support of the second informal draft because they mostly supported the draft language. They also did not support guidance for contaminant concentrations that could be developed following the adoption of amended rule language. These stakeholders do not believe guidance is enforceable.

Notice of Movement/Use of Contaminated Soil/Dredged Material

While the requirement to provide notice of projects over a certain volume and contaminant concentration has been removed, some feel notice is warranted, even more than in earlier rule drafts, while others contend providing notice is unrealistic for the number of potential construction projects occurring at any time in a local jurisdiction.

# WAC 173-350-100 and New Section WAC 173-350-021 – Select Definitions and Determination of Solid Waste

The goal of the determination of solid waste section was to provide a tool to increase clarity and uniformity across the state to define what is a solid waste. The tool clarifies the types of materials that are solid waste and those that are not. In addition, it allows waste materials that have been processed to become legitimate commodities or products no longer subject to solid waste regulatory oversight.

Recyclable materials were never meant to be excluded from regulatory oversight. The statutory definition of recyclable materials makes them a subset of solid waste. Mismanagement of recyclable solid waste historically has caused environmental and human health impacts.

#### **Areas of Consensus**

Definition of Recycling

Comments on the second draft resulted in changes to the draft language of the definition of recycling and the determination of solid waste section. These changes reflect a general consensus from those who commented. The draft definition of recycling is now the following: "Recycling" means transforming or remanufacturing waste materials into usable or marketable materials for use other than landfill disposal or incineration. Recycling includes processing waste materials to produce tangible commodities.

#### **Areas of Dispute**

Connecting Recycling to "Well-Established Markets" and "Positive Market Value"

The main themes that generated comments and did not result in changes to draft language are the concepts of tying recycling to "well-established markets" and "positive market value." Both concepts are to be evaluated when making a determination that a waste material has value, is a commodity and a product, and no longer solid waste. Some stakeholders requested that we remove these terms to broaden the types of materials that would no longer be considered solid waste and therefore remove regulatory oversight of the management of those materials. Other stakeholders wanted us to impose additional restrictions on these terms to tighten any loopholes in the system and keep more materials under regulatory oversight.

There is a general interest from the recycling industry to exclude as many materials as possible from regulation, while conversely, solid waste management companies and some local jurisdictional health departments want to retain authority to regulate recyclable materials. After analysis, Ecology concluded these concepts were vital to prevent sham recycling in the state and prevent pollution from improper waste handling, and that the draft rule language should not be expanded to include even more materials.

#### What Should be Regulated as Solid Waste

While there is no consensus on what materials should still be regulated as solid waste, the draft rule provides a tool that will allow local governments to evaluate what materials are legitimate commodities and products, and no longer regulated as solid waste. This rule change will provide a financial gain for the recycling industry, while retaining regulatory authority over recyclable materials as required in statute.

## **Recommendations and Conclusion**

Chapter 173-350 WAC covers a broad range of issues and is very complex. Due to the complexity of the issues and interest of stakeholders, Ecology extended the typical rulemaking timeline to allow for multiple informal comment periods. Ecology engaged hundreds of stakeholders, and staff worked diligently to draft language and incorporate comments. Ecology has and will continue to implement an open, transparent rule development process.

Ecology began working with stakeholders four years ago to identify issues, evaluate solutions, and craft draft rule language to improve requirements and increase clarity. In addition to stakeholder meetings held to address specific areas, Ecology conducted two informal comment periods on a comprehensive draft, seeking review and comments, which is beyond what is required by the Administrative Procedure Act. Ecology carefully reviewed feedback on each draft and continued to work with stakeholders to craft language responsive to their comments and concerns, recognizing that not all stakeholders will be satisfied with the resulting language.

Ecology has continued to meet with numerous stakeholders to listen, discuss, and problem solve. Throughout this process, Ecology relied on cooperative relationships to develop amendments that protect Washington's environment while promoting a strong economy.

The majority of the draft amendments to the rule have stakeholder support and consensus. Ecology is committed to continuing discussions on the remaining issues before formally proposing the rule for public review and comment in November 2017. Ecology recommends continuing the rule process and reporting back to the Legislature during the 2018 Legislative Session to describe the final rule proposal.

# **Next Steps**

Staff are continuing work on rule language and intend to present a draft rule to Ecology's economist by September 13, 2017. The economist will prepare the required preliminary regulatory analysis for release with the proposed rule. The analysis includes the Preliminary Cost-Benefit Analysis and Least Burdensome Alternative Analysis, as well as related determinations required under the Administrative Procedure Act, and an evaluation of compliance under the Regulatory Fairness Act (Small Business Economic Impact Statement). Ecology will also prepare and publish an environmental checklist and threshold determination under the State Environmental Policy Act (SEPA).

The Proposed Rulemaking Notice (CR-102) is expected to be filed with the Office of the Code Reviser on November 22, 2017, followed by formal hearing(s) in mid or late January. Public comments will be accepted during the hearing and for a period of time afterward. Ecology implemented a new online eComments tool that makes it easier for stakeholders to submit comments electronically.

Ecology will prepare the Concise Explanatory Statement, including a response to comments received during the formal comment period. If adopted, the revised rule is scheduled to be filed with the Code Reviser on March 21, 2018, effective on April 21, 2018.

What Happens	When
September 13, 2017	Rule language and supporting input delivered to agency economist
November 22, 2017	Proposed rule filed with Code Reviser. Official comment period begins.
Public hearing/meeting/webinar	Mid to late January 2018 – to be announced
Final rule and regulatory analyses returned to agency economist.	February 21, 2018
Rule adopted	March 21, 2018
Rule effective	April 21, 2018

# **Appendix A-1**

173-350 Draft Rule Current as of August 3, 2017

#### Chapter 173-350 WAC

#### SOLID WASTE HANDLING STANDARDS

Last Update: 3/25/13

#### WAC

173-350-010	Purpose.
173-350-020	Applicability.
173-350-021	Determination of solid waste.
173-350-025	Owner responsibilities for solid waste.
173-350-030	Effective dates.
173-350-040	Performance standards.
173-350-100	Definitions.
173-350-200	Beneficial use permit exemptions.
173-350-210	Recycling and material recovery facilities.
173-350-220	Composting facilities.
173-350-225	Other organic material handling activities.
173-350-230	Land application.
173-350-240	Energy recovery and incineration facilities.
173-350-250	Anaerobic digesters.
173-350-300	On-site storage, collection and transportation standards.
173-350-310	Intermediate solid waste handling Transfer stations and drop box facilities.

173-350-320	Piles used for storage or treatment.
173-350-330	Surface impoundments and tanks.
173-350-350	Waste tire storage and transportation.
173-350-355	Waste tire transportation.
173-350-360	Moderate risk waste handling.
173-350-400	Limited purpose landfills.
173-350-410	Inert waste landfills.
173-350-490	Other methods of solid waste handling.
173-350-500	Groundwater monitoring.
173-350-600	Financial assurance requirements.
173-350-700	Permits and local ordinances.
173-350-710	Permit application and issuance.
173-350-715	General permit application requirements.
173-350-900	Remedial action.
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WAC 173-350-010 Purpose. This chapter is adopted under the authority of chapter 70.95 RCW, Solid waste management—Reduction and recycling, to protect public health, to prevent land, air, and water pollution, and conserve the state's natural, economic, and energy resources by:

- (1) Setting minimum functional performance standards for the proper handling and disposal of solid waste originating from residences, commercial, agricultural and industrial operations and other sources;
- (2) Identifying those functions necessary to assure effective solid waste handling programs at both the state and local level;
- (3) Following the priorities for the management of solid waste as set by the legislature in chapter 70.95 RCW, Solid waste management—Reduction and recycling.;
- (4) Describing the responsibility of persons, municipalities, regional agencies, state and local government related to solid waste;
- (5) Requiring solid waste handling facilities to be located, designed, constructed, operated and closed in accordance with this chapter;
- (6) Promoting regulatory consistency by establishing statewide minimum standards for solid waste handling; and
- (7) Encouraging the development and operation of waste recycling facilities and activities needed to accomplish the management priority of waste recycling.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-010, filed 1/10/03, effective 2/10/03.]

#### WAC 173-350-020 Applicability.

- (1) This chapter applies to facilities and activities that manage solid wastes as that term is defined in WAC 173-350-100. Facilities handling solid waste must comply with the standards of all applicable sections of this chapter.
  - (2) This chapter does not apply to the following:
- $(\frac{1}{a})$  Overburden from mining operations intended for return to the mine;
- (2b) Wood waste used for ornamental, animal bedding, mulch and plant bedding, or road building purposes;
- (3c) Wood waste directly resulting from the harvesting of timber left at the point of generation and subject to regulated under chapter 76.09 RCW, Forest practices;
- $(4\underline{d})$  Land application of manures and <u>bedding</u>, crop residues, and <u>on-farm vegetative waste</u> at agronomic rates;
- \_(5) Agricultural composting when all agricultural wastes are generated, processed, and applied on-farm at agronomic rates in accordance with accepted agricultural practices. This categorical exemption does not apply to producers subject to RCW 70.95.306, composting of bovine and equine carcasses;

- $(\frac{6e}{})$  Mushroom substrate production when materials that are not solid waste (such as processed chicken manure) are used in the production;
  - (7) Home composting as defined in WAC 173-350-100;
- $(\frac{8f}{})$  Single-family residences and single-family farms whose year round occupants engage in solid waste disposal regulated under WAC 173-351-700(4);
- (9g) Clean soils and clean dredged material as defined in WAC 173-350-100;
- of the Clean Water Act (33 U.S.C. Sec. 1344 or 1341) or section 10 of the Rivers and Harbors Act (33 U.S.C. Sec. 403) Dredged material as defined in 40 C.F.R. 232.2 that is subject to:
- (ai) Management of dredged material, as defined in 40 C.F.R. Sec. 232.2, prior to placement into surface water or onto land;
- \_\_The requirements of a permit issued by the U.S. Army Corps of Engineers or an approved state under section 404 of the Federal Water Pollution Control Act (33 U.S.C. 1344);
- (bii) Placement of dredged material, as defined in 40 C.F.R. Sec. 232.2, into surface water or onto land where there will be runoff or return water to surface water. The requirements of a permit issued by

- the U.S. Army Corps of Engineers under section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1413); or
- (c) In the case of U.S. Army Corps of Engineers civil works projects, the administrative equivalent of the permits referred to in (a) and (b) of this subsection, as provided for in U.S. Army Corps of Engineers regulations, including, for example, 33 C.F.R. 336.1, 336.2, and 337.6;
- $(\frac{11}{\underline{i}})$  Biosolids that are managed under chapter 173-308 WAC, Biosolids management;
- $(\frac{12}{\underline{j}})$  Domestic septage taken to a sewage treatment plant permitted under chapter 90.48 RCW, Water pollution control;
- $(\frac{13k}{})$  Liquid wastes, the discharge or potential discharge of which, is regulated under federal, state or local water pollution permits;
- $(\frac{141}{})$  Domestic wastewater facilities and industrial wastewater facilities otherwise regulated by federal, state, or local water pollution permits;
- $(\frac{15m}{})$  Dangerous wastes fully regulated under chapter 70.105 RCW, Hazardous waste management, and chapter 173-303 WAC, Dangerous waste regulations;

- $(\frac{16n}{})$  Special incinerator ash regulated under chapter 173-306 WAC, Special incinerator ash management standards;
- (170) PCB wastes regulated under 40 C.F.R. Part 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions, except for:
  - (ai) PCB household waste; and
- (bii) PCB bulk product wastes identified in 40 C.F.R. Part 761.62 (b)(1) that are disposed of in limited purpose landfills;
- (18p) Radioactive wastes, defined by chapter 246-220 WAC, Radiation protection—General provisions, and chapter 246-232 WAC, Radioactive protection—Licensing applicability;
- $(\frac{19q}{})$  Landfilling of municipal solid waste regulated under chapter 173-351 WAC, Criteria for municipal solid waste landfills;
  - (20) Drop boxes used solely for collecting recyclable materials;
  - (21r) Intermodal facilities as defined in WAC 173-350-100; and
- (s) Collection, transport, and sale of used goods and materials solely for the purpose of reuse as defined in WAC 173-350-100;
- $(\frac{22}{\underline{t}})$  Solid waste handling facilities that have engaged in closure and closed before the effective date of this chapter.
- (u) Commercial fertilizers registered with the Washington state department of agriculture and managed in accordance with the provi-

- sions of chapter 15.54 RCW, Fertilizers, minerals, and limes, and
  rules adopted thereunder;
- (v) Manufactured topsoil, as defined in WAC 173-350-100, composed only of clean soil and clean dredged material, composted materials, wood waste, or other commercial products (e.g. Bioretention Soil Media, water retaining crystals, or registered commercial fertilizers or liming agents);
- (w) Engineered soil, as defined in WAC 173-350-100, when reused, as defined in WAC 173-350-100, in another construction project for the same engineering properties;
- (x) Management of soil and sediment within a site undergoing remedial action under chapter 70.105D RCW, Hazardous waste cleanup-Model toxics control act, chapter 90.48, Water pollution control, or 42 U.S.C. Sec. 9601 et seq., Comprehensive environmental response, compensation, and liability act;
- (y) Contaminated soil, as defined in WAC 173-350-100, placed at or near the location of generation within a project site;
- (z) Steel slag that is a primary product of production in the electric arc steel-making process, produced to specification, managed as an item of commercial value, and placed in commerce for general

- public consumption, if the steel slag material is not abandoned, discarded, or placed in the solid waste stream;
- (aa) Organic materials, as defined in WAC 173-350-100, used for animal feed or to create animal feed;
- (bb) Management of routine livestock mortalities when managed in compliance with sections (1), (4), (6), or (8) of WAC 16-25-025, Disposal of dead livestock; and
- (cc) Management of routine non-livestock animal mortalities by burial, incineration in a unit with a design capacity of less than twelve tons per day, natural decomposition, or rendering, when managed in compliance with WAC 246-203-121, General sanitation.

[Statutory Authority: RCW 70.95.020(3), 70.95.060(1), 70.95.260(6), 70.95.305, 70.95.330. WSR 13-08-016 (Order 10-06), § 173-350-020, filed 3/25/13, effective 4/25/13. Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-020, filed 1/10/03, effective 2/10/03.]

## WAC 173-350-021 Determination of Solid Waste

(1) <u>Determination of solid waste - Applicability.</u> This section must be applied when determining whether a material is a solid waste as defined in WAC 173-350-100. Some waste materials already have criteria

for use, or standards to no longer be considered solid waste, in other sections of this rule. This section may not be applied to the following materials regulated under other sections of this chapter:

- (a) Contaminated soil and contaminated dredged materials defined in WAC 173-350-100;
  - (b) Composted materials regulated under WAC 173-350-220; and
  - (c) Digestate regulated under WAC 173-350-250.
  - (2) A material is a solid waste if it meets any of the criteria in (a) through (g) below:
  - (a) The material has been discarded, abandoned, or disposed of;
- (b) The material has been permanently placed in or on land for the purpose of disposal;
- (c) The material is a byproduct generated from the manufacturing or processing of a product, and is placed on the land for beneficial use;
- (d) The material has been collected through residential or commercial solid waste or recyclable material collection;
- (e) The material has been received at a solid waste handling facility;

- (f) The generator has paid for or will need to pay for removal or processing of the material for solid waste recycling, storage, incineration, or landfilling; or
- (g) The material has been stockpiled for recycling, reuse, or use after recycling, but no market is available and stockpiles provide vector attraction or harborage, or release pollutants into the environment in violation of other human health or environmental rules and regulations.
- (3) A material that met any of the criteria in subsection (2) is no longer a solid waste if it meets all of the criteria in (a) through (e) below:
  - (a) The material is no longer discarded or abandoned;
- (b) The material has been recycled, or is ready for reuse, as defined in WAC 173-350-100;
- (c) The material has positive market value, as indicated by established markets for the material. Paying a person to remove or process the material for recycling, disposal, or incineration is not positive market value, nor is paying a discounted amount for removal or processing;

- (d) The material is stored and managed to preserve its value, and is stored in a manner that presents little or no risk to human health and the environment; and
- (e) The material does not contain harmful chemical, physical, biological, or radiological substances that will pose a threat to human health or the environment for its intended or likely manner of use.
- (4) If a material does not meet all of the criteria of subsection (3) of this section, the person in possession of the material is still considered to be handling solid waste and is required to obtain a permit from the jurisdictional health department, or meet the requirements of a conditional permit exemption under the applicable section(s) of this chapter, or manage the material in accordance with the provisions of section 200, Beneficial use permit exemptions. In an action to enforce the requirements of this chapter, the generator or person in possession of the material must demonstrate that the material is no longer a solid waste.
- (5) Nothing in this chapter shall impact the rights of a commercial recycler, non-profit, or commercial generator under RCW 70.95.903, RCW 81.77.104, RCW 36.58.160, and RCW 35.21.158.

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

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-025, filed 1/10/03, effective 2/10/03.]

## WAC 173-350-030 Effective dates.

- units. These The standards in this chapter apply to a facility with new solid waste handling units, all facilities, except existing facilities, when updated or new sections in this chapter become effective.
- (2) Effective dates Existing facilities with a solid waste handling permit.
- (a) The owner or operator of <a href="mailto:an\_existing">an\_existing facility</a>
  must:
- (i) Meet all applicable operating, environmental monitoring, closure and post-closure planning, and financial assurance requirements of this chapter by June 30, 2014within eighteen months of the effec-

tive date associated with each solid waste handling unit at a facility; and

- (ii) Meet all applicable performance and design requirements, other than location or setback requirements, by December 31, 2014within twenty-four months of the effective date associated with each solid waste handling unit at a facility.
- (b) These standards apply to all new solid waste handling units at existing facilities upon the effective date of this chapter.
- (cb) If, as determined by the jurisdictional health department, significant changes to the operation, design, capacity, performance, or monitoring of changes to a facility are needed to meet updated or new sections of this chapter, the owner or operator of existing facilities must initiate the submit a request for permit modification process as outlined in WAC 173-350-710(4) by December 31, 2013 within twelve months of the effective date associated with each solid waste handling unit at a facility. The request must demonstrate that an owner or operator will meet updated or new sections by applicable effective dates. If a permit modification is necessary, every application for a permit modification must describe the date and methods for altering an existing facility to meet (a)(i) and (ii) of this subsection.

- (c) An owner or operator of an existing facility that cannot meet the requirements in updated or new sections of this chapter associated with solid waste handling units at the facility must close those units in compliance with applicable requirements of this chapter.
- (3) Effective dates Existing facilities meeting terms and conditions for permit exemption, or existing facilities previously not regulated under this chapter.
  - (a) The owner or operator of an existing facility must:
- (i) For facilities eligible for permit exemption, meet any revised or new terms and conditions for a permit exemption within twelve months of the effective date associated with each solid waste handling unit at a facility; and
- (ii) For facilities that must obtain a permit to meet requirements in updated or new sections of this chapter, submit a complete permit application as outlined in WAC 173-350-710 within twelve months of the effective date associated with each solid waste handling unit at a facility.
- (b) An owner or operator of an existing facility that cannot meet the requirements in updated or new sections of this chapter associated with solid waste handling units at the facility by their effective

dates must close those units in compliance with applicable requirements of this chapter.

- (d) The jurisdictional health department must determine if a new permit application is required based on the extent of the changes needed to bring the facility into compliance.
- (e) All facilities must close in compliance with applicable requirements of this chapter.

[Statutory Authority: RCW 70.95.020(3), 70.95.060(1), 70.95.260(6), 70.95.305, 70.95.330. WSR 13-08-016 (Order 10-06), § 173-350-030, filed 3/25/13, effective 4/25/13. Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-030, filed 1/10/03, effective 2/10/03.1

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

(1) Design, construct, operate, and close and provide postclosure care as applicable, at any solid waste facility all facilities in a manner that does not pose a threat to human health or the environment;

- (2) Comply with chapter 90.48 RCW, Water pollution control and implementing regulations, including chapter 173-200 WAC, Water quality standards for groundwaters of the state of Washington;
- (32) Not be in conflict with Conform to the approved local comprehensive solid waste management plan prepared in accordance with chapter 70.95 RCW, Solid waste management—Reduction and recycling, and/or the local hazardous waste management plan prepared in accordance with chapter 70.105 RCW, Hazardous waste management; and
- (4) Not cause any violation of emission standards or ambient air quality standards at the property boundary of any facility and comply with chapter 70.94 RCW, Washington Clean Air Act; and
- (53) Comply with all other applicable local, state, and federal laws and regulations.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-040, filed 1/10/03, effective 2/10/03.]

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

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

"Aerobic decomposition" means decomposition of organic materials primarily by aerobic microbes under controlled conditions.

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

"Agricultural wastes" means wastes on from farms resulting from the raising or growing of plants and animals including, but not limited to, crop residue, <a href="livestock">livestock</a> manure from herbivores and nonherbivores, animal bedding, and carcasses of dead animals.

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

"Air quality standard" means a standard set for maximum allowable contamination in ambient air as authorized set forth in chapter 70.94 RCW, Washington clean air act. 173 400 WAC, General regulations for air pollution sources.

"All weather surface" means a road surface over which emergency vehicles and typical passenger vehicles can pass in all types of weather.

"Anaerobic digester" means a vessel that processes organic material into biogas and digestate through microbial decomposition under anaerobic (low oxygen) conditions.

"Asphaltic materials" means material produced from a mixture of petroleum asphalt and mineral aggregate and used for the construction of roads, sidewalks and similar purposes. Roofing materials containing asphalt are not considered to be asphaltic materials.

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

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

"Biofilter" means a bed or layer of material that supports beneficial microorganisms, typically a mixture of compost and wood chips, designed to filter and treat air emissions. A biofilter adsorbs and then biologically degrades odorous compounds.

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

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

"Bulking agent" means an ingredient used to improve structure and porosity, or to lower moisture content, primarily in composting. Bulking agents improve convective air flow and reduce settling and compac-

tion. Bulking agents may include, but are not limited to, wood waste, straw, and other high-carbon materials.

"Byproduct" means a material that is not one of the primary products of a manufacturing production process. A byproduct is not produced for the general public's use.

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

"Capacity" means the maximum amount of material that can be contained on-site at any one time. Capacity is identified by the conditions of exemption, the permit, or the plan of operations as approved by the jurisdictional health department or the department. All material includes, but is not limited to, incoming waste, feedstocks, bulking agents, stockpiled wastes, active composting, curing piles, composted materials, and sorted recyclable materials on site.

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

"Cementitious material" means a material other than cured concrete containing Portland cement, fly ash, cement kiln dust, bottom ash, or other cement-like materials, used to add rigidity to soils

during construction projects such as temporary retaining walls and shaft construction, or generated from construction or road maintenance projects. Cementitious materials include, but are not limited to, jet grout, controlled low strength material (CLSM), flowable fill, low density fill, k-crete, shotcrete, concrete washout, concrete road grindings, and dewatered drilling slurries containing cementitious materials.

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

"Clean dredged material" means dredged material that does not contain contaminants from a release. It also includes dredged material that contains one or more contaminants from a release and when moved from one location to another for placement on or into the ground:

- (1) Does not contain contaminants at concentrations that exceed a cleanup level under chapter 173-340 WAC, Model toxics control act-Cleanup, that would be established for the location where dredged material is placed; or
- (2) Contains contaminants that affect pH, but pH of the dredged material is between 4.5 and 9.5 or within natural background pH limits that exist at the location where dredged material is placed.

"Clean soils and clean dredged material" means soils and dredged material which are not dangerous wastes, contaminated soils, or contaminated dredged material as defined in this section. that does not contain contaminants from a release. It also includes soil that contains one or more contaminants from a release and when moved from one location to another for placement on or into the ground:

- (1) Does not contain contaminants at concentrations that exceed a cleanup level under chapter 173-340 WAC, Model toxics control act-Cleanup, that would be established for the location where soil is placed; or
- (2) Contains contaminants that affect pH, but pH of the soil is between 4.5 and 9.5 or within natural background pH limits that exist at the location where soil is placed.

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

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

"Collection event" means a one-time or recurrent designation of a site and areas within that site used by an operator to collect MRW from the public and to store the MRW for less than forty-eight hours.

"Commingled recyclable materials" means a mixture of several types of recyclable materials in one load or container, such as aluminum cans, paper, plastic, and cardboard in one container, or wood, concrete, and metal in one load.

"Commodity" means a material that meets widely recognized standards and specifications, such as those from ASTM International or the Institute of Scrap Recycling Industries, Inc., (for example, commodity-grade scrap metal) that is mutually interchangeable with other materials meeting the same specifications, and that has well-established markets.

"Composted material" means organic solid waste that has undergone biological degradation and transformation under controlled conditions designed to promote aerobic decomposition at a solid waste facility in compliance with the requirements of this chapter. Composting is a form of organic material recycling. Natural decay of organic solid waste under uncontrolled conditions does not result in composted material.

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

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

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

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

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

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

"Contaminated dredged material" means dredged material containing one or more contaminants from a release and when moved from one location to another for placement on or into the ground:

- (1) Contains contaminants at concentrations that exceed a cleanup level under chapter 173-340, Model toxics control act-Cleanup, that would be established for the location where dredged material is placed; or
- (2) Contains contaminants that affect pH, and pH of the dredged material is below 4.5 or above 9.5 or is not within natural background pH limits that exist at the location where dredged material is placed.

An example of a contaminated dredged material may include but is not limited to dredged material from surface waters containing contaminants from a release. resulting from the dredging of surface waters

of the state where contaminants are present in the dredged material at concentrations not suitable for open water disposal and the dredged material is not dangerous waste and is not regulated by section 404 of the Federal Clean Water Act (P.L. 95-217).

"Contaminated soils" means soil containing one or more contaminants from a release and when moved from one location to another for placement on or into the ground:

- (1) Contains contaminants at concentrations that exceed a cleanup level under chapter 173-340 WAC, Model toxics control act-Cleanup, that would be established for the location where soil is placed; or
- (2) Contains contaminants that affect pH, and pH of the soil is below 4.5 or above 9.5 or is not within natural background pH limits that exist at the location where soil is placed.

Examples of contaminated soil may include but is not limited to street waste, petroleum contaminated soil, engineered soil, and soil likely to have contaminants from industrial or historical activities. soils removed during the cleanup of a hazardous waste site, or a dangerous waste facility closure, corrective actions or other clean up activities and which contain harmful substances but are not designated dangerous wastes.

"Controlled conditions" means the conditions in which facilities must be operated to meet the performance standards of WAC 173-350-040 and the applicable handling standards of this chapter. Controlled conditions at compost facilities—These may include, but are not limited to, controlling odors, run-on and runoff, moisture levels, pH levels, carbon to nitrogen ratios, temperatures, oxygen levels, particle sizes, and free air space.

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

"Crop residues" means vegetative material <a href="from farms">from farms</a> left\_over from the harvesting of crops, including left\_over pieces or whole fruits or vegetables, crop leaves and stems, and unprocessed produce <a href="from storage facilities">from storage facilities</a>. Crop residue does not include food processing waste.

"Cured concrete" means concrete which has been produced from design mixtures specified to produce a twenty-eight-day unconfined compressive strength of no less than twelve hundred pounds per square inch and allowed to harden. Off-specification concrete which does not achieve this minimum strength value may be evaluated for consideration

as a cured concrete by the solid waste permitting agency on a case-bycase basis. Cured concrete may also contain embedded steel, wood, or plastic materials used in the reinforcement or tensioning of concrete structural elements. For the purposes of solid waste handling under this chapter, other cementitious materials are not considered to be cured concrete.

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

"De minimis" means present in an amount as to have negligible effect on the look, characteristics, use, or impact to human health or the environment of a material. The presence of man-made materials such as, but not limited to, paper, plastic, metal, and demolition debris that can reasonably be removed or that may become a litter problem is not de minimis.

"Department" means the Washington state department of ecology.

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

"Digestate" means both solid and liquid substances that remain following anaerobic digestion of organic material in an anaerobic digester.

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

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

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

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

"Dredged material" means material excavated or dredged from below the ordinary high water mark of surface water. Material removed from a stormwater management device such as, but not limited to, a catch basin, is not dredged material.

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

container and not a tip floor, and serve the general public and not route collection vehicles.

"Energy recovery" means a process operating under federal and state environmental laws and regulations for converting solid waste into usable energy and for reducing the volume of solid waste. Tthe recovery of energy in a useable form from may include mass burning or refuse-derived fuel incineration, pyrolysis or any other means of using the heat of combustion of solid waste that involves high temperature (above twelve hundred degrees Fahrenheit) processing.

"Engineered soil" means soil that has been altered by the addition of man-made materials used to adjust soil engineering properties for construction projects, such as to alter shear strength or hydraulic conductivity of soil. Engineered soil includes, but is not limited to, soil with cementitious materials.

"Existing facility" means a facility with one or more solid waste handling units which is owned or leased, and in operation, or for which facility construction has begun, on or before the effective dates of in this chapter associated with each solid waste handling unit, and the owner or operator has met terms and conditions for permit exemption or obtained permits or approvals necessary under federal, state and local statutes, regulations and ordinances.

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

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

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

"Feedstock" means a source separated waste material used as a component of composting, manufacturing, or as part of an industrial process.

"Food processing waste" means a source-separated organic material that is generated by a food processing facility licensed to process food by the United States Department of Agriculture, the United States Food and Drug Administration, the Washington state department of agriculture, or other applicable regulatory agency. Food processing wastes may include, but are not limited to, sludge from food processing water treatment plants, culls, DAF (dissolved air flotation) from a food

processing facility, pomace, and paunch manure, not intended for animal or human consumption.

"Garbage" means putrescible solid wastes.

"Glass" means typical window glass, glass containers, glass fiber, glass resistant to thermal shock, and glass ceramics. Glass materials containing significant concentrations of lead, mercury, or other toxic substances, and bulk loads of glass which contain non-de minimis amounts of other materials may not be disposed of in inert waste landfills.

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

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

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

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

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

"Incineration" means <u>a process of</u> reducing the volume of solid wastes <u>operating under federal and state environmental laws and regulations</u> by use of an enclosed device using controlled flame combustion.

"Incompatible waste" means a waste that is unsuitable for mixing with another waste or material because the mixture might produce ex-

cessive heat or pressure, fire or explosion, violent reaction, toxic dust, fumes, mists, or gases, or flammable fumes or gases.

"Industrial solid wastes" means solid waste generated from manufacturing operations, food processing, or other industrial processes.

"Industrial wastewater facility" means all structures, equipment, or processes required to collect, <a href="mailto:carry awayconvey">carry awayconvey</a>, treat, reclaim, or dispose of industrial wastewater.

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

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

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

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

"Jurisdictional health department" means city, county, citycounty or district public health department. "Land application site" means a contiguous area an area or areas of land under the same ownership or operational control on which solid wastes are beneficially used through application at an agronomic rate, as a soil amendment, or for land reclamation. utilized for their agronomic or soil-amending capability.

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

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

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

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

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

ited moderate risk waste facility does not include retailers and distributors operating as product take-back centers.

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

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

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

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

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

"Lower explosive limits" means the minimum concentration of vapor in air below which propagation of a flame does not occur in the presence of an ignition source. lowest percentage by volume of a mixture

of explosive gases that will propagate a flame in air at twenty-five degrees centigrade and atmospheric pressure.

"Manufactured organics" means source separated solid wastes, such as non-plastic coated paper plates, cups, compostable bags, and other items designed to decompose through composting, anaerobic digestion, or through other organic materials recycling processes. Manufactured organics do not include physical contaminants such as plastics and coated paper products that will not readily decompose under typical composting conditions, or wood derived fuel or wood waste as defined in this sectionchapter.

"Manufactured topsoil" means soil or dredged material mixed with materials that improve the quality of the soil or dredged material for establishing vegetation and/or for water quality treatment purposes. If used as fill, material is not manufactured topsoil. Manufactured topsoil containing solid waste such as but not limited to laminate, plastic, or asphalt shingles, not otherwise excluded from this chapter, is subject to management under this chapter.

"Manure and bedding" means manure (feces) and bedding from livestock including, but not limited to, herbivorous animals such as horses, cows, chickens, sheep, and goats, and <u>includes wash water from</u> cleanup of such manure and bedding.

"Material recovery facility" means any facility that collectsreceives, compacts, repackages, or sorts, or processes for transport source separated solid waste for the purpose of recycling.

"Mobile systems and collection events" means activities using a vehicle (such as a truck or trailer) conducted at a temporary location to collect moderate risk waste from the public prior to transporting the material to a MRW facility, collection event, or permitted hazardous waste facility.

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

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

"Municipal solid waste (MSW)" means a subset of solid waste which includes unsegregated garbage, refuse and similar solid waste material discarded from residential, commercial, institutional and industrial sources and community activities, including residue after recyclables

have been separated. Solid waste that has been segregated by source and characteristic may qualify for management as a non-MSW solid waste, at a facility designed and operated to address the waste's characteristics and potential environmental impacts. The term MSW does not include:

- <u>(a)</u> Dangerous wastes other than wastes excluded from the requirements of chapter 173-303 WAC, Dangerous waste regulations, in WAC 173-303-071 such as household hazardous wastes;
- ■—(b) Any solid waste, including contaminated soil and debris, resulting from response action taken under section 104 or 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (42 U.S.C. 9601), chapter 70.105D RCW, Hazardous waste clean-up—Model Toxics Control Act, chapter 173-340 WAC, the Model Toxics toxics Control Act act-Celeanup, regulation or a remedial action taken under those statutes and rules; nor
- ■—(c) Mixed or segregated recyclable material that has been source-separated from garbage, refuse and similar solid waste. The residual from source separated recyclables is MSW.

"Natural background" means the concentration of chemical, physical, biological, or radiological substances consistently present in the environment that has not been influenced by regional or localized

human activities. Metals at concentrations naturally occurring in bedrock, sediments and soils due solely to the geologic processes that formed the materials are natural background. In addition, low concentrations of other persistent substances due solely to the global use or formation of these substances are natural background.

"New solid waste handling unit" means a solid waste handling unit that begins operation or facility construction after effective dates in this chapter associated with each solid waste handling unit, and an existing solid waste handling unit that begins significant modifications to existing solid waste handling units, after the effective dates of—in this chapter associated with each solid waste handling unit.

"Nuisance odor" means any odor which is found offensive or may unreasonably interfere with any person's health, comfort, or enjoyment beyond the property boundary of a facility.

"On-farm" means activities taking place on any agricultural land under the control of the same entity including parcels that are not geographically contiguous but managed by the same entity for agricultural production.

"On-farm vegetative waste" means plant-based wastes produced onfarm from raising, growing, or processing plants and animals.

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

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

"Organic feedstocks" means source separated organic materials including bulking agents suitable for vermicomposting, composting, anaerobic digestion, and other processes that transform organic materials into usable or marketable materials.

"Organic materials" means any solid waste that is a biological substance of plant or animal origin capable of microbial degradation. Organic materials include, but are not limited to, manure, yard debris, food waste, food processing wastes, wood waste, and garden wastes.

"Other conversion technologies" means processes that transform organic feedstocks into useable or marketable materials, but does not include composting, vermicomposting, or anaerobic digestion.

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

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

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

"Person" means an individual, firm, association, co-partnership, political subdivision, government agency, municipality, industry, public or private corporation, or any other entity whatsoever.

"Petroleum contaminated soil" means soil that contains petroleum materials from a release more substantial than releases expected during routine operations of vehicles. Releases may include, but are not limited to, releases from leaking storage tanks or vehicular accidents. Petroleum materials include, but are not limited to, gasoline, diesel fuel, and fuel oil.

"Pharmaceutical collection program" means a program that collects unwanted pharmaceuticals, controlled or non-controlled, from households only, that is authorized to collect under and is compliant with the requirements of Drug Enforcement Administration regulation 21 C.F.R. Part 1317, Disposal (2014).

"Physical contaminants" as they relate to incoming feedstocks and compost quality means inorganic and organic constituents that are not readily decomposed during the composting process including, but not limited to, plastics, glass, textiles, rubber, leather, metal, ceramics, polystyrene, and wood pieces containing paint, laminates, bonding agents or chemical preservatives such as creosote, pentachlorophenol, or copper-chrome-arsenate.

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

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

"Point of compliance" means a location at which a monitored parameter can be measured and evaluated for compliance with established standards or permit conditions. For groundwater compliance monitoring, the point of compliance will be located as near to the downgradient edge of the solid waste handling activity point established in the groundwater by the jurisdictional health department as near a possible source of release as technically, hydrogeologically and geographically

feasible. Other points of compliance in other media may be established by the solid waste permitting agency for solid waste handling facilities permitted under this chapter.

"Post-closure care" means those actions taken by an owner or operator of a limited purpose landfill after closure, and until the landfill is determined by the solid waste permitting authority to be functionally stable. the requirements placed upon disposal facilities after closure to ensure their environmental safety for at least a twenty year period or until the site becomes stabilized (i.e., little or no settlement, gas production, or leachate generation).

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

"Post-consumer food waste" means source separated organic materials originally intended for human consumption including, but not limited to, vegetables, fruits, grains, meats and dairy products resulting from serving food. Post-consumer food waste is typically collected from cafeterias, homes, and restaurants.

"Preconsumer animal-based wastes" means source separated organic materials from animals such as meat, fat, dairy, or eggs that are a result of food preparation for human consumption or are products that

did not reach the intended consumer. Preconsumer animal-based wastes are typically collected from food processing facilities and grocery stores.

"Preconsumer vegetative waste" means source separated organic materials from vegetables, such as pits, peels, and pomace from human food preparation, or vegetable products that did not reach the consumer. Preconsumer vegetative wastes are typically collected from food processing facilities and grocery stores.

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

"Private facility" means a privately owned facility maintained on private property solely for the purpose of managing waste generated by the entity owning the site.

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

"Processing capacity" means the amount of incoming materials in tons or cubic yards that a solid waste facility can process in a given amount of time, such as a calendar year. Processing capacity is identified by the conditions of exemption, the permit, or the plan of operations as approved by the jurisdictional health department or the department.

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

"Public facility" means a publicly or privately owned facility that accepts solid waste generated by other persons, or a publicly owned facility maintained on publicly owned property solely for the purpose of managing waste generated by the public entity owning the facility.

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

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

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

"Recycling" means transforming or remanufacturing waste materials into usable or marketable materials for use other than landfill disposal or incineration. Recycling includes processing waste materials

to produce tangible commodities. Recycling does not include collection, compacting, repackaging, and sorting for the purpose of transport.

"Release" means any intentional or unintentional entry of a contaminant into the environment at more than de minimis amounts and includes, but is not limited to, spilling, leaking, pouring, emitting, emptying, discharging, adding, applying, amending, injecting, pumping, escaping, leaching, dumping, or disposing of any contaminant.

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

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

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

"Reuse" means using an object or material again, either for its original purpose or for a similar purpose, without significantly altering the physical form of the object or material. Reuse is not a solid waste handling activity, but separating materials from other solid wastes for reuse is a solid waste handling activity. Use of solid waste as fill or alternative daily cover is not reuse.

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

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

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

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

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

"Sewage sludge" means solid, semisolid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.

<u>"Site capacity"</u> means the maximum amount of all material that can be contained on-site at any one time. Site capacity is identified by the conditions of exemption, the permit, or the plan of operations as approved by the jurisdictional health department or the department.

All materials include but are not limited to, incoming waste, feedstocks, bulking agents, stockpiled wastes, active composting, curing piles, composted materials, and sorted recyclable materials on-site.

"Soil" means material overlying bedrock consisting primarily of clay, silt, sand, gravel size particles, and soil biota, that may contain de minimis amounts of other materials. Soil does not include dredged material.

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

"Solid waste," "waste materials," or "wastes" means all putrescible and nonputrescible solid and semisolid wastes including, but not

limited to, garbage, rubbish, ashes, industrial wastes, swill, sewage sludge, demolition and construction wastes, abandoned vehicles or parts thereof, contaminated soils and contaminated dredged material, and recyclable materials. See WAC 173-350-021 to determine if a material is solid waste.

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

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

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

"Specified risk material" means the skull, brain, trigeminal ganglia (nerves attached to brain and close to the skull exterior), eyes, spinal cord, distal ileum (a part of the small intestine), and the dorsal root ganglia (nerves attached to the spinal cord and close to the vertebral column) of cattle aged thirty months or older.

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

"Street waste" means solid or dewatered materials collected from storm water catch basins and similar storm water treatment and conveyance structures, and materials collected during street and parking lot sweeping.

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

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

"Tank" means a stationary device facility or part of a facility designed to contain an accumulation of liquids or sludges, and designed and constructed of materials with sufficient strength so that

its walls can be self-supporting. semisolid materials meeting the definition of solid waste or leachate, and which is constructed primarily of nonearthen materials to provide structural support.

"Throughput" means the amount of incoming feedstocks in tons or cubic yards that a solid waste facility processes in a given amount of time, such as a calendar year. Throughput is identified by the conditions of exemption, the permit, or the plan of operations as approved by the jurisdictional health department or the department.

"Transfer station" means a permanent, fixed, supplemental collection and transportation—facility that receives solid waste from offsite from, used by persons and route collection vehicles for consolidation into to deposit collected solid waste from off site into a larger transfer vehicles or containers for transport to a solid waste handling facility.

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

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

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

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

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

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

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

"Waste tires" means any tires that are no longer suitable for their original intended purpose because of wear, damage or defect.

Used tires, which were originally intended for use on public highways that are considered unsafe in accordance with RCW 46.37.425, are waste tires. Waste tires also include quantities of used tires that may be suitable for their original intended purpose when mixed with tires considered unsafe per RCW 46.37.425.

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

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

"Wood waste" means solid waste consisting of wood pieces or particles generated as a by-product or waste from the manufacturing of wood products, construction, demolition, handling and storage of raw materials, trees and stumps. This includes, but is not limited to, sawdust, chips, shavings, bark, pulp, hogged fuel, and log sort yard

waste, but does not include wood pieces or particles containing paint, laminates, bonding agents or chemical preservatives such as creosote, pentachlorophenol, or copper-chrome-arsenate.

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

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

[Statutory Authority: RCW 70.95.020(3), 70.95.060(1), 70.95.260(6), 70.95.305, 70.95.330. WSR 13-08-016 (Order 10-06), § 173-350-100, filed 3/25/13, effective 4/25/13. Statutory Authority: Chapter 70.95 RCW. WSR 05-11-033 (Order 04-12), § 173-350-100, filed 5/10/05, effective 6/10/05; WSR 03-03-043 (Order 99-24), § 173-350-100, filed 1/10/03, effective 2/10/03.]

WAC 173-350-200 Beneficial use permit exemptions.

(1) Beneficial use permit exemptions - Applicability.

- (a) This section applies to the beneficial use of solid waste in a manner approved by the department when the department has approved a beneficial use permit application.
  - (b) This section does not apply to:
- (i) Solid waste handling facilities requiring permits or facilities operating under a conditional exemption authorized by RW 70.95.305;
- (ii) Materials used as alternative daily cover at landfills, which requires approval as part of the solid waste permitting process or subsequent allowance by the jurisdictional health department; and
- (iii) Use of a solid waste as a component of fill unless a demonstration shows that the material meets specific engineering needs and specifications other than occupying space. Any proposal made under this section to use solid waste as a component of fill must be certified by a professional engineer registered in the state of Washington, in an engineering discipline appropriate for the proposed activity.
  - (2) Beneficial use permit exemptions Application procedures.
- (a) Applications for permit exemptions must be prepared and submitted on forms prescribed by the department and in accordance with the requirements of this subsection. Any person(s) applying for a beneficial use permit exemption must demonstrate to the satisfaction of

the department that the proposed use of the specific solid waste does not present a threat to human health or the environment. The application must at a minimum contain the following:

- (i) The name(s), address(es), and phone number(s) of the waste generator(s);
- (ii) The name(s), address(es), and phone number(s) of the applicant;
- (iii) The uniform business identifier number for the waste generator and any third-party handler of the waste material;
- (iv) A detailed description of the solid waste, including ingredients used in making the original product from which the solid waste is derived, and the proposed beneficial use;
  - (v) Evidence that the material will perform as claimed;
- (vi) A description of how the waste will be transported or distributed for the proposed beneficial use;
- (vii) A description of the materials that contribute or potentially contribute contaminants/pollutants to the waste to be beneficially used;
- (viii) A schematic and text summary of the waste generator(s) operations, including all points where wastes are generated, treated or stored;

- (ix) A description of how terms and conditions of subsection (3)(a) of this section will be met;
- (x) A State Environmental Policy Act checklist under chapter 197-11 WAC, SEPA rules;
  - (xi) Appropriate signatures as described in WAC 173-350-715(3);
- (xii) If the beneficial use is proposed as a soil amendment, or for other solid wastes beneficially applied to the land, a description of how the terms and conditions of (3)(b) of this section will be met; and
- (xiii) Any additional information deemed necessary by the department.
- (b) Once the department determines that the application is complete, the department will notify the applicant and initiate the public review process outlined in subsection (5) below.
- (c) Once the public review process outlined in subsection (5) has begun, any changes to the application or submittal of additional information by the applicant will result in a withdrawal of the completeness determination by the department and termination of the public review process. The department will resume review of the amended application in accordance with the procedures of subsection (5) of this section.

- (d) After completion of the comment period, the department will review comments, technical information from agency and other publications, standards published in regulations, and other information deemed relevant by the department to render a decision.
- (e) Every complete application will be approved or disapproved by the department in writing within ninety days after receipt. Exemptions will be granted by the department only to those beneficial uses of solid waste that the department determines do not present a threat to human health or the environment.
- (f) Upon approval of the application by the department, the beneficial use of the solid waste by the original applicant is exempt from solid waste permitting for use anywhere in the state consistent with the terms and conditions of the approval.

Any person may apply to the department for exemption from the permitting requirements of this chapter for beneficial use of solid waste. Applications for permit exemptions shall be prepared and submitted in accordance with the requirements of subsections (3) and (4) of this section. Upon the department's approval of an application for permit exemption, all approved beneficial use of solid waste shall be conducted in accordance with the terms and conditions for approval, as

well as those general terms and conditions prescribed in subsection (2) of this section.

- (23) Beneficial use permit exemptions General terms and conditions.
- (a) The following general terms and conditions apply to all permit exempt beneficial uses of solid waste approved by the department. All persons beneficially using solid waste approved for permit exemption in accordance with this section shallmust:
- (i) Conduct the beneficial use in a manner that does not present a threat to human health or the environment;
- (ii) Ensure that the material is not a dangerous waste regulated under chapter 173-303 WAC, Dangerous waste regulations;
- (iii) Not dilute a waste, or the residual from treatment of a waste in order to lessen contaminant concentrations inherent in the waste<sub>7</sub> as a substitute for treatment or disposal;
- (iv) Meet the performance standards of WAC 173-350-040; Comply with all applicable federal, state, and local rules, regulations, requirements and codes, and local land use requirements;
- (v) Immediately notify the department and the jurisdictional health department of any accidental release(s) of contaminants to the environment;

- (vi) Separate wastes intended for beneficial use from <a href="https://occur.org/journal-style="color: blue;">occur;</a> wastes that are <a href="https://occur.org/destriction">destination</a>, prior to entering the location where the beneficial use will occur;
- (vii) Manage the waste in a manner that controls vector attraction;
- (viii) Ensure that solid waste being stored prior to being beneficially used is managed in accordance with the requirements of all
  applicable sections of this chapter unless alternative intermediate
  storage is approved by the department during the beneficial use exemption application review process;
- (ix) Allow the department or the jurisdictional health department, at any reasonable time, to inspect the location where a permit exempt solid waste is stored or used to ensure compliance with applicable terms and conditions of this section; and
- (x) Prepare and submit a copy of an annual report to the department by April 1st on forms supplied by the department. The annual report shall must detail the activities of the exemption holder during the previous calendar year and shall must include the following information:
- (A) The permit exemption number applicable to the beneficial use activity;

- (B) The name, address, and telephone number of the exemption holder;
  - (C) The amount of solid waste beneficially used;
- (D) A certification that the nature of the waste and the operating practices have been in compliance with the terms and conditions of this section and the approved beneficial use permit exemption during the previous calendar year; and
- (E) Any additional information that may be specified required by the department as a condition of the beneficial use determination. under the beneficial use permit exemption.
- (b) In addition to the general terms and conditions established in (a) of this subsection, solid wastes applied to the land for agronomic value or soil amending capability under a beneficial use permit exemption shallmust:
- (i) Provide an analysis of nutrients at a minimum to include organic nitrogen, nitrate-nitrogen, ammonium-nitrogen, total phosphorus, and total potassium, reported on a dry weight basis;
- (ii) Provide an analysis of physical/chemical parameters to include at a minimum: total solids, total volatile solids, pH, electrical conductivity, and total organic carbon;

- (iii) Provide a discussion of any pathogens known or suspected to be associated with this material, including those than can cause disease in plants, animals or humans;
- (iv) Provide additional analysis required by the department. The department may reduce the analytical requirements of this section;
- (vi) Meet the standards for metals standards required established by the Washington state department of agriculture (WSDA) for registered commercial fertilizers regulated under by following the procedures of WAC 16-200-7062 7061 through WAC 16-200-7064, Feeds, fFertilizers, and livestock remedies;
- (vii) Be applied Apply at an application rate and in a manner that ensures protection of groundwater and surface water and does not exceed an application rate that would violate the Washington state department of agriculture standards for metals in fertilizers; and . At a minimum, the application rate shall take into account the concentration of available nutrients and micronutrients in the soil amendment, other solid waste applied to the land, residual nutrients at the application site(s), additional sources of nutrients, pollutant loading rates, soil and waste pH, soil type, crop type and vertical separation from groundwater; and

(viii) Not be stored at an application site during periods when precipitation,—or wind, or other factors will cause migration from the storage area, unless the site is specifically designed to accommodate storage during these periods and storage is approved by the department during the permit exemption application process. The quantity stored at an application site shall—must\_not exceed the maximum—amount\_needed to meet the annual needs of the site based on the approved application rate. When a soil amendment is stored at an application site it shall—must\_not contain free\_liquid waste unless the requirements of WAC 173-350-330 are met\_or an alternative storage method is approved by the department during the permit exemption application process.

- (c) The department may require a person operating under any exemption issued under this section to meet additional or more stringent requirements for protection of human health and the environment, or to ensure compliance with other applicable regulations:
- (i) At the time the department approves an application for a beneficial use permit exemption; or
- (ii) When new information becomes available that warrants additional protections, but in the opinion of the department does not necessitate revocation of the beneficial use permit exemption.

- (d) The department shall will notify in writing the exempted party and all jurisdictional health departments of any additional or more stringent requirements.
- \_(3) Beneficial use permit exemption Initial application procedure. Any person(s) interested in obtaining a statewide exemption from solid waste permitting requirements for the beneficial use of a solid waste must demonstrate to the satisfaction of the department that the proposed use does not present a threat to human health and the environment. Applications shall be submitted to the department on a form supplied by the department. All application attachments and other submittals must be on paper no larger than 11 inch x 17 inch. The application shall at a minimum contain the following:
- (a) The name(s), address(es) and phone number(s) of the waste
  generator(s);
- (b) The name(s), address(es) and phone number(s) of the applicant. If the applicant is a broker or other third party the uniform business identifier number shall also be included;
  - (c) A list of all product(s) made by the waste generator(s);
  - (d) A list of all feedstocks used to manufacture the product(s);
- (e) A description of the solid waste and the proposed beneficial use;

- (f) A description of how the waste will be transported or distributed for the proposed beneficial use;
- (g) A description of other materials that contribute or potentially contribute contaminants/pollutants to the waste to be beneficially used;
- (h) A schematic and text summary of the waste generator(s) operations, including all points where wastes are generated, treated or stored;
- (i) A description of how terms and conditions of subsection (2)(a) of this section will be met;
  - (j) A State Environmental Policy Act checklist;
- (k) If the beneficial use is proposed as a soil amendment, or for other solid wastes beneficially applied to the land, a description of how the terms and conditions of subsection (2)(b) of this section will be met; and
- (1) Any additional information deemed necessary by the depart-
- (4) Beneficial use permit exemptions Secondary application procedure. Beneficial use permit exemptions, approved by the department in accordance with the procedures of subsection (5) of this section, are granted solely to the original applicant(s). Any person, other

than the original applicant(s), interested in beneficially using solid waste pursuant to the terms and conditions of an existing permit exemption shall must apply to the department by following the procedures described in subsection  $(\frac{32}{2})$  of this section.

- (5) Beneficial use permit exemptions Determination, revocation, and appeals Public Review Process.
- (a) The department shall review every application for completeness. Once an application is determined to be complete, the department shallwill:
- (i) Notify the applicant that the application has been determined to be complete-;
- (ii) Notify all jurisdictional health departments, interested parties, representatives of the solid waste industry, and the Washington department of agriculture that a proposal is under consideration and provide access to Forward a copy of the complete application and supporting documentation via the department's website for review and comment. Access to the proposal and supporting documentation will be available in hard copy or other format upon request; to all jurisdictional health departments for review and comment. Within forty-five calendar days, the jurisdictional health departments shall forward

their comments and any other information that they deem relevant to the department.

- (iii) Post the complete proposal and supporting documentation on the agency's website for not less than 45 calendar days along with instructions for commenting on the proposal;
- (iv) Within forty-five calendar days, any person or jurisdictional health department may comment on the application by forwarding comments and any other information deemed relevant, to the department; and
- (v) The Washington state department of agriculture's comments must be limited to addressing whether approving the application will result in the risk of spreading disease, plant pathogens, or pests to areas that are not under a quarantine, as defined in RCW 17.24.007.

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

(b) The department will develop and maintain a register of all complete applications it receives for beneficial use exemptions, and all approvals and denials. The register will include information regarding the proposed beneficial use and the waste being beneficially used.

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

- solid waste industry contacts. After completion of the comment period, the department shall review comments, technical information from agency and other publications, standards published in regulations, and other information deemed relevant by the department to render a decision.
- (d) Every complete application shall be approved or disapproved by the department in writing within ninety days after receipt. Exemptions shall be granted by the department only to those beneficial uses

of solid waste that the department determines do not present a threat to human health or the environment.

- (e) Upon approval of the application by the department, the beneficial use of the solid waste by the original applicant is exempt from solid waste handling permitting for use anywhere in the state consistent with the terms and conditions of the approval.
- (6) Beneficial use permit exemptions Revocations, enforcement, and appeals.
- $(\frac{\mathbf{fa}}{\mathbf{a}})$  The department may require a person operating under any exemption covered by this section to apply to the jurisdictional health department for a solid waste handling permit under the applicable section of this chapter if:
- (i) The exemption holder fails to comply with the terms and conditions of this section and the approval; or
- (ii) The department determines that the exemption was obtained by misrepresenting or omitting any information that potentially could have affected the issuance or terms and conditions of an exemption; or
- (iii) New information not previously considered or available as part of the application demonstrates to the department that management of the waste under a beneficial use permit exemption may present a threat to human health or the environment.

- (gb) The department shall will provide written notification to the exempted party and all jurisdictional health departments of any requirement to apply for a permit under this chapter. A person that is required by the department to apply for permit coverage shall must immediately cease beneficial use activities until all necessary solid waste handling permits are issued.
- $(\frac{hc}{c})$  The terms and conditions of subsection  $(\frac{23}{2})(a)(viii)$  of this section shall remain in effect until the solid waste handling permit process has been completed unless an administrative order issued under the authority of RCW 70.95.315 directs that use activities cease.
- (id) Any person that violates the terms and conditions of a beneficial use permit exemption issued under this section may be subject to the <u>civil penalty</u>enforcement provisions of RCW 70.95.315.
- voke a beneficial use permit exemption shall must be made to the pollution control hearings board by filing with the hearings board a notice of appeal within thirty days of the decision of the department. The board's review of the decision shall will be made in accordance with chapter 43.21B RCW, Environmental and land use hearings office—Pollution control hearings board, and any subsequent appeal of a deci-

sion of the board shall must be made in accordance with RCW 43.21B.180. Persons that may appeal are:

## Persons that may appeal are:

- (i) For waste derived soil amendments any aggrieved party may appeal.; and
- (ii) For all other beneficial uses of solid waste any jurisdictional health department or the applicant may appeal.
- (67) Beneficial use permit exemptions Solid waste exempt from permitting by rule. Reserved.

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

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-200, filed 1/10/03, effective 2/10/03.]

## WAC 173-350-210 Recycling and material recovery facilities.

- (1) Recycling and material recovery facilities Applicability.
- (a) These standards apply to recycling and material recovery facilities. solid waste.
- (b) These standards do not apply to:
- (ai) Storage or, treatment or recycling of solid waste in piles which are subject to WAC 173-350-320;

- (iib) Storage or recycling of solid waste in surface impoundments which are subject to WAC 173-350-330;
  - (eiii) Composting facilities subject to WAC 173-350-220;
- (div) Solid waste that is beneficially used on the land approved in accordance with the procedures of WAC 173-350-200 or that is subject to WAC 173-350-230;
- (ev) Storage of waste tires prior to recycling which is subject to WAC 173-350-350;
- (fvi) Storage of moderate risk waste prior to recycling which is subject to WAC 173-350-360;
- (gvii) Energy recovery or incineration of solid waste which is subject to WAC 173-350-240;
  - (hviii) Anaerobic digesters subject to WAC 173-350-250;
  - (ix) Other organic materials handling subject to WAC 173-350-225;
- (x) Transfer stations or drop box facilities subject to WAC 173-350-310; and
- (xi) Drop boxes used solely for collecting recyclable materials subject to WAC 173-350-310.
- Intermediate solid waste handling facilities subject to WAC 173-350 - 310.

(2) Recycling and material recovery facilities - Permit exemptions and notification. (a) In accordance with RCW 70.95.305, recycling and material recovery facilities managed in accordance with the terms and conditions of Table 210-A of this subsection are of solid waste is subject solely to the requirements of (b) of this subsection and is exempt from solid waste handling permitting. If a facility does not operate in compliance with the terms and conditions established for an exemption under this subsection, the facility may be subject to the permitting requirements for solid waste handling under this chapter. Any person engaged in recycling that does not comply with the terms and conditions of (b) of this subsection is required to obtain a permit from the jurisdictional health department in accordance with the requirements of WAC 173-350-490. In addition, violations of the terms and conditions of (b) of this subsection may be subject to the penalty enforcement provisions of RCW 70.95.315.

Table 210-A Terms and Conditions for Solid Waste Permit Exemption

	Waste Materials	Specific Requirements for Activity or Operation
(1)	Concrete or wood waste at point of generation	(a) Meet the performance standards of WAC 173-350-040; and (b) Recycle and use materials back on site.
(2)	Comingled concrete and asphaltic materials	(a) Meet the performance standards of WAC 173-350-040; (b) Allow inspections by the department or jurisdictional health department at reasonable times; (c) Thirty days prior to operation, facilities must submit a notification of intent to operate as a conditionally exempt facility to the jurisdictional health department and the department. Notice of intent must be submitted on a form provided by the department and must be complete; and

		(d) Prepare and submit an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report must
		detail material recovery or recycling activities during the previous calendar year and must include the following information:
		(i) Name and address of the operation;
		(ii) Calendar year covered by the report;
		(iii) Annual quantities and types of waste received, recovered or recycled, and disposed, in tons, for purposes of determining progress towards achieving the goals of waste reduction, waste recycling, and treatment in accordance with RCW 70.95.010(4);
		(iv) Destination of materials; and
		(v) Any additional information required by the department.
<u>(3)</u>	Source-separated recyclable materials	(a) Meet the performance standards of WAC 173-350-040; and
		(b) Accept only wastes segregated into individual material streams. Examples of individual material streams are loads composed solely of cardboard, mattresses, or metal of one type or several types. More than one individual material stream may be accepted at the same facility, but mixed waste materials, including commingled recyclable materials, may not be accepted under this exemption;
		(c) Dispose of an incidental and accidental residual not to exceed five percent of the total waste received, by weight per year, and five percent by weight per load;
		(d) Manage the operation to prevent the attraction of vectors;
		(e) Allow inspections by the department or jurisdictional health department at reasonable times;
		(f) Thirty days prior to operation, facilities must submit a notification of intent to operate as a conditionally exempt facility to the jurisdictional health department and the department. Notice of intent must be submitted on a form provided by the department and must be complete; and
		(g) Prepare and submit an annual report to the jurisdictional health department and the department by April 1 <sup>st</sup> on forms supplied by the department. The annual report must detail material recovery or recycling activities during the previous calendar year and must include the following information:
		(i) Name and address of the operation;
		(ii) Calendar year covered by the report;
		(iii) Annual quantities and types of waste received, recovered or recycled, and disposed, in tons, for purposes of determining progress towards achieving the goals of waste reduction, waste recycling, and treatment in accordance with RCW 70.95.010(4);
		(iv) Destination of materials; and
		(v) Any additional information required by the department.

(3) Recycling and material recovery facilities - Permit requirements - Location. There are no specific location standards for recycling and material recovery facilities subject to permitting under this chapter; however, recycling and material recovery facilities must meet the performance standards of WAC 173-350-040.

- (4) Recycling and material recovery facilities Permit requirements - Design. Recycling and material recovery facilities must be designed so that the facilities can be operated to meet the performance standards of WAC 173-350-040. The owner or operator of a recycling or material recovery facility must prepare engineering reports/plans and specification to address the following design standards:
- (a) Control public access, and prevent unauthorized vehicular traffic and illegal dumping of waste;
  - (b) Be sturdy and constructed of easily cleanable materials;
- (c) Provide effective means to control rodents, insects, birds, and other vectors;
- (d) Provide effective means to control litter, including but not limited to, orientation of the tipping floor in a manner that prevents prevailing winds from moving waste outside the collection area when other structures are not in place to prevent this;
- (e) Provide a tip floor made of impervious material such as concrete or asphalt to prevent soil and groundwater contamination. The surface must be durable enough to withstand equipment. The jurisdic-

tional health department may approve other types of surfaces if the applicant can demonstrate that it will prevent soil and groundwater contamination;

- (f) Cover the tipping floor to protect it from precipitation;
- (g) Convey leachate from the tipping floor to a surface impoundment, tank or sanitary sewer, or use other methods approved by the jurisdictional health department to prevent uncontrolled discharge;
- (h) Provide for storm water runoff collection and discharge from a twenty-five-year storm;
- (i) Provide pollution control measures to protect air quality; and
  - (j) Provide all-weather surfaces for vehicular traffic.
- (5) Recycling and material recovery facilities Permit Requirements - Documentation.
- (a) The owner or operator must submit facility drawings and construction documents for, at a minimum, any elements described in (4) of this section to the jurisdictional health department for review and approval. The facility drawings and construction documents must be prepared by a professional engineer registered in the state of Washington, and must include:

- (i) An engineering report that presents the design basis and calculations for the engineered features. The engineering report must demonstrate that the proposed design will meet the performance standards of WAC 173-350-040;
- (ii) Scale drawing of the facility including the location and size of waste storage areas, fixed equipment, buildings, storm water management features where applicable, access rods, traffic patterns, and other constructed areas and buildings integral to facility operation;
- (iii) Design specifications for the engineered features of the facility as applicable; and
- (iv) For new construction, a construction quality assurance plan that describes monitoring, testing, and documentation procedures that will be performed during construction of the facility, to ensure the facility is constructed in accordance with the approved design.
- (b) The owner or operator must provide copies of the construction record drawings for engineered features at the facility and a report documenting facility construction, including the results of observations and any testing carried out as part of the construction quality assurance plan, to the jurisdictional health department and the department. The owner or operator must not commence operation in a new-

ly-constructed portion of the facility until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report/plans and specifications and has approved the construction documentation in writing.

- (6) Recycling and material recovery facilities Permit requirements - Operating. The owner or operator of a recycling or material recovery facility must:
- (a) Operate the site in compliance with the performance standards of WAC 173-350-040 and this subsection. In addition the owner or operator must develop, keep, and follow a plan operation approved as part of the permitting process. The plan of operation must be available for inspection at the request of the jurisdictional health department. If necessary, the plan must be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation must include the following:
- (i) A description of the types of waste materials to be handled at the facility;
- (ii) A description of the procedures used to ensure that dangerous waste and other unacceptable waste are not accepted at the facility;

- (iii) A description of how waste materials are to be handled onsite, including recycling or recovery, storage, maximum site capacity, method of adding or removing waste materials from the facility, and equipment used;
- (iv) A description of how the owner or operator will ensure the facility is operated in a way to:
  - (A) Control litter, dust, and nuisance odors;
  - (B) Control rodents, insects, and other vectors;
  - (C) Provide attendant(s) on-site during hours of operation;
- (D) Provide a sign at the site entrance that identifies the facility and shows at a minimum the name of the site;
- (E) Immediately summon fire, police, or emergency service personnel in the event of an emergency;
- (F) Remove or otherwise manage leachate from containment structure(s) to prevent soil and/or groundwater contamination;
- (G) Remove waste materials from the tipping floor at least daily; and
- (H) Ensure that waste materials capable of attracting birds do not pose an aircraft safety hazard.
- (v) A description of how operators will inspect and maintain the facility to prevent malfunctions, deterioration, operator errors, and

discharges that may cause or lead to the release of wastes to the environment or a threat to human health, including the inspection form operators will use. Inspections must be conducted as needed, but at least weekly, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process;

(vi) A description of how operators will maintain operating records on the amounts (weight or volume) and types of waste received and removed from the facility, including the form or computer printout used to record this information. Facility annual reports must be maintained in the operating record. Facility inspection reports must be maintained in the operating record, including at least the date of inspection, the name and signature of the inspector, a notation of observations made, and the date and nature of any needed repairs or remedial action. Significant deviations from the plan of operation must be noted in the operating record. Records must be kept for a minimum of five years and must be available upon request by the jurisdictional health department;

(vii) Safety and emergency plans; and

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

- (b) Prepare and submit an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report must detail recycling or material recovery activities during the previous calendar year and must include the following information:
- (i) Name and address of the recycling or material recovery operation;
  - (ii) Calendar year covered by the report;
- (iii) Annual quantities and types of waste received, recovered or recycled, and disposed, in tons, for purposes of determining progress towards achieving the goals of waste reduction, waste recycling, and treatment in accordance with RCW 70.95.010(4);
  - (iv) Destination of material; and
- (v) Any additional information required by the jurisdictional health department as a condition of the permit.
- (7) Recycling and material recovery facilities Permit requirements - Groundwater monitoring. There are no specific groundwater monitoring requirements for recycling and material recovery facilities that are subject to this chapter; however, recycling and material recovery facilities must meet the performance standards of WAC 173-350-040.

- (8) Recycling and material recovery facilities Permit requirements - Closure. The owner or operator of a recycling or material recovery facility must develop, keep, and follow a closure plan that includes:
- (a) Notification to the jurisdictional health department sixty days in advance of closure;
- (b) Removal of all waste material to a facility that conforms with the applicable regulations for handling the waste; and
  - (c) Methods of removing waste material.
- (9) Recycling and material recovery facilities Permit Requirements - Financial assurance. There are no specific financial assurance requirements for recycling and material recovery facilities subject to this chapter; however, recycling and material recovery facilities must meet the performance standards of WAC 173-350-040.
- (10) Recycling and material recovery facilities Permit application contents. The owner or operator of a recycling or material recovery facility must obtain a solid waste permit from the jurisdictional health department. All applications for permits must be submitted according to the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and WAC 173-350-715, each application for a permit must contain:

- (a) Engineering reports/plans and specifications that address the standards of subsections (4) and (5) of this section;
- (b) A plan of operation meeting the applicable requirements of subsection (6) of this section;
- (c) A closure plan meeting the requirements of subsection (8) of this section; and
- (d) Any additional information required by written notification of the jurisdictional health department.
- (b) Recycling shall be conducted in conformance with the following terms and conditions in order to maintain permit exempt status:
  - (i) Meet the performance standards of WAC 173-350-040;
- (ii) Accept only source separated solid waste for the purpose of recycling;
- (iii) Allow inspections by the department or jurisdictional health department at reasonable times;
- (iv) Notify the department and jurisdictional health department, thirty days prior to operation, or ninety days from the effective date of the rule for existing recycling operations, of the intent to conduct recycling in accordance with this section. Notification shall be in writing, and shall include:

- (A) Contact information for the person conducting the recycling activity;
  - (B) A general description of the recycling activity;
  - (C) A description of the types of solid waste being recycled; and
  - (D) An explanation of the recycling processes and methods;
- (v) Prepare and submit an annual report to the department and the jurisdictional health department by April 1st on forms supplied by the department. The annual report shall detail recycling activities during the previous calendar year and shall include the following information:
  - (A) Name and address of the recycling operation;
  - (B) Calendar year covered by the report;
- (C) Annual quantities and types of waste received, recycled and disposed, in tons, for purposes of determining progress towards achieving the goals of waste reduction, waste recycling, and treatment in accordance with RCW 70.95.010(4); and
- (D) Any additional information required by written notification of the department.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-210, filed 1/10/03, effective 2/10/03.]

## WAC 173-350-220 Composting facilities.

- (1) Composting facilities Applicability.
- (a) These standards apply This section applies to all facilities that treat solid waste by composting.
  - (b) These standards do This section does not apply to:
- (i) Methods of managing organic materials that are excluded from the solid waste handling standards in WAC 173-350-020;
- (ii) Composting used as a treatment for contaminated soils regulated under WAC 173-350-320;
- (iii) Anaerobic digesters regulated under WAC 173-350-250, or treatment of other liquid or solid wastes in digesters regulated under WAC 173-350-330;
- (iv) Composting of bovine and equine carcasses for producers subject to RCW 70.95.306. Producers that fail to meet the conditions of RCW 70.95.306 will be required to obtain a solid waste handling permit from the jurisdictional health department and must comply with all other conditions of this chapter; and
- (v) Composting biosolids when managed under chapter 173-308 WAC, Biosolids management.

(2) Composting facilities - Permit exemptions. In accordance with RCW 70.95.305, (b) Conditionally conditionally exempt facilities composting materials and volumes in Table 220-A must meet the conditions listed in Table 220-A, and (ea) of this subsection to be conditionally exempt from solid waste handling permitting. Feedstocks not listed in Table 220-A must be approved by the department and jurisdictional health department. For the purposes of this subsection, "material onsite at any one time" includes feedstocks, active composting, curing piles, and composted materials. An owner or operator that does not comply with the terms and conditions of Table 220-A and (ea) of this subsection is required to obtain a permit from the jurisdictional health department and must comply with all other applicable requirements of this chapter. Violations of the terms and conditions of Table 220-A and (ea) of this subsection may be subject to the penalty enforcement provisions of RCW 70.95.315.

Table 220-A Terms and Conditions for Solid Waste Permit Exemptions

	Organic Materials	Volume	Specific Requirements for Activity or Operation
(1)	All organic feedstocks	No more than 5,000 gallons or 25 cubic yards of material onsite at any one time.	No notification, reporting or testing requirements.
(2)	All organic feedstocks	Greater than 25 but no more than 250 cubic yards of material on-site at any one time, not to exceed 1,000 cubic yards in a calendar year.	(a) Thirty days prior to operation, facilities must submit a notification of intent to operate as a conditionally exempt facility to the jurisdictional health department and the department. Notice of intent must be submitted on a form provided by the department;  (b) Facilities that distribute composted material off-site must meet the following conditions:

	Organic Materials	Volume	Specific Requirements for Activity or Operation
			(i) Manage the operation to reduce pathogens to meet limits set by Table 220-B;
			(ii) Conduct compost analysis according to the requirements of Table 220-B. Compost testing frequency is based on volume of compost produced annually as required by subsection (4)(a)(x)(B) of this section; and
			(iii) Submit annual reports and results of composted material analysis to the department and the jurisdictional health department by April 1st of each calendar year. Annual reports must be submitted on forms provided by the department.
(3)	Yard debris Crop residues Manure and bedding Bulking agents	Greater than 25 but no more than 500 cubic yards of material on-site at any one time, not to exceed 2,500 cubic yards processed in a calendar year.	(a) Thirty days prior to operation, facilities must submit a notification of intent to operate as a conditionally exempt facility to the jurisdictional health department and the department. Notice of intent must be submitted on a form provided by the department.
			(b) Facilities that distribute composted materials off-site must meet the following conditions:
			(i) Manage the operation to reduce pathogens to meet limits set by Table 220-B;
			(ii) Conduct compost analysis according to the requirements of Table 220-B. Compost testing frequency is based on volume of compost produced annually as required by subsection (4)(a)(x)(B) of this section; and
			(iii) Submit annual reports and results of composted material analysis to the department and the jurisdictional health department by April 1st of each calendar year. Annual reports must be submitted on forms provided by the department.
(4)	Agricultural wastes Yard debris Bulking agents	Greater than 25 but no more than 1,000 cubic yards of agricultural wastes and bulking agents on-farm at any one time, and up to 50% of organic materials on-farm can be yard debris.	Agricultural farms managing more than 25 cubic yards of imported yard debris on-site at any one time or composting only agricultural wastes but that distribute off-site must meet the following conditions:  (a) Thirty days prior to operation, facilities must submit a notification of intent to operate as a conditionally exempt facility to the jurisdictional health department and the department. Notification must be submitted on a form provided by the department;
			(b) If agricultural farm is only managing agricultural waste and not distributing composted material off farm, then notification in (4)(a) of this table is not required;
			(c) Facilities that distribute composted material off-site must meet the following conditions:
			(i) Manage operation to reduce pathogens to meet limits set by Table 220-B of this section;
			(ii) Conduct compost analysis according to the requirements of Table 220-B. Compost testing frequency is based on volume of compost produced annually as required by subsection (4)(a)(x)(B) of this section; and

	Organic Materials	Volume	Specific Requirements for Activity or Operation
			(iii) Submit annual reports and results of composted material analysis to the department and the jurisdictional health department by April 1st of each calendar year. Annual reports must be submitted on forms provided by the department.
(5)	Agricultural wastes Manure and bedding from zoos Bulking agents	Greater than 25 cubic yards with no upper limits when only agricultural wastes, manure and bedding from zoos, and bulking agents are processed on-farm, or on-site for zoos.	Agricultural farms that distribute composted material off-farm, or off-site for zoos, must meet the following conditions:  (a) Thirty days prior to operation, facilities must submit a notification of intent to operate as a conditionally exempt facility to the jurisdictional health department and the department. Notification must be submitted on a form provided by the department;
			(b) For composting at a dairy, composting must occur as part of an updated dairy nutrient management plan as required by chapter 90.64 RCW, Dairy Nutrient nutrient Management management Actact;
			(c) For composting at a farm other than a dairy, composting must occur as part of an updated farm management plan written in conjunction with a conservation district, a qualified engineer, or other agricultural professional able to certify that the plan meets applicable conservation practice standards in the USDA Washington Field Office Technical Guide, Code 317, produced by the Natural Resources Conservation Service;
			(d) Facilities that distribute composted material off-site must meet the following conditions:
			(i) Manage the operation to reduce pathogens to meet limits set by Table 220-B of this section;
			(ii) Conduct compost analysis according to the requirements of Table 220-B. Compost testing frequency is based on volume of compost produced annually as required by subsection (4)(a)(x)(B) of this section; and
			(iii) Submit annual reports and results of composted material analysis to the department and the jurisdictional health department by April 1st of each calendar year. Annual reports must be submitted on forms provided by the department.

(ea) Composting operations managing the types and volumes of materials identified in Table 220-A must meet the following terms and conditions to maintain their exempt status:

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

- (ii) Manage the operation to prevent the migration of agricultural pests identified by local horticultural pest and disease control boards, as applicable;
- (iii) Control nuisance odors to prevent migration beyond property boundaries;
- (iv) Manage the operation to prevent attraction of flies, rodents, and other vectors; and
- (v) Allow the department or the jurisdictional health department to inspect the site at reasonable times.
- (23) Composting facilities Permit Requirements Location.

  standards (permit requirements). There are no specific location standards for composting facilities subject to this chapter; however, composting facilities must meet the requirements of other federal, state, or local laws and regulations that apply under performance standards of WAC 173-350-040(5).

Note: When considering compost facility location, please review the U.S. Department of Transportation Federal Aviation Advisory Circular. No. 150/5200-33B 2007.

- (34) Composting facilities Permit requirements Design.

  standards (permit requirements). Composting facilities must be designed and constructed to meet the requirements of this subsection.
- (a) Composting facilities must be designed and constructed such that:

- (i) The facility can be operated to meet the performance standards requirements of in WAC 173-350-040; and
- (ii) The facility can be operated to promote controlled, aerobic decomposition. This requirement is intended to ensure that compost facility designers take into account porosity, nutrient balance, pile oxygen, pile moisture, pile temperature, and retention time of composting when designing a facility. It is not intended to mandate forced aeration or any other specific composting technology.
- (b) The owner or operator of a composting facility must prepare and provide to the jurisdictional health department engineering reports, engineering plans, and engineering specifications that address the design standards of this subsection. The engineering documents must be prepared by a professional n engineer licensed registered in the state of Washington, and must include:
- (i) An engineering report that presents the design basis and calculations for the engineered features of the facility including, but not limited to: <a href="Padpad">Padpad</a>, impoundments, storm water management features, leachate management features, and aeration and emission control features as required by the permitting air authority where applicable. The engineering report must demonstrate that the proposed design will meet the performance standards of this chapter;

- (ii) Scale drawings of the facility including the location and size of feedstock and composted material storage areas, compost processing areas, fixed equipment, buildings, storm water management features where applicable, access roads, traffic patterns, and other constructed areas and buildings integral to facility operation;
- (iii) Design specifications for the engineered features of the facility including, but not limited to, pads, storm water management features, leachate management features, and aeration and emission management features as required by a permitting air authority where applicable; and
- (iv) A construction quality assurance plan that describes monitoring, testing, and documentation procedures that will be performed during construction of the facility to ensure the facility is constructed in accordance with the approved design.
- (c) When operations require public access, all-weather roads must be provided from the highway or roads to and within the compost facility and must be designed and maintained to prevent traffic congestion, traffic hazards, dust, and noise pollution.
- (d) Compost facilities must manage storm water and leachate to meet the standards of this section and of any and all federal, state, and local water and air quality permits.

- (e) Composting facilities must minimize the production of leachate and runoff by designing storm water management features such as run-on prevention systems, which may include covered areas (roofs), diversion swales, ditches, or other features designed to divert storm water from areas of feedstock preparation, active composting, and curing.
- (i) Composting facilities must manage any leachate generated at the facility by providing leachate management features. The leachate management features include, but are not limited to, leachate collection, conveyance, and storage structures, or treatment systems. Leachate must be collected from areas of feedstock storage and preparation, active composting, and curing, and be conveyed to a leachate storage structure or treatment system. Any discharges to ground that result in contaminants migrating to groundwater require a waste discharge permit under chapter 90.48 RCW, Water pollution control, prior to discharge. Discharges to ground that result in degradation of groundwater quality are prohibited under chapter 90.48 RCW, Water pollution control. Any discharge to sanitary sewer requires additional permitting by the local delegated authority or department;

- (ii) Storm water and leachate collection and conveyance structures must be designed based on the volume of water resulting from a twenty-five-year storm event as defined in WAC 173 350 100;
- (iii) Leachate storage structures such as ponds or tanks must be of adequate capacity to store the normal maximum volume of leachate generated by the facility. The normal maximum volume will be established based on the following conditions:
  - (A) Facility design;
- (B) Normal climatic precipitation and evaporation data for the location of the facility;
  - (C) Monthly leachate reuse or removal; and
- (D) A factor of safety to accommodate variability of actual conditions from normal conditions.
- (iv) Leachate holding ponds and tanks must be designed according to the following:
- (A) Leachate ponds at registered dairies must meet Natural Resources Conservation Service standards for a waste storage facility in the 2001 (revised June 2011) Washington Field Office Technical Guide (Code 313).
- (B) Leachate ponds at composting facilities other than registered dairies must be designed to meet the following requirements:

- (I) Have a liner consisting of a minimum 30-mil thickness geomembrane on a subgrade that provides sufficient bearing capacity to support the liner and the contents of the pond. A liner constructed with a high density polyethylene geomembrane must be at least 60-mil thick to allow for proper welding. The jurisdictional health department may approve the use of an alternative liner design if the owner or operator can demonstrate during the permitting process that the proposed design will prevent migration of solid waste constituents or leachate into the ground or surface waters at least as effectively as the liners described in this subsection;
- (II) Have dikes and slopes designed to maintain their structural integrity under conditions of a leaking liner and capable of withstanding erosion from wave action, overfilling, or precipitation;
- (III) Have freeboard (distance between the liquid level and the top of the pond) equal to or greater than eighteen inches to avoid overtopping from wave action, overfilling, or precipitation. The jurisdictional health department may reduce the freeboard requirement provided if that other engineering controls are in place that prevent overtopping. These engineering controls must be specified during the permitting process; and

- (IV) Leachate ponds that have the potential to impound more than ten-acre feet (three million two hundred fifty-nine thousand gallons) of liquid measured from the top of the dike and which would be released by a failure of the containment dike must be reviewed and approved by the dam safety section of the department.
- (C) Tanks used to store leachate must meet design standards in WAC  $173-350-330 \ (\frac{34}{9})$  (b).
- (f) Incoming feedstocks, active composting, and curing materials must be placed on pads that prevent contamination of soil or groundwater underlying or adjacent to the pads. Pads must meet the following requirements:
- (i) All pads must be curbed or graded in a manner to prevent ponding, to control run-on and runoff, and to separately collect and convey all storm water and leachate to separate storage or holding systems. Storm water that is combined with leachate must be managed as leachate in accordance with this section;
- (ii) All pads must be constructed on subgrades that provide sufficient bearing capacity to support the weight of the pad, the materials placed on them, and the equipment used in handling the materials;
- (iii) The entire surface area of the pad must be designed to maintain its structural and hydraulic integrity against loads result-

ing from any machinery used for feedstock and compost handling activities, and from surface wear or damage caused by feedstock and compost handling, or by active composting at the facility;

- (iv) The pad may be constructed of materials such as concrete (with sealed joints), asphaltic concrete, or soil cement that prevents subsurface soil and groundwater contamination; and
- (v) The jurisdictional health department may allow pads for compost facilities to be designed and constructed with materials other than those listed in (f)(iv) of this subsection, provided the applicant demonstrates in the engineering report to the jurisdictional health department's and the department's satisfaction that the alternative pad provides sufficient protection to meet the performance standards of this section and of WAC 173-350-040.
- Operating standards (permit requirements). Within thirty days of completing construction, the owner or operator of a composting facility must provide copies of the construction record drawings for engineered features at the facility and a report documenting facility construction, including the results of observations and testing carried out as part of the construction quality assurance plan, to the jurisdictional health department and the department. Facilities must not

begin operating until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report, plans, and specifications and has approved the construction documentation in writing. The jurisdictional health department has thirty days after receiving complete construction records to provide its determination.

- (6) Composting facilities Permit requirements Operating. The owner or operator of a composting facility must:
  - (a) Operate the facility to:
- (i) Control air contaminants such as dust and nuisance odors to prevent other contaminants from migrating beyond property boundaries in accordance with WAC 173-350-040(43);
  - (ii) Prevent the attraction of vectors;
- (iii) Prevent the migration of agricultural pests identified by local pest and disease control boards, as applicable;
- (iv) Ensure access to the facility is restricted when the facility is closed;
- (v) Ensure that only feedstocks identified in the approved plan of operation are accepted at the facility;

- (vi) Ensure the facility operates under the supervision and control of a properly trained individual(s) during all hours of operation:
- (A) Facility supervisors responsible for daily operation must receive training, or be able to document prior training, in the basics of composting within the first year of supervising the facility. Training must consist of classroom and hands-on course work and conclude with a certificate of completion that must be kept on-site at all times. Appropriate compost training can be obtained through organizations such as the Washington organic recycling council, the Solid Waste Association of North America, the U.S. Composting Council, or other training as approved by the jurisdictional health department—; and
- (B) Ensure facility employees are trained in appropriate facility operations, maintenance procedures, and safety and emergency procedures according to individual job duties and according to an approved plan of operation. A trained supervisor may provide appropriate training to employees responsible for daily operations.
- (vii) Implement and document pathogen reduction activities. Documentation must include compost pile temperatures representative of the composting materials, and notation of turnings as appropriate, based

on the composting method used. Pathogen reduction activities must at a minimum include the following:

- (A) In vessel composting The temperature of the active compost pile must be maintained at fifty-five degrees Celsius (one hundred thirty-one degrees Fahrenheit) or higher for three consecutive days (seventy-two hours); or
- (B) Aerated static pile must have a cover such as a synthetic material or a layer of finished compost to ensure that pathogen reduction temperatures are reached and vectors are controlled. — The temperature of the active compost pile must be maintained at fifty-five degrees Celsius (one hundred thirty-one degrees Fahrenheit) or higher for three consecutive days (seventy-two hours); or
- (C) Windrow composting The temperature of the active compost pile must be maintained at fifty-five degrees Celsius (one hundred thirty-one degrees Fahrenheit) or higher for fifteen days or longer. During the period when the compost is maintained at fifty-five degrees Celsius (one hundred thirty-one degrees Fahrenheit) or higher, there must be a minimum of five turnings of the windrow; or
- (D) An alternative method of composting that can be demonstrated by the owner or operator to achieve an equivalent reduction of human pathogens.

- (viii) Monitor the composting process according to the plan of operation submitted during the permitting process. Monitoring must include inspection of incoming loads of feedstocks and pathogen reduction requirements of (a)(vii) of this subsection;
- (ix) Collect composted material samples for analysis that are representative of the pile. Use a sampling method such as described in the U.S. Composting Council 2002 Test Methods for the Examination of Composting and Compost, Method 02.01-A through E; and
- (x) Analyze composted material for metals and other testing parameters listed in Table 220-B.
- (A) The jurisdictional health department may require additional tests for metals and contaminants;
- (B) Testing frequency is based on amount of composted material produced. A representative sample of composted material must be tested for every 5,000 cubic yards produced, or every three hundred sixty-five days, whichever is more frequent. The jurisdictional health department may modify the frequency of testing based on historical data for a particular facility;
- (C) Composted material meeting the conditions of subsection (46)(a)(x) and (6)(g) of this section can be stored off of a pad.

Table 220-B Testing Parameters

Metals and other testing parameters	Limit (mg/kg dry weight), unless otherwise specified
Arsenic	≤ 20 ppm
Cadmium	≤ 10 ppm
Copper	≤ 750 ppm
Lead	≤ 150 ppm
Mercury	≤ 8 ppm
Molybdenum	≤ 9 ppm
Nickel	≤ 210 ppm
Selenium	≤ 18 ppm
Zinc	≤ 1400 ppm
Physical contaminants <sup>1</sup>	≤ 1 percent by weight total, not to exceed .25 percent film plastic by weight
Sharps	0
pН	5 - 10 (range)
Biological stability <sup>2</sup>	Moderately unstable to very stable
Fecal coliform <sup>3</sup>	< 1,000 Most Probable Number per gram of total solids (dry weight)
OR	
Salmonella	< 3 Most Probable Number per 4 grams of total solids (dry weight)

<sup>&</sup>lt;sup>1</sup>A label or information sheet must be provided with compost that exceeds .1% percent by weight of film plastic. See WAC 173-350-220 (46)(f)(iii)(D)(I).

Note: Biosolids composters regulated under this chapter must communicate with the jurisdictional health department to determine if different testing parameters and testing frequencies are required.

- Inspect the facility to prevent malfunctions and deterioration, operator errors and discharges that may cause or lead to the release of waste to the environment or a threat to human health. Inspections must be conducted at least weekly, unless an alternate schedule approved by the jurisdictional health department as part of the permitting process.
- (c) For compost facilities with leachate holding ponds, conduct regular liner inspections at least once every five years, unless an

Tests for biological stability must be done as outlined in the United States Composting Council Test Methods for the Examination of Composting and Compost unless otherwise approved by the jurisdictional health department.
<sup>3</sup>Test for either fecal coliform or salmonella.

alternate schedule is approved by the jurisdictional health department as part of the permitting process. The frequency of inspections must be specified in the operations plan and must be based on the type of liner, expected service life of the material, and the site-specific service conditions:

- (i) Inspect the liner for degradation and ruptures of the liner material and for failure of any seams or joints in the liner material. If the maximum wetted extent of the liner geomembrane cannot be directly inspected visually, then the liner must be tested for leaks by electrical leak detection survey methods. If leaks, degradation, or ruptures of the liner material are detected, the liner must be repaired; and
- (ii) The jurisdictional health department must be given sufficient notice and have the opportunity to be present during liner inspections. An inspection record must be kept at the facility or other convenient location if permanent office facilities are not on-site, for at least five years from the date of inspection. Inspection records must be available to the jurisdictional health department upon request.
  - (d) Maintain operating records of the following:
  - (i) Daily temperatures representative of compost piles;

- (ii) Additional process monitoring data as prescribed in the plan of operation;
- (iii) Results of analyses for composted materials as required in (a)(x) of this subsection and Table 220-B; and
- (iv) Facility inspection reports must be maintained in the operating record. Significant deviations from the plan of operation must be noted in the operating record. Records must be kept for a minimum of five years and must be available upon request by the jurisdictional health department.
- (e) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st of each calendar year on forms provided by the department. The annual report must detail the facility's activities during the previous calendar year and must include the following information:
  - (i) Name and address of the facility;
  - (ii) Calendar year covered by the report;
- (iii) Annual quantity and type of feedstocks received and compost produced, in cubic yards or tons;
- (iv) Annual quantity of composted material sold or distributed, in cubic yards or tons;

- (v) Annual summary of laboratory analysis of composted material; and
- (vi) Any additional information required by the jurisdictional health department as a condition of the permit.
- (f) Develop, keep, and follow a plan of operation approved as part of the permitting process. The plan of operation must convey to site personnel the concept of operation intended by the designer. The plan of operation must be kept on-site and be available for inspection at the request of the jurisdictional health department. If necessary, the plan must be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation must include the following:
- (i) List of feedstocks to be composted, including a general description of the source of feedstocks. Feedstocks must be approved by the department or jurisdictional health department;
- (ii) A plan to control air contaminants such as dust and nuisance odors to prevent contaminants from migrating beyond property boundaries in accordance with WAC 173-350-040(43), including:
- (A) A description of how staff will document and respond to nuisance odor complaints should they arise. The plan must include date

and time of complaints, weather conditions, and operations at the facility at the time of the complaint, and a summary of actions taken;

- (B) A description of facility and operational features to prevent nuisance odors beyond the facility's property boundary, as determined by the jurisdictional health department, the department, or the air authority. The description must address the receiving, composting, curing, and storage areas of the facility;
- (C) A description of facility maintenance activities that encompass nuisance odor prevention and control, such as acquiring critical odor control backup equipment in the event of a breakdown, a schedule for purging aeration lines and changing biofilter media as appropriate, and a schedule for cleaning leachate ponds or leachate storage tanks as appropriate; and
- (D) A description of how feedstocks with high moisture or the potential for high odors will be managed to reduce nuisance odors upon receipt, and through the composting process.
- (iii) A description of how wastes and organic materials including incoming feedstocks, composting, curing, and composted materials are to be handled on-site during the facility's active life, including:
- (A) Maximum <u>site</u> capacity in cubic yards for all materials onsite at any one time. The jurisdictional health department may require

cumulative capacity for materials or separate capacities for incoming feedstocks, composting, curing, and composted materials, or any combination;

- (B) Throughput Processing capacity in tons or cubic yards of solid waste feedstocks processed in a given amount of time. The jurisdictional health department may require monthly or annual throughput processing capacity;
- (C) Procedures and criteria for ensuring that only the feedstocks described will be accepted. This includes a plan for rejecting feedstocks contaminated with greater than five percent physical contaminants by volume, or a plan to accept and separate contaminated loads from noncontaminated loads, and reduce physical contaminants to an acceptable level prior to composting;
- (D) Procedure to reduce physical contaminants in composted material to meet testing parameters in Table 220-B. Grinding to reduce the size of physical contaminants does not meet the requirements of this section;
- (I) Compost facilities must provide a label or information sheet to purchasers of compost that exceeds .1%—percent film plastic by weight but does not exceed .25%—percent film plastic by weight. The label or information sheet must include the statement in subsection

- (4)(f)(iii)(D)(II) of this section, or equivalent language approved by jurisdictional health department or the department.
- (II) "This compost does not meet Department of Ecology standards for film plastic content for unrestricted use. This compost may only be used in locations where a means of removing or containing the film plastic on site is put in place promptly after use. Acceptable controls include removal from the site, incorporation, planting, covering with soil or another media, or containment in a compost sock or similar device. This product may not be used adjacent to regulated waters of the state (e.g., wetlands, streams, lakes) or in environmentally sensitive areas."
  - (E) Procedures for handling unacceptable wastes;
- (F) A discussion on types and amounts of feedstocks including basic calculations showing that the facility will be able to achieve an acceptable mix of materials for efficient decomposition;
- (G) Material flow plan describing general procedures to manage all materials on-site from incoming feedstock to composted material;
- (H) A description of equipment, including equipment to add water to compost as necessary;
- (I) Compost process monitoring plan, including compost mix (carbon to nitrogen ratio), temperature, moisture, and porosity;

- (J) Pathogen reduction plan;
- (K) Representative sampling and analysis plan for the composted material such as described in the 2002 U.S. Composting Council Test Methods for the Examination of Composting and Compost Method 02.01-A through E;
- (L) Leachate management plan, including monthly precipitation and evaporation data, and if applicable, monthly leachate reuse or removal; and
  - (M) Storm water management plan.
- (iv) A description of how equipment, structures, and other systems are to be inspected and maintained, including the frequency of inspections and inspection logs;
- (v) A description of how facility staff will receive appropriate training in the operation of the facility, including how they will be trained to identify nuisance odors and how to correct them;
- (vi) A community relations plan describing how the owner or operator will document and manage complaints;
  - (vii) Safety, fire, and emergency plans;
- (viii) Forms for recordkeeping of daily volumes or weights of incoming feedstocks by type, outgoing composted material, and process monitoring results; and

- (ix) Other details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.
- (g) Manage composted material piles that have met the testing parameters in Table 220-B in the following manner:
  - (i) Comply with the performance standards of WAC 173-350-040; and
- (ii) Minimize and control runoff from composted material piles through the use of covers, diversion swales, berms, ditches, or other features designed to prevent runoff and divert storm water from compost material; and
- (iii) Minimize odor by maintaining porosity of composted material piles and managing moisture levels in composted material piles, not to exceed sixty percent moisture.
- (57) Composting facilities Permit requirements Groundwater monitoring. requirements (permit requirements). There are no specific groundwater monitoring requirements for composting facilities subject to this chapter; however, composting facilities must meet the requirements of other federal, state, or local laws and regulations that applyperformance standards of under WAC 173-350-040(5).

- (68) Composting facilities -- Permit requirements Closure. requirements (permit requirements). The owner or operator of a composting facility must:
- (a) Notify the jurisdictional health department sixty days in advance of closure. At closure, the facility owner or operator is financially responsible for the removal of all solid waste, including but not limited to, raw or partially composted feedstocks, composted material and leachate from the facility. The materials must be sent to another facility that complies with the applicable regulations for handling the waste; and.
- (b) Develop, keep, and follow a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan must include methods of removing solid waste, leachate, and other organic materials from the facility. For planning purposes, assume that the facility is at full, permitted site capacity at the time of closure.
- (79) Composting facilities -- Permit requirements Financial assurance. requirements (permit requirements). There are no specific financial assurance requirements for composting facilities subject to this chapter; however, composting facilities must meet the require-

ments of other federal, state, or local laws and regulations that apply underperformance standards of WAC 173-350-040(5).

- (810) Composting facilities Permit application contents (permit requirements). The owner or operator of a composting facility must obtain a solid waste permit from the jurisdictional health department. All applications for permits must be submitted in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and WAC 173-350-715, each application for a permit must contain:
- (a) Engineering reports, plans, and specifications that address the design standards of subsections  $\frac{(3)(4)}{(3)}$  and  $\frac{(5)}{(5)}$  of this section;
- (b) A plan of operation meeting the requirements of subsection(46) of this section; and
- (c) A closure plan meeting the requirements of subsection  $(\frac{68}{2})$  of this section.
- \_\_(9) Composting facilities Construction records (permit requirements). Within thirty days of completing construction, the owner or operator of a composting facility must provide copies of the construction record drawings for engineered facilities at the site and a report documenting facility construction, including the results of observations and testing carried out as part of the construction quality

assurance plan, to the jurisdictional health department and the department. Facilities must not begin operating until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report, plans, and specifications and has approved the construction documentation in writing. The jurisdictional health department has thirty days after receiving complete construction records to provide its determination.

(1011) Composting facilities - Designation of composted materials. (permit requirements). When used on-site or distributed off-site, composted materials meeting the testing parameters of Table 220-B are no longer subject to this chapter. Composted materials that do not meet these requirements are solid waste and subject to management under chapter 70.95 RCW, Solid waste management-Reduction and recycling.

[Statutory Authority: RCW 70.95.020(3), 70.95.060(1), 70.95.260(6), 70.95.305, 70.95.330. WSR 13-08-016 (Order 10-06), § 173-350-220, filed 3/25/13, effective 4/25/13. Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-220, filed 1/10/03, effective 2/10/03.]

WAC 173-350-225 Other organic material handling activities.

(1) In accordance with RCW 70.95.305, activities identified in this section are exempt from solid waste handling permitting when in compliance with the terms and conditions of this section. Any person engaged in the activities in this section that does not comply with the terms and conditions of this section is required to obtain a permit from the jurisdictional health department in accordance with the requirements of WAC 173-350-490. In addition, violations of the terms and conditions of this subsection may be subject to the penalty enforcement provisions of RCW 70.95.315.

Table 225-A Terms and Conditions for Solid Waste Permit Exemptions

	Organic Materials	Volume	Specific Requirements for Activity or Operation
(1)	All organic feedstocks	No more than 5,000 gallons or 25 cubic yards of material onsite at any one time.	No notification, reporting or testing requirements.
(2)	All organic feedstocks	Greater than 25 but no more than 250 cubic yards of material generated on- or offsite, or up to 1,000 cubic yards of material generated on-site at any one time.	Exemption applies to vermicomposting only. Vermicomposting facilities managing more than 25 cubic yards of any organic material must meet the following conditions:  (a) Thirty days prior to operation, facilities must submit a notification of intent to operate as a conditionally exempt facility to the jurisdictional health department and the department. Notice of intent must be submitted on a form provided by the department.  (b) Facilities that distribute material off-site must submit annual reports to the department and the jurisdictional health department by April 1st of each calendar year. Annual reports must be submitted on forms provided by the department.
(3)	Preconsumer vegetative food waste Yard debris Crop residues Manure and bedding Bulking agents	Greater than 25 but no more than 1,000 cubic yards of material on-site at any one time.	Exemption applies to vermicomposting only. Vermicomposting facilities managing more than 25 cubic yards of only the listed feedstocks must meet the following conditions:  (a) Thirty days prior to operation, facilities must submit a notification of intent to operate as a conditionally exempt facility to the jurisdictional health department and the department. Notice of intent must be submitted on a form provided by the department.

	Organic Materials	Volume	Specific Requirements for Activity or Operation
			(b) Facilities that distribute material off-site must submit annual reports to the department and the jurisdictional health department by April 1st of each calendar year. Annual reports must be submitted on forms provided by the department.
(4)	All organic feedstocks	Greater than 5,000 but no more than 50,000 gallons of liquid or semi-solid material on-site at any one time; or Greater than 25 but no more than 250 cubic yards of nonliquid material on-site at any one time.	Other conversion technologies managing more than 5,000 gallons liquid or semi-solid or 25 cubic yards of nonliquid material must meet the following conditions:  (a) Thirty days prior to operation, facilities must submit a notification of intent to operate as a conditionally exempt facility to the jurisdictional health department and the department. Notification must be submitted on a form provided by the department.
			(b) Facilities that distribute material off-site must meet the following conditions:
			(i) Sample and test material every 1 million gallons or 5,000 cubic yards or once per year, whichever is more frequent, to demonstrate it meets compost quality standards of WAC 173-350-220(4) (Table 220-B) before it is distributed for off-site use; or
			(ii) Ensure material meets the conditions for a commercial fertilizer as applicable in chapter 15.54 RCW, Fertilizers, minerals, and limes; or
			(iii) Send material to a compliant permitted or conditionally exempt compost facility for further treatment to meet compost quality standards; or
			(iv) Land apply material in accordance with WAC 173-350-230, Land application; or
			(v) Use material in accordance with WAC 173-350-200, Beneficial use permit exemption; or
			(vi) Process or manage material in an alternate manner approved by the department or the jurisdictional health department.
			(c) Submit annual reports to the department and the jurisdictional health department by April 1st of each calendar year. Annual reports must be submitted on forms provided by the department.

- (2) Facilities managing under the rules and volumes of material described in Table 225-A above are conditionally exempt facilities when they meet the following conditions:
  - (a) Comply with the performance standards of, WAC 173-350-040;

- (b) Allow inspections by the department and/or jurisdictional health department at reasonable times to verify compliance with the conditions specified in this subsection;
- (c) Manage the operation to prevent attraction of flies, rodents, and other vectors;
- (d) Control nuisance odors to prevent migration beyond property boundaries; and
- (e) Manage the operation to prevent the migration of agricultural pests identified by local horticultural pest and disease control boards, as applicable.

[Statutory Authority: RCW 70.95.020(3), 70.95.060(1), 70.95.260(6), 70.95.305, 70.95.330. WSR 13-08-016 (Order 10-06), § 173-350-225, filed 3/25/13, effective 4/25/13.]

WAC 173-350-230 Land application.

- (1) Land application Applicability.
- (a) This section applies These standards apply to solid waste that is beneficially used on the land through application at an agronomic rate, as a soil amendment, or for its agronomic value, or soil amending capability, including land reclamation.

- (b) This section does These standards do not apply to:
- (ai) Land application of manure and bedding, crop residue, and on-farm vegetative waste at agronomic rates as excluded under WAC 173-350-020*i*

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

- (b) Biosolids regulated under chapter 173 308 WAC, Biosolids management;
- (c) Composted materials no longer considered solid waste under WAC 173 350 220(10);
- (d) Dangerous waste regulated under chapter 173-303 WAC Dangerous waste regulations;
- (eii) Waste derived soil amendments Land application of solid waste exempted from permitting under WAC 173-350-200; and
- (f) Solid waste used to improve the engineering characteristics of soil.
  - (iii) Composted materials as defined in WAC 173-350-100;
- (iv) Vermicompost and organic materials meeting the terms and conditions for permit exemption of WAC 173-350-225; and

- (v) Digestate meeting the terms and conditions for permit exemption or permitting requirements of WAC 173-350-250.
- (2) Land application Permit exemptions. There are no permit exemptions for land application.
- (3) Land application -- Permit requirements Location. standards. There are no specific location standards for land application of solid waste subject to this chapter; however, land application sites must meet the requirements provided underperformance standards of WAC 173 - 350 - 040 + (5).
- (34) Land application -- Permit requirements Design. standards. There are no specific design standards for land application of solid waste subject to this chapter; however, land application sites must meet the requirements provided underperformance standards of WAC 173-350-040(5).
- (45) Land application -- Permit requirements Documentation. Operating standards. There are no specific engineering or construction documentation requirements, however, land application sites must meet the performance standards of WAC 173-350-040.
- (6) Land application Permit requirements Operation. The owner or operator of a land application site must:

- (a) shall operate Operate the site in compliance with the performance standards of WAC 173-350-040 and this section. The jurisdictional health department shall determine the need for environmental monitoring to ensure compliance with the performance standards. In addition the owner or operator must develop, keep, and follow a plan of operation approved as part of the permitting process. The plan of operation must be available for inspection at the request of the jurisdictional health department. If necessary, the plan may be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation must include the following: shall:
  - (a) Operate the site to ensure that:
- (i) A description of the types of solid wastes to be land applied;
- (ii) A description of the processes by which the solid waste is generated and treated;
- (iii) A description of the characteristics of the waste that provide agronomic, soil-amending, or reclamation capability;
- (iv) A waste monitoring plan that provides representative characterization of the waste over time;

- (v) A description of how the owner of operator will ensure that land application occurs at a predictable application rate determined as follows:
- (A) For agricultural applications, solid waste must be applied to the land at a rate that does not exceed the agronomic rate. The agronomic rate should be based on Washington State University cooperative extension service fertilizer guidelines or other appropriate resources accepted by the jurisdictional health department;
- (B) For the purposes of land reclamation or other soil amending activities, the application rate may be designed, for example, to achieve a soil organic matter content or other soil physical characteristics to promote long-term soil productivity, with consideration of the carbon-to-nitrogen ratio to control nutrient leaching; and
- (C) For liquid wastes, the application rate must also be based on soil permeability and infiltration rate.
- (vi) A description of how the owner or operator will determine the application rate that accounts for the characteristics of the waste to be applied, characteristics of receiving site soils, irrigation practices, climate, and the crop to be grown;
- (vii) A description of the process, system, and equipment that will be used to apply the waste that explains:

- (A) How the equipment and system will be calibrated to deliver waste at the appropriate rate;
- (B) Whether the waste will be allowed to remain on the surface of the land, tilled into the soil, or injected into the soil at the time of application;
- (C) When the waste will be applied to the land relative to crop and livestock management practices; and
- (D) Any restrictions on application related to climatic factors including typical precipitation, twenty-five-year storm events, temperature, wind, frozen soils, saturated soils, or seasonal high groundwater.
- (viii) A description of how the waste will be managed at all points during storage and application to control attraction to vectors and to mitigate nuisance odor impacts (unless exempted under chapter 70.94 RCW, Washington clean air act), including a description of how owners or operators will respond to complaints;
- (ix) If the seasonal high groundwater is three feet or less below the surface, a management plan describing how groundwater will be protected;
- (x) For waste stored in piles at on the land application site, a description of how the owner or operator will ensure that:

- (A) Contamination of groundwater, surface water, air, and land during storage and in case of fire or flood is prevented;
- (B) The potential for combustion within the pile and the poten tial for combustion from other sources is minimized;
- (C) The duration of on-site waste storage of the entire pile is limited to one year and limited to the amount that will be applied to the site during a one-year period according to the plan of operation, or less if the jurisdictional health department believes it is necessary to prevent the contamination of groundwater, surface water, air, or and land: . Subsequent accumulation under the same conditions is allowed at the same location after the entire pile has been used; and
- (D) For piles that will not meet conditions of (A) through (C) of this subsection, a demonstration that the owner or operator will meet the requirement of WAC 173-350-320.
- (xi) For waste stored in piles somewhere other than the land application site, a description of how the owner or operator will meet the requirements of WAC 173-350-320;
- (xii) For storage of liquid waste or semisolid waste in surface impoundments or tanks, a description of how the owner or operator will meet the requirements of WAC 173-350-330;

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

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

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

- (A) For agricultural applications, solid waste shall be applied to the land at a rate that does not exceed the agronomic rate. The agronomic rate should be based on Washington State University cooperative extension service fertilizer quidelines or other appropriate guidance accepted by the jurisdictional health department;
- (B) For the purposes of land reclamation or other soil amending activities, the application rate may be designed to achieve a soil organic matter content or other soil physical characteristic and promote long-term soil productivity, with consideration of the carbon-tonitrogen ratio to control nutrient leaching; and
- (C) For liquid wastes, the application rate shall also be based on soil permeability and infiltration rate.

(bxiii) A description of how the owner or operator will mMaintain daily operating records of the location where waste is applied, amount

and type of waste applied to the land, the crop planted, and other any additional nutrient inputs, including the form or computer printout used to record this information. Facility annual reports must be maintained in the operating record. Significant deviations from the plan of operation shall must be noted in the operating record. Records shall must be kept for a minimum of five years and shall be available upon request by the jurisdictional health department; and

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

- (eb) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall must detail the land application activities during the previous calendar year and shall must include the following information:
- (i) Site aAddress or legal description of where waste was land applied;
  - (ii) Calendar year covered by the report;
- (iii) Annual quantity quantities and types of waste managedreceived from each source;

- (iv) For each crop grown: The the acreage used, the amount, type and source of each waste applied, the crop, and any additional nutrient inputs to the land, such as manure, biosolids, or commercial fertilizer;
- (v) Quantity and type of any waste remaining in storage as of December 31st of the reporting year;
- (vi) Any additional waste characterization information required to be obtained as a condition of the permit, and a summary report of that data;
- (vii) Any environmental monitoring data required to be obtained as a condition of the permit, and a summary report of that data; and
- (viii) Any additional information required by the jurisdictional health department as a condition of the permit.
- (d) Develop, keep, and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:

- (i) A description of the types of solid wastes to be handled at the site;
- (ii) A description of how wastes are to be handled on site during the life of the site including:
- (A) How wastes will be delivered to the site and meet any local agency notification requirements;
- (B) A description of the process, system and equipment that will be used to apply the waste to the land that explains:
- (I) How the equipment and system will be calibrated to deliver waste at the agronomic rate;
- (II) Whether the waste will be allowed to remain on the surface of the land, will be tilled into the soil, or will be injected into the soil at the time of application;
- (III) When the waste will be applied to the land relative to crop and livestock management practices; and
- (IV) Any proposed restrictions on application related to climatic factors including typical precipitation, twenty-five-year storm events as defined in WAC 173 350 100, temperature, and wind, or site conditions including frozen soils and seasonal high groundwater;

- (C) A description of how the waste will be managed at all points during storage and application to control attraction to disease vectors and to mitigate nuisance odor impacts;
- (iii) A spill response plan including the names and phone numbers of all contacts to be notified in the event of a spill and how the spill will be cleaned up;
- (iv) If the seasonal high groundwater is three feet or less below the surface, a management plan describing how groundwater will be protected;
- (v) A waste monitoring plan providing analytical results representative of the waste being applied to the land, over time, taking into account the rate of production of the waste, timing of delivery, and storage;
- (vi) The forms used to record volumes, weights and waste application data;
- (vii) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.
- (57) Land application -- Permit requirements Groundwater monitoring. requirements. There are no specific groundwater monitoring requirements for land application sites subject to this chapter; howev-

er, land application sites must meet the requirements provided underperformance standards of WAC  $173-350-040\frac{(5)}{}$ .

- (68) Land application Permit requirements Closure. requirements. The owner or operator of all land application sites shall must notify the jurisdictional health department sixty days in advance of closure. All land application sites shall must be closed by applying all materials in storage in accordance with the permit, or by removing those materials to a facility that conforms to the applicable regulations for handling the waste.
- ance. requirements. There are no specific financial assurance requirements for land application sites subject to this chapter; however, land application sites must meet the requirements provided underperformance standards of WAC 173-350-040(5).

## (810) Land application - Permit application contents.

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

- (i) Contact information, including name, contact person, mailing address, phone, fax, e-mail for:
- (A) Any person who generates waste that will be applied to the site;
  - (B) The person who is applying for a permit (the permit holder);
  - (C) The person who prepares the permit application; and
  - (D) The person who owns the site where the waste will be applied.
- (ii) Statement of intended use. The permit application shall contain a clear explanation of the benefit to be obtained from land application of the material. Avoidance of disposal is not adequate justification for land application of solid waste.
  - (iii) An analysis of the waste which includes:
  - (A) A description of the material to be applied to the land;
- (B) A description of the processes by which the material is generated and treated including all processed feedstocks;
  - (C) Any pseudonyms or trade names for the material;
- (D) A discussion of the potential for the material to generate nuisance odors or to attract disease vectors, including any complaints regarding nuisance odors associated with this material;
- (Eii) An analysis of pollutant concentrations of the following reported on a dry weight basis:

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(₹A) Total arsenic;
(<del>II</del>B) Total barium;
(IIIC) Total cadmium;
(<del>IV</del>D) Total chromium;
(¥E) Total copper;
(<del>VI</del>F) Total lead;
(VIIG) Total mercury;
(VIIIH) Total molybdenum;
(<del>IX</del>I) Total nickel;
(XJ) Total selenium;
(XIK) Total zinc.
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(Fiii) An analysis of nutrients at a minimum to include total organic Kjeldahl nitrogen, total nitrate-nitrogen, total ammonia- and ammonium-nitrogen, total phosphorus, and extractable total potassium, reported on a dry weight basis;

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

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

- (I) The concentration of fecal coliform bacteria expressed as CFU or MPN per gram of dry solid material; and
- (Jvi) Any additional analysis required by the jurisdictional health department. The jurisdictional health department may reduce the analytical requirements of this section; . Methods of analysis are to be determined by the jurisdictional health department.
- (ivvii) A land application comprehensive site characterization including:
- (A) A description of current practices and a brief description of past practices on the application—site, ; including application of wastes, soil amendments, manures, biosolids, liming agents, and other fertilization practices, livestock usage, irrigation practices, and crop history. Also indicate whether any management plan has been prepared for the site such as a farm, forest, or nutrient management plan. Discuss any potential changes to management practices at the site;
- (B) A description of the climate at the application site including typical precipitation, precipitation of a twenty five year storm, as defined in WAC 173-350-100, temperatures, and seasonal variations;
- (CB) A brief discussion of the potential for run-on and runoff, and typical depths to seasonal high groundwater. Runoff discussion

must include direction of site drainage and identification of any surface water within one-quarter mile of the site;

- (ĐC) An analysis of soil nutrients including plant available nitrogen residual nitrate in the upper two three feet of soil in one foot increments;
- (ED) A site map showing property boundaries, and ownership of adjacent properties and adjacent property uses, with the application areas clearly shown, and with the latitude and longitude of the approximate center of each land application site;
- (FE) A topographic relief map of the site extending one-quarter mile beyond the site boundaries at a scale of 1:24,000 or other scale if specified by the jurisdictional health department;
- (GF) Show the following information on either of the maps provided or on additional maps if needed:
  - (I) Location of the site by street address, if applicable;
  - (II) The zoning classification of the site;
  - (III) The means of access to the site;
- (IV) The size of the site in acres, and if applicable, the size of individual fields, units, and application areas;
- (V) The location and size of any areas which will be used to store the waste;

- (VI) Adjacent properties, uses, and their zoning classifications; (VII) Delineation of wetlands on the site;
- (VIII) Any portion of the site that falls within a wellhead protection area;
- (<del>IX</del>VII) Any seasonal or perennial surface water <del>bodies</del>—located on the site or perennial surface water bodies within one-quarter mile of the site;
- (XVIII) The location of all wells within one-quarter mile of the boundary of the application area which are listed in public records or otherwise known, whether for domestic, irrigation, or other purposes;
- (XIIX) Any setback or buffer to surface water, property boundaries, or other feature, if proposed;
- (X<del>II</del>) The location of any critical areas or habitat identified under the Endangered Species Act, local growth management plans, habitat conservation plans, conservation reserve program, or local shoreline master program; and
- \_(XIII) A copy of the Natural Resources Conservation Service soil survey map from the most recent edition of the soil survey that includes the distribution of soil types with an overlay of the site boundaries; and

(XIV) A description of the soil type(s), textural classes, and soil depths present on the site as determined by the most recent edition of the Natural Resources Conservation Service soil survey or from actual field measurements.

(v<u>iii</u>) A plan of operation meeting the requirements of subsection (46) of this section.

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

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-230, filed 1/10/03, effective 2/10/03.]

WAC 173-350-240 Energy recovery and incineration facilities.

- (1) Energy recovery and incineration facilities Applicability.
- (a) These standards apply to all facilities designed to burn more than twelve tons of solid waste or refuse-derived fuel per day.
- (b) These standards do not apply to facilities that burn gases recovered at from a landfill or solid waste digesters.
- (e2) Energy recovery and incineration facilities Permit exemptions. In accordance with RCW 70.95.305, the combustion of waste materials in compliance with the terms and conditions of Table 240-A is exempt from the requirement to obtain a solid waste handling permit from the jurisdictional health department. If a facility does not operate in compliance with the terms and conditions established for an exemption under this subsection, the facility may be subject to the permitting requirements for solid waste handling under this chapter. wood waste, wood derived fuel, and wastewater treatment sludge generated from the manufacturing of wood pulp or paper, for the purpose of energy recovery is subject solely to the requirements of (d)(i) through (iv) of this subsection and is exempt from solid waste handling permitting. An owner or operator that does not comply with the terms and conditions of (d)(i) through (iv) of this subsection is required to obtain a permit from the jurisdictional health department and shall comply with all other applicable requirements of this chap-

ter. In addition, violations of the terms and conditions of  $(\frac{d}{d})(\frac{1}{d})$ through (iv) of this subsection may be subject to the penalty enforcement provisions of RCW 70.95.315.

Table 240-A Terms and Conditions for Solid Waste Permit Exemption

	Waste Materials	Specific Requirements for Activity or Operation
(1)	Wood waste Wood derived fuel Wastewater treatment sludge generated from the manufacturing of wood pulp or paper	(a) Meet the performance standards of WAC 173-350-040;  (b) Ensure that only materials approved in writing by the agency with jurisdiction over the facility for air quality regulation are combusted;  (c) Allow department and jurisdictional health department representatives to inspect the facility at reasonable times for the purpose of determining compliance with this chapter; and  (d) Ensure that wastewater treatment sludge generated from the manufacturing of wood pulp or paper is combusted only in energy recovery units at the facility from which it originates.

- (d) Owners and operators of all categorically exempt energy recovery facilities shall:
  - (i) Comply with the performance standards of WAC 173 350 040;
- (ii) Ensure that only fuels approved in writing by the agency with jurisdiction over the facility for air quality regulation are combusted;
- (iii) Allow department and jurisdictional health department representatives to inspect the facility at reasonable times for the purpose of determining compliance with this chapter; and

- (iv) Ensure that wastewater treatment sludge generated from the manufacturing of wood pulp or paper is combusted only in energy recovery units at the facility from which it originates.
- (23) Energy recovery and incineration facilities -- Permit requirements - Location. standards. There are no specific location standards for energy recovery or incineration facilities subject to this chapter; however, energy recovery and incineration facilities must meet the requirements provided underperformance standards of WAC 173 - 350 - 040 + (5).
- (34) Energy recovery and incineration facilities Permit requirements - Design. standards. There are no specific design standards for energy recovery or incineration facilities subject to this chapter; however, energy recovery and incineration facilities must meet the requirements provided under WAC Energy recovery and incineration facilities must be designed so that the facility can be operated to meet the performance standards of WAC  $173-350-040\frac{(5)}{.}$  The owner or operator of an energy recovery or incineration facility must prepare engineering reports/plans and specifications to address the following:
- (a) The design of the storage and handling units for incoming waste as well as fly ash, bottom ash, and any other wastes produced by air or water pollution controls; and

- (b) The design of the incinerator or thermal reactor, including charging or feeding systems, combustion air systems, combustion or reaction chambers, including heat recovery systems, ash handling systems, and air pollution and water pollution control systems. Instrumentation and monitoring systems design must also be included.
- (5) Energy recovery and incineration facilities Permit requirements - Documentation.
- (a) The owner or operator must submit facility drawings and construction documents for, at a minimum, any elements described in (4) of this section to the jurisdictional health department for review and approval. The facility drawings and construction documents must be prepared by a professional engineer registered in the state of Washington and must include:
- (i) An engineering report that presents the design basis and calculations for the engineered features. The engineering report must demonstrate that the proposed design will meet the performance standards of WAC 173-350-040;
- (ii) Scale drawing of the facility including the location and size of waste storage areas, fixed equipment, buildings, storm water management features where applicable, access roads, traffic patterns,

and other constructed areas and buildings integral to facility operation;

- (iii) Design specifications for the engineered features of the facility as applicable; and
- (iv) For new construction, a construction quality assurance plan that describes monitoring, testing, and documentation procedures that will be performed during construction of the facility, to ensure the facility is constructed in accordance with the approved design.
- (b) The owner or operator must provide copies of the construction record drawings for engineered features at the facility and a report documenting facility construction, including the results of observations and any testing carried out as part of the construction quality assurance plan, to the jurisdictional health department and the department. The owner or operator must not commence operation in a newly-constructed portion of the facility until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report/plans and specifications and has approved the construction documentation in writing.
- (46) Energy recovery and incineration facilities -- Permit Requirements - Operating. standards. The owner or operator of an energy recovery or incineration facility shallmust:

- (a) Operate the facility to: Operate the site in compliance with the performance standards of WAC 173-350-040 and this section. In addition, the owner or operator must develop, keep, and follow a plan of operation approved as part of the permitting process. The plan of operation must be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation must include the following:
- (i) A description of the types of waste materials to be handled at the facility;
- (ii) A description of the procedures used to ensure that dangerous waste and other unacceptable waste are not accepted at the facility;
- (iii) A description of how waste materials are to be handled onsite, including maximum site capacity, methods of adding or removing waste materials from the facility and equipment used;
- (iv) A description of how the owner or operator will ensure that the facility is operated in a way to:
  - (A) Control litter, just and nuisance odors;
  - (B) Control rodents, insects, and other vectors;

- (iC) Confine solid wastes prior to and after processing to specifically designed piles, surface impoundments, tanks or containers meeting the applicable standards of this chapter. Storage of wastes other than in the specifically designed storage compartments—containers is prohibited. Equipment and space shall—must—be provided in the storage and charging areas, and elsewhere as needed, to allow periodic cleaning as required to maintain the plant in a sanitary and clean condition;
- (D) Manage solid wastes on-site during the facility's active life, including alternative storage, and/or disposal plans for all situations that would result in overfilling of the storage facility;
- $(\frac{iiE}{i})$  Handle solid wastes, including combustion or other residues, in a manner that complies with this chapter; and
- $(\frac{i + i + i}{i})$  Provide recyclable material collection at all facilities that accept municipal solid waste from the general public, self-haul residential, or commercial waste generators; and.
- \_(iv) Ensure that dangerous waste is not disposed, treated, stored or otherwise handled, unless the requirements of chapter 173-303 WAC, Dangerous waste regulations, are met.
- $(\underline{bv})$  Inspect the facility to prevent malfunctions and deterioration, operator errors and discharges that may lead to the release of

wastes to the environment or cause a threat to human health. Inspections must address how equipment, structures and other systems, including leachate collection and gas collection equipment, are to be inspected and maintained. The owner or operator shall must conduct these inspections as needed, but at least weekly, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process. Inspections must be recorded on an inspection form to be included in the plan of operation.

(evi) A description of how operators will Mmaintain daily operating records on the amounts (weights or volume) and types of wastes received and removed from the facility, and number of vehicles delivering waste to the facility, including the form or computer printout used to record this information. Facility annual reports must be maintained in the operating record. Facility inspection reports shall must be maintained in the operating record, including at least the date of inspection, the name and signature of the inspector, a notation of observations made, and the date and nature of any needed repairs or remedial action. - The operator must notify the jurisdictional health department prior to any significant deviation from the plan of operation, and Significant deviations from the plan of operation shall alsomust be noted on the operating record. Records shall must be main

tained kept for a minimum of five years and shall must be available upon request by the jurisdictional health department.

(vii)\_Safety, fire and emergency plans, including:

- (A) Actions to take if there is a fire or explosion;
- (B) Actions to take if leaks are detected;
- (C) Remedial action programs to be implemented in case of a release of hazardous substances to the environment; and
- (D) Actions to take for other releases (e.g., failure of runoff containment system).
- (viii) Other such details to demonstrate that the facility will be operated in accordance with this chapter and as required by the jurisdictional health department.
- (db) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st of each year on forms supplied by the department. The annual report shall must detail the facility's activities during the previous calendar year and shall must include the following information:
  - (i) Name and address of the facility;
  - (ii) Calendar year covered by the report;
- (iii) Annual quantitiesy and types of each type of solid waste received and incinerated, in tons if available;

- (iv) Annual quantity, type and destination of solid waste bypassed, in tons;
- (v) Annual quantity of ash disposed and disposal location, in tons; and
- (vi) Any additional information required by the jurisdictional health department as a condition of the permit.
- (e) Develop, keep and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:
- (i) A description of the types of solid wastes to be handled at the facility;
- (ii) How solid wastes are to be handled on-site during the facility's active life, including alternative storage, and/or disposal plans for all situations that would result in overfilling of the storage facility;

- (iii) A description of how equipment, structures and other systems, including leachate collection and gas collection equipment, are to be inspected and maintained, including the frequency of inspection and inspection logs;
  - (iv) Safety, fire and emergency plans including:
  - (A) Actions to take if there is a fire or explosion;
  - (B) Actions to take if leaks are detected;
- (C) Remedial action programs to be implemented in case of a release of hazardous substances to the environment;
- (D) Actions to take for other releases (e.g., failure of runoff containment system);
  - (v) Forms used to record volumes or weights;
- (vi) Other such details to demonstrate that the facility will be operated in accordance with this chapter and as required by the jurisdictional health department.
- (57) Energy recovery and incineration facilities -- Permit requirements - Groundwater monitoring. requirements. There are no specific groundwater monitoring requirements for energy recovery and incineration facilities subject to this chapter; however, energy recovery and incineration facilities must meet the requirements provided underperformance standards of WAC  $173-350-040\frac{(5)}{(5)}$ .

- (68) Energy recovery and incineration facilities -- Permit requirements - Closure. requirements. The owner or operator of an energy recovery or incineration facility must develop, keep, and follow a closure plan that includes shall:
- (a) Notificationy to the jurisdictional health department one hundred eighty days in advance of closure;-

At the time of closure all solid waste shall be removed to a facility that conforms with the applicable regulations for handling the waste.

- (b) Removal of all waste material to a facility that meets all applicable regulations for handling the waste, or combustion of all remaining waste prior to closure; and
- (c) Methods of removing waste material. Develop, keep and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan shall include the methods of removing waste.
- (7) Energy recovery and incineration facilities Environmental impact statement required. In accordance with RCW 70.95.700, no solid waste energy recovery or incineration facility shall be operated prior to the completion of an environmental impact statement containing the considerations required under RCW 43.21C.030 (2)(c) and prepared pur-

suant to the procedures of chapter 43.21C RCW, State Environmental Policy Act.

- (89) Energy recovery and incineration facilities -- Permit requirements - Financial assurance requirements. There are no specific financial assurance requirements for energy recovery facilities and incineration facilities subject to this chapter; however, energy recovery and incineration facilities must meet the requirements provided underperformance standards of WAC 173-350-040(5).
- (910) Energy recovery and incineration facilities Permit application contents. The owner or operator of an energy recovery or incineration facility shall must obtain a solid waste permit from the jurisdictional health department. All applications for permits shall must be in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and WAC 173-350-715, each permit application shall must contain:
- (a) Preliminary eEngineering reports/plans and specifications that address the standards of subsection (4) and (5) of this section; ÷
- (i) The design of the storage and handling facilities on site for incoming waste as well as fly ash, bottom ash and any other wastes produced by air or water pollution controls; and

- (ii) The design of the incinerator or thermal treater, including charging or feeding systems, combustion air systems, combustion or reaction chambers, including heat recovery systems, ash handling systems, and air pollution and water pollution control systems. Instrumentation and monitoring systems design shall also be included.
- (b) A plan of operation that addresses the requirements of subsection (46) of this section; and
- (c) A closure plan meeting the requirements of subsection (68) of this section.
- (11) Energy recovery and incineration facilities Environmental impact statement. In accordance with RCW 70.95.700, no solid waste energy recovery or incineration facility established on or after January 1, 1989 may be operated prior to the completion of an environmental impact statement containing the considerations required under RCW 43.21C.030 (2)(c) and prepared pursuant to the procedures of chapter 43.21C RCW, State environmental policy.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-240, filed 1/10/03, effective 2/10/03.]

WAC 173-350-250 Anaerobic digesters.

- (1) Anaerobic digesters Applicability.
- (a) These standards apply This section applies to all facilities that treat solid waste by anaerobic digestion. , except (a), (b), and (c) of this subsection:
  - (b) These standards do not apply to:
- (ai) Storage or treatment of solid or liquid wastes in surface impoundments or tanks regulated under WAC 173-350-330;
- (bii) Anaerobic digesters regulated in accordance with chapter 90.48 RCW, Water pollution control; and
- (eiii) Anaerobic digesters regulated in accordance with chapter 173-308 WAC, Biosolids management.
- (2) Anaerobic digesters Permit exemptions. In accordance with RCW 70.95.305, anaerobic digester facilities processing the types and volumes of materials identified in Table 250-A are subject solely to the requirements of Table 250-A and (b) of this subsection and are exempt from solid waste handling permitting. Feedstocks not listed in Table 250-A must be approved by the department. Violations of the terms and conditions of Table 250-A and (b) of this subsection may be subject to penalty enforcement provisions of RCW 70.95.315.
- (a) An owner or operator that does not comply with the terms and conditions of Table 250-A and (b) of this subsection must÷

- ullet Oobtain a solid waste handling permit from the jurisdictional health department  $\dot{\tau}$  and
- ${\color{red} \bullet \ \, \textbf{C}}\underline{\textbf{c}} \text{omply}$  with all applicable requirements of this chapter.

Violations of the terms and conditions of Table 250-A and (b) of this subsection may be subject to the penalty enforcement provisions of RCW 70.95.315.

Table 250-A Terms and Conditions for Exemptions

	Organic Materials	Volume	Specific Requirements for Activity or Operation
(1)	All organic feedstocks	No more than 5,000 gallons or 25 cubic yards of material on-site at any one time.	No notification, reporting or testing requirements.
(2)	All organic feedstocks	Greater than 5,000 but no more than 50,000 gallons of liquid or semi-solid material on-site at any one time; or	For facilities managing more than 5,000 gallons or 25 cubic yards on-site at any one time, and if organic materials are received from or distributed off-site, the owner or operator must:  (a) Thirty days prior to operation, facilities must submit a notification of intent to operate as a conditionally exempt facility to the jurisdictional health department and the department. Notice of intent must be submitted on a form provided by the department.
		Greater than 25 but no more than 250 cubic yards of nonliquid material on-site at any one time.	(b) Facilities that distribute digestate (solids, semi-solids or liquids) off-site must meet the following conditions:
			(i) Sample and test digestate solids every 5,000 cubic yards or once per year, whichever is more frequent, to demonstrate it meets compost quality standards of WAC 173-350-220(4) (Table 220-B) before it is distributed for off-site use; or
			(ii) Ensure digestate liquids or nonseparated digestate meets the conditions for a commercial fertilizer as applicable in chapter 15.54 RCW. Fertilizers, minerals, and limes; or
			(iii) Send digestate to a compliant permitted or conditionally exempt compost facility for further treatment to meet compost quality standards; or
			(iv) Land apply digestate in accordance with WAC 173-350-230, Land application; or
			(v) Use digestate in accordance with WAC 173-350-200, Beneficial use permit exemptions; or
			(vi) Process or manage digestate in an alternate manner approved by the department or the jurisdictional health department;
			(vii) Submit annual reports and results of digestate analysis (if applicable) to the department and the jurisdictional health department by April 1st of each calendar year. Annual reports must be submitted on forms provided by the department.

## **Organic Materials**

# Livestock manure; may include livestock manure that is imported, which means originating off of the farm or site where the anaerobic digester is being operated; and

(3)

Organic feedstocks except materials collected from municipal, commercial or residential solid waste collection programs. All imported organic materials must be preconsumer.

If imported organic feedstocks are likely to contain animal by-products, they must be previously source separated at a facility licensed to process food by the United States Department of Agriculture, the United States Food and Drug Administration, the Washington state department of agriculture, or other applicable regulatory agency.

If imported organic feedstocks contain bovine processing waste, they must be derived from animals approved by the United States Department of Agriculture Food Safety and Inspection Service and not contain any specified risk material.

Imported organic feedstocks cannot contain sheep carcasses or sheep processing waste.

### Volume

No limits when livestock manure is at least 50% percent of total feedstocks volume, and imported, nonmanure organic feedstocks are not greater than 30% percent of total feedstock volume.

# **Specific Requirements for Activity or Operation**

- (a) Thirty days prior to operation, facilities managing imported organic feedstocks must submit a notification of intent to operate as a conditionally exempt facility to the jurisdictional health department and the department. Notice of intent must be submitted on a form provided by the department.
- (b) All organic materials must be received and stored in a structure(s) that:
- (i) Complies with the Natural Resources Conservation Service's Practice Standard Code 313 in effect as of July 26, 2009, or other approved storage construction standard approved by the department or the jurisdictional health department;
- (ii) Is certified by a representative of the Natural Resources Conservation Service to be effective at protecting surface and groundwater; or
- (iii) Meets applicable construction industry standards adopted by the American Concrete Institute or the American Institute of Steel Construction in effect as of July 26, 2009; and
- (iv) Prevents migration of nuisance odors beyond property boundaries and minimizes attraction of flies, rodents, and other vectors.
- (c) The anaerobic digester must be designed and operated in accordance with standards in the Natural Resources Conservation Service's Conservation Practice Standard, Code 366, in effect as of July 26, 2009.
- (d) All imported organic feedstocks must be fed into the anaerobic digester within 36 hours.
- (e) Digestate must be managed in accordance with a dairy nutrient management plan under chapter 90.64 RCW, Diary nutrient management, that includes elements addressing management and use of digestate.

Digestate that is managed in accordance with the dairy nutrient management plan under chapter 90.64 RCW. Dairy nutrient management, is no longer a solid waste when those plans include elements addressing management and use of digestate.

- (f) Facilities that distribute digestate (solids, semi-solids or liquids) off-site other than under a nutrient management plan must meet the following conditions:
- (i) Digestate must meet compost quality standards of WAC 173-350-220 for pathogens, stability, nutrient testing, metals and other testing before it is distributed for off-site use; or
- (ii) Be sent to an off-site permitted compost facility for further treatment to meet compost quality standards; or
- (iii) Be processed or managed in an alternate manner approved by the department; and facilities must: Submit annual reports and results of digestate analysis (if applicable) to the department and the jurisdictional health department by April 1st of each calendar year. Annual reports must be submitted on forms provided by the department.

- (b) The owner or operator of an anaerobic digester in compliance with all of the conditions of Table 250-A must also meet all of the following conditions in order to maintain exempt status:
  - (i) Comply with the performance standards of WAC 173-350-040;
- (ii) Allow inspections by the department and/or jurisdictional health department at reasonable times to verify compliance with the conditions specified in this subsection;
- (iii) Manage the operation to prevent the attraction of flies, rodents, and other vectors; and
- (iv) Manage the operation to prevent the migration of agricultural pests identified by local horticultural pest and disease control boards, as applicable.
- (3) Anaerobic digesters Permit requirements Location. standards ards (permit requirements). There are no specific location standards for anaerobic digesters subject to this chapter; however, anaerobic digesters must meet the requirements of other federal, state, or local laws and regulations that apply underperformance standards of WAC 173-350-040(5).

Note: When considering anaerobic digestion facility location, please review the U.S. Department of Transportation Federal Aviation Advisory Circular No. 150/5200-33B. 2007.

(4) Anaerobic digesters - Permit requirements - Design. stand

ards (permit requirements). Anaerobic digesters must be designed such

so that the facility can be operated to meet the performance standards requirements in of WAC 173-350-040. The owner or operator of an anaerobic digester facility must:

- (a) Prepare and provide to the jurisdictional health department engineering reports, plans, specifications, and a construction quality assurance plan that address the standards of this subsection. The reports, plans, and specifications must be prepared by an professional engineer licensed registered in the state of Washington and must include:
- (i) An engineering report that presents the design basis and calculations for the engineered features of the facility including, but not limited to, pads, impoundments, leachate management features (if applicable), digestate management features, storm water management features, and anaerobic digester features. The engineering report must demonstrate that the proposed design will meet the performance standards of this chapter;
- (ii) Scale drawings of the facility including the location and size of feedstock storage areas, fixed equipment, buildings, leachate management features (if applicable), digestate management features, storm water management features, access road and other constructed areas, and buildings integral to facility operation;

- (iii) Design specifications for the engineered features of the facility including, but not limited to, pads, storm water management features, leachate management features (if applicable), digestate management features, and an anaerobic digester design that demonstrates all structures, containers, tanks, and/or surface impoundments will meet the requirements of this section, and of any federal, state, or local water and air quality permits; and
- (iv) A construction quality assurance plan that describes monitoring, testing and documentation procedures that must be performed during construction of the facility to ensure the facility is constructed in accordance with the approved design.
- (b) Provide all weather roads from the public highway to and within the facility when operations require public access. Roads must be designed and maintained to prevent traffic congestion, traffic hazards, dust and noise pollution—;
- (c) Design waste receiving areas, digesters, digestate management features, storm water, and leachate management features (if applicable), to prevent contamination of air, soil, surface water, and groundwater.
- (i) Feedstock, leachate (if applicable), and digestate receiving and storage areas must either be in tanks or surface impoundments

meeting the requirements of this section, or be on pads to prevent contamination of air, soil, surface water, and groundwater underlying or adjacent to receiving and storage areas;

- (ii) Pads must meet the following requirements:
- (A) All pads must be curbed or graded in a manner to prevent ponding, control run-on and runoff, and separately collect and convey all storm water and leachate to separate storage or holding systems. Storm water that is combined with leachate must be treated as leachate in accordance with this section;
- (B) All pads must be constructed on subgrades that provide sufficient bearing capacity to support the weight of the pad, the materials placed on them, and the equipment used in handling the materials;
- (C) The entire surface area of the pad must be designed to maintain its structural and hydraulic integrity against loads resulting from feedstock and digestate storage, machinery used for feedstock handling, and against surface wear or damage caused by feedstock and digestate handling and storage;
- (D) The pad may be constructed of materials such as concrete (with sealed joints) or asphaltic concrete that prevents subsurface soil and groundwater contamination; and

- (E) The jurisdictional health department may allow pads to be designed and constructed with materials other than those listed in (c)(ii)(D) of this subsection, provided if the applicant demonstrates in the engineering report to the jurisdictional health department's satisfaction that the alternative pad provides sufficient protection to meet the performance standards of this section and of WAC 173-350-040.
- (iii) The anaerobic digester design must comply with one of the following three conditions:
- (A) Design criteria in the Natural Resources Conservation Service's Washington Conservation Practice Standard, Anaerobic Digester Code 366 in effect October 2010, or other effective date as specified by the department; or
- (B) Surface impoundment and tank design standards, WAC 173-350- $330(\frac{34}{4});$  or
- (C) Other engineered design that the owner or operator can demonstrate complies with the conditions meets the performance standards of WAC 173-350-040 to the jurisdictional health department's and the department's satisfaction. Written consent from the jurisdictional health department and the department constitutes approval.

- (iv) Storm water management features must divert storm water from feedstock receiving and storage areas, and from digestate collection and storage areas. Features may include, but are not limited to, runon prevention systems, berms, diversion swales, ditches, and other features;
- (v) Leachate management features may include, but are not limited to, runoff prevention systems, leachate collection, conveyance, storage structures, and treatment systems;
- (vi) Leachate (if applicable) must be contained or collected. Any discharges to ground that result in contaminants migrating to groundwater require a waste discharge permit under chapter 90.48 RCW, Water pollution control, prior to discharge. Discharges to ground that result in degradation of groundwater quality are prohibited under chapter 90.48 RCW, Water pollution control. Any discharge to sanitary sewer requires additional permitting by the local delegated authority or department;
- (vii) Leachate ponds or tanks, or digestate liquid storage in ponds or tanks must meet one of the following conditions:
- (A) Ponds must meet Natural Resources Conservation Service Standard for a waste storage facility in the 2001 Washington Field Office Technical Guide 313 (revised June 2011); or

- (B) Ponds must have a liner consisting of a minimum 30-mil thickness geomembrane on a subgrade that provides sufficient bearing capacity to support the liner and the contents of the pond. A liner constructed with a high density polyethylene geomembrane must be at least 60-mil thick to allow for proper welding; and
- (I) Have dikes and slopes designed to maintain their structural integrity under conditions of a leaking liner and capable of withstanding erosion from wave action, overfilling, or precipitation; and
- (II) Have freeboard (distance between the liquid level and the top of the pond) equal to or greater than eighteen inches to avoid overtopping from wave action, overfilling, or precipitation. The jurisdictional health department may reduce the freeboard requirement provided that if other engineering controls are in place that prevent overtopping. These engineering controls must be specified during the permitting process; or
- (C) The jurisdictional health department may approve the use of an alternative liner design if the owner or operator can demonstrate during the permitting process that the proposed design will prevent migration of solid waste constituents or leachate into the ground or surface waters at least as effectively as the liners described in this subsection; or

- (D) Tanks used to store leachate or digestate liquid must meet design standards in WAC  $173-350-330 (\frac{34}{2})(b)$ .
- (viii) Leachate ponds and digestate liquid storage that have the potential to impound more than 10-acre feet (three million two hundred fifty-nine thousand gallons) of liquid measured from the top of the dike and that would be released by a failure of the containment dike must be reviewed and approved by the department's dam safety section.
- (5) Anaerobic digesters Permit requirements Documentation. Facilities must not start operation until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report, plans, and specifications and has approved the construction documentation in writing and issued a permit. Within thirty days of completing construction, the owner or operator of an anaerobic digestion facility must provide the following materials to the jurisdictional health department and the department:
- (a) Copies of the construction record drawing for engineered features at the facility; and
- (b) A report documenting facility construction, including the results of observations and testing carried out as part of the construction quality assurance plan.

- (56) Anaerobic digesters Permit requirements Operating. standards (permit requirements). The owner or operator of an anaerobic digester must operate in compliance with the performance standards of WAC 173-350-040 or Natural Resource Conservation Service Practice Standard Code 366 as applicable, and:
  - (a) Operate the facility to:
- (i) Control air contaminants, such as dust and nuisance odors, to prevent these and other contaminants from migrating beyond property boundaries;
  - (ii) Prevent the attraction of vectors;
- (iii) Prevent the migration of agricultural pests identified by the local horticultural pest and disease control boards as applicable;
- (iv) Confine organic materials prior to and after processing to specifically designated areas, meeting the applicable standards of this section;
- (v) Ensure that dangerous waste is not accepted, treated, or stored;
- (vi) Ensure the facility operates under the supervision and control of a properly trained individual during hours of operation when facility staffing is required;

- (vii) Ensure facility employees are trained in appropriate facility operations, maintenance procedures, and safety and emergency procedures according to individual job duties and according to an approved plan of operation; and
- (viii) Restrict access to the facility when the facility is closed.
- (b) Inspect the facility to prevent malfunctions and deterioration, operator errors, and discharges that may lead to the release of wastes to the environment or cause a threat to human health. The owner or operator must conduct these inspections as needed, but at least weekly, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process.
  - (c) Maintain operating records of the following:
- (i) Process monitoring data as described in the plan of operation;
- (ii) The quantity in gallons or cubic yards, and types of feedstocks received;
- (iii) Results of analysis for digestate that is sold or distributed, according to subsection (5)(e) of this section; and
- (iv) Facility inspection reports. Significant deviations from the plan of operation must be noted in the operating record. Records must

be kept for a minimum of five years and must be available upon request by the jurisdictional health department.

- (d) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st of each calendar year for activities during the previous calendar year. Annual reports must be submitted on forms provided by the department and must include:
  - (i) Annual quantity and type of feedstocks received;
  - (ii) Annual quantity of digestate distributed if applicable;
- (iii) Annual summary of digestate analysis as applicable, if digestate is distributed off-site; and
- (iv) Any additional information required by the department or the jurisdictional health department.
- (e) If distributing digestate (solids, semi-solids, or liquids) off-site, produce and manage the product so that it does not harm human health or the environment; and:
- (i) Test representative samples of digestate solids every 5,000 cubic yards to demonstrate it meets compost quality standards in WAC 173-350-220(46) (Table 220-B). An alternate testing frequency may be required or approved by the jurisdictional health department; or

- (ii) Ensure digestate meets the conditions for a commercial fertilizer as applicable in chapter 15.54 RCW, Fertilizers, minerals, and <a href="mailto:limes">limes</a>; or
- (iii) Send digestate to a permitted compost facility for further processing; or
- (iv) Land apply digestate in accordance with WAC 173-350-230, Land application; or
- (v) Use digestate in accordance with WAC 173-350-200, Beneficial use permit exemption; or
- (vi) Apply digestate on agricultural lands at agronomic rates in accordance with a dairy nutrient management plan or a nutrient management plan; or
- (vii) Manage digestate in an alternate manner as approved by the jurisdictional health department and the department.
- (f) Develop, keep, and abide by follow a plan of operation approved as part of the permitting process. The plan must describe the facility's operation and must convey to site operating personnel the concept of operation intended by the facility designer. The plan of operation must be kept on-site and available for inspection at the request of the jurisdictional health department. When necessary, the plan must be modified with the approval, or at the direction of the

jurisdictional health department. Each plan of operation must include the following:

- (i) A description of the types of feedstocks to be handled at the facility. Feedstocks must be approved by the department or jurisdictional health department;
- (ii) Procedures for ensuring that only feedstocks described will be accepted;
  - (iii) Procedures for handling unacceptable wastes;
- (iv) A plan for processing digestate to meet the requirements of (e) of this subsection, if distributing digestate off-site;
- (v) A nutrient management plan for agricultural lands and farm lands (as described in RCW 84.34.020) if using digestate on-site;
- (vi) A description of how facility staff will be appropriately trained;
- (vii) A calculation of monthly processing capacity based on maximum volume (cubic yards or gallons) of all materials on-site at any one time. All materials on-site include feedstocks, digesting materials and digestate;
- (viii) A material flow plan describing general procedures to manage all materials on-site. All materials on-site include incoming feedstock, digesting materials, and digestate;

- (ix) An odor management plan including, but not limited to, the following components:
  - (A) Methods for treating emissions to reduce odors, if any;
- (B) A community relations plan to address odor issues should they arise; and
- (C) A description of facility and operational improvements that could be made, if nuisance odors are identified beyond the facility's property boundary, as determined by the jurisdictional health department, the department, or the permitting air authority. The description of operational improvements must address feedstock receiving, processing, and digestate storage areas of the facility.
- (x) A description of how equipment, structures, and other systems will be inspected and maintained, including frequency of inspection and inspection logs. This description must include, but is not limited to:
  - (A) The groundwater monitoring system, if required;
- (B) The overfilling prevention equipment, including details of filling and emptying techniques; and
- (C) The liners of surface impoundments and tanks, tank piping, and secondary containment, as applicable.

- (xi) Safety, fire, and emergency plans including a spill prevention/response plan;
- (xii) The forms used to record volumes (in cubic yards or gallons) of accepted feedstocks; and
- (xiii) Other such details to demonstrate that the facility is operated in accordance with this chapter and as required by the jurisdictional health department.
- (67) Anaerobic digesters Permit requirements Groundwater monitoring requirements (permit requirements). There are no specific groundwater monitoring requirements for anaerobic digestion facilities subject to this chapter; however, anaerobic digestion facilities must meet the requirements of other federal, state, or local laws and regulations that apply underperformance standards of WAC 173-350-040(5).
- (78) Anaerobic digesters Permit requirements Closure. requirements. The owner or operator of an anaerobic digester facility must:
- (a) Develop, keep, and follow a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan must include removing all organic materials, including digestate, from the facility. For planning purposes, assume the facility is at full permitted site capacity when it is closed; and

- (b) Notify the jurisdictional health department sixty days in advance of closure. At closure, the facility is financially responsible for the removal of all organic materials including, but not limited to, raw or partially digested feedstocks, and digestate from the facility. The materials must be sent to another facility that complies with the applicable regulations for handling the waste.
- surance. requirements (permit requirements). There are no specific financial assurance requirements for anaerobic digestion facilities subject to this chapter; however, anaerobic digestion facilities must meet the requirements of other federal, state, or local laws and regulations that apply underperformance standards of WAC 173-350-040(5).
- (109) Anaerobic digesters Permit application contents. (permit requirements). The owner or operator of an anaerobic digestion facility not exempt under subsection (2) of this section must obtain a solid waste permit from the jurisdictional health department. All applications for permits must be in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and WAC 173-350-715, each permit application must contain:
- (a) Engineering reports, plans, and specifications that address the design standards of subsection (4) and (5) of this section;

- (b) A plan of operation that addresses the requirements of subsection (56) of this section; and
- (c) A closure plan meeting the requirements of subsection  $(\frac{78}{})$  of this section.
- (10) Anaerobic digester Construction records (permit requirements). Facilities must not start operation until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report, plans, and specifications and has approved the construction documentation in writing and issued a permit. Within thirty days of completing construction, the owner or operator of an anaerobic digestion facility must provide the following materials to the jurisdictional health department and the department:
- (a) Copies of the construction record drawings for engineered facilities at the site; and
- (b) A report documenting facility construction, including the results of observations and testing carried out as part of the construction quality assurance plan.

[Statutory Authority: RCW 70.95.020(3), 70.95.060(1), 70.95.260(6), 70.95.305, 70.95.330. WSR 13-08-016 (Order 10-06), § 173-350-250, filed 3/25/13, effective 4/25/13.]

WAC 173-350-300 On-site storage, collection, and transportation standards.

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

# (2) On-site storage.

- (a) The owner or occupant of any premises, business establishment, or industry shall is be responsible for the safe and sanitary storage of all containerized solid wastes accumulated at those premises.
- (b) The owner, operator, or occupant of any premises, business establishment, or industry **shall** must store solid wastes in containers that meet the following requirements:
- (i) Disposable containers shall must be sufficiently strong to allow lifting without breakage and shall must be thirty-two gallons in capacity or less where manual handling is practiced;
- (ii) Reusable containers, except for detachable containers, shall must be:

- (A) Rigid and durable;
- (B) Corrosion resistant;
- (C) Nonabsorbent and water tight;
- (D) Rodent-proof and easily cleanable;
- (E) Equipped with a close-fitting cover;
- (F) Suitable for handling with no sharp edges or other hazardous conditions; and
- (G) Equal to or less than thirty-two gallons in volume where manual handling is practiced;
- (iii) Detachable containers shall must be durable, corrosionresistant, nonabsorbent, nonleaking and have either a solid cover or screen cover to prevent littering.
  - (3) Collection and transportation standards.
- (a) All persons collecting or transporting solid waste shall must avoid littering at the loading point, during transport and during proper unloading of the solid waste.
- (b) Vehicles or containers used for the collection and transportation of solid waste shall must be tightly covered or screened where littering may occur, durable and of easily cleanable construction. Where garbage is being collected or transported, containers shall must

be cleaned as necessary to prevent nuisance odors and insect breeding and shall must be maintained in good repair.

- (c) Vehicles or containers used for the collection and transportation of any solid waste <del>shall must</del> be loaded and moved in <del>such a</del> manner that the containers will not fail, and the contents will not spill or leak. Where such spillage or leakage does occur the waste shall must be picked up immediately by the collector or transporter and returned to the vehicle or container and the area properly cleaned.
- (d) All persons commercially collecting or transporting solid waste shall must inspect collection and transportation vehicles at least monthly. Inspection records shall must be maintained at the facility normally used to park such vehicles or such other location that maintenance records are kept. Such rRecords shall must be kept for a period of at least two years, and be made available upon the request of the jurisdictional health department.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-300, filed 1/10/03, effective 2/10/03.]

173-350-310 Intermediate solid waste handling facilitiesTransfer stations and drop box facilities.

- (1) Transfer stations and drop box facilities Intermediate solid waste handling facilities - Applicability.
- (a) This section is applicable These standards apply to transfer stations and drop box facilities as defined in WAC 173-350-100.
  - (b) These standards do not apply to:

to any facility engaged in solid waste handling that provides intermediate storage and/or processing prior to transport for final disposal. This includes, but is not limited to, material recovery facilities, transfer stations, baling and compaction sites, and drop box facilities. This section is not applicable to:

- (ai) Storage or, treatment or recycling of solid waste in piles which are subject to WAC 173-350-320;
- (bii) Storage or recycling of solid waste in surface impoundments which are subject to WAC 173-350-330;
  - \_(c) Composting facilities subject to WAC 173 350 220;
- (diii) Recycling and material recovery facilities which is subject to WAC 173-350-210;
  - (eiv) Storage of waste tires which is subject to WAC 173-350-350;
- (fv) Storage Handling of moderate risk waste prior to recycling which is subject to WAC 173-350-360; and

- (g) Energy recovery or incineration of solid waste which is subject to WAC 173-350-240; and
- (hvi) Drop boxesWaste containers placed at the point of waste generation which is subject to WAC 173-350-300.
- (2) Materials recovery facilities Transfer stations and drop box facilities - Permit exemptions. and notification. (a) In accordance with RCW 70.95.305, material recovery facilities drop boxes managed in accordance with the terms and conditions of Table 310-A(b) of this subsection are exempt from solid waste handling permitting. If a facility does not operate in compliance with the terms and conditions established for an exemption under this subsection, the facility may be subject to the permitting requirements for solid waste handling under this chapter. An owner or operator that does not comply with the terms and conditions of (b) of this subsection is required to obtain a permit from the jurisdictional health department as an intermediate solid waste handling facility and shall comply with the requirements of WAC 173-350-310. In addition, violations of the terms and conditions of (b) of this subsection may be subject to the penalty enforcement provisions of RCW 70.95.315.

Table 310-A Terms and Conditions for Solid Waste Permit Exemption

Specific Regularities for receivity of Speciation		Waste Materials	Specific Requirements for Activity or Operation
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- (1) Drop boxes used solely for collecting recyclable materials

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

  (b) Allow department and jurisdictional health department representatives to inspect the drop box at reasonable times for the purpose of determining compliance with this chapter.
- \_(b) Material recovery facilities shall be managed according to the following terms and conditions to maintain their exempt status:
  - (i) Meet the performance standards of WAC 173-350-040;
- (ii) Accept only source separated recyclable materials and dispose of an incidental and accidental residual not to exceed five percent of the total waste received, by weight per year, or ten percent by weight per load;
- (iii) Allow inspections by the department or jurisdictional health department at reasonable times;
- (iv) Notify the department and jurisdictional health department, thirty days prior to operation, or ninety days from the effective date of the rule for existing facilities, of the intent to operate a material recovery facility in accordance with this section. Notification shall be in writing, and shall include:
  - (A) Contact information for facility owner or operator;
  - (B) A general description of the facility; and
- (C) A description of the types of recyclable materials managed at the facility;

- (v) Prepare and submit an annual report to the department and the jurisdictional health department by April 1st on forms supplied by the department. The annual report shall detail facility activities during the previous calendar year and shall include the following information:
  - (A) Name and address of the facility;
  - (B) Calendar year covered by the report;
- (C) Annual quantities and types of waste received, recycled and disposed, in tons, for purposes of determining progress towards achieving the goals of waste reduction, waste recycling, and treatment in accordance with RCW 70.95.010(4); and
- (D) Any additional information required by written notification of the department.
- (3) Intermediate solid waste handling Transfer stations and drop box facilities -- Permit requirements - Location. standards. There are no specific location standards for intermediate solid waste handling facilities transfer stations or drop box facilities subject to this chapter; however, intermediate solid waste handling facilities must meet the requirements provided underperformance standards of WAC 173-350-040(5).

- (4) Intermediate solid waste handling Transfer stations and drop box -facilities -- Permit requirements - Design. - standards. Transfer stations and drop box facilities must be designed so that the facilities can be operated to meet the performance standards of WAC 173-350-040. The owner or operator of all intermediate solid waste handlingtransfer stations or drop box facilities shall must prepare engineering reports/plans and specifications to address the following design standards:
- (a) Material recovery facilities, tTransfer stations must, baling and compaction sites shall:
- (i) Control public access, and prevent unauthorized vehicular traffic and illegal dumping of waste;
  - (ii) Be sturdy and constructed of easily cleanable materials;
- (iii) Provide effective means to control rodents, insects, birds and other vectors;
- (iv) Provide effective means to control litter, including but not limited to, orientation of the tipping floor in a manner that prevents prevailing winds from moving waste outside the collection area when other structures are not in place to prevent this;
- (v) Provide a tip floor made of impervious material such as concrete or asphalt to prevent soil and groundwater contamination. The

surface must be durable enough to withstand damage from operating equipment. The jurisdictional health department may approve other types of surfaces if the applicant can demonstrate that it will prevent soil and groundwater contamination;

(vi) Cover protection of the tipping floor to protect it from wind, rain or snowprecipitation;

(vii) Convey leachate from the tipping floor to a surface impoundment, tank, or sanitary sewer, or use other methods approved by the jurisdictional health department to prevent uncontrolled discharges;

(viii) Provide for storm water runoff collection and discharge from a twenty-five year storm;

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

(viiix) Provide pollution control measures to protect air quality; and

 $(\frac{viii}{x})$  Provide all-weather surfaces for vehicular traffic.

(b) Drop <del>boxes</del> box facilities must:

- (i) Control public access, and prevent unauthorized vehicular traffic and illegal dumping of waste;
- (ii) Provide drop boxes shall be constructed of durable, watertight materials with a lid or screen on top that prevents litter, the loss of materials during transport, and access by rats and other vectors, and control litter.;
- (iii) Be designed so that customers may easily place waste directly into drop boxes; and
  - (iv) Provide all-weather surfaces for vehicular traffic.
- (5) Transfer station and drop box facilities Permit requirements - Documentation.
- (a) The owner or operator must submit facility drawings and construction documents for, at a minimum, any elements described in (4) of this section to the jurisdictional health department for review and approval. The facility drawings and construction documents must be prepared by a professional engineer registered in the state of Washington, and must include:
- (i) An engineering report that presents the design basis and calculations for the engineered features. The engineering report must demonstrate that the proposed design will meet the performance standards of WAC 173-350-040;

- (ii) Scale drawings of the facility including the location and size of waste storage areas, fixed equipment, buildings, storm water management features where applicable, access roads, traffic patterns, and other constructed areas and buildings integral to facility operation;
- (iii) Design specifications for the engineered features of the facility as applicable; and
- (iv) For new construction, a construction quality assurance plan that describes monitoring, testing, and documentation procedures that will be performed during construction of the facility, to ensure the facility is constructed in accordance with the approved design.
- (b) The owner or operator must provide copies of the construction record drawings for engineered features at the facility and a report documenting facility construction, including the results of observations and any testing carried out as part of the construction quality assurance plan, to the jurisdictional health department and the department. The owner or operator must not commence operation in a newly-constructed portion of the facility until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report/plans and specifications and has approved the construction documentation in writing.

- (56) Intermediate solid waste handling Transfer stations and drop box facilities -- Permit requirements - Operating. standards. The owner or operator of an intermediate solid waste handling a transfer station or drop box facility shallmust:
- (a) Operate the facility to:site in compliance with the performance standards of WAC 173-350-040 and this subsection. In addition, the owner or operator must develop, keep, and follow a plan of operation approved as part of the permitting process. The plan of operation must be available for inspection at the request of the jurisdictional health department. If necessary, the plan must be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation must include the following:
- (i) A description of the types of waste materials to be handled at the facility;
- (i) For material recovery facilities transfer stations, bailing and compaction sites:
  - (A) Be protective of human health and the environment;
- (Bii) A description of the procedures used to ensure that Prohibit the disposal of dangerous waste and other unacceptable waste are not accepted at the facility;

- (iii) A description of how waste materials are to be handled onsite including maximum site capacity, methods of adding or removing waste from the facility and equipment used, and how operators will ensure adequate dumping capacity at all times;
- (iv) A description of how the owner or operator will ensure the facility is operated in a way to:
  - (C) Control rodents, insects, and other vectors;
  - (ĐA) Control litter, dust, and nuisance odors;
  - (B) Control rodents, insects and other vectors;
  - (EC) Prohibit scavenging;
  - (F) Prohibit open burning;
  - (G) Control dust;
  - (H) For putrescible waste, control nuisance odors;
  - (I) Provide attendant(s) on-site during hours of operation;
- (JD) Provide Have a sign at the site entrance that identifies the facility and shows at a mimimum least the name of the site; and, if applicable, hours during which the site is open for public use, what materials the facility does not accept and other necessary information posted at the site entrance; and
- (E) Ensure that waste capable of attracting birds does not pose an aircraft safety hazard.

- (v) A description of how operators will inspect and maintain the facility to prevent deterioration or the release of wastes to the environment that could pose a threat to human health, including the inspection form operators will use. Inspections must be as needed, but at least weekly, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process;
- (vi) A description of how operators will maintain operating records on the amounts (weight or volume) and types of waste received or removed from the facility, including the form or computer printout used to record this information. Facility annual reports must be maintained in the operating record. Facility inspection reports must be maintained in the operating record, including at least the date of inspection, the name and signature of the inspector, a notation of observations made, and the date and nature of any needed repairs or remedial action. Significant deviations from the plan of operation must be noted in the operating record. Records must be kept for a minimum of five years and must be available upon request by the jurisdictional health department;

(vii) Safety and emergency plans; and

- (viii) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.
- (b) For transfer stations, the plan of operations must also address how the operators will:
  - (i) Prove attendant(s) onsite during hours of operation;
- (ii) Immediately summon fire, police, or emergency service personnel in the event of an emergency;
- (iii) Remove or otherwise manage leachate from containment structure(s) to prevent soil and/or groundwater contamination; and
- (iv) Remove waste from the tipping floor at a frequency approved by the jurisdictional health department.
- (K) Have communication capabilities to immediately summon fire, police, or emergency service personnel in the event of an emergency.
- (iic) For drop box facilities, the plan of operations must also address how the operators will service the facility : (A) Be serviced as often as necessary to ensure adequate dumping capacity at all times. Storage of waste outside the drop boxes is prohibited;
  - (B) Be protective of human health and the environment;
  - (C) Control rodents, insects, and other vectors;
  - (D) Control litter;

- (E) Prohibit scavenging;
- (F) Control dust;
- (G) For putrescible waste, control nuisance odors; and
- (H) Have a sign that identifies the facility and shows at least the name of the site, and, if applicable, hours during which the site is open for public use, what materials the facility does not accept and other necessary information posted at the site entrance;
- (b) Inspect and maintain the facility to prevent deterioration or the release of wastes to the environment that could pose a threat to human health. Inspection shall be as needed, but at least weekly, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process;
- (c) Maintain daily operating records on the weights and types of wastes received or removed from the facility. Facility inspection reports shall be maintained in the operating record. Significant deviations from the plan of operation shall be noted in the operating record. Records shall be kept for a minimum of five years and shall be available upon request by the jurisdictional health department;
- (d) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall must detail the

facility's activities during the previous calendar year and shall must include the following information:

- (i) Name and address of the facility;
- (ii) Calendar year covered by the report;
- (iii) Annual quantity of each type of solid waste handled by the facility, in tons;
- (iv) Destination of waste transported from the facility for processing or disposal; and
- (v) Any additional information required by the jurisdictional health department as a condition of the permit.
- (e) Develop, keep and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:
- (i) A description of the types of solid wastes to be handled at the facility;

- (ii) A description of how solid wastes are to be handled on-site during the facility's life, including maximum facility capacity, methods of adding or removing waste from the facility and equipment used;
- (iii) A description of the procedures used to ensure that dangerous waste and other unacceptable waste are not accepted at the facili-<del>ty;</del>
  - (iv) Safety and emergency plans;
- (v) A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspection and inspection logs;
- (vi) For putrescible wastes, an odor management plan describing the actions to be taken to control nuisance odors;
  - (vii) The forms used to record volumes or weights; and
- (viii) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.
- (67) Intermediate solid waste handlingTransfer station and drop box facilities -- Permit requirements - Groundwater monitoring. requirements. There are no specific groundwater monitoring requirements for intermediate solid waste handling transfer station and drop box facilities subject to this chapter; however, intermediate solid waste

handling facilities must meet the requirements provided underperformance standards of WAC 173-350-040(5).

- (78) Intermediate solid waste handlingTransfer stations and drop box facilities -- Permit requirements - Closure. requirements. The owner or operator of an intermediate solid waste handling a transfer station or drop box facility must develop, keep, and follow a closure plan that includes facility shall:
- (a) Notificationy to the jurisdictional health department one hundred eightyninety days in advance of closure of a transfer station or drop box facility.
- (b) Removal of aAll waste shall be removed to a facility that conforms with the applicable regulations for handling the waste-; and (c) Methods of removing waste.
- (b) Develop, keep and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan shall include the methods of removing waste.
- (89) Intermediate solid waste handling Transfer station and drop box facilities -- Permit requirements - Financial assurance. There are no specific financial assurance requirements for intermediate solid waste handling transfer stations and drop box facilities subject to

this chapter; however, intermediate solid waste handling facilities must meet the requirements provided underperformance standards of WAC 173 - 350 - 040 + (5).

- (910) Intermediate solid waste handling Transfer station and drop box facilities - Permit application contents. The owner or operator of an intermediate solid waste handling a transfer station or drop box facility shall must obtain a solid waste permit from the jurisdictional health department. All applications for permits shall be submitted in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and WAC 173-350-715, each application for a permit shall contain:
- (a) For material recovery facilities, transfer stations, baling and compaction sites:
- (ia) Engineering reports/plans and specifications that address the design standards of subsections (4) and (5) $\frac{1}{1}$  of this section;
- (iib) A plan of operation meeting the applicable requirements of subsection (56) of this section; and
- (iiic) A closure plan meeting the requirements of subsection (78) of this section .
  - (b) For drop boxes:

- (i) Engineering reports/plans and specifications that address the design standards of subsection (4)(b) of this section;
- (ii) A plan of operation meeting the applicable requirements of subsection (5) of this section; and
- (iii) A closure plan meeting the requirements of subsection (7) of this section.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-310, filed 1/10/03, effective 2/10/03.]

WAC 173-350-320 Piles used for storage or treatment.

- (1) Piles used for storage or treatment Applicability.
- (a) This section is applicable These standards apply to solid waste stored or treated the storage or treatment of solid waste in piles. where putrescible waste piles that do not contain municipal solid waste are in place for more than three weeks, nonputrescible waste and contaminated soils and dredged material piles are in place for more than three months and municipal solid waste piles are in place for more than three days.
- (b) These standards do not apply to This section is not applicable to:

- (i) Piles of recyclable materials stored indoors at recycling or material recovery facilities that are subject to WAC 173-350-210;
- (ii) Waste pPiles located at composting facilities subject to WAC 173-350-220 that are an integral part of the facility's operation;
- (ii) Piles of nonputrescible waste stored in enclosed buildings provided that no liquids or liquid waste are added to the pile; and
- (iii) Piles to be land applied that are managed under WAC 173-350-230;
- (iv) Piles located at anaerobic digester sites that are subject to WAC 173-350-250; and
- (iiiv) Piles of waste tires or used tires subject to WAC 173-350-350<del>-;</del>
- (b2) Piles used for storage or treatment Permit exemptions. In accordance with RCW 70.95.305, facilities managing solid wastes in piles meeting the conditions listed in Table 320-A and the conditions of (a) storage piles of wood waste used for fuel or as a raw material, wood derived fuel, and agricultural wastes on farms, are subject solely to the requirements of (c)(i) through (iii) of this subsection and are exempt from solid waste handling permitting. If a facility does not operate in compliance with the terms and conditions established for an exemption under this subsection, the facility may be subject to

the permitting requirements for solid waste handling under this chapter. An owner or operator that does not comply with the terms and conditions of (c)(i) through (iii) of this subsection is required to obtain a permit from the jurisdictional health department and shall comply with all other applicable requirements of this chapter. In addition, violations of the terms and conditions of (c)(i) through (iii) of this subsection may be subject to the penalty enforcement provisions of RCW 70.95.315.

Table 320-A Terms and Conditions for Solid Waste Permit Exemptions

	Waste Materials	Volume, Storage Time, and Site <u>Capacity Requirements</u>	Specific Requirements for Activity or Operation
<u>(1)</u>	Wood waste, non- ferrous metals, brick, cured con- crete, or asphaltic materials	Up to 250 cubic yards of total material on site.  No storage time limit.	No notification or reporting requirements.
(2)	Agricultural waste and on-farm vegeta- tive wastes stored on farms	No volume limit.  The duration of storage of the entire pile is limited to one year and limited to the amount that will be applied to the site during a one-year period.  Subsequent accumulation under the same conditions is allowed at the same location after the entire pile has been used.	No notification or reporting requirements.
(3)	Wood waste used for fuel or raw mate- rial and wood de- rived fuel	Over 250 cubic yards; no upper volume limit.  At the end of each calendar year, the facility must have removed at least fifty percent of the sum of the volume of all waste present at the start of the calendar year and of the volume of all waste accepted during the calendar year.  For example: A facility begins the calendar year with 300 CY of wood waste on hand. The facility accepts 400 CY during the calendar year. In order to meet this exemption re-	(a) Thirty days prior to operation, facilities must submit a notification of intent to operate as a conditionally exempt facility to the jurisdictional health department and the department. Notice of intent must be submitted on a form provided by the department and must be complete;  (b) Maintain records on the volume of wastes received, processed, and moved off site for five years; and  (c) Prepare and submit an annual report to the department and the jurisdictional health department by April 1st on forms supplied by the department. The annual report must detail the facility's activities during the previous calendar year and must include the following information:

		quirement, at least 0.5 x (300+400) = 350 CY must be removed from the facility by the end of the calendar year, leaving no more than 349 CY on hand.	(i) Name and address of the facility; (ii) Calendar year covered by the report; (iii) Annual quantities and types of solid waste handled by the facility, including amounts received, amounts removed and where it went, and the amount of waste remaining at the facility at year's end, in tons; and (iv) Any additional information required by the department.
(4)	Wood waste, non- ferrous metals, brick, cured con- crete, or asphaltic materials	Over 250 cubic yards up to 2,000 cubic yards total material on site.  At the end of each calendar year, the facility must have removed at least fifty percent of the sum of the volume of all waste present at the start of the calendar year and of the volume of all waste accepted during the calendar year.  For example: A facility beings the calendar year with 300 CY of cured concrete on hand. The facility accepts 400 CY during the calendar year. In order to meet this exemption requirement, at least 0.5 x (300+400) = 350 CY must be removed from the facility by the end of the calendar year, leaving no more than 349 CY on hand.	(a) Thirty days prior to operation, facilities must submit a notification of intent to operate as a conditionally exempt facility to the jurisdictional health department and the department. Notice of intent must be submitted on a form provided by the department and must be complete;  (b) Maintain records on the volume of wastes received, processed, and moved off site for five years; and  (c) Prepare and submit an annual report to the department and the jurisdictional health department by April 1st on forms supplied by the department. The annual report must detail the facility's activities during the previous calendar year and must include the following information:  (i) Name and address of the facility;  (ii) Calendar year covered by the report;  (iii) Annual quantities and types of solid waste handled by the facility, including amounts received, amounts removed and where it went, and the amount of waste remaining at the facility at year's end, in tons; and  (iv) Any additional information required by the department.
(5)	Temporary piles of contaminated soils and contaminated dredged material	No volume limit.  All contaminated soils and contaminated dredged materials are removed from the site within ninety days from the date storage began.	No notification or reporting requirements.
(6)	Wood waste, non- ferrous metals, brick, cured con- crete, or asphaltic materials stored in enclosed buildings provided that no liquids or liquid waste are added to the pile	No time limit.  No time limit.	(a) Thirty days prior to operation, facilities must submit a notification of intent to operate as a conditionally exempt facility to the jurisdictional health department and the department. Notice of intent must be submitted on forms provided by the department and must be complete; and  (i) Name and address of the facility;  (ii) Calendar year covered by the report;  (iii) Annual quantities and types of solid waste handled by the facility, including amounts received, amounts removed and where it went, and the amount of waste remaining at the facility at year's end, in tons; and  (iv) Any additional information required by the department.

- (c) Owners and operators of all storage piles that are categorically exempt from solid waste handling permitting in accordance with (b) of this subsection shall:
- (i) Ensure that at least fifty percent of the material stored in the pile is used within one year and all material is used within three <del>years;</del>
- (ii) Comply with the performance standards of WAC 173-350-040; and
- (iii) Allow department and jurisdictional health department representatives to inspect the waste pile at reasonable times for the purpose of determining compliance with this chapter.
- (d) In accordance with RCW 70.95.305, the storage of inert waste in piles is subject solely to the requirements of (e)(i) through (vi) of this subsection and are exempt from solid waste handling permit ting. The storage of inert waste in piles at a facility with a total volume of two hundred fifty cubic yards or less is subject solely to the requirements of (e)(iv) of this subsection. An owner or operator that does not comply with the terms and conditions of (e)(i) through (vi) of this subsection is required to obtain a permit from the jurisdictional health department and shall comply with all other applicable

requirements of this chapter. In addition, violations of the terms and conditions of (e)(i) through (vi) may be subject to the penalty provisions of RCW 70.95.315.

- (e) Owners and operators of all storage piles that are categorically exempt from solid waste handling permitting in accordance with (d) of this subsection shall:
- (i) Implement and abide by a procedure that is capable of detecting and preventing noninert wastes from being accepted or mixed with inert waste;
- (ii) Ensure that at least fifty percent of the material stored in the pile is used within one year and all the material is used within three years;
- (iii) Control public access and unauthorized vehicular traffic to prevent illegal dumping of wastes;
- (a) Management of waste in piles identified in Table 320-A must meet the following terms and conditions to maintain their exempt status:
  - (i $\checkmark$ ) Comply with the performance standards of WAC 173-350-040;
- (ii) Manage the operation to prevent fugitive dust and the attraction of vectors;

(viii) Allow the department and or jurisdictional health department representatives to inspect the waste pilesite at reasonable times;

for the purpose of determining compliance with this chapter; and

- (iv) For facilities accepting multiple waste materials listed in Table 320-A, and where lower volume limits are not otherwise listed, no more than 2,000 cubic yards total of all waste material can be onsite (total multiple materials); and
- (v) Comply with the international fire code as implemented through the local fire control agency.
- (vi) Notify the department and jurisdictional health department thirty days prior to commencing operations of the intent to store inert waste in accordance with this section. Notification shall be in writing, and shall include:
  - (A) Contact information for the owner or operator;
  - (B) A general description and location of the facility; and
  - (C) A description of the inert waste handled at the facility.
- (23) Piles used for storage or treatment -- Permit requirements -Location standards. There are no specific location standards for piles subject to this chapter; however, waste piles must meet the requirements provided underperformance standards of WAC 173-350-040(5).

- (34) Piles used for storage or treatment Permit requirements -Design. standards.(a) Piles used for storage or treatment of solid waste must be designed so that the facility can be operated to meet the performance standards of WAC 173-350-040. If applicable, the The owner or operator of a piles used for storage or treatment of solid waste must shall prepare engineering reports/plans and specifications, including a construction quality assurance plan, to address the following design standards: of this subsection.
- (a) The maximum waste capacity, elevation and boundaries of the waste pile shall must be provided. All Ppiles used for storage or treatment regulated under this section must shall be designed and constructed to meet the following requirements:
- (i) Control public access to prevent illegal dumping and unauthorized access to the facility;
- (ii) Comply with the uniform international fire code as implemented through the local fire control agency;
- (iii) Minimize Control vectors harborage to the extent practicable; and
- (iv) Provide all-weather approach roads and exits surfaces for vehicles.

- (b) In addition to the requirements of (a) of this subsection, the owner or operator of piles of putrescible waste, contaminated soils or contaminated dredged material or waste determined by the jurisdictional health department to be likely to produce leachate posing a threat to human health or the environment shall must prepare engineering reports/plans and specifications of the surface on which the pile(s) will be placed. This must include an analysis of the surface under the stresses expected during operations, and the design of the surface water management systems including run-on prevention and runoff conveyance, storage, and treatment. The piles shall facility must be designed and constructed to:
- (i) Place waste on a sealed impervious surface, such as concrete or asphaltic concrete, to prevent soil and groundwater contamination. The surface shall must be durable enough to withstand material handling practices. The jurisdictional health department may at the time of permitting:
- (A) Aapprove other types of surfaces , such as engineered soil, if the applicant can demonstrate that the proposed surface will prevent soil and groundwater contamination; and

- (B) Waive the impervious surface requirement if the applicant can demonstrate how soil and groundwater will be protected by other design features or permits.
- (ii) Control run-on and runoff from a twenty-five-year storm, as defined in WAC 173-350-100.
- (5) Piles used for storage or treatment Permit requirements -Documentation.
- (a) The owner or operator must submit construction documents for any elements described in (4) of this section to the jurisdictional health department for review and approval. The construction documents addressed in subsection 4(b) of this section must be prepared by a professional engineer registered in the state of Washington, and must include:
- (i) An engineering report that presents the design basis and calculations for the engineered features of any impervious surface, such as concrete, asphaltic concrete, or other proposed surface; storm water management features; and emission control features as required by the permitting air authority where applicable. The engineering report must demonstrate that the proposed design will meet the performance standards of this chapter;

- (ii) Scale drawings of the facility including the location and size of waste storage areas, fixed equipment, buildings, storm water management features where applicable, access roads, traffic patterns, and other constructed areas and buildings integral to facility operation;
- (iii) Design specifications for the engineered features of the facility including any impervious or other proposed surface, runon/runoff controls, storm water management features, and aeration and emission management features as required by a permitting air authority where applicable; and
- (iv) A construction quality assurance plan that describes monitoring, testing, and documentation procedures that will be performed during construction of the facility to ensure the facility is constructed in accordance with the approved design.
- (b) The owner or operator must provide copies of the construction record drawings for engineered features at the facility and a report documenting facility construction, including the results of observations and testing carried out as part of the construction quality assurance plan, to the jurisdictional health department and the department. The owner or operator must not commence operation in a newlyconstructed portion of the facility until the jurisdictional health

department has determined that the construction was completed in accordance with the approved engineering reports/plans and specifications and has approved the construction documentation in writing.

- (46) Piles used for storage or treatment Permit requirements -Operating. standards. The owner or operator of piles used for storage or treatment shallmust:
- (a) Operate the site in compliance with the performance standards of WAC 173-350-040 and this subsection. In addition, the owner or operator must develop, keep, and follow a plan of operation approved as part of the permitting process. The plan of operation must be available on-site for inspection at the request of the jurisdictional health department. If necessary, the plan may be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation must include the following:
- (i) A description of the types of waste materials to be handled at the facility;
- (ii) A description of the procedures used to ensure that dangerous waste and other unacceptable waste are not accepted at the facility;
- (iii) A description of how waste materials are to be handled onsite, including recycling or recovery, storage, maximum site capacity,

methods of adding or removing waste materials from the facility and equipment used, and how operators will ensure adequate dumping capacity at all times;

- (iv) A description of how the owner or operator will ensure the facility is operated in a way to:
  - (a) Operate the facility to:
  - (i) Control fugitive dust;
  - (A) Control litter, dust, and nuisance odors;
  - (B) Control rodents, insects, and other vectors;
  - (iiC) Control access to the pile; and
- (iii) Ensure that nonpermitted waste is not accepted at the facility;
- (iv) Control vector harborage and implement vector control as necessary;
- $(label{VD})$  Ensure that waste piles capable of attracting birds do not pose an aircraft safety hazard; and.
- (vi) For piles of putrescible waste and contaminated soils or dredged material, control nuisance odors.
- (bv) A description of how operators will i Inspect and maintain the facility to prevent malfunctions, deterioration, operator errors and discharges that may cause or lead to the release of wastes to the

environment or a threat to human health. Inspections shall must include the engineered surface on which the piles are placed, and the leachate and stormwater control systems. Inspections shall must be as needed, but at least weekly, to ensure it the facility is meeting the operational standards, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process;

(evi) A description of how operators will mMaintain daily operating records on the amounts (weights or volume) and the types of waste received or and removed from the facility, including the form or computer printout used to record this information. Facility annual reports must be maintained in the operating record. Facility inspection reports shall must be maintained in the operating record., including at least the date of inspection, the name and signature of the inspector, a notation of observations made, and the date and nature of any needed repairs or remedial action. Significant deviations from the plan of operation shall must be noted in the operating record. Records shall must be kept for a minimum of five years and shall must be available upon request by the jurisdictional health department;

(vii) Safety and emergency plans;

- (viii) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department;
- (ix) If storing or treating contaminated soils or contaminated dredged materials each plan of operation must also include the following:
- (A) Ensure that all soils and dredged materials are sufficiently characterized:
- (I) Prior to storage or treatment so that contaminants not identified, or are at concentrations greater than those listed in the approved plan of operation are not accepted or handled at the facility; and
- (II) Prior to removal to an offsite location so that all soils and dredged material that are not clean soils or clean dredged materials are delivered to a facility that meets the requirements of chapter 70.95 RCW, Solid waste management-Reduction and recycling;
- (B) Maintain operating records that identify the source of contaminated soils and contaminated dredged material received at the facility, contaminants and concentrations contained, and any documentation used to characterize soils and dredged materials. Records must contain end uses, including the location of final placement, for any

soils or dredged materials removed from the facility that contain residual contaminants;

- (C) A description of contaminants and concentrations in soils and dredged materials that will be handled at the facility;
- (D) A sampling and analysis plan and other procedures used to characterize soils and dredged materials; and
- (E) Forms used to record the source of contaminated soils or contaminated dredged materials, contaminant concentration and other documentation used to characterize soils and dredged materials, and end uses and the location of final placement for any soils or dredged materials removed from the facility that contain residual contaminants.
- (x) Treatment of contaminated soils and contaminated dredged materials must be performed using a process that reduces or eliminates contaminants and harmful characteristics. Contaminated soils and contaminated dredged materials must not be diluted to meet treatment goals or as a substitute for disposal, except for incidental dilution of minor contaminants.
- (db) Prepare and submit Shall prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report

shall must detail the facility's activities during the previous calendar year and shall include the following information:

- (i) Name and address of the facility;
- (ii) Calendar year covered by the report;
- (iii) Annual quantity quantities and types of solid waste handled by the facility, including amounts received, amounts removed and the amount of waste remaining at the facility at year's end, in tons; and
- (iv) Destination of waste material transported from the facility for processing or disposal; and
- (iv) Any additional information required by the jurisdictional health department as a condition of the permit.
- (e) Develop, keep and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to the site operating personnel that concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:
- (i) A description of the types of solid waste to be handled at the facility;

- (ii) A description of how solid wastes are to be handled on-site during the facility's life including:
- (A) The maximum amount of waste to be stored or treated in pile(s) at the facility;
- (B) Methods of adding and removing waste from the pile and equipment used;
- (iii) A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspection and inspection logs;
  - (iv) Safety and emergency plans;
  - (v) Forms to record weights or volumes; and
- (vi) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.
- (f) Operate the facility in conformance with the following operating standards when storing or treating contaminated soils or dredged material:
- (i) Ensure that all soils and dredged material are sufficiently <del>characterized:</del>
- (A) Prior to storage or treatment so that contaminants not identified, or at concentrations greater than those provided in the ap-

proved plan of operation are not accepted or handled at the facility; and

- (B) Prior to removal to an offsite location so that all soils and dredged material that are not clean soils or dredged material are delivered to a facility that meets the requirements of chapter 70.95 RCW, Solid waste management Reduction and recycling;
- (ii) In addition to the daily operating records in (c) of this subsection, a record of the source of contaminated soils and dredged material received at the facility, contaminants and concentrations contained, and any documentation used to characterize soils and dredged material. Records shall be maintained of end uses, including the location of final placement, for any soils or dredged material removed from the facility that contain residual contaminants;
- (iii) In addition to the elements in (e) of this subsection, the plan of operation shall include:
- (A) A description of contaminants and concentrations in soils and dredged material that will be handled at the facility;
- (B) A sampling and analysis plan and other procedures used to characterize soils and dredged material; and
- (C) Forms used to record the source of contaminated soils or dredged material, contaminant concentrations and other documentation

used to characterize soils and dredged material, and end uses and the location of final placement for any soils or dredged material removed from the facility that contain residual contaminants;

- (iv) Treatment of contaminated soils and dredged materials shall be performed using a process that reduces or eliminates contaminants and harmful characteristics. Contaminated soils and dredged materials shall not be diluted to meet treatment goals or as a substitute for disposal, except for incidental dilution of minor contaminants.
- (57) Piles used for storage or treatment -- Permit requirements -Groundwater monitoring. requirements. There are no specific groundwater monitoring requirements for piles used for storage and treatment subject to this chapter; however, waste piles must meet the require ments provided under performance standards of WAC 173-350-040(5).
- (68) Piles used for storage or treatment -- Permit requirements -Closure. requirements. The owner or operator of piles used for storage or treatment shallmust develop, keep, and follow a closure plan that addresses:
- (a) Notify Notification to the jurisdictional health department sixty days in advance of closure...;

- (b) Removal of aAll waste shall be removed from the pile at closure to a facility that conforms with the applicable regulations for handling the waste-; and
  - (c) Methods for removing the waste.
- (b) Develop, keep and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. As a minimum, the closure plan shall include the methods of removing waste.
- (79) Piles used for storage or treatment Permit requirements -Financial assurance. requirements. There are no specific financial assurance requirements for piles used for storage or treatment subject to this regulation chapter; however, waste piles must meet the requirements provided underperformance standards of WAC 173-350-040(5).
- (810) Piles used for storage or treatment Permit application contents. The owner or operator of piles used for storage or treatment shall must obtain a permit from the jurisdictional health department. All applications for permits shall must be submitted in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and WAC 173-350-715, each application for a permit shall must contain:
  - (a) The design of fire control features;

- (ba) Engineering reports/plans and specifications that address the design standards of subsections (4) and (5) of this section;
- (b) A construction quality assurance plan that addresses the requirements of (5) of this section;
- (c) A plan of operation meeting the requirements of subsection (46) of this section; and
- (d) A closure plan meeting the requirements of subsection (68) of this section.
- (9) Piles used for storage or treatment Construction records. The owner or operator of piles used for storage or treatment shall provide copies of the construction record drawings for engineered facilities at the site and a report documenting facility construction, including the results of observations and testing carried out as part of the construction quality assurance plan, to the jurisdictional health department and the department. Facilities shall not commence operation until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report/plans and specifications and has approved the construction documentation in writing.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-320, filed 1/10/03, effective 2/10/03.]

WAC 173-350-330 Surface impoundments and tanks.

- -(1) Surface impoundments and tanks Applicability.
- (a) These standards are applicable apply to:
- (i) Surface impoundments used to store or treat leachate, liquids, or semisolid wastes holding solid waste associated with solid waste facilities permitted under this chapter including, but not limited to, leachate lagoons associated with landfills permitted under this chapter and chapter 173-351 WAC, Criteria for municipal solid waste landfills, and surface impoundments associated with limited purpose landfills, recycling facilities, transfer stations, and piles used for storage or treatment, or with landfills permitted under chapter 173-351 WAC, Criteria for municipal solid waste landfills;
- (ii) Above or below ground tTanks with a capacity greater than one thousand gallons holding solid waste associated with solid waste handling facilities used to store or treat leachate, liquids, or semisolid wastes or leachate associated with solid waste handling facilities permitted under this chapter including, but not limited to, limited purpose landfills, recycling facilities, transfer stations, and piles used for storage or treatment, or with landfills permitted under

- chapter 173-351 WAC, Criteria for municipal solid waste landfills. and
- (iii) Piping systems within the boundaries of solid waste facilities that convey solid waste to or from surface impoundments and tanks as described in (i) or (ii) of this subsection.
  - (b) These standards are not applicabledo not apply to:
- (i) Surface impoundments, or piping systems that are elements of:
- (A) Wastewater treatment systems permitted whose facilities are regulated under local, state or federal water pollution control permits, including storm water permits, which specify similar requirements for surface impoundments, tanks and piping systems associated with the permitted system; and
- (iiB) Leachate management features holding ponds at compost facilities regulated under WAC 173-350-220, except that tanks used to store leachate must meet design standards in (4)(b) of this section.  $\div$
- (iii) Septic tanks regulated under chapter 246-272A WAC, On-site sewage systems, that receive receiving only domestic sewage from facilities at the sitegenerated at the solid waste facility;
- (iii) Wastewater features that convey only domestic sewage generated at the solid waste facility to a domestic wastewater facility;

- (iv) Agricultural waste operations conducted in accordance with managed according to a farm management plan written in conjunction with the local conservation district;
- (v) Underground storage tanks subject to chapter 173-360 WAC, Underground storage tanks; and
- (vi) Tanks used to store moderate risk waste subject to WAC 173-350-360; and
- (vii) Tanks with a capacity of five thousand gallons or less meeting the conditions for exemption under Table 220-A(1), Table 225-A(1), or Table 250-A(1).
- (c) Specific elements of these standards apply to or are referenced as criteria for other activities that are primarily regulated under other sections of this chapter, or by other regulations. Those other activities include, but are not limited to:
  - (i) Beneficial use permit exemptions under WAC 173-350-200(3);
- (ii) Composting facility design standards under WAC 173-350-220(4);
- (iii) Land application operating criteria under WAC 173-350-230(6);
- (iv) Anaerobic digester design standards under WAC 173-350-250(4); and

- (v) Standards for facilities storing biosolids or sewage sludge under WAC 173-308-280.
- (2) Surface impoundments and tanks Permit exemptions. There are no exemptions for surface impoundments and tanks.
- (23) Surface impoundments and tanks Permit requirements -Location. standards.
- (a) Surface impoundments and tanks shall must not be located in unstable areas unless the owner or operator demonstrates that engineering measures have been incorporated in the facility's design to ensure that the integrity of the liners, monitoring system and structural components will not be disrupted. The owner or operator shall must place the demonstration in the application for a permit.
- (b) No surface impoundment or tank regulated under this section may be located closer than one hundred feet to an existing drinking water supply well.
- (34) Surface impoundments and tanks Permit requirements Design. standards. Surface impoundments and tanks must be designed so that the facility can be operated to meet the performance standards of WAC 173-350-040. The owner or operator of surface impoundments and tanks regulated under this section must prepare engineering re-

ports/plans and specifications to address the following design standards:

- (a) The owner or operator of a surface impoundment shall prepare engineering reports/plans and specifications, including a construction quality assurance plan, to address the design standards of this subsection. In determining pond capacity, volume calculations shall be based on the facility design, monthly water balance, and precipitation data. All surface impoundments shallAll surface impoundments regulated under this section must be designed and constructed to meet the following requirements:
- (i) Have a liner consisting of a minimum 30-mil thickness geomembrane overlying a structurally stable foundation to support the liners and the contents of the impoundment. (HDPE geomembranes used as primary liners or leak detection liners shall must be at least 60-mil thick to allow for proper welding.) The jurisdictional health department may approve the use of alternative designs if the owner or operator can demonstrate during the permitting process that the proposed design will prevent migration of solid waste constituents or leachate into the ground or surface waters at least as effectively as the liners described in this subsection.

- (ii) Have a groundwater monitoring system which that complies with the requirements of WAC 173-350-500 or a leak detection layer. If a leak detection layer is used, it shall must consist of an appropriate drainage layer underlain by a geomembrane of at least 30-mil thickness.
- (iii) Have embankments and slopes designed to maintain structural integrity under conditions of a leaking liner and capable of withstanding erosion from wave action, overfilling, or precipitation.
- (iv) Have a minimum of eighteen inches of freeboard equal to or greater than eighteen inchesabove the design operating capacity to provide protection against wave action, overfilling, or precipitation. Impoundment operating capacity volume calculations must be based on the facility design, monthly water balance, and normal climatic precipitation and evaporation data for the location of the facility. During the permitting process the jurisdictional health department may reduce the freeboard requirement provided that other specified engineering controls are in place which prevent overtopping.
- (v) Identify a leakage rate for the primary containment system that will trigger corrective action.
- (vi) When a surface impoundment is constructed with a single geomembrane liner, the owner or operator must test the liner shall be

tested using an electrical leak location evaluation capable of detecting a hole 3—three millimeters in its longest dimension or other equivalent post-construction test method prior to being placed in service. Results of the test shall must be submitted with the construction record drawings-; and

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

(vii) No All surface impoundment liners must shall be designed so constructed such that the bottom of the lowest liner component is less thana minimum of five feet (one and one-half meters) above the seasonal high level of groundwater, unless the owner or operator can demonstrate during the permitting procedure process that the proposed liner design will not be affected by contact with groundwater. All surface impoundment liners shall be constructed such that the bottom of the lowest component is above the seasonal high level of groundwater. For the purpose of this section, groundwater includes any water-bearing unit which that is horizontally and vertically extensive, hydraulically recharged, and volumetrically significant.

- (b) Tanks must be designed and constructed to meet the following requirements:
- (b) The owner or operator of a tank used to store or treat liquid or semisolid wastes meeting the definition of solid waste or leachate, shall prepare engineering reports/plans and specifications, including a construction quality assurance plan, to address the following design standards:
- (i) Tanks and ancillary equipment shall must be tested for leaks or tightness using a method acceptable to the jurisdictional health department prior to being covered, enclosed or placed in use. If a tank is found to leak or not to be tight, all repairs necessary to remedy the leak(s) in the system shall must be performed and verified to the satisfaction of the jurisdictional health department prior to the tank being covered or placed in use-;
- (ii) Tanks that are constructed or installed to be wholly or partially below ground must: Below ground tanks and other tanks where all or portions of the tank are not readily visible shall be designed to resist buoyant forces in areas of high groundwater and shall either <del>be:</del>
- (A) Retested for tightness at a minimum of once every two years; or

- (A) Be designed to resist buoyant forces in areas of high ground-water;
- (B) Be exquipped with a leak detection system capable of detecting a release from the tank; and
- (C) Have a leakage rate identified for the primary containment system. Leakage above this rate will trigger corrective action.
- (iii) For tanks or components in which the external shell of a metal tank or any metal component will be in contact with the soil or water, a determination shall <u>must</u> be made by a corrosion expert of the type and degree of external corrosion protection that is needed to ensure the integrity of the tank during its operating life. This determination shall <u>must</u> be included with design information submitted with the permit application;
- (iv) Above ground tanks shall must be equipped with secondary containment. This may be accomplished by use of a double-walled tank with leak detection, or construction of a separate containment structure using constructed of, or lined with, materials compatible with the waste being stored and capable of containing the volume of the largest tank within its boundary plus the precipitation from the attemptive-year storm if the containment structure is exposed to precipitation; event as defined in WAC 173 350 100;

- (v) Areas used to load or unload tanks shall must be designed to contain spills, drippage drips and accidental releases during loading and unloading of vessels;
- (vi) Tanks and piping shall must be protected from impact by vehicles or equipment through use of curbing, grade separation, bollards or other appropriate means;
- (vii) Tanks shall—must be structurally suited for the proposed use; and
- (viii) Tanks, valves, fittings and ancillary piping shall must be protected from failure caused by freezing.
- (c) All facilities which include surface impoundments or tanks regulated under this section must provide controls to limit public access and prevent unauthorized vehicular traffic and illegal dumping of wastes. This must be accomplished by use of artificial barriers, natural barriers, or both, as appropriate to protect human health and the environment. A lockable gate is required at each entry to the facility.
- (5) Surface impoundments and tanks Permit requirements Documentation.
- (a) The owner or operator must submit construction documents for, at a minimum, any elements described in (4) of this section to the ju-

risdictional health department for review and approval. The construction documents must be prepared by a professional engineer registered in the state of Washington, and must include:

- (i) An engineering report that presents the design basis and calculations for the engineered features of the surface impoundment and tank systems, storm waste management features, and emission control features as required by the permitting air authority where applicable. The engineering report must demonstrate that the proposed design will meet the performance standards of this chapter;
- (ii) Scale drawings of the facility including the location and size of waste storage areas, fixed equipment, buildings, storm water management features where applicable, access roads, traffic patterns, and other constructed areas and buildings integral to facility operation;
- (iii) Design specifications for the engineered features of the facility including any surface impoundment and tank systems, runon/runoff controls, storm water management features, and aeration and emission management features as required by a permitting air authority where applicable; and
- (iv) A construction quality assurance plan that describes monitoring, testing, and documentation procedures that will be performed

during construction of the facility to ensure that facility is constructed in accordance with the approved design.

- (b) The owner or operator must provide copies of the construction record drawings for engineered features at the facility and a report documenting facility construction, including the results of observations and testing carried out as part of the constructions quality assurance plan, to the jurisdictional health department and the department. The owner or operator must not commence operation in a newlyconstructed portion of the facility until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report/plans and specifications and has approved the construction documentation in writing.
- (45) Surface impoundments and tanks Permit requirements Operating. standards. The owner or operator of a surface impoundment or tank shallmust:
- (a) Operate the facility to in compliance with the performance standards of WAC 173-350-040 and this subsection. In addition, the owner or operator must develop, keep, and follow a plan of operation approved as part of the permitting process. The plan must describe the facility's operation and convey to site operating personnel the concept of operation intended by the designer. The plan of operation must

be available for inspection at the request of the jurisdictional health department. If necessary, the plan may be modified with the approval, or at the direction, of the jurisdictional health department. Each plan of operation must include the following:

- (i) A description of the types of solid waste to be handled at the facility;
- (ii) A description of the procedures used to ensure that dangerous waste and other unacceptable waste are not accepted at the facility;
- (iii) A description of how wastes are handled on-site during the facility's active life, including:
- (iA) The equipment and procedures that will be used to Pprevent overfilling of surface impoundments or tanks;
- (B) The equipment and procedures that will be used to and maintain a minimum of eighteen inches of required freeboard in surface impoundments; and
- (iiC) The equipment and procedures that will be used to cControl access to the site :.
- (iv) A description of how the owner or operator will ensure the facility is operated in a way to:
  - (A) Control litter, dust, and nuisance odors; and

- (B) Control rodents, insects, and other vectors.
- (iii) Control nuisance odors for wastes or liquids with the potential to create nuisance odors; and
- (iv) Control birds at impoundments storing wastes capable of attracting birds.
- (v) A description of how operators will inspect and maintain the facility to prevent malfunctions, deterioration, operator errors and discharges that may cause or lead to the release of wastes to the environment that could pose a threat to human health, including the inspection form operators will use. Inspections must be conducted as needed, but at least weekly, to ensure that facility is meeting the operational standards unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process. Facility inspection reports must be maintained in the operating record. The elements addressed in this description must include:
  - (A) The groundwater monitoring system, if required;
- (B) The overfilling prevention equipment, including details of filling and emptying techniques;
- (C) The liners and embankments, tank piping, and secondary containment;

- (D) Procedures for cleaning containment structures, including removal of sediment, vegetation, and debris, and
- (E) Procedures for testing surface impoundment liners, tanks, and piping systems for leaks.
- (b) Inspect surface impoundments, tanks and associated piping, pumps and hoses as needed, but at least weekly, to ensure they are meeting the operational standards, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process. In addition, surface impoundments shall have regular liner inspections. Their frequency and methods of inspection shall be specified in the plan of operation and shall be based on the type of liner, expected service life of the material, and the site specific service conditions. The inspections shall be conducted at least once every five years, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process. The jurisdictional health department shall be given sufficient notice and have the opportunity to be present during liner inspections.
- (evi) Maintain daily operating records on the quantity and the types of waste removed from the surface impoundment or tank. A description of how the operators will maintain operating records on the amounts (weight or volume) and types of waste received and removed

from the facility, including the form or computer printout used to record this information. Facility annual reports must be maintained in the operating record. Facility inspection reports shall must be maintained in the operating record, including at least the date of inspection, the name and signature of the inspector, a notation of observations made, and the date and nature of any needed repairs or remedial action. Significant deviations from the plan of operation shall be noted in the operating record. Records shall must be kept for a minimum of five years and shall be available for inspection upon request by the jurisdictional health department-;

- (vii) A description of safety planning and emergency activities, including:
- (A) How on-site fire protection will be provided, as determined by the local and state fire control jurisdiction;
- (B) How communications sufficient to handle emergencies will be provided between employees working at the facility and management offices, on-site and offsite;
- (C) Response procedures in the event of fire, a description of fire protection equipment available on-site and actions to take if there is a fire or explosion; and

- (D) Response procedures in the event leaks are detected, or other releases occur.
- (viii) Acknowledgment that the owner or operator will inspect surface impoundments, tanks and associated piping, pumps and hoses as needed, but at least weekly, to ensure they are operating as designed and meeting the operational standards, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process;
- (ix) Acknowledgment that the owner or operator will inspect surface impoundment liners for leaks no less frequently than every five years. The frequency and methods of inspection must be specified in the plan of operation and must be based on the type of liner, expected service life of the material, and the site-specific service conditions. The jurisdictional health department must be given sufficient notice and have the opportunity to be present during liner inspections;
- (x) Acknowledgment that the owner or operator will conduct leak or tightness testing no less frequently than every two years on all below-ground tanks and other tanks and piping that have not been equipped with a leak detection system capable of detecting a release from the tank or piping and where any portions of the tank or piping

cannot be inspected visually. The jurisdictional health department must be given sufficient notice and have the opportunity to be present during leak or tightness testing events; and

- (xi) Other details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.
- (db) Shall pPrepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall must detail the facility's activities during the previous calendar year and shall must include the following information:
  - (i) Name and address of the facility;
  - (ii) Calendar year covered by the report;
- (iii) Results of groundwater monitoring in accordance with WAC 173-350-500, if applicable;
- (iv) Results of leak detection system monitoring, if applicable; and
- (v) Results of liner inspections and piping tightness testing, if applicable; and
- $(v_i)$  Any additional information required by the jurisdictional health department as a condition of the permit.

- (e) Develop, keep and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:
- (i) A description of the types of solid waste to be handled at the facility;
- (ii) A description of how wastes are handled on-site during the facility's active life;
- (iii) A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspection and inspection logs. This description shall include:
  - (A) The groundwater monitoring system, if required;
- (B) The overfilling prevention equipment, including details of filling and emptying techniques;
- (C) The liners and embankments, tank piping and secondary containment;
  - (D) Safety and emergency plans;

- (E) The forms used to record weights and volumes; and
- (F) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.
- (57) Surface impoundments and tanks Permit requirements -Groundwater monitoring. requirements.
- (a) Surface impoundments not equipped with a leak detection layer are subject to the groundwater monitoring requirements of WAC 173-350-500.
- (b) Surface impoundments equipped with a leak detection layer and tanks are not subject to the groundwater monitoring requirements of this chapter; however, surface impoundments must meet the requirements provided underperfomance standards of WAC 173-350-040(5).
- (68) Surface impoundments and tanks -- Permit requirements -Closure. requirements. The owner or operator of a surface impoundment or tank shallmust develop, keep, and follow a closure plan that includes:
- (a) Notify Notification to the jurisdictional health department sixty days in advance of closure-;

- (b) Removal of aAll waste material from the surface impoundment or tank shall be removed to a facility that conforms with the applicable regulations for handling the waste; and
  - (c) Methods of removing waste material.
- (b) Develop, keep and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan shall include the methods of removing waste.
- (79) Surface impoundments and tanks -- Permit requirements Financial assurance. requirements. There are no specific financial assurance requirements for surface impoundments or tanks subject to this chapter; however, surface impoundments and tanks must meet the requirements provided under performance standards of WAC 173-350-040(5).
- (810) Surface impoundments and tanks Permit application contents.\_\_(a) The owner or operator of a surface impoundment or tank shall must obtain a solid waste permit from the jurisdictional health department..., either as a separate permit or in compliance with (11)(a) of this section. All applications for permits shall must be submitted in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and WAC

- 173-350-715, each application for a permit involving surface impoundments or tanks must shall contain:
- (ia) Engineering reports/plans and specifications that address the design standards of subsections (4) and (5) of this section;
- (b) A construction quality assurance plan that addresses the requirements of (5) of this section;
- (iic) A plan of operation meeting the requirements of subsection (46) of this section;
- (iiid) For surface impoundments not equipped with a leak detection layer, hydrogeologic reports and plans that address the requirements of subsection (57) of this section;
- (ive) A closure plan meeting the requirements of subsection (68)of this section; and
- (f) Documentation that all owners of property located within one hundred feet of the surface impoundment or tank have been notified that the proposed facility may impact their ability to construct water wells, in accordance with chapter 173-160 WAC, Minimum standards for construction and maintenance of wells.
- (9) Surface impoundments and tanks Construction records. The owner or operator of a surface impoundment or tank shall provide copies of the construction record drawings for engineered facilities at

the site and a report documenting facility construction, including the results of observations and testing carried out as part of the construction quality assurance plan, to the jurisdictional health department and the department. Facilities shall not commence operation until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report/plans and specifications and has approved the construction documentation in writing.

- (11) Surface impoundments and tanks Relationship to other permits.
- (a) Permits for other types of solid waste facilities with surface impoundments or tanks to which this section is applicable must address the applicable requirements of this section in addition to requirements for the other types of solid waste handling.
- (b) Surface impoundments that have the potential to impound more than ten-acre feet (three million two hundred fifty-nine thousand gallons) of liquid measured from the top of the embankment and would be released by a failure of the containment embankment must also be reviewed and approved by the dam safety section of the department.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-330, filed 1/10/03, effective 2/10/03.]

WAC 173-350-350 Waste tire storage. and transportation.

- (1) Waste tire storage and transportation Applicability.
- (a) These standards apply to This section is applicable to all:(a) Facilities facilities that store waste tires in quantities of greater than eight hundred automobile tires or greater than eight tons the combined weight equivalent of sixteen thousand pounds of all types of waste tires.
- (b) This section is not applicable These standards do not apply to the storage of waste tires in an enclosed building or in mobile containers used to transport waste tires. For purposes of this section, mobile containers must be used primarily for the transport of tires and must be moved between the storage facility and off site annually.
- (b) Persons engaged in the business of transporting waste tires except for:
  - (i) Any person transporting five tires or less;
- (ii) Any person transporting used tires back to a retail outlet for repair or exchange;
- (iii) Any waste hauler regulated by chapter 81.77 RCW, Solid waste collection companies;

- (iv) The United States, the state of Washington or any local government, or contractors hired by these entities, when involved in the cleanup of illegal waste tire piles; and
- (v) Tire retailers associated with retreading facilities who use company-owned vehicles to transport waste tires for the purposes of retreading or recycling.
- (2) Waste tire storage Permit exemptions. There are no exemptions for waste tire storage.
- (2) Waste tire storage and transportation Transportation prohibitions and enforcement.
- (a) No person shall enter into a contract for transportation of waste tires with an unlicensed waste tire transporter.
- (b) Waste tires shall only be delivered to a facility that has obtained the required permits or licenses for storage, processing, or disposal of waste tires.
- (c) Any person subject to this section who transports or stores waste tires without a valid waste tire carrier license or waste tire storage license issued by the Washington state department of licensing shall be subject to the penalty provisions of RCW 70.95.560.
- (3) Waste tire storage and transportation Carrier license requirements.

- (a) All persons subject to this section engaged in the business of transporting waste tires are required to obtain a waste tire carrier license from the Washington state department of licensing.
- (b) Application forms for a waste tire carrier license will be available at unified business identifier service centers located throughout the state. Unified business identifier service locations include:
- (i) The field offices of the department of revenue and the department of labor and industries;
  - (ii) The tax offices of employment security;
  - (iii) The Olympia office of the secretary of state; and
- (iv) The business license service office of the Washington state department of licensing.
- (c) An application for a waste tire carrier license and a cab card for one vehicle shall include a two hundred fifty dollar application fee, fifty dollars of which shall be nonrefundable. Each additional vehicle cab card to be used by the licensee requires an additional fifty dollar fee. The application shall include:
- (i) A performance bond in the sum of ten thousand dollars in favor of the state of Washington; or

- (ii) In lieu of the bond, an applicant may submit other financial assurance acceptable to the department.
- (d) The refundable portion of application fees may be returned to the applicant if the application is withdrawn before the department has approved or denied the application.
- (e) A waste tire carrier license shall be valid for one year from the date of approval.
- (43) Waste tire storage and transportation -- Permit requirements - Location. standards. There are no specific location standards for waste tire storage sites subject to this chapter; however, waste tire storage sites must meet the requirements provided underperformance standards of WAC 173-350-040(5).
- (54) Waste tire storage and transportation -- Permit requirements - Design. standards. Waste tire storage facilities must be designed so that the facility can be operated to meet the performance standards of WAC 173-350-040. The owner or operator of a waste tire storage facility must area shall prepare engineering reports/plans and specifications to address the design standards of this subsection. The maximum number of tires to be stored on site and the individual waste tire storage pilelocations and sized sizes shall must be provided. The fFacility shall be designed so that design requirements are as follows:

- (a) Unless otherwise specified in fire code, waste tires stored inside an enclosed building or structure must be stored so that:
- (i) Storage piles or racks adjacent to or along one wall do not extend beyond twenty-five feet from the wall, do not exceed fifty feet in length along the wall, and do not exceed thirty feet in height;
- (ii) Storage piles or racks not adjacent to or along a wall do not exceed fifty feet in width and do not exceed thirty feet in height;
- (iii) Aisles between storage piles or racks are no less than eight feet in width; and
- (iv) Buildings and structures where the designated area for the storage of tires exceeds twenty thousand cubic feet in space are equipped throughout with an automatic sprinkler system.
- (b) Unless otherwise specified in fire code, waste tires stored outside must be stored so that:
- (ai) The size of any individual pile of waste tires shall beis limited to:
  - (iA) A maximum area of five thousand square feet;
  - (iiB) A maximum volume of fifty thousand cubic feet; and
  - (<del>iii</del>C) A maximum height of ten feet<del>;</del>.

- (bii) A clear space of at least forty feet between each pile of waste tires shall beis provided. The clear space shall must not contain flammable or combustible material or vegetation;
- (ciii) Tire storage shall is not be located within ten fifty feet of any property line or building; and shall not exceed six feet in height within twenty feet of any property line or building; and
- (iv) Tire storage is not located within one hundred feet of brush or forested areas;
- (v) Where the total volume of waste tires stored on site is more than one hundred and fifty thousand cubic feet, storage arrangement must meet the following:
- (A) Individual storage piles comply with size and separation requirements outlined in 4(b)(i-iv) of this subsection;
- (B) Adjacent storage piles are considered a group, and the aggregate volume of storage piles in a group do not exceed one hundred and fifty thousand cubic feet; and
  - (C) Separation between groups is at least seventy-five feet.
- (vi) Waste tire storage is not located under bridges, elevated trestles, elevated roadways, or elevated railroads.
- (dc) Public access to any waste tire storage facility must shall be limited.

- (5) Waste tire storage Permit requirements Documentation.
- (a) The owner or operator must submit construction documents for, at a minimum, any elements described in (4) of this section to the jurisdictional health department for review and approval. The construction documents must be prepared by a professional engineer registered in the state of Washington, and must include:
- (i) An engineering report that presents the design basis and calculations for the engineered features where applicable. The engineering report must demonstrate that the proposed design will meet the performance standards of WAC 173-350-040; and
- (ii) Scale drawings of the facility including the location and size of waste storage areas, fixed equipment, buildings, storm water management features where applicable, access roads, traffic patterns, and other constructed areas and building integral to facility operation.
- (6) Waste tire storage and transportation Permit requirements - Operating. standards. The owner or operator of a waste tire storage facility shallmust:
- (a) Operate the site in compliance with the performance standards of WAC 173-350-040 and this subsection. In addition, the owner or operator must develop, keep, and follow a plan of operation approved as

part of the permitting process. The plan of operation must be available for inspection at the request of the jurisdictional health department. If necessary, the plan may be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation must include the following:

- (i) A description of the types of waste tires to be handled at the facility;
- (ii) A description of the procedures used to ensure that dangerous waste and other unacceptable waste are not accepted at the facility;
- (iii) A description of how waste tires are to be handled on-site during the facility's life, including:
  - (A) Routine storage;
- (B) Procedures for ensuring that all waste tires received by the facility have been transported in accordance with the waste tire carrier section WAC 173-350-355;
  - (C) Maximum site capacity; and
- (D) Methods of adding or removing waste tires from the facility and equipment used.
- (iv) A description of how the owner or operator will ensure the facility is operated in a way to:

- (A) Control litter, dust, and nuisance odors;
- (B) Control rodents, insects, and other vectors;
- (C) Control public access in a manner sufficient to prevent arson, unauthorized vehicular traffic, illegal dumping of wastes, and to prohibit scavenging;
- (D) Prohibit open burning and manage waste tires in a way to protect them from any material or conditions that may cause them to ignite;
  - (E) Provide attendant(s) on-site during hours of operation;
- (F) Provide a sign at the site entrance that identifies the facility and shows at a minimum the name of the site;
- (G) Immediately summon fire, police, or emergency service personnel in the event of an emergency;
- (H) Limit the total quantity of waste tires stored on-site at any time to the amount permitted by the jurisdictional health department;
- (I) Provide on-site fire control equipment sufficient to extinguish any fire reasonably possible from one individual pile of waste tires. Fire control equipment may include, but is not limited to automatic sprinkler protection, fire hydrants, fire hoses, ancillary firefighting equipment, portable fire extinguishers, and material-handling equipment capable of moving tires during firefighting operations; and

- (a) Operate the facility to:
- (i) Have communication capabilities to immediately summon fire, police, or other emergency service personnel in the event of an emer-<del>gency;</del>
- (ii) Control public access in a manner sufficient to prevent arson, unauthorized vehicular traffic and illegal dumping of wastes;
- (iii) Manage waste tires in such a way that it is protected from any material or conditions which may cause them to ignite;
- (iv) Limit the total quantity of waste tires stored on site at any time to the amount permitted by the jurisdictional health department;
- (v) Provide on site fire control equipment sufficient to extinguish any fire reasonably possible from one individual pile of waste tires. Fire control equipment may include, but is not limited to:
  - (A) Automatic sprinkler protection;
  - (B) Fire hydrants, hoses and ancillary equipment;
  - (C) Portable fire extinguishers; and
- (D) Material handling equipment capable of moving tires during firefighting operations;
  - (vi) Provide vector control; and

(viiJ) Issue written or computer printed receipts upon receiving loads of waste tires.

(bv) A description of how operators will i Inspect and maintain the facility to prevent malfunctions, deterioration, operator errors and discharges that may lead to or the release of wastes to the environment or causethat could pose a threat to human health, including the inspection form operators will use. Inspections shall must be as needed, but at least weekly, to ensure it is meeting the operational standards, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process. Facility inspection reports must be maintained in the operating record;

(evi) A description of how operators will Mmaintain daily operating records on the amounts (number of tires, weight of tires in tons, or volume of tires in cubic yards) and types of waste received and removed from the facility, including the form or computer printout used to record this information. Weight and volume are adequate measurements provided that the operator documents the approximate number of tires included in each load. Facility annual reports must be maintained in the operating record. Facility inspection reports must be maintained in the operating record, including at least the date of inspection, the name and signature of the inspector, a notation of observations made, and the date and nature of any needed repairs or remedial action. Significant deviations from the plan of operation must be noted in the operating record. Records must be kept for a minimum of five years and must be available upon request by the jurisdictional health department;

- (vii) Safety, fire, and emergency plans addressing the following:
- (A) Procedures for the use of communications equipment to immediately report emergencies to the fire department, police, or emergency service personnel;
- (B) A list of all emergency equipment at the facility including the location and a brief description of its capabilities;
- (C) Procedures for firefighting and the operation of fire control equipment;
  - (D) Employee training and emergency duty assignments; and
  - (E) Procedures for and frequency of fire drills.
- (viii) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.

## including:

(i) The numbers of tires received and removed from the site. Quantities may be measured by:

- (A) Actual number of tires; or
- (B) Weight, provided the operator documents the approximate number of tires included in each load; or
- (C) Volume in cubic yards, provided the operator documents the approximate number of tires included in each load;
  - (ii) Facility inspection reports;
  - (iii) Significant deviations from the plan of operation;
- (iv) Records shall be kept for a minimum of five years and shall be available upon request by the jurisdictional health department;
- (db) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall must detail the facility's activities during the previous calendar year and shall must include the following information:
  - (i) Name and address of the facility;
  - (ii) Calendar year covered by the report;
  - (iii) Annual quantity of tires received, in tons;
- (iv) Annual quantity of tires removed from the facility and end where they went, use, in tons;
  - (v) Total tons of tires remaining at the facility at year's end;

- (vi) Applicable financial assurance reviews and audit findings in accordance with WAC 173-350-600; and
- (vii) Any additional information required by the jurisdictional health department as a condition of the permit.
- (e) Develop, keep and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:
- (i) A description of how waste tires are to be handled on-site during the active life including:
  - (A) Transportation and routine storage; and
- (B) Procedures for ensuring that all waste tires received by the facility have been transported in accordance with this section;
- (ii) A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspection and inspection logs;
  - (iii) Safety, fire and emergency plans addressing the following:

- (A) Procedures for the use of communications equipment to immediately report emergencies to the fire department, police, or emergency service personnel;
- (B) A list of all emergency equipment at the facility including the location and a brief description of its capabilities;
- (C) Procedures for firefighting and the operation of fire control equipment;
  - (D) Employee training and emergency duty assignments;
  - (E) Procedures for and frequency of fire drills;
  - (iv) The forms used to record weights and volumes; and
- (v) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.
- (7) Waste tire storage and transportation -- Permit requirements - Groundwater monitoring. requirements. There are no specific groundwater monitoring requirements for waste tire storage sites; however, waste tire storage sites must meet the requirements provided underperformance standards of WAC 173-350-040(5).
- (8) Waste tire storage and transportation Permit requirements --Closure. requirements.

- (a) The owner or operator of a facility that stores waste tires must develop, keep, and follow a closure plan that includes shall:
- (ai) Notificationy to the jurisdictional health department, and where applicable the financial assurance instrument provider, one hundred eighty days in advance of closure;
- (bii) Commencement of closure, implementation of the closure plan, in part or whole, within thirty days after receipt of the final waste tires;
- (iii) Projected time intervals that identify when partial closure is to be implemented;
- (iv) Closure cost estimates and projected fund withdrawal intervals for the associated closure costs, from the approved financial assurance instrument;
  - (v) Methods of waste tire removal; and
- $(\underline{\text{cvi}})$  Provide Submittal of a certification that the site has been closed in accordance with the approved closure plan to the jurisdictional health department; and.
- (d) Develop, keep and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum the closure plan shall include:

(i) Projected time intervals that identify when partial closure is to be implemented, and identify closure cost estimates and projected fund withdrawal intervals for the associated closure costs, from the approved financial assurance instrument; and

## (ii) Methods of waste tire removal.

- (eb) The jurisdictional health department shall must notify the owner or operator, the department, and the financial assurance instrument provider, of the date when the jurisdictional health department has verified that the facility has been closed in accordance with the specifications of the approved closure plan.
- (9) Waste tire storage and transportation Permit requirements -Financial assurance. requirements.
- (a) The owner or operator shall must establish a financial assurance mechanism in accordance with WAC 173-350-600 for closure in accordance with the approved closure plan. The funds shall must be sufficient for hiring a third party to remove the maximum number of tires permitted to be stored at the facility and deliver the tires to a facility permitted to accept the tires.
- (b) Nothing in this section shall may prohibit the application of funds from an existing bond as required under RCW 70.95.555, to the

total amount required for financial assurance, provided if the bond can be used for the activities described in (a) of this subsection.

- (c) No owner or operator shall may commence or continue operations at the site until a financial assurance instrument has been provided for closure activities in conformance with WAC 173-350-600.
- (10) Waste tire storage Permit application contents. and trans portation - Solid waste permit requirements. The owner or operator shall A person who stores more than eight hundred automobile tires or the combined weight equivalent of eight tons of waste tires must obtain a solid waste permit from the jurisdictional health department. All applications for permits shall must be in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and WAC 173-350-715, each application for a permit shall must contain:
- (a) Engineering reports/plans and specifications that address the design standards of subsections (4) and (5) of this section;
- (b) A plan of operation addressing the requirements of subsection (6) of this section;
- (c) A closure plan meeting the requirements of subsection (8) of this section; and

- (d) Documentation as needed to meet the financial assurance requirements of subsection (9) of this section.
- (11) Waste tire storage and transportation Storage site license requirements.
- (a) An owner or operator of a waste tire storage facility must obtain a waste tire storage license. In order to obtain a waste tire storage license, the The facility owner or operator shall must first obtain a solid waste handling permit for the storage of waste tires from the jurisdictional health department.
- (b) Application forms for a waste tire storage site owner license are available at unified business identifier service locations located throughout the state. Unified business identifier service locations include:
- (i) The field offices of the Washington state department of revenue and the Washington state department of labor and industries;
- (ii) The tax offices of Washington state department of employment security;
  - (iii) The Olympia office of the secretary of state; and
- (iv) The business license service office of the Washington state department of licensingrevenue.

- (c) An application for a waste tire storage site owner license shall must include a two hundred fifty dollaran application fee determined by the Washington state department of revenue for each facility, . fifty dollars of which shall be nonrefundable. The A refundable portion of application fees may be returned to the applicant under the following conditions:
- (i) The department determines that a solid waste permit would meet the substantive requirements of RCW 70.95.555 and determines that a license is not required; or
- (ii) The applicant withdraws the application before the department has approved or denied the application.
- (d) A waste tire storage site license shall beis valid for one year from the date of approval and must be renewed annually.
  - (12) Waste tire storage prohibitions and enforcement.
- (a) Waste tires may only be delivered to a facility that has obtained the required permits or licenses for storage, processing, or disposal of waste tires.
- (b) Any person subject to this section who stores waste tires without a valid waste tire storage license issued by the Washington state department of revenue is subject to the enforcement provisions of RCW 70.95.560.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-350, filed 1/10/03, effective 2/10/03.]

## WAC 173-350-355 Waste tire transportation

- (1) Waste tire transportation Applicability. These standards apply to:
- (a) Persons engaged in the business of transporting waste tires except for:
  - (i) Any person transporting five tires or less;
- (ii) Any person transporting used tires back to a retail outlet for repair or exchange;
- (iii) Any waste hauler regulated by chapter 81.77 RCW, Solid waste collection companies;
- (iv) The United States, the state of Washington, or any local government, or contractors hired by these entities, when involved in the cleanup of illegal waste tire piles; and
- (v) Tire retailers associated with retreading facilities who use company-owned vehicles to transport waste tires for the purposes of retreading or recycling.
  - (2) Waste tire transportation Carrier license requirements.

- (a) All persons subject to this section engaged in the business of transporting waste tires are required to obtain a waste tire carrier license from the Washington state department of revenue.
- (b) Application forms for a waste tire carrier license will be available at unified business identifier service centers located throughout the state. Unified business identifier service locations include:
- (i) The field offices of the Washington state department of revenue and the Washington state department of labor and industries;
- (ii) The tax offices of Washington state department of employment security;
  - (iii) The Olympia office of the secretary of state; and
- (iv) The business license service office of the Washington state department of revenue.
- (c) An application for a waste tire carrier license and a cab card for one vehicle must include an application fee determined by the Washington state department of revenue. Each additional vehicle cab card to be used by the licensee requires an additional fee determined by the Washington state department of revenue. The application must include:

- (i) A performance bond in the sum of ten thousand dollars in favor of the state of Washington; or
- (ii) In lieu of the bond, an applicant may submit other financial assurance acceptable to the department.
- (d) A refundable portion of application fees may be returned to the applicant if the application is withdrawn before the department has approved or denied the application.
- (e) A waste tire carrier license is valid for one year from the date of approval and must be renewed annually.
  - (3) Waste tire transportation Prohibitions and enforcement.
- (a) No person may enter into a contract for transportation of waste tires with an unlicensed waste tire transporter.
- (b) Waste tires may only be delivered to a facility that has obtained the required permits or licenses for storage, processing, or disposal of waste tires.
- (c) Any person subject to this section who transports waste tires without a valid waste tire carrier license issued by the Washington state department of revenue is subject to the enforcement provisions of RCW 70.95.560.

## WAC 173-350-360 Moderate risk waste handling.

- (1) Moderate risk waste handling Applicability.
- (a) This section is applicable These standards apply to:
- (i) Any facility that accepts segregated solid waste categorized as moderate risk waste (MRW), as defined in WAC 173-350-100;
- (ii) A "transporter" or "marine terminal operator" who owns or leases and operates a "transfer facility" (as these terms are defined in WAC 173-303-040) or a transfer facility at a marine terminal and stores a shipment of MRW or household hazardous waste (HHW) for a period of longer than ten days. Such shipments must be documented on a shipping paper according to 49 C.F.R. Subpart C - Shipping Paper Parts 172.200 through 172.204. A transporter must maintain ten-day storage records that include the dates that a shipment of MRW and HHW entered the transfer facility and departed the transfer facility. Ten-day records must be retained for two years; and
- (ii) Persons transporting MRW using only a bill of lading (MRW that is not shipped using a uniform hazardous waste manifest) who store MRW for more than ten days at a single location; and
  - (iii) Mobile systems and collection events.

- (b) This section is not applicable These standards do not apply to:
- (i) A transporter or marine terminal operator who owns or leases and operates a transfer facility or a transfer facility at a marine terminal and stores a shipment of MRW or HHW that is documented on a shipping paper according to 49 C.F.R. Subpart C -Shipping Paper Parts 172.200 through 172.204 for a period of ten days or less;
- (i) Persons transporting MRW managed in accordance with the requirements for shipments of manifested dangerous waste under WAC 173-<del>303-240;</del>
- (ii) Universal waste regulated under chapter 173-303 WAC, Dangerous waste regulations; and
- (iii) Conditionally exempt small quantity generators managing their own wastes in compliance with the performance standards of WAC 173-350-040 and WAC 173-303-070 (8)(b).
- (2) Mobile systems and collection events. Moderate risk waste handling - Permit exemptions. In accordance with RCW 70.95.305, the operation of mobile systems, and collection events, limited MRW facilities, product take-back centers, and law pharmaceutical collection programs managed in accordance with the terms and conditions in Table 360-A below are subject solely to the requirements of (a) through (n)

of this subsection and are exempt from solid waste handling permitting. An owner or operator that does not comply If a facility does not operate in compliance with the terms and conditions established for an exemption under-of this subsection, the facility may be subject to the permitting requirements for solid waste handling under this chapter. is required to obtain a permit from the jurisdictional health department and shall comply with the applicable requirements for a moderate risk waste handling facility. In addition, violations of the terms and conditions of Table 360-A and this subsection may be subject to the penalty enforcement provisions of RCW 70.95.315. Owners and operators of mobile systems and collection events shall:

Table 360-A Terms and Conditions for Solid Waste Permit Exemptions

Terms and Conditions for  Conditional Permit Exemption	Mobile System*	Collection Event*	Limited MRW Facility	Product Take-Back Center	Pharmaceutical Collection Program
(a) Notify the department and jurisdictional health department of the intent to operate at least thirty days prior to commencing operations.  The notification must include a description of the types and quantities of MRW to be handled;	<u>X</u>	<u>X</u>	<u>X</u>		
(b) Manage MRW in compliance with the performance standards of WAC 173-350-040;	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
(c) Maintain records of the amount and type of MRW received, number of households and/or conditionally exempt small quantity generators served, and the type of final disposition (e.g. reuse, recycled, treatment, energy recovery, incineration, or landfilling). Records must be maintained for five years and must be made available to the department or jurisdictional health department on request:	<u>X</u>	<u>X</u>	<u>X**</u>		

(d) Ensure MRW is handled in a manner that:  (i) Prevents a spill or release of hazardous substances to the environment;  (ii) Prevents exposure of the public to hazardous substances; and  (iii) Results in delivery to a facility that meets the performance standards of WAC 173-350-040;	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
(e) Ensure that incompatible wastes are not allowed to come into contact with each other;	<u>X</u>	<u>X</u>		<u>X</u>	
(f) Ensure that containers holding MRW remain closed except when adding or removing waste in order to prevent a release of MRW through evaporation or spillage if overturned;	X	<u>X</u>	<u>X</u>		
(g) Ensure that containers holding MRW have legible labels and markings that identify the waste type;	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	
(h) Ensure that containers holding MRW are maintained in good condition (e.g. no severe rusting or apparent structural defects);	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	
(i) Ensure that designated personnel are familiar with the chemical nature of the materials and the appropriate mitigating action necessary in the event of fire, leak, or spill;	<u>X</u>	<u>X</u>		<u>X</u>	
(j) Control public access and prevent unauthorized entry;	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	
(k) Prepare and submit an annual report to the department and the jurisdictional health department by April 1st on forms supplied by the department. The annual report must detail the collection activities during the previous calendar year and must include the following:  (i) Name and addresses of all collection sites;  (ii) Calendar year covered by the report;  (iii) Annual quantity and type of MRW collected, in pounds or gallons, by waste type;  (iv) Number of households and CESQGs served annually;  (v) Type of final disposition (for example, reuse, recycled, treatment, energy recovery, incineration, or landfilling) by waste type of MRW; and  (vi) Any additional information required by the department;	<u>X</u>	<u>X</u>	<u>X**</u>		
(I) Allow inspections by the department or jurisdictional health department at reasonable times;	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	
(m) Notify the jurisdictional health department and the department of any spills or discharges of MRW to the environment within twenty-four hours of knowledge of an incident;	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
(n) Mobile collection systems using trucks or trailers with concealed construction, permanently attached to a chassis may require a commercial coach insignia if subject to chapter 296-150C WAC, Commercial coaches, administered by the department of labor and industries; and	X	<u>X</u>			

(o) Provide secondary containment for containers and tanks capable of					
storing fifty-five gallons or more of liquid MRW.	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	

<sup>\*</sup> The requirements of these columns do not apply to pharmaceutical collection programs conducted as a mobile system or collection event.

- \*\*Limited MRW facilities are NOT required to keep track of number of households and CESQGs served annually.
- (a) Notify the department and the jurisdictional health department of the intent to operate a mobile system or collection event at least thirty days prior to commencing operations. The notification shall include a description of the types and quantities of MRW to be handled;
- (b) Manage mobile systems or collection events in compliance with the performance standards of WAC 173-350-040;
- (c) Record the weights or gallons of each type of MRW collected, number of households and conditionally exempt small quantity generators served, and type of final disposition (e.g., reuse, recycled, treatment, energy recovery, or disposal). Records shall be maintained for a period of five years and will be made available to the depart ment or jurisdictional health department on request;
- (d) Ensure that the MRW at a mobile system or collection event is handled in a manner that:
- (i) Prevents a spill or release of hazardous substances to the environment;
  - (ii) Prevents exposure of the public to hazardous substances; and

- (iii) Results in delivery to a facility that meets the performance standards of WAC 173-350-040;
- (e) Ensure that incompatible wastes are not allowed to come into contact with each other;
- (f) Ensure that containers holding MRW remain closed except when adding or removing waste in order to prevent a release of MRW through evaporation or spillage if overturned;
- (g) Ensure that containers holding MRW have legible labels and markings that identify the waste type;
- (h) Ensure that containers holding MRW are maintained in good condition (e.g., no severe rusting or apparent structural defects);
- (i) Ensure that personnel are familiar with the chemical nature of the materials and the appropriate mitigating action necessary in the event of fire, leak or spill;
  - (j) Control public access and prevent unauthorized entry;
- (k) Prepare and submit a copy of an annual report to the department and the jurisdictional health department by April 1st on forms supplied by the department. The annual report shall detail the collection activities during the previous calendar year and shall include the following information:

- (i) Name of owner or operator, and locations of all collection sites;
  - (ii) Calendar year covered by the report;
- (iii) Annual quantity and type of MRW, in pounds or gallons by waste type;
  - (iv) Number of households and CESQGs served;
- (v) Type of final disposition (e.g., reuse, recycled, treatment, energy recovery, or disposal); and
- (vi) Any additional information required by written notification of the department;
- (1) Allow inspections by the department or the jurisdictional health department at reasonable times;
- (m) Notify the department and the jurisdictional health department of any failure to comply with the terms and conditions of this subsection within twenty four hours; and
- (n) Mobile collection systems using truck or trailers with concealed construction, permanently attached to a chassis may require a commercial coach insignia if subject to chapter 296 150C WAC, adminis tered by the department of labor and industries.
- (3) Limited MRW facilities and product take-back centers. In accordance with RCW 70.95.305, the operation of limited MRW facilities

is subject solely to the requirements of (a) through (i) of this subsection and is exempt from solid waste handling permitting. Product take back centers are only subject to (b), (e) and (f) of this subsection. An owner or operator that does not comply with the terms and conditions of this subsection is required to obtain a permit from the jurisdictional health department and shall comply with the applicable requirements for an MRW facility. In addition, violations of the terms and conditions of this subsection may be subject to the penalty provisions of RCW 70.95.315. Owners and operators of limited MRW facilities shall:

- (a) Notify the department and the jurisdictional health department within thirty days prior to operation of the intent to operate a limited MRW facility with a description of the type and quantity of MRW to be handled;
- (b) Ensure waste at a limited MRW facility or product take back center is handled in a manner that:
- (i) Prevents a spill or release of hazardous substances to the environment;
- (ii) Prevents exposure of the public to hazardous substances; and (iii) Results in delivery to a facility that meets the performance standards of WAC 173 350 040;

- (c) Ensure that containers and tanks holding MRW are maintained in good condition (e.g., no severe rusting or apparent structural de-<del>fects);</del>
- (d) Provide secondary containment for containers and tanks capable of storing fifty-five gallons or more of liquid MRW;
- (e) Ensure the facility meets the performance standards of WAC <del>173-350-040;</del>
- (f) Notify the department and the jurisdictional health department of any failure to comply with the terms and conditions of this subsection within twenty-four hours of knowledge of an incident;
- (q) Allow inspections by the department and jurisdictional health department at reasonable times;
- (h) Maintain records of the amount and type of MRW received, and the final disposition of the MRW by amount and type; and
- (i) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall cover the facility's activities during the previous calendar year and shall include the following information:
  - (A) Name and address of the facility;
  - (B) Calendar year covered by the report;

- (C) Annual quantity and type of MRW, in pounds or gallons by waste type;
  - (D) Number of households and CESQGs served;
- (E) Type of final disposition (e.g., reuse, recycled, treatment, energy recovery, or disposal); and
- (F) Any additional information required by written notification of the department.
- (43) Moderate risk waste facilities -- Permit requirements Location. standards. There are no specific location standards for moderate risk waste facilities subject to this chapter; however, moderate risk waste facilities must meet the requirements provided underperformance standards of WAC 173-350-040(5).
- (54) Moderate risk waste facilities -- Permit requirements Design. standards. Moderate risk waste facilities (MRW) must be designed so that the facility can be operated to meet the performance standards of WAC 173-350-040. (a) The owner or operator of a moderate risk wasteMRW facility shall must prepare engineering reports/plans and specifications, including a construction quality assurance plan, to address the following design standards of this subsection. Each MRW facility shall:

- (a) All MRW facilities regulated under this subsection must be designed and constructed to meet the following requirements:
- (i) Be surrounded by a fence, walls, or natural features and provided with a lockable door or gate to control public and animal access;
- (ii) Be constructed of materials that are chemically compatible with the MRW handled;
- (iii) Provide secondary containment to capture and contain releases and spills, and facilitate timely cleanup in areas where MRW is handled. All secondary containment shallmust:
  - (A) Have sufficient capacity to:
- (I) Contain ten percent of <a href="the">the</a> volume of all containers or tanks holding liquid or the total volume of the largest container holding liquids in the area, whichever is greater;
- (II) Provide additional capacity to hold the precipitation from a twenty-five-year storm as defined in WAC 173-350-100, in uncovered areas; and
- (III) Provide additional capacity to hold twenty minutes of flow from an automatic fire suppression system, where such a suppression system exists.

- (B) Be segregated to prevent for incompatible wastes from coming into contact with one another; and
- (C) For a floor or other structure that serves as the secondary containment, be Have a base underlying the containers which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, accumulated precipitation, or fire suppression materials until the collected material is detected and removed. The base shallfloor must be sloped or the containment system shall must otherwise be designed and operated to drain and remove liquids resulting from leaks, spills, precipitation, or fire suppression unless the containers are elevated or are otherwise protected from contact with accumulated liquids;
  - (iv) Be accessible by all-weather roads;
- (v) Prevent run-on and control runoff from a twenty-five-year storm, as defined in WAC 173 350 100;
- (vi) Provide a sign at the site entrance that identifies the facility and shows at least a minimum the name of the site, and if applicable, hours during which the site is open for public use, and acceptable materials;
- (vii) Provide sufficient ventilation to remove toxic vapors and dust from the breathing zone of workers and prevent the accumulation

of flammable or combustible gases or fumes that could present a threat of fire or explosion;

- (viii) Be constructed with explosion-proof electrical wiring, fixtures, lights, motors, switches and other electrical components as required by local fire code or the department of labor and industries;
- (ix) Provide electrical grounding in areas where flammable and combustible liquids are consolidated to allow for bonding to consolidation equipment; and
- (x) Provide protection of the MRW handling areas from wind, rain or snow and precipitation through structural or operational measures.
- (b) The owner or operator of a tank used to store or treat MRW shall must prepare engineering reports/plans and specifications, in cluding a construction quality assurance plan, to address the following design standards:
- (i) Tanks and ancillary equipment shall must be tested for tightness using a method acceptable to the jurisdictional health department prior to being covered, enclosed or placed in use. If a tank is found not to be tight, all repairs necessary to remedy the leak(s) in the system shall must be performed and verified to the satisfaction of the jurisdictional health department prior to the tank being covered or placed in use;

- (ii) Below ground tanks shall must be designed to resist buoyant forces in areas of high groundwater and shall must either be:
- (A) Retested for tightness at a minimum of once every two years;or,
- (B) Equipped with a leak detection system capable of detecting a release from the tank.
- (iii) For tanks or components in which the external shell of a metal tank or any metal component will be in contact with the soil or water, a determination shall must be made by a corrosion expert of the type and degree of external corrosion protection that is needed to ensure the integrity of the tank during its operating life. This determination shall must be included with design information submitted with the permit application;
- (iv) Areas used to load or unload tanks shall must be designed to contain spills, drippage drips and accidental releases during loading and unloading of vessels;
- (v) Tanks and piping shall must be protected from impact by vehicles or equipment through use of curbing, grade separation, bollards, or other appropriate means;
- (vi) Tanks shall must be structurally suited for the proposed use; and

- (vii) Tanks, valves, fittings and ancillary piping shall must be protected from failure caused by freezing.
- (c) Prefabricated structures with concealed construction shall must meet the requirements of chapter 296-150F WAC, Factory-built housing and commercial structures, administered by the department of labor and industries.
- (5) Moderate risk waste facilities Permit requirements Documentation.
- (a) The owner or operator must submit construction documents for, at a minimum, any elements described in (4) of this section to the jurisdictional health department for review and approval. The construction documents must be prepared by a professional engineer registered in the state of Washington and must include:
- (i) An engineering report that presents the design basis and calculations for the engineered features of moderate risk waste facilities and tank systems, secondary containments areas, ventilation systems, storm water management features, and emission control features as required by the permitting air authority where applicable. The engineering report must demonstrate that the proposed design will meet the performance standards of this chapter;

- (ii) Scale drawings of the facility including the location and size of waste storage areas, fixed equipment, buildings, storm water management features where applicable, access roads, traffic patterns, and other constructed areas and buildings integral to facility operation;
- (iii) Design specifications for the engineered features of the facility including any tank systems, run-on/runoff controls, storm water management features, and aeration and emission management features as required by a permitting air authority where applicable; and
- (iv) A construction quality assurance plan that describes monitoring, testing, and documentation procedures that will be performed during construction of the facility to ensure the facility is constructed in accordance with the approved design.
- (b) The owner or operator must provide copies of the construction record drawings for engineered features at the facility and a report documenting facility construction, including the results of observations and testing carried out as part of the construction quality assurance plan, to the jurisdictional health department and the department. The owner or operator must not commence operation in a newlyconstructed portion of the facility until the jurisdictional health department has determined that the construction was completed in ac-

cordance with the approved engineering report/plans and specifications and has approved the construction documentation in writing.

- (6) Moderate risk waste facilities -- Permit requirements Operating. standards. The owner or operator of a MRW facility shallmust:
- (a) Operate the site in compliance with the performance standards of WAC 173-350-040 and this subsection. In addition, the owner or operator must develop, keep, and follow a plan of operation approved as part of the permitting process. The plan must describe the facility's operation and convey to site operating personnel the concept of operation intended by the designer. The plan of operation must be available on-site for inspection at the request of the jurisdictional health department. If necessary, the plan may be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation must include the following:
- (i) A description of the types of solid wastes to be handled at the facility;
- (ii) A description of the procedures used to ensure that dangerous waste and other unacceptable waste are not accepted at the facility;
- (iii) A description of how MRW will be handled on-site during the active life of the facility including:

- (A) Methods for managing and/or identifying unknown wastes;
- (B) Procedures for managing wastes that arrive in corroded or leaking containers or when MRW is left at the gate when the facility is unattended;
  - (C) Protocol for sorting, processing, and packaging MRW;
- (D) Maximum quantities of MRW to be safely stored in each area at any time;
- (E) Waste acceptance protocol to preclude and redirect fully regulated dangerous waste and any unacceptable waste types, such as explosives and/or radioactives; and
- (F) For facilities that offer material exchanges, a procedure for determining what MRW is suitable for exchange and how the materials exchange will be operated.
- (aiv) A description of how the owner or operator will ensure Manage MRW handling activities and facilities will be managed so that:
- (iA) Each storage area is marked with signs to clearly show the type of MRW to be stored in that area;
- (iiB) Incompatible MRW and materials shall are not be mixed together or allowed to come into contact with each other;
  - (iiiC) MRW shall be is compatible with the containment system;

- (ivD) Unless otherwise approved by the jurisdictional health department, ccontainers or tanks are closed except when actively adding or removing MRW in order to prevent a release of MRW through evaporation or spillage if overturned;
- (VE) All containers or tanks have visible and legible labels or markings that identify the MRW type and are visible for inspection;
- (viF) Containers of MRW shall beare stored in a manner that allows for easy access and inspection. Drums containing MRW shall must have at least one side with a minimum of thirty inches clear aisle space;
- (viiG) Containers holding MRW are maintained in good condition including, but not limited to, no severe rusting or apparent structural defects;
- (H) A shipment of MRW transported is documented on a shipping paper in accordance with 49 C.F.R. Subpart C - Shipping Paper parts 172.200 through 172.204, except shipping papers are not required for:
- (I) Transportation of HHW in a private motor vehicle or vessel including a leased or rented motor vehicle or vessel by a homeowner for non-commercial purposes to an MRW facility;
- (II) Transportation of MRW or HHW in a motor vehicle, aircraft, or vessel operated by a federal, state, or local government employee

solely for non-commercial federal, state, or local government purposes.

(viii) Uniform hazardous waste manifests are prepared and used at the point where possession of the MRW is given to a commercial registered dangerous waste transporter for shipments of MRW destined for out of state locations. This shall be completed in accordance with WAC <del>173-303-180;</del>

- (ixI) Public access is restricted to areas identified in the plan of operation and unauthorized entry is prevented;
- (\*J) Communication capabilities are provided to summon fire, police, or emergency service personnel;
- (xiK) Flammable or explosive gases do not exceed ten percent of the lower explosive limit in the area where flammable liquid MRW is handledconsolidated. An explosive gas monitoring program shallalarm system must be implemented to ensure that this standard is achieved;
- (xii) MRW is delivered to a facility that meets the performance standards of WAC 173-350-040;
- (L) Electrical grounding is provided and bonding occurs in areas where flammable and combustible liquids are consolidated;

(xiiiM) Personnel trained to manage MRW in accordance with this section and the plan of operation approved during the permitting process are present at all times when MRW is accepted and handled; and

responsible for routine inspections and operations are familiar with the chemical nature of the materials and the appropriate mitigating action necessary in the event of fire, leak or spill; and

(xivN) The jurisdictional health department and the department are notified of any spills or discharges of MRW to the environment within twenty-four hours of knowledge of an incident.

- (bv) A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspection and inspection logs. The operator must eEnsure that routine and annual inspections are conducted as follows:
- (iA) Routine inspections shall must be conducted at least weekly or once each operating day, whichever is more frequent, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process. Routine inspections shall must be performed for:
  - (AI) Operating hazards;
  - (BII) Presence of operable safety equipment;
  - (CIII) Container integrity; and

- (₱IV) General facility condition÷.
- (iiB) Annual inspections shall must be conducted to determine the condition of:
- (AI) Secondary containment systems including all readily accessible below floor space, sumps, and tanks for deterioration and evidence of containment failure; and
  - (BII) All ventilation and flammable vapor monitoring systems.
- (vi) A description of how operators will maintain operating records on the amounts (weight or volume) and the types of waste received and removed from the facility, including the form or computer printout used to record this information. Facility annual reports must be maintained in the operating record. Facility inspection reports must be maintained in the operating record, including at least the date of inspection, the name and signature of the inspector, a notation of observations made, and the date and nature of any needed repairs or remedial action. Significant deviations from the plan of operation must be noted in the operating record. Records must be kept for a minimum of five years, and must be available upon request by the jurisdictional health department;

(vii) Safety and emergency plans including:

- (A) A list of all on-site emergency equipment with its capability, purpose, and training requirements;
- (B) A description of actions to take if leaks in containers, tanks, or containment structures are suspected or detected and for other releases (e.g., failure of runoff containment system, gases generated due to chemical reactions or rapid volatilizations).

(viii) A description of employee training requirements; and

- (ix) Other details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.
- (c) Maintain daily operating records of the weights or gallons of each type of MRW collected and the number of households and CESQGs served. Facility inspection reports shall be maintained in the operating record, including at least the date and time of the inspection, the name and signature of the inspector, a notation of observations made, and the date and nature of any needed repairs or remedial action. Significant deviations from the plan of operation shall be noted in the operating record. Records shall be kept for a minimum of five years and shall be available for inspection at the request of the jurisdictional health department.

- (db) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall must detail the facility's activities during the previous calendar year and must include the following information:
- (i) Name and address of the facility and locations of all collection sites;
  - (ii) Calendar year covered by the report;
- (iii) Annual quantity quantities and types of MRW, in pounds or gallons;
  - (iv) Number of households and CESOGs served;
- (v) Type of final disposition (e.g., for example, reuse, recycled,
  treatment, energy recovery, incineration, or disposal landfilling) by
  waste type of MRW;
- (vi) Applicable financial assurance reviews and audit findings in accordance with WAC 173-350-600; and
- (vii) Any additional information required by the jurisdictional health department as a condition of the permit.
- \_(e) Develop, keep and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to site operating personnel the concept of

operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:

- (i) A description of the types of solid wastes to be handled at the facility;
- (ii) A description of how MRW will be handled on-site during the active life of the facility including:
  - (A) Methods for managing and/or identifying unknown wastes;
- (B) Procedures for managing wastes that arrive in corroded or leaking containers or when MRW is left at the gate when the facility is unattended;
  - (C) Protocol for sorting, processing and packaging MRW;
- (D) Procedures to protect containers of MRW susceptible to damage from weather and temperature extremes;
- (E) Maximum quantities of MRW to be safely stored in each area at any time;
- (F) Waste acceptance protocol to preclude and redirect fully regulated dangerous waste and any unacceptable waste types, such as explosives and/or radioactives; and

- (G) For facilities that offer material exchanges, a procedure for determining what MRW is suitable for exchange and how the materials exchange will be operated;
- (iii) A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspection and inspection logs;
  - (iv) Safety and emergency plans including:
- (A) A list of all on-site emergency equipment with its capability, purpose, and training requirements;
- (B) A description of actions to take if leaks in containers, tanks, or containment structures are suspected or detected and for other releases (e.g., failure of runoff containment system, gases generated due to chemical reactions or rapid volatilization);
  - (v) The forms used to record weights and volumes; and
- (vi) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.
- (7) Moderate risk waste facilities Permit requirements -Groundwater monitoring. requirements. There are no specific groundwater monitoring requirements for MRW facilities subject to this chap-

ter; however, moderate risk waste facilities must meet the requirements provided underperformance standards of WAC 173-350-040(5).

- (8) Moderate risk waste facilities -- Permit requirements Closure. requirements.
- (a) The owner or operator of a moderate risk waste facility shallmust develop, keep, and follow a closure plan that includes:
- (ai) Notify Notification to the jurisdictional health department, and where applicable, the financial assurance instrument provider, no later than one hundred eighty days prior to the projected date of the final receipt of MRW, of the intent to implement the closure planclose the facility in part or whole. ; The facility shall close in a manner t.hat:
  - (i) Minimizes the need for further maintenance;
- (ii) Removes Removal of all MRW and ensures delivery of the MRW to a facility that conforms with the applicable regulations for handling the waste;
- (iii) Decontaminates Decontamination of all areas where MRW has been handled, including, but not limited to, secondary containment, buildings, tanks, equipment, and property; and
- (iv) Prepares the facility for remedial measures after closure, if required.

- (biv) Commencement of closure activities in part or whole within thirty days following the receipt of the final volume of MRW..; Waste shall not be accepted for disposal or for use in closure.
- (c) At facility closure completion, in part or whole, submit the following to the jurisdictional health department:
- (iv) Submittal of a certification by the owner or operator, and a professional engineer <del>licensed</del> registered in the state of Washington that the site has been closed in accordance with the approved closure planclosure procedures; and
- (iivi) Submittal of aA closure report signed by the facility owner or operator and the certifying engineer that describes:
- (A) Actions taken to determine if there has been a release to the environment; and
- (B) The results of all inspections conducted as part of the closure procedure.
- (d) Keep and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan shall include:
- (i) A description of the activities and procedures that will be used to ensure compliance with this subsection;

- $(\underline{v}$ ii) An estimate of the maximum volume of MRW on-site at any time during the active life of the facility; and
- ( $\underline{\mathbf{v}}$ iii) Closure cost estimates and projected fund withdrawal intervals from the financial assurance instrument, if  $\underline{\mathbf{such}}$  an instrument is required by subsection (9) of this section.
- (eb) The jurisdictional health department shall will notify the owner or operator, the department, and the financial assurance instrument provider, of the date when the jurisdictional health department has verified that the facility has been closed in accordance with the specifications of the approved closure plan.
- (9) Moderate risk waste facilities Permit requirements Financial assurance. requirements.
- (a) The owner or operator of any fixed moderate risk waste facility that stores more than nine thousand gallons of MRW on-site, excluding used oil, is required to establish financial assurance in accordance with WAC 173-350-600.
- (b) Proof of financial assurance shall must be provided to the jurisdictional health department prior to the acceptance of any MRW. The financial assurance instrument shall must provide sufficient funds to guarantee that all closure requirements are met. In the event that hazardous substances are released to the environment and site remedia-

tion is necessary, additional financial assurance shall must be provided in order that so site remediation can be accomplished.

- (c) Nothing in this section shall prevents an owner or operator from including the cost of MRW facility financial assurance in an instrument established for a co-located permitted solid waste facility so long as there are adequate funds available for both closure activities and the instrument identifies the commitment of funds for both activities.
- (10) Moderate risk waste facilities Permit application contents. The owner or operator of a MRW facility shall must obtain a solid waste permit from the jurisdictional health department. All applications for permits shall must be submitted in accordance with the requirements established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and WAC 173-350-715, each application for a permit shall must contain:
- (a) Engineering reports/plans and specifications that address the design standards of subsections (4) and (5) of this section;
- (b) A construction quality assurance plan that addresses the requirements of subsection (5) of this section;
- (bc) A plan of operation meeting the requirements of subsection (6) of this section;

- (ed) A closure plan meeting the requirements of subsection (8) of this section; and
- (de) Documentation as needed to meet the financial assurance requirements of subsection (9) of this section.

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

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-360, filed 1/10/03, effective 2/10/03.]

WAC 173-350-400 Limited purpose landfills.

(1) Limited purpose landfills - Applicability.

- (a) These standards apply to all—limited purpose landfills. Landfills in this category include facilities which may encompass considerable variations in waste types, site conditions, and operational controls. The primary characteristic of a limited purpose landfill is that it is not allowed to receive municipal solid waste. except:
  - (b) These standards do not apply to:
- (ai) Municipal solid waste lLandfills regulated under chapter 173-351 WAC, Criteria for municipal solid waste landfills;
- (bii) Inert waste | Landfills regulated under WAC 173-350-410, Inert waste landfills;
- (ciii) Special incinerator ash lLandfills regulated under chapter 173-306 WAC, Special incinerator ash management standards;
- (div) Dangerous waste | Landfills regulated under chapter 173-303 WAC, Dangerous waste regulations; and
- (ev) Chemical waste landfills used for the disposal of polychlorinated biphenyls (PCBs) regulated under Title 40 C.F.R. Part 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions.
- (2) Limited purpose landfills Permit exemptions. There are no permit exemptions for limited purpose landfills.

- (23) Limited purpose landfills -- Permit requirements Location.

  standards. All limited purpose landfills shall must be located to meet the following requirements:
- (a) No landfill shall may be located over a Holocene fault, in subsidence areas, or on or adjacent to an unstable slope or other geologic features which could compromise the structural integrity of the facility.;
- (b) No landfill's active area shall may be located closer than one thousand feet to an existing a down gradient drinking water supply well, i unless the owner or operator can demonstrate that a minimum of ninety days will occur between the time that a contaminant is detected and the time the contaminant can reach the nearest down gradient drinking water supply well. Such demonstrations shall be prepared by a licensed professional in accordance with the requirements of chapter 18.220 RCW and shall be included in the permit application. The demonstration shall be based on the details of the sampling and analysis plan and the hydrogeologic properties of the hydrogeratigraphic unit.
- (c) No landfill's active area shall may be located in a channel migration zone as defined in WAC 173-350-100 or within two hundred feet, measured horizontally, of a stream, lake, pond, river, or saltwater body, nor or in any wetland. nor any public land that is being

used by a public water system for watershed control for municipal drinking water purposes in accordance with WAC 248-54-660(4). All facilities shall must conform to location restrictions established in local shoreline management plans adopted pursuant to chapter 90.58 RCW, Shoreline management act of 1971;-

- (d) No landfill shall may be located within ten thousand feet of any airport runway currently used by turbojet aircraft or five thousand feet of any airport runway currently used by only piston-type aircraft unless the federal aviation administration grants a waiver. This requirement is only applicable where **such** a landfill is used for disposing of wastes where a bird hazard to aircraft would be created. and
- (e) All landfills shall must comply with the location standards specified in RCW 70.95.060.
- (34) Limited purpose landfills -- Permit requirements Design. standards. (a) This section applies to landfills with considerable variations in waste types, site conditions, and operational controls. All landfills shall must be designed and constructed to meet the design standards of this subsection, the performance standards of WAC 173-350-040, and shall must be appropriate for and compatible with the waste, the site, and the operation. The owner or operator of a limited

purpose landfill shall must prepare engineering reports≠, plans, and specifications to address the following factors:, including a construction quality assurance plan, to address the design standards of this subsection. An owner or operator shall be able to demonstrate during the permitting process that the design of a proposed landfill will mitigate threats to human health and the environment. When evaluating a landfill design, the jurisdictional health department shall consider the following factors:

- (a) Landfill design must consider:
- (i) Waste characterization;
- (ii) Soil conditions;
- (iii) Hydrogeologic conditions;
- (iv) Hydraulic conditions;
- (v) Contaminant fate and transport;
- (vi) Topography;
- (vii) Climate;
- (viii) Seismic conditions;
- (ix) The total site capacity of the facility and each landfill unit;
  - (x) Anticipated leachate characteristics and quantity;
  - (xi) Operational controls; and

- (xii) Environmental monitoring systems.
- (b) Liner system design.
- (i) Liner system performance standard. Limited purpose landfills shall must be constructed in accordance with a design that:
- (A) Will prevent the contamination of the hydrostratigraphic units identified in the hydrogeologic assessment of the facility at the relevant point of compliance as specified during the permitting process; and
- (B) Controls methane and other explosive gases generated by the facility to ensure they do not exceed:
- (I) Twenty-five percent of the lower explosive limit for the gases in facility structures (excluding the gas control or recovery system components);
- (II) The lower explosive limit in soil for gases in soil or in ambient air for the gases at the property boundary or beyond; and
- (III) One hundred parts per million by volume of hydrocarbons (expressed as methane) in offsite structures.
- (ii) Liner system design and construction. The owner or operator of a limited purpose landfill must select one of the three options for liner system design and construction described in (A), (B), and (C) of this item. The options described in (B) and (C) require that the owner

or operator must demonstrate to the satisfaction of the jurisdictional health department during the permitting process that the proposed liner design will comply with the liner performance standards of (b)(i) of this subsection and the specific requirements of this item.

- (A) Presumptive liner design. Limited purpose landfills designed and constructed with the following composite liner are presumed to meet the performance standard of (b)(i) of this subsection. The presumptive liner design consists of the following two components:
- (I) A lower component consisting of at least a two-foot layer of compacted soil with a hydraulic conductivity of no more than  $1 \times 10^{-7}$ cm/sec; and
- (II) An upper component consisting of a high-density polyethylene (HDPE) geomembrane with a minimum of 60-mil thickness. The geomembrane must be installed in direct and uniform contact with the lower component.
- (B) Facility-specific liner design. Limited purpose landfills may be designed and constructed with an engineered liner system that the owner or operator demonstrates will meet the performance standard of (b)(i) of this subsection. The final liner system must be appropriate for and compatible with the characteristics of the site, the wastes

that are specified in a solid waste permit as allowed for disposal in the landfill, and the operation of the facility.

- (C) Operation without an engineered liner. Limited purpose landfills may be designed and constructed without an engineered liner system, if the owner or operator demonstrates to the satisfaction of the jurisdictional health department during the permitting process that:
- (ii) The jurisdictional health department may allow a limited purpose landfill to be designed and constructed without a liner system if the owner or operator can demonstrate during the permitting process that:
- (AI) The contaminant levels in the waste and leachate are unlikely to pose an adverse impact to the environment; and
- (BII) The ability of natural soils to provide a barrier or reduce the concentration of contaminants provides sufficient protection to meet the performance standards of WAC 173-350-040; and
- (CIII) Explosive gases generated by the facility will not exceed the criteria established in (b)(i) of this subsection.÷
- (I) Twenty five percent of the lower explosive limit for the gases in facility structures (excluding the gas control or recovery system components);

- (II) The lower explosive limit in soil gases or in ambient air for the gases at the property boundary or beyond; and
- (III) One hundred parts per million by volume of hydrocarbons (expressed as methane) in offsite structures.
- shall may be constructed such that with the bottom of the lowest component is—less than ten feet—(three meters) above the seasonal high level of groundwater, unless a hydraulic gradient control system has been installed which prevents groundwater from contacting the liner. For the purpose of this section, groundwater includes any water-bearing unit which is horizontally and vertically extensive, hydraulically recharged, and volumetrically significant as to harm or endanger the integrity of the liner at any time.
- (iv) Hydraulic gradient control system performance standard. When a hydraulic gradient control system is to be incorporated into a land-fill design, a demonstration shall must be made during the permit process that the hydraulic gradient control system can be installed to control groundwater fluctuations and maintain separation between the controlled seasonal high level of groundwater in the identified water-bearing unit and the bottom of the lowest liner system component. The hydraulic gradient control system shall must not have negatively im-

pacts on waters of the state or impede the capability to collect representative samples representative of the quality of groundwater at the relevant point of compliance. The demonstration shall must include:

- (A) A discussion in the geologic and hydrogeologic site characterization showing the effects from subsoil settlement, changes in surrounding land uses, climatic trends or other impacts affecting groundwater levels during the active life, closure and post-closure periods of the landfill;
- (B) A discussion showing potential impacts of the gradient control system's potential impacts on operation to existing quality and quantity of groundwater or surface waters. This discussion shall must include potential impacts to water users and instream flow and levels of surface waters in direct hydrologic contact or continuity with the hydraulic gradient control system. Any currently available ground or surface water quality data for hydrostratigraphic units, springs, or surface waters in direct hydrologic contact or continuity with the hydraulic gradient control system shall must be included;
- (C) Conceptual engineering drawings of the proposed landfill and a A discussion as toof how the hydraulic gradient control system will

protect or impact the structural integrity and performance of the liner system; and

- (D) Preliminary engineering drawings of the hydraulic gradient control system;
- (ED) Design specifications for the proposed ground and surface water monitoring systems; and.
- (F) A discussion of the potential impacts from the gradient control system on the capability of collecting groundwater samples that will represent the quality of groundwater passing the relevant point of compliance.
- (v) Presumptive liner design. Limited purpose landfills designed and constructed with the following composite liner are presumed to meet the performance standard of (b)(i) of this subsection. An alternative liner system design shall be used when the nature of the waste, the disposal facility, or other factors are incompatible with the presumptive liner. The presumptive liner design consists of the following two components:
- (A) A lower component consisting of at least a two foot layer of compacted soil with a hydraulic conductivity of no more than 1 x 10-7 <del>cm/sec.</del>

- (B) An upper component consisting of a high-density polyethylene (HDPE) geomembrane with a minimum of 60-mil thickness. The geomembrane shall be installed in direct and uniform contact with the lower component.
- (c) Leachate collection and control system design. Except as provided inwhen a landfill is designed and constructed without an engineered liner under (b)(ii)(C) of this subsection, limited purpose landfills shall must be constructed in accordance with a design that:
- (i) Provides for collection and removal of leachate generated in the landfill;
- (ii) Is capable of maintaining a leachate head of less than a one-foot head of leachate over the liner system and less than a twofoot feet head in leachate sump areas;
- (iii) Includes a monitoring system capable of collecting representative samples of leachate generated in the landfill; and
- (iv) Provides for leachate storage, treatment, or pretreatment to meet the requirements of WAC 173-350-330, Surface impoundments and tanks, for permitted discharge under chapter 90.48 RCW, Water pollution control, and the Federal Clean Water Act, as appropriate when leachate is to be discharged from the facility.

- (d) Run-on/runoff control system design. Limited purpose land-fills shall must be constructed in accordance with a design that:
- (i) Will prevent flow onto the active portion of the landfill during the peak discharge from a twenty-five-year storm, as defined in WAC 173-350-100;
- (ii) Will prevent unpermitted discharges from the active portion of the landfill resulting from a twenty-five-year storm, as defined in  $\frac{1}{3}$
- (iii) When located in a one hundred-year flood plain, the entrance and exit roads, and landfill practices do not restrict the flow of the base flood, reduce the temporary water storage capacity of the flood plain, or result in washout of solid waste. , to pose a hazard to human life, wildlife, land or water resources.
  - (e) Final closure system design.
- (i) Final closure performance standard. Limited purpose landfills shall must be closed in accordance with a design that:
  - (A) Prevents exposure of waste;
- (B) Minimizes infiltration (at a minimum, the design will prevent the generation of significant quantities of leachate to eliminate the need for leachate removal by the end of the post-closure period);
  - (C) Prevents erosion from wind and water;

- (D) Is capable of sustaining native vegetation;
- (E) Addresses anticipated settlement, with a goal of achieving no less than two to five percent slope after settlement;
- (F) Provides sufficient stability and mechanical strength and addresses potential freeze-thaw and desiccation;
- (G) Provides for the management of run-on and runoff, preventing erosion or otherwise damaging the closure cover;
  - (H) Minimizes the need for post-closure maintenance;
- (I) Provides for collection and removal of methane and other gases generated in the landfill when management is required. Landfill gas shall must be purified for sale, used for its energy value, or flared when the quantity and quality of landfill gases will support combustion. Landfill gases may be vented when they will not support combustion. The collection and removal system shall must include a monitoring system capable of collecting representative samples of gases generated in the landfill; and
- (J) Meets the requirements of regulations, permits and policies administered by the jurisdictional air pollution control authority or the department under chapter 70.94 RCW, Washington Clean Air air Act act and Section 110 of the Federal Clean Air Act.

- (ii) Final cover design and construction. The owner or operator of a limited purpose landfill must select one of the two options for final cover system design and construction described in (A) and (B) of this item. The option described in (B) requires that the owner or operator must demonstrate to the satisfaction of the jurisdictional health department during the permitting process that the proposed final cover design will comply with the final cover performance standards of (e)(i) of this subsection and the specific requirements of this item.
- (iiA) Presumptive final closure cover design. Limited purpose landfills designed and constructed with the following final closure cover are presumed to meet the performance standards in (e)(i)(A) through (D) of this subsection. An alternative final closure cover shall be used when the nature of the waste, the disposal facility or other factors are incompatible with the presumptive final closure cover system. The presumptive final closure cover consists of the following components:
- (AI) An anti-erosion layer consisting of a minimum of two feet (60 cm) of earthen material of which at least twelve inches (30 cm) of the uppermost layer is capable of sustaining native vegetation, seeded with grass or other shallow rooted vegetation; and

- (BII) A geomembrane with a minimum of 30-mil (.76 mm) thickness, or a greater thickness that is commensurate with the ability to join the geomembrane material and site characteristics such as slope, overlaying a competent foundation.
- (B) Facility-specific final cover. Limited purpose landfills may be designed and constructed with an engineered final cover system that the owner or operator demonstrates will meet the performance standards of (e)(i) of this subsection. The final cover system must be appropriate for and compatible with: the characteristics of the site, the wastes that are specified in a solid waste permit as allowed for disposal in the landfill, and the operation of the facility.
- (f) Water balance and groundwater contaminant fate and transport modeling. Any modeling performed for evaluating a landfill design shall must meet the following performance standards:
  - (i) All water balance analysis shall must be performed using:
- (A) The Hydrologic Evaluation of Landfill Performance (HELP) Model; or
- (B) Alternate methods approved by the jurisdictional health department. Alternate methods shall must have supporting documentation establishing its ability to accurately represent the water balance within the landfill unit.

- (ii) Any groundwater and contaminant fate and transport modeling shall must be conducted by a licensed professional in accordance with the requirements of chapter 18.220 RCW, Geologists, and meet the following performance standards:
- (A) The model shall must have supporting documentation that establishes the ability of those methods to represent groundwater flow and contaminant transport under the conditions at the site;
- (B) The model shall must be calibrated against site-specific field data;
- (C) A sensitivity analysis shall must be conducted to measure the model's response to changes in the values assigned to major parameters, specific tolerances, and numerically assigned space and time discretizations;
- (D) The value of the model's parameters requiring site-specific data shall must be based upon actual field or laboratory measurements; and
- (E) The values of the model's parameters that do not require site-specific data shall must be supported by laboratory test results or equivalent methods documenting the validity of the chosen parameter values.

- (g) Seismic impact zones. Limited purpose landfills located in seismic impact zones shall <u>must</u> be designed and constructed so that all containment structures, including liners, leachate collection systems, surface water control systems, gas management, and closure cover systems are able to resist the maximum horizontal acceleration in lithified earth materials for the site.
- (h) The owner or operator of limited purpose landfills located in an unstable area shall <u>must</u> demonstrate that engineering measures have been incorporated into the landfill's design to ensure that the integrity of the structural components of the landfill will not be disrupted. The owner or operator <u>shall must</u> place the demonstration in the application for a permit. The owner or operator <u>shall must</u> consider the following factors, at a minimum, when determining whether an area is unstable:
- (i) On-site or local soil conditions that may result in significant differential settling, surface rupture, or liquefaction;
- (ii) On-site or local geologic or geomorphologic features <u>indi-</u>
  cating differential settling, surface rupture, or liquefaction; and
- (iii) On-site or local human-made features or events (both surface and subsurface) indicating differential settling, surface rupture, or liquefaction.

- (i) Setback requirements. Limited purpose landfills shall must be designed to provide a setback of at least one hundred feet between the active area and the property boundary. The setback shall must be increased if necessary to:
  - (i) Control nuisance odors, dust, and litter;
- (ii) Provide a space for the placement of monitoring wells, gas probes, run-on/runoff controls, and other design elements; or
- (iii) Provide sufficient area to allow proper operation of the landfill and access to environmental monitoring systems and facility structures.
- (j) Access control and traffic requirements. All limited purpose landfills must:
- (i) Provide controls to limit public access and prevent unauthorized vehicular traffic, illegal dumping of wastes, and keep animals out, by use of artificial barriers, natural barriers, or both, as appropriate to protect human health and the environment. A lockable gate is required at each entry to the landfill;
- (ii) Provide approach and exit roads of all-weather construction, with traffic separation and traffic control on-site, and at the site entrance; and

- (iii) Provide a sign at the entrance that identifies the facility and provides emergency contact information.
- (5) Limited purpose landfills Permit requirements Documentation.
- (a) The owner or operator must submit construction documents for, at a minimum, any elements of the landfill described in (4) of this section to the jurisdictional health department for review and approval. The construction documents must be prepared by a professional engineer registered in the state of Washington, and must include:
- (i) An engineering report that presents the design basis and calculations for the engineered features of the facility including, but not limited to: liners, final closure covers, impoundments, storm water management features, leachate management features, and aeration and emission control features as required by the permitting air authority where applicable. The engineering report must demonstrate that the proposed design will meet the performance standards of this chapter;
- (ii) Scale drawings of the facility including the location and size of waste storage and disposal areas, fixed equipment, buildings, storm water management features where applicable, access roads, traf-

fic patterns, and other constructed areas and buildings integral to facility operation;

- (iii) Design specifications for the engineered features of the facility including, but not limited to, liners, final closure covers, storm water management features, leachate management features, and aeration and emission management features as required by a permitting air authority where applicable; and
- (iv) A construction quality assurance plan that describes monitoring, testing, and documentation procedures that will be performed during construction of the facility to ensure the facility is constructed in accordance with the approved design.
- (b) The owner or operator of a limited purpose landfill must provide copies of the construction record drawings for engineered features at the facility and a report documenting facility construction, including the results of observations and testing carried out as part of the construction quality assurance plan, to the jurisdictional health department and the department. The owner or operator must not commence operation in a newly-constructed portion of the facility until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering

report/plans and specifications and has approved the construction documentation in writing.

- (46) Limited purpose landfills -- Permit requirements Operating. standards. The owner or operator of a limited purpose landfill <del>shall</del>must:
- (a) Operate the facility in compliance with the performance standards of WAC 713-350-040 and this subsection. In addition, the owner or operator must develop, keep, and follow a plan of operation approved as part of the permitting process. The plan must describe the facility's operation and convey to site operating personnel the concept of operation intended by the designer. The plan of operation must be available for inspection at the request of the jurisdictional health department. If necessary, the plan may be modified with the approval, or at the direction, of the jurisdictional health department. Each plan of operation must include the following:
- (i) A description of the types of solid waste to be handled at the facility;
- (ii) A description of the criteria and procedures used to ensure that dangerous waste and other unacceptable waste, including liquid waste, are not accepted at the facility;

- (iii) A description of how solid wastes are to be handled onsite, including identification of unloading and staging area, transportation practices, and housekeeping activities;
- (iv) A description of how the owner or operator will ensure the facility is operated to:
- (A) Protect containment and monitoring structures such as liners, leachate collection systems, surface water control systems, gas management, cover systems, and monitoring wells;
  - (B) Control litter, dust, and nuisance odors;
  - (C) Control rodents, insects, and other vectors;
  - (D) Provide attendant(s) on-site during hours of operation; and
  - (E) Prevent scavenging.
- (v) If the landfill's capacity is greater than fifty thousand cubic yards per year, acknowledgement that at least two landfill personnel will be on-site with one person at the active face when the site is open to the public;
  - (vi) A description of how waste will be landfilled, including:
- A) How solid waste will be compacted before succeeding layers are added, except that the first lift over a liner may be left uncompacted to act as a cushion for subsequent lifts;

- (B) How cover of disposed waste will be managed. Putrescible waste must be covered at the end of each operating day, or at more frequent intervals if necessary. The jurisdictional health department may grant a temporary waiver, not to exceed three months, from this cover requirement if the owner or operator demonstrates that there are extreme seasonal climatic conditions that make meetings these requirement impractical. Materials used for cover must be:
  - (I) At least six inches of earthen material, such as soils; or
- (II) Alternative materials or an alternative thickness other than at least six inches of earthen material as approved by the jurisdictional health department when the owner or operator demonstrates that the alternative material or thickness will control vectors, fires, nuisance odors, blowing litter, scavenging, provide adequate access for heavy vehicles, and will not adversely affect gas or leachate composition and controls.
- (vii) A description of how any explosive gases generated at the facility will be monitored and controlled, and how the owner or operator will respond to the detection of explosive gases in a manner that ensures protections of human health. This element of the plan must include, at a minimum:

- (A) Controls to ensure that explosive gases generated by the facility do not exceed the criteria of (4)(b)(i)(B) of this section; <del>to:</del>
- (i) Control public access and prevent unauthorized vehicular traffic, illegal dumping of wastes, and keep animals out by using artificial barriers, natural barriers, or both, as appropriate to protect human health and the environment. A lockable gate shall be required at each entry to the landfill;
- (ii) Provide approach and exit roads of all weather construction, with traffic separation and traffic control on-site, and at the site entrance;
- (iii) Ensure that no liquid waste or liquids are placed in disposal facilities;
- (iv) Provide on-site fire protection as determined by the local and state fire control jurisdiction. Landfills disposing of wastes that can support combustion shall have a method to control subsurface fires;
- (v) Ensure that at least two landfill personnel are on site with one person at the active face when the site is open to the public for disposal facilities with a permitted capacity of greater than fifty thousand cubic yards per year;

(vi) Provide communication between employees working at the landfill and management offices, on-site and offsite, sufficient to handle emergencies;

(vii) Control fugitive dust;

(viii) Perform no open burning unless permitted by the jurisdictional air pollution control agency or the department under chapter 70.94 RCW, Washington Clean Air Act;

(ix) Collect scattered litter as necessary to prevent vector harborage, a fire hazard, aesthetic impacts, or adversely affect wildlife or its habitat;

(x) Prohibit scavenging;

(xi) Ensure that reserve operational equipment shall be available to maintain and meet these standards; and

(xii) Ensure that operations do not endanger any containment or monitoring structures such as liners, leachate collection systems, surface water control systems, gas management, cover systems and monitoring wells.

(b) Operate the facility in compliance with the following operating standards unless a demonstration can be made during the permitting process that due to the nature, source of the waste, or quality of the leachate generated, these standards are not necessary for the protection of human health or the environment:

(i) Implement a program at the facility for detecting and preventing the disposal of dangerous waste fully regulated under chapter 173-303 WAC, municipal solid waste and other prohibited wastes. This program shall include, at a minimum:

(A) Random inspections of incoming loads unless the owner or operator takes other steps (for example, instituting source controls restricting the type of waste received) to ensure that incoming loads do not contain prohibited wastes. Random inspections shall include:

(I) Discharging a random waste load onto a suitable surface, or portion of the tipping area. A suitable surface shall be chosen to avoid interference with operations, so that sorted waste can be distinguished from other loads of uninspected waste, to avoid litter, and to contain runoff;

(II) The contents of the load shall be visually inspected prior to actual disposal of the waste. The facility owner or operator shall return prohibited waste to the hauler, arrange for disposal of prohibited wastes at a facility permitted to manage those wastes, or take other measures to prevent disposal of the prohibited waste at the facility;

- (B) Maintaining records of inspections, or the results of other procedures if appropriate;
- (C) Training facility personnel to recognize regulated dangerous waste, prohibited polychlorinated biphenyls (PCB) wastes and other prohibited wastes; and
- (D) Immediate notification of the department and the jurisdictional health department if a regulated dangerous waste or prohibited PCB waste is discovered at the facility.
- (ii) Thoroughly compact the solid waste before succeeding layers are added except for the first lift over a liner.
- (iii) Cover disposed waste to control disease vectors, fires, nuisance odors, blowing litter, and scavenging. Putrescible waste shall be covered at the end of each operating day, or at more frequent intervals if necessary. The jurisdictional health department may grant a temporary waiver, not to exceed three months, from the requirement of this subsection if the owner or operator demonstrates that there are extreme seasonal climatic conditions that make meeting such requirements impractical. Materials used for cover shall be:
- (A) At least six inches (15 cm) of earthen material, such as soils; or

- (B) Alternative materials or an alternative thickness other than at least six inches (15 cm) of earthen material as approved by the jurisdictional health department when the owner or operator demonstrates that the alternative material or thickness will control vectors, fires, nuisance odors, blowing litter, scavenging, provide adequate access for heavy vehicles, and will not adversely affect gas or leachate composition and controls.
- (iv) Prevent or control on-site populations of disease vectors using techniques appropriate for the protection of human health and the environment; and
- (v) Implement a program at the facility to control and monitor explosive gases and to respond to the detection of explosive gases in a manner that ensures protection of human health. This program shall include, at a minimum:
- (A) Ensure that explosive gases generated by the facility do not <del>exceed:</del>
- (I) Twenty-five percent of the lower explosive limit for the gases in facility structures (excluding the gas control or recovery system components);
- (II) The lower explosive limit in soil gases or in ambient air for the gases at the property boundary or beyond; and

- (III) One hundred parts per million by volume of hydrocarbons (expressed as methane) in offsite structures;
- (B) A routine explosive gas-monitoring program to ensure that all standards are met. The minimum frequency for monitoring is quarterly. The type and frequency of monitoring shall must be determined based on the following factors:
  - (I) Soil conditions;
  - (II) The hydrogeologic conditions surrounding the facility;
  - (III) The hydraulic conditions surrounding the facility; and
  - (IV) The location of facility structures and property boundaries;
- (C) If explosive gas levels exceed the limits identified in (4)(b)(i)(B) of this section, those of this subsection take all necessary steps to ensure protection of human health including:
  - (I) Notifying the jurisdictional health department;
  - (II) Notifying the local fire authority;
  - (III) Monitoring offsite structures;
- (<del>III</del>IV) Monitoring explosive gas levels daily, unless otherwise authorized by the jurisdictional health department;
- (IV) Evacuation Evacuating of buildings affected by landfill gas until determined to be safe for occupancy;

(VI) Within seven calendar days of the explosive gas levels detection, placing in the operating record the explosive gas levels detected and a description of the steps taken to protect human health and provide providing written notification to the jurisdictional health department; and

(VII) Within sixty days of the explosive gas levels detection, implementing a remediation plan for the explosive gas releases, describing the nature and extent of the problem and the remedy. This plan must shall be sent to the jurisdictional health department for approval as an amendment to the plan of operation. A copy of the remediation plan shall be placed in the operating record; and

(ĐVIII) When constructing Construction and decommissioning of all gas monitoring and extraction wells, do so in a manner that protects groundwater and meets the requirements of chapter 173-160 WAC, Minimum standards for construction and maintenance of wells.

(eviii) A description of how equipment, structures and other systems, including leachate collection, gas collection, run-on/runoff controls, and hydraulic gradient control systems, are to be inspected and maintained, including the frequency of inspection and inspection logs. Inspect and maintain the facility to prevent malfunctions and deterioration, operator errors, and discharges that may cause or lead

to the release of wastes to the environment or cause a threat to human health. The inspections shall must be at least weekly, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process.

(ix) A description of how The owner or operators will maintain operating records on the amounts (weight or volume) and types of waste received and removed from the facility, and the number of vehicles delivering waste to the facility, including the form or computer printout used to record this information. Facility annual reports must be maintained in the operating record. Facility inspection reports must be maintained in the operating record, shall keep an inspection report or summary including at least the date and time of inspection, the printed name and the signature of the inspector, a notation of observations made, and the date and nature of any needed repairs or corrective remedial actions. : (d) Maintain daily operating records on the weights (or volumes), number of vehicles entering and the types of wastes received. Facility inspection reports shall be maintained in the operating record. Significant deviations from the plan of operation shall must be noted on in the operating record. Records shall must be maintained kept for a minimum of five years and shall must be available upon request by the jurisdictional health department;

- (x) A description of safety planning and emergency activities, including:
- (A) On-site fire protection, as determined by the local and state fire control jurisdiction. Landfills disposing of wastes that can support combustion must have a method to control subsurface fires;
- (B) Communications sufficient to handle emergencies will be provided between employees working at the landfill and management offices, on-site and offsite;
- (C) Response procedures in the event of fire (including subsurface fires), a description of fire protection equipment available onsite and actions to take if there is a fire or explosion; and
- (D) Response procedures in the event leachate or gas leaks are detected, or other releases occur.
- (xi) Other details to demonstrate that the landfill will be operated in accordance with this subsection and as required by the jurisdictional health department.
- (b) Prepare and submit a monitoring plan to the jurisdictional health department describing all gas, leachate, surface water, and groundwater monitoring to be conducted in order to meet the requirements of subsections (4) and (5) of this section, as well as WAC 173-350-500 for groundwater. This plan must be approved by the jurisdic-

tional health department before being implemented. The jurisdictional health department may specify a periodic review schedule for the plan. This monitoring plan must:

- (i) Provide appropriate, consistent sampling and analysis procedures designed to produce representative results. As appropriate, the plan must include procedures for:
  - (A) Sample collection and handling;
  - (B) Sample preservation and shipment;
  - (C) Analytical procedures;
  - (D) Chain-of-custody control;
  - (E) Quality assurance and quality control; and
  - (F) Decontamination of equipment.
- (ii) The sampling and analytical methods must provide sufficient sensitivity, precision, selectivity and limited bias so that changes in conditions can be detected and quantified. All laboratory analyzed samples must be sent to an accredited laboratory for analyses according to chapter 173-50 WAC, Accreditation of environmental laboratories.
- (ec) Prepare and submit a copy of anlandfill annual status report and an annual monitoring report to the jurisdictional health department and the department by April 1st of each year on forms provided by

the department. These annual reports shall must cover landfill activities during the previous calendar year and shall must include the following information:

- (i) Name and address of the facility;
- (ii) Calendar year covered by the report;
- (iii) Annual quantity quantities and types of waste accepted in tons or cubic yards with an estimate of density in pounds per cubic yard;
- (iv) Results of groundwater monitoring in accordance with WAC <del>173-350-500;</del>
- (iv) Applicable financial assurance reviews and audit findings in accordance with WAC 173-350-600; and
- (vi) Any additional information required by the jurisdictional health department as a condition of the permit ...
- (f) Develop, keep, and abide by a plan of operation approved as part of the permitting process. The plan shall describe the operation of the facility and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the

- approval, or at the direction of the jurisdictional health department. Each plan of operation shall contain:
- (i) A description of the types of solid waste to be handled at the facility;
- (ii) A description of how solid wastes are to be handled on-site during its active life including:
  - (A) The acceptance criteria that will be applied to the waste;
- (B) Procedures for ensuring only the waste described will be ac-<del>cepted;</del>
  - (C) Procedures for handling unacceptable wastes; and
- (D) Unloading and staging areas, transportation, routine filling, compaction, grading, cover or other vector controls, and housekeeping;
- (iii) A description of how equipment, structures and other systems, including leachate collection, gas collection, run-on/runoff controls, and hydraulic gradient control systems, are to be inspected and maintained, including the frequency of inspection and inspection <del>logs;</del>
  - (iv) Safety and emergency plans including;
- (A) Procedures for fire (including subsurface fires) prevention, a description of fire protection equipment available on-site and actions to take if there is a fire or explosion;

- (B) Actions to take if leaks are detected or for other releases, such as failure of runoff containment system, if such systems are re-<del>quired;</del>
  - (v) The forms for recording weights and volumes; and
- (vi) Other such details to demonstrate that the landfill will be operated in accordance with this subsection and as required by the jurisdictional health department.
- (57) Limited purpose landfills -- Permit requirements Groundwater monitoring. requirements. Limited purpose landfills are subject to the groundwater monitoring requirements of WAC 173-350-500.
- (68) Limited purpose landfills -- Permit requirements Closure. requirements. The following closure requirements apply in full to facilities with limited purpose landfills when the facility is ending active disposal operations:
- (a) The owner or operator must develop, keep, and follow a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan must include the following information:
- (i) A description of the final closure cover, designed in accordance with (4)(e) of this section, the methods and procedures to be used to install the closure cover, sources of borrow materials for the

closure cover, and a schedule or description of the time required for completing closure activities;

- (ii) Projected time intervals at which sequential partial closure and final closure are to be implemented;
- (iii) A description of the activities and procedures that will be used to ensure compliance with (b) through (f) of this subsection; and
- (iv) Identify closure cost estimated and projected fund withdrawal intervals for the associated closure costs, from the approved financial assurance instrument.
- (ab) The owner or operator shall must notify the jurisdictional health department, and where applicable, the financial assurance instrument provider, one hundred eighty days in advance of closure of the facility, or any portion thereof. The facility, or any portion thereof, shall must close in a manner that:
  - (i) Minimizes the need for further maintenance;
- (ii) Controls, minimizes, or eliminates threats to human health and the environment from post-closure escape of solid waste constituents, leachate, landfill gases, contaminated runoff, or waste decomposition products to the ground, groundwater, surface water, and the atmosphere; and

- (iii) Prepares the facility, or any portion thereof, for the post-closure period.
- (bc) The owner or operator shall must commence implementation of the closure plan in part or whole within thirty days after receipt of the final volume of waste and/or attaining the final landfill elevation at part of or at the entire landfill as identified in the approved facility closure plan unless otherwise specified in the closure plan-;
- (c) The owner or operator shall not accept waste, including in ert wastes, for disposal or for use in closure except as identified in the closure plan approved by the jurisdictional health department.
- (d) The owner or operator shall develop, keep, and abide by a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan shall include the following information:
- (i) A description of the final closure cover, designed in accordance with subsection (3)(e) of this section, the methods and procedures to be used to install the closure cover, sources of borrow materials for the closure cover, and a schedule or description of the time required for completing closure activities;

- (ii) Projected time intervals at which sequential partial closure and final closure are to be implemented;
- (iii) A description of the activities and procedures that will be used to ensure compliance with (a) through (g) of this subsection; and
- (iv) Identify closure cost estimates and projected fund withdrawal intervals for the associated closure costs, from the approved financial assurance instrument.
- (e) The owner or operator shall submit final engineering closure plans, in accordance with the approved closure plan and all approved amendments, for review, comment, and approval by the jurisdictional health department.
- (fd) When landfill closure is completed in part or whole, the owner or operator shall must submit the following to the jurisdictional health department a certification by a professional engineer registered in the state of Washington, that the landfill, or a portion thereof, has been closed in accordance with the approved closure plan;÷
- (e) Environmental covenant. Following closure of a limited purpose landfill, the owner operator must file an environmental covenant conforming to the procedures and requirements of chapter 64.70 RCW, Uniform environmental covenants act. Unless waived in writing by the

- department, the environmental covenant must be in a form approved by the department and include at a minimum the following provisions:
- (i) State that the document is an environmental covenant executed pursuant to chapter 64.70 RCW, Uniform environmental covenants act;
- (ii) Contain a legally sufficient description of the real property subject to the covenant;
- (iii) Designate the department, or other person approved by the department, as the holder of the covenant;
- (iv) Be signed by the department, every holder, and, unless waived by the department, every owner of a fee simple interest in the real property subject to the covenant;
- (v) Identify the name and location of the administrative record for the property subject to the environmental covenant;
- (vi) Describe with specificity the activity or use limitations on the real property subject to the covenant. At a minimum, this must prohibit uses and activities that:
- (A) Threaten the integrity of any cover, waste containment, storm water control, gas leachate, public access control, or environmental monitoring systems;

- (B) May interfere with the operation and maintenance, monitoring, or other measures necessary to assure the integrity of the landfill and continued protection of human health and the environment; and
- (C) May result in the release of solid waste constituents or otherwise exacerbate exposures.
- (vii) Grant the department and the jurisdictional health department the right to enter the property at reasonable times for the purpose of evaluating compliance with the environmental covenant, including the right to take samples.
- (i) Landfill closure plan sheets signed by a professional engineer registered in the state of Washington and modified as necessary to represent as built changes to final closure construction for the landfill, or a portion thereof, as approved in the closure plan; and
- (ii) Certification by the owner or operator, and a professional engineer registered in the state of Washington, that the landfill, or a portion thereof has been closed in accordance with the approved closure plan.
- (q) The owner or operator shall record maps and a statement of fact concerning the location of the disposal facility as part of the deed with the county auditor not later than three months after closure.

- (hf) The jurisdictional health department shall will notify the owner or operator, the department, and the financial assurance instrument provider, of the date when the jurisdictional health department has verified that the facility, or a portion thereof, has been closed in accordance with the specifications of the approved closure plan and the closure requirements of this section, at which time the postclosure period shall commences.
- (7) Limited purpose landfills Post-closure requirements. The following post closure requirements apply in full to facilities with limited purpose landfills:
- (a) The owner or operator shall provide post-closure activities to allow for continued facility maintenance and monitoring of air, land, and water for a period of twenty years, or as long as necessary for the landfill to stabilize and to protect human health and the environment. For disposal facilities, post closure care includes at least the following:
- (i) Maintaining the integrity and effectiveness of any final closure cover, including making repairs to the closure cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, maintaining the vegetative cover, and preventing run-on and runoff from eroding or otherwise damaging the final closure cover;

- (ii) General maintenance of the facility and facility structures for their intended use;
- (iii) Monitoring groundwater, surface water, leachate, or other waters in accordance with the requirements of WAC 173-350-500 and the approved monitoring plan, including remedial measures if applicable, and maintaining all monitoring systems;
- (iv) Monitoring landfill gas and maintaining and operating the gas collection and control systems;
- (v) Maintaining, operating, and monitoring hydraulic gradient controls systems if applicable;
  - (vi) Monitoring settlement; and
- (vii) Any other activities deemed appropriate by the jurisdictional health department.
- (b) The owner or operator shall commence post-closure activities for the facility, or portion thereof, after completion of closure activities outlined in subsection (6) of this section. The jurisdictional health department may direct that post-closure activities cease until the owner or operator receives a notice to proceed with postclosure activities.

- (c) The owner or operator shall develop, keep, and abide by a post-closure plan approved by the jurisdictional health department as a part of the permitting process. The post closure plan shall:
- (i) Address facility maintenance and monitoring activities for at least a twenty-year period or until the landfill becomes stabilized (i.e., little or no settlement, gas production or leachate generation), and monitoring of groundwater, surface water, gases and settlement can be safely discontinued; and
- (ii) Project time intervals at which post closure activities are to be implemented, and identify post-closure cost estimates and projected fund withdrawal intervals from the selected financial assurance instrument, where applicable, for the associated post closure costs.
- (d) The owner or operator shall complete post-closure activities for the facility, or portion thereof, in accordance with the approved post closure plan and schedule, or the plan shall be so amended with the approval of the jurisdictional health department. The jurisdictional health department may direct facility post-closure activities, in part or completely, to cease until the post closure plan has been amended and has received written approval by the health department.
- (e) When post-closure activities are complete, the owner or operator shall submit a certification to the jurisdictional health depart

ment, signed by the owner or operator, and a professional engineer registered in the state of Washington stating why post-closure activities are no longer necessary.

- (f) If the jurisdictional health department finds that postclosure monitoring has established that the landfill is stabilized, the health department may authorize the owner or operator to discontinue post-closure maintenance and monitoring activities.
- (g) The jurisdictional health department shall notify the owner or operator, the department, and the financial assurance instrument provider, of the date when the jurisdictional health department has verified that the facility has completed post-closure activities in accordance with the specifications of the approved post closure plan.
- (89) Limited purpose landfills Permit requirements Financial assurance. requirements.
- (a) Financial assurance is required for all limited purpose landfills.
- (b) Each owner or operator shall must establish a financial assurance mechanism in accordance with WAC 173-350-600 that will accumulate funds equal to the closure and post-closure cost estimates over the life of the landfill, or over the life of each landfill unit if closed discretely.

- (c) No owner or operator shall may commence or continue disposal operations in any part of a facility subject to this section until a financial assurance instrument has been provided for closure and postclosure activities in conformance accordance with WAC 173-350-600.
- (910) Limited purpose landfills Permit application contents. The owner or operator shall must obtain a solid waste permit from the jurisdictional health department. All applications for permits shall must be in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and WAC 173-350-715, each application for a permit shall must contain:
- (a) Demonstrations that the facility meets the location standards of subsection  $(\frac{23}{2})$  of this section;
- (b) Documentation that all owners of property located within one thousand feet of the facility property boundary of the landfill as it is proposed to be located in the solid waste permit application have been notified that the proposed facility may impact their ability to construct water supply wells, in accordance with chapter 173-160 WAC, Minimum standards for construction and maintenance of wells;
- (c) Engineering reports, →plans, and specifications that address the  $\frac{\text{design}}{\text{standards}}$  standards of subsections (34) and (5) of this section;

- (d) A construction quality assurance plan that addresses the requirements of subsection (5) of this section;
- (de) A plan of operation meeting the requirements of subsection (46) of this section;
- (ef) Hydrogeologic reports and plans that address the requirements of subsection (57) of this section;
- $(\frac{1}{2})$  A closure plan meeting the requirements of subsection  $(\frac{1}{2})$ of this section;
- (gh) A post-closure plan meeting the requirements of subsection (711) of this section; and
- (hi) Documentation as needed to meet the financial assurance requirements of subsection (89) of this section.
- (10) Limited purpose landfills Construction records. The owner or operator of a limited purpose landfill shall provide copies of the construction record drawings for engineered facilities at the site and a report documenting facility construction, including the results of observations and testing carried out as part of the construction quality assurance plan, to the jurisdictional health department and the department. Facilities shall not commence operation until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report/plans and

specifications and has approved the construction documentation in writing.

## (11) Limited purpose landfills - Post-closure care requirements.

- (a) The owner or operator must conduct post-closure care for as long as necessary for the landfill to become functionally stable. A landfill is functionally stable when it does not present a threat to human health or the environment at the point of exposure for humans or environmental receptors. The point of exposure is identified as the closest location at which a receptor could be exposed to contaminants and receive a dose by a credible pathway from the landfill. Potential threats to human health or the environment are assessed by considering leachate quality and quantity, landfill gas production rate and composition, cover system integrity, and groundwater quality. The postclosure care period may be adjusted under (b) of this subsection. Post-closure care must consist of at least the following:
- (i) Maintaining the integrity and effectiveness of any final cover, including making repairs to the cover as necessary to correct the effects of settlement, subsidence, erosion, maintaining the vegetative cover (including cutting of vegetation when needed) or other events, and preventing run-on and runoff from eroding or otherwise damaging the final cover;

- (ii) Monitoring the groundwater, surface water, leachate, landfill gas, and landfill settlement according to the monitoring plan described in (4)(f) of this section, including any monitoring of remedial measures if applicable, and maintaining all monitoring systems;
- (iii) Maintaining and operating the leachate collection system under (3)(c) of this section, if applicable. The jurisdictional health department may recommend to the department, and the department may, under its authority in chapter 90.48 RCW, Water pollution control, allow the owner or operator to stop managing leachate if the owner or operator demonstrates that leachate no longer poses a threat to human health and the environment;
- (iv) Maintaining and operating the landfill gas collection and control system under (3)(e)(i)(I) and (4)(b)(v) of this section; and
- (v) Maintaining, operating and monitoring hydraulic gradient control systems if applicable;
- (vi) Maintaining the facility and facility structures for their intended uses; and
- (vii) Performing any other activities deemed appropriate by the jurisdictional health department.
- (b) The jurisdictional health department and owner or operator will consider at least the following factors when determining when a

landfill unit is functionally stable or whether to decrease or increase the post-closure care period:

- (i) Leachate. The landfill's production and quality of leachate must have attained a state where maintenance and operation of the leachate collection system can be discontinued without posing a threat to human health or the environment;
- (ii) Landfill gas. The landfill's production and composition of gas must have attained a state where maintenance and operation of the gas collection system can be discontinued while meeting the criteria in (4)(b)(i)(B) of this section and not pose a threat to human health or the environment from methane or non-methane compounds;
- (iii) Settlement and cover integrity. The cover system must attain geotechnical stability for slope and settlement. Vegetation and other erosion controls must prevent exposing waste or otherwise threaten integrity of the cover system. The cover system must have attained a state where no additional care is required to ensure its integrity from settlement or erosion; and
- (iv) Groundwater quality. Groundwater quality must remain in compliance with the performance standards of WAC 173-350-040 at the point of compliance.

- (c) The owner or operator must commence post-closure activities for the facility, or portion thereof, after completion of closure procedures and activities outlined in subsection (8) of this section;
- (d) The owner or operator must develop, keep, and follow a postclosure plan approved by the jurisdictional health department as a part of the permitting process. The post-closure plan must:
- (i) Address facility maintenance and monitoring activities for the duration of the post-closure care period; and
- (ii) Project time intervals at which post-closure activities are to be implemented, and identify post-closure cost estimates and projected fund withdrawal intervals from the selected financial assurance instrument, where applicable, for the associated post-closure costs.
- (e) The owner or operator must complete post-closure activities for the facility, or portion thereof, in accordance with the approved post-closure plan and schedule, or the plan must be so amended with the approval of the jurisdictional health department;
- (f) When post-closure activities are complete, the owner or operator must submit a certification to the jurisdictional health department, signed by the owner or operator, and a professional engineer registered in the state of Washington stating why post-closure activities are no longer necessary;

- (g) If the jurisdictional health department finds that postclosure monitoring has established that the landfill is functionally stable, the health department may authorize the owner or operator to discontinue post-closure maintenance and monitoring activities; and
- (h) The jurisdictional health department must notify the owner or operator, the department, and the financial assurance instrument provider, of the date when the jurisdictional health department has verified that the facility has completed post-closure activities in accordance with the specifications of the approved post-closure plan. [Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-400, filed 1/10/03, effective 2/10/03.]

#### WAC 173-350-410 Inert waste landfills.

(1) Inert waste landfills - Applicability. These standards apply to landfills that receive only the following types of solid waste if the waste has not been tainted, through exposure from chemical, physical, biological, or radiological substances, such that it presents a threat to human health or the environment greater than that inherent to the material:

# (i) Cured concrete;

- (ii) Asphaltic materials;
- (iii) Brick and masonry;
- (iv) Ceramic materials produced from fired clay or porcelain;
- (v) Glass; and
- (vi) Stainless steel and aluminum.

inert wastes, as identified pursuant to WAC 173 350 990, including facilities that use inert wastes as a component of fill.

(2) Inert waste landfills - Permit exemptions. In accordance with RCW 70.95.305, inert waste landfill facilities meeting the terms and conditions of Table 410-A with a total capacity of two hundred fifty cubic yards or less of inert wastes are categorically are exempt from solid waste handling permitting. and other requirements of this section, provided that the inert waste landfill is operated in compliance with the performance standards of WAC 173-350-040. If a facility does not operate in compliance with the terms and conditions established for an exemption under this subsection, the facility may be subject to the permitting requirements for solid waste handling under this chapter. An owner or operator that does not comply with the performance standards of WAC 173-350-040 is required to obtain a permit from the jurisdictional health department, In addition, violations of the terms

and conditions of this subsection and may be subject to the penalty enforcement provisions of RCW 70.95.315.

Table 410-A Terms and Conditions for Solid Waste Permit Exemption

	Waste Material	<u>Volume</u>	Specific Requirements for Activity or Operation
<u>(1)</u>	Inert wastes as listed in WAC 173- 350-410(1)(a) above	250 cubic yards or less	(a) Meet the performance standards of WAC 173-350-040; (b) No notification or reporting requirements.
(2)	Inert wastes as listed in WAC 173- 350-410(1)(a) above	Greater than 250 cubic yards, but no more than 2000 cubic yards	(a) Meet the performance standards of WAC 173-350-040; (b) Manage the operation to prevent the generation of fugitive dust; (c) Allow the department or the jurisdictional health department to inspect the site at reasonable times; (d) Thirty days prior to operation, facilities must submit a notification of intent to operate as a conditionally exempt facility to the jurisdictional health department and the department. Notice of intent must be submitted on a form provided by the department and must be complete; and (e) Prepare and submit an annual report to the department and the jurisdictional health department by April 1st of forms supplied by the department. The annual report must detail the facility's activities during the previous calendar year and must include the following information:  (i) Name and address of the facility; (ii) Calendar year covered by the report; (iii) Annual quantities and types of solid waste landfilled; and (iv) Any additional information required by the department.

- (23) Inert waste landfills Permit requirements Location. standards. All inert waste landfills shall must be located to meet the following requirements. No inert waste landfill's active area shall may be located:
  - (a) On an unstable slope;
  - (b) Closer than ten feet from the facility property line;

- (c) Closer than one hundred thousand feet to an existing drinking water supply well; or
- (d) In a channel migration zone as defined in WAC 173 350 100, or within one hundred feet measured horizontally, of a stream, lake, pond, river, or saltwater body, nor in any wetland. nor any public land that is being used by a public water system for watershed control for municipal drinking water purposes in accordance with WAC 248-54-660(4).
- Inert waste landfills -- Permit requirements Design. standards. Inert waste landfills must be designed so that the facility can be operated to meet the performance standards of WAC 173-350-040. The owner or operator of an inert waste landfill shall must prepare engineering reports/plans and specifications to address the design standards of this subsection. The existing site topography, including the location and approximate thickness and nature of any existing waste, the vertical and horizontal limits of excavation and waste placement, final closure elevation and grades, and the design capacity of each landfill unit, total design capacity, and future use of the facility after closure, shall must be included. Inert waste landfills shall must be designed and constructed to:

- (a) Ensure that all waste is above the seasonal high level of groundwater. For the purpose of this section, groundwater includes any water-bearing unit which is horizontally and vertically extensive, hydraulically recharged, and volumetrically significant;
  - (b) Maintain a stable site; and
- (c) Manage surface water, including run-on prevention and runoff conveyance, storage, and treatment, to protect the waters of the state; and
- (d) Provide controls to limit public access and prevent unauthorized vehicular traffic and illegal dumping of wastes by use of artificial barriers, natural barriers, or both, as appropriate to protect human health and the environment. A lockable gate is required at each entry to the landfill.
  - (5) Inert waste landfills Permit requirements Documentation.
- (a) The owner or operator must submit construction documents for, at a minimum, any elements of the landfill described in (4) of this section to the jurisdictional health department for review and approval. The construction documents must be prepared by a professional engineer registered in the state of Washington, and must include:
- (i) An engineering report that presents the design basis and calculations for the engineered features of the facility including any

run-on/runoff controls, impoundments, storm water management features, and emission control features as required by the permitting air authority where applicable. The engineering report must demonstrate that the proposed design will meet the performance standards of this chapter;

- (ii) Scale drawings of the facility including the location and size of waste storage and disposal areas, fixed equipment, buildings, storm water management features where applicable, access roads, traffic patterns, and other constructed areas and buildings integral to facility operation;
- (iii) Design specifications for the engineered features of the facility including any run-on/runoff controls, impoundments, stormwater management features, and aeration and emission management features as required by a permitting air authority where applicable; and
- (iv) A construction quality assurance plan that describes monitoring, testing, and documentation procedures that will be performed during construction of the facility to ensure the facility is constructed in accordance with the approved design.
- (b) The owner or operator of an inert waste landfill must provide copies of the construction record drawings for engineered features at the facility and a report documenting facility construction, including

the results of observations and testing carried out as part of the construction quality assurance plan, to the jurisdictional health department and the department. The owner or operator must not commence operation in a newly-constructed portion of the facility until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report/plans and specifications and has approved the construction documentation in writing.

- (46) Inert waste landfills -- Permit requirements Operating. standards. The owner or operator of an inert waste landfill shallmust:
- (a) Operate the facility in compliance with the performance standards of WAC 173-350-040 and this subsection. In addition, the owner or operator must develop, keep, and follow a plan of operation approved as part of the permitting process. The plan must describe the facility's operation and convey to site operating personnel the concept of operation intended by the designer. The plan of operation must be available for inspection at the request of the jurisdictional health department. If necessary, the plan may be modified with the approval, or at the direction, of the jurisdictional health department. Each plan of operation must include the following:

- (i) A description of the types of solid waste to be handled at the facility;
- (ii) A description of the procedures used to unsure that dangerous waste and other unacceptable waste are not accepted at the facility;
- (iii) A description of how waste materials are to be handled onsite, including tipping procedures, routine filling and grading, maximum site capacity, and equipment used;
- (iv) A description of how the owner or operator will ensure the facility is operated in a way to:
  - (A) Control litter and dust;
  - (B) Control runoff;
  - (C) Prevent unstable conditions during landfilling; and
- (D) Control unauthorized vehicular traffic and prevent illegal dumping.
- (v) A description of how equipment, structures, run-on/runoff controls, and other systems are to be inspected and maintained, including the frequency of inspection and inspections logs. to:
- (i) Control public access and prevent unauthorized vehicular traffic and illegal dumping of wastes;

- (ii) Implement a program at the facility capable of detecting and preventing noninert wastes from being accepted or mixed with inert waste;
- (iii) Handle all inert waste in a manner that is in compliance with the performance standards of WAC 173-350-040;
- (iv) Handle all inert waste in a manner that controls fugitive dust and is protective of waters of the state; and
  - (v) Prevent unstable conditions resulting from their activities;
- (b) Inspect and maintain the facility to prevent malfunctions and deterioration, operator errors and discharges that may cause a threat to human health. The iInspections shall must be as needed, but at least weekly, to ensure meeting operational standards, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process;
- (evi) A description of how operators will mMaintain daily operating records of the quantities—amounts (weight or volume) and types of inert waste received, including the form or computer printout used to records this information. Facility annual reports must be maintained in the operating record. disposed. In addition, record and retain information that documents that all wastes landfilled meet the criteria for inert waste. Facility inspection reports shall must be maintained

in the operating record, including at least the date of inspection, the name and signature of the inspector, a notation of observations made, and the date and nature of any needed repairs or remedial action. Significant deviations from the plan of operation shall must be noted in the operating record. Records shall must be maintained kept for minimum of five years and shall must be available upon request by the jurisdictional health department;

(vii) Safety and emergency plans; and

(viii) Other details to demonstrate that the facility will meet the requirements of this subsection and as required by the jurisdictional health department.

- (db) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall detail the facility's activities during the previous calendar year and shall must include the following information:
  - (i) Name and address of the facility;
  - (ii) Calendar year covered by the report;
- (iii) Annual quantity quantities and types of waste received; and disposed in tons or cubic yards with an estimate of density in pounds per cubic yard; and

- (iv) Any additional information required by the jurisdictional health department as a condition of the permit ...
- (e) Develop, keep, and abide by a plan of operation approved as part of the permitting process. The plan shall describe the facility's operation and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include:
- (i) A description of the types of solid waste to be handled at the facility;
- (ii) A description of how solid wastes are to be handled on-site during its active life including:
  - (A) Acceptance criteria that will be applied to the waste;
- (B) Procedures for ensuring only the waste described will be ac-<del>cepted;</del>
  - (C) Procedures for handling unacceptable wastes; and
  - (D) Procedures for transporting and routine filling and grading;

- (iii) A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspection and inspection logs;
  - (iv) Safety and emergency plans;
  - (v) The forms used to record weights and volumes; and
- (vi) Other such details to demonstrate that the facility will meet the requirements of this subsection and as required by the jurisdictional health department.
- (57) Inert waste landfills -- Permit requirements Groundwater monitoring standards. There are no specific groundwater monitoring requirements for inert waste landfills subject to this chapter; however, inert waste landfills must meet the requirements provided under performance standards of WAC  $173-350-040\frac{(5)}{(5)}$ .
- (6) Inert waste landfills -- Permit requirements Closure. requirements. The owner or operator of an inert waste landfill shallmust develop, keep, and follow a closure plan that includes:
- (a) Notify Notification to the jurisdictional health department sixty days in advance of closure of the facility;
- (b) Close Closure of the inert waste landfill unit by leveling the wastes to the extent practicable, or as appropriate for the pro-

posed future use, and fill all voids which could pose a physical threat for persons, or which provide disease vector harborages...;

- (c) Closure of The inert waste landfills shall be closed in a manner that will to control fugitive dust and protect the waters of the state; and
- (ed) Recording of maps and a statement of fact concerning the location of the landfill as part of the deed with the county auditor not later than three months after closure.
- surance requirements. There are no specific financial assurance requirements for inert waste landfills subject to this chapter; however, inert waste landfills must meet the requirements provided underperformance standards of WAC 173-350-040(5).
- (810) Inert waste landfills Permit application contents. The owner or operator shall must obtain a solid waste permit from the jurisdictional health department. All applications for permits shall be submitted in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and WAC 173-350-715, each application for a permit shall contain:
- (a) Engineering reports/plans and specifications that address the design standards of subsections (4) and (5)—(3) of this section;

- (b) A plan of operation that meets the requirements of subsection (46) of this section; and
- (c) A closure plan that meets the requirements of subsection (8) of this section; and
- (ed) Documentation that all owners of property located within one thousand feet of the facility property boundary of the landfill as it is proposed to be located in the solid waste permit application have been notified that the proposed facility may impact their ability to construct water supply wells, in accordance with chapter 173-160 WAC, Minimum standards for construction and maintenance of wells. [Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24),

WAC 173-350-490 Other methods of solid waste handling.

§ 173-350-410, filed 1/10/03, effective 2/10/03.]

-(1) Other methods of solid waste handling - Applicability. This section applies These standards apply to other methods of solid waste handling not specifically identified elsewhere in this regulation, nor excluded from this regulation.

- (2) Other methods of solid waste handling Permit rRequirements. Owners and operators of solid waste handling facilities subject to this section shallmust:
- (a) Comply with the requirements inperformance standards of WAC 173-350-040; and
- (b) Obtain a permit in accordance with the provisions of WAC 173-350-700 from the jurisdictional health department. Permit applications shall must be submitted in accordance with the provisions of WAC 173-350-710 and shall must include information required in WAC 173-350-715, and any other information as may be required by the jurisdictional health department.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-490, filed 1/10/03, effective 2/10/03.]

### WAC 173-350-500 Groundwater monitoring.

- (1) Groundwater monitoring General provisions. Professional qualifications.
- (a) Applicability. This section applies to limited purpose land-fills subject to WAC 173-350-400 and surface impoundments that do not have a leak detection layer subject to WAC 173-350-330. Subsections

- (1), (3), (4) and (5) apply to all such facilities, and subsection (2) applies to WAC 173-350-400 limited purpose landfills only.
- (b) Jurisdictional health departments are responsible for regulation of groundwater monitoring at landfills and other solid waste handling facilities they permit, except in instances where responsibility is shared with the department.
- (c) All reports, plans, procedures, and design specifications required by this section shall must be prepared by a licensed professional in accordance with the requirements of chapter 18.220 RCW, Geologists.
- (2) Groundwater monitoring Site characterization for landfill sites. A site proposed for limited purpose landfill solid waste activities subject to WAC 173-350-400 must shall be characterized for its geologic and hydrogeologic properties and suitability for constructing, operating, and monitoring a solid wastethe facility in accordance with all applicable requirements of this chapter. The site characterization report shall must be submitted with the permit application and shall must include at a minimum the following:
- (a) A summary of local and regional geology and hydrology, including:
  - (i) Faults;

- (ii) Zones of joint concentrations Joints and fractures;
- (iii) Unstable slopes and subsidence areas on-site;
- (iv) Areas of groundwater recharge and discharge;
- (v) Stratigraphy; and
- (vi) Erosional and depositional environments. and facies interpretation(s);
- (b) A site-specific borehole program including that includes a description of lithology, soil/bedrock types and properties, preferential groundwater flow paths or zones of higher hydraulic conductivity, the presence of confining unit(s) and geologic features such as fault zones, cross-cutting structures, etc., and the target hydrostratigraphic unit(s) to be monitored, and other relevant information. All procedures conducted must follow current applicable ASTM procedures. A list of procedures that were followed must be identified in subsequent report(s). Requirements of the borehole program include:
- (i) Each boring will be of sufficient depth below the proposed grade of the bottom liner to identify soil, bedrock, and hydrostratigraphic unit(s);
- (ii) Boring samples shall must be collected from five-foot intervals at a minimum and at changes in lithology. Representative samples

- shall must be described using the unified soil classification system; following ASTM D2487-85 and tested for the following, if appropriate:
- (A) Particle size distribution by sieve and hydrometer analyses; in accordance with approved ASTM methods (D422 and D1120); and
  - (B) Atterburg limits; following approved ASTM method D4318; (iii) Each lithologic unit on site will be analyzed for:
- (AC) Moisture content sufficient to characterize the unit; using ASTM method D2216; and
- (D) Shear strength and consolidation testing on soft or potentially weak layers, for use in stability and settlement analyses; and
- (BE) Hydraulic conductivity by an in-situ field method or laboratory method. All samples collected for the determination of permeability shall be collected by standard ASTM procedures;
- (iviii) All boring logs shall must be submitted with the following information:
  - (A) Soil and rock descriptions and classifications;
  - (B) Method of sampling;
  - (C) Sample depth, interval and recovery;
  - (D) Date of boring;
  - (E) Water level measurements;

- (F) Standard penetration number; following approved ASTM method D1586-67;
  - (G) Boring location; and
  - (H) Soil test data (in report text or on log).÷
- (iv) All borings not converted to monitoring wells or piezometers shall be carefully backfilled, plugged, and recorded in accordance with WAC 173-160-420;
- $(v_{\pm})$  During the borehole drilling program, any on-site drilling and lithologic unit identification shall must be performed under the direction of a licensed professional in accordance with the requirements of chapter 18.220 RCW, Geologists, who is trained to sample and identify soils and bedrock lithology;
- (vii) An on-site horizontal and vertical reference datum shall must be established during the site characterization. The standards for land boundary surveys and geodetic control surveys and guidelines for the preparation of land descriptions shall must be used to establish borehole and monitoring well coordinates and casing elevations from the reference datum; and
- $(vii\frac{1}{2})$  Other methods, including geophysical techniques, may be used to supplement the borehole program to ensure that a sufficient hydrogeologic site characterization is accomplished +.

- (c) A site-specific flow path analysis that includes:
- (i) The depths to groundwater and hydrostratigraphic unit(s) including transmissive and confining units; and
- (ii) Potentiometric surface elevations and contour maps, direction and rate of horizontal and vertical groundwater flow.
- (d) Identification of the quantity, location, and construction (where available) of private and public wells within a two thousandfoot radius, measured from the edge of the solid waste handling unit<del>site boundaries</del>;
- (e) Tabulation of all water rights for groundwater and surface water within a two thousand-foot (610 m) radius, measured from site boundaries;
- (f) Identification and description of all surface waters within a one-mile (1.6 km) radius, measured from the edge of the solid waste handling unitsite boundaries;
- (g) A summary of all previously collected site groundwater and surface water analytical data, and for expanded facilities, identification of impacts of the existing facility upon ground and surface waters from landfill leachate discharges to date;
  - (h) Calculation of a site water balance;

- (i) Conceptual design of groundwater and surface water monitoring systems, and where applicable surface water and a vadose zone monitoring systems, including proposed construction and installation methods for these systems;
- (j) Description of land use in the area, including nearby residences;
- (k) A topographic map of the site and drainage patterns, including an outline of the waste management areasolid waste handling unit, property boundary, the proposed location of groundwater monitoring wells, and township and range designations; and
  - (1) Geologic cross sections.
  - (3) Groundwater monitoring System design.
- (a) The groundwater monitoring system design and report shall must be submitted with the permit application and shall must meet the following criteria:
- (i) A sufficient number of monitoring wells shall must be installed at appropriate locations and depths to yield representative groundwater samples from those hydrostratigraphic units which have been identified in theduring site characterization as the earliest potential contaminant flowpaths;

- (ii) Represent the quality of groundwater at the point of compliance, and include at a minimum:
- (A) A groundwater flow path analysis which supports why the chosen hydrostratigraphic unit is capable of providing an early warning detection of any groundwater contamination-;
- (B) Documentation and calculations of all of the following information:
- (I) Hydrostratigraphic unit thickness including confining units and transmissive units;
- (II) Vertical and horizontal groundwater flow directions including seasonal, man-made, or other short-term fluctuations in groundwater flow;
  - (III) Stratigraphy and lithology;
  - (IV) Hydraulic conductivity; and
  - (V) Porosity and effective porosity.
- (b) Upgradient monitoring wells (background wells) shall must meet the following performance criteria:
- (i) Shall Must be installed in groundwater that has not been affected by leakage from a landfill solid waste handling unit; or
- (ii) If hydrogeologic conditions do not allow for the determination of an upgradient monitoring well, then sampling at other monitor-

ing wells which provide representative background groundwater quality may be allowed.

- (c) Downgradient monitoring wells (compliance wells) shall must meet the following performance criteria:
- (i) Represent the quality of groundwater at the point of compliance;
- (ii) Be installed as close as practical to the point of compliance; and
- (iii) When physical obstacles preclude installation of groundwater monitoring wells at the relevant point of compliance, at the landfill unit or solid waste facility, the downgradient monitoring system may be installed at the closest practical distance hydraulically downgradient from the relevant point of compliance that ensures detection of groundwater contamination in the chosen hydrostratigraphic unit.
- (d) All monitoring wells shall must be constructed in accordance with chapter 173-160 WAC, Minimum standards for construction and maintenance of wells, and chapter 173-162 WAC, Regulation and licensing of well contractors and operators.
- (e) The owner or operator shall must notify the jurisdictional health department and the department of any proposed changes to the design, installation, development, and decommission of any monitoring

wells, piezometers, and other measurement, sampling, and analytical devices. Proposed changes shall must not be implemented prior to the jurisdictional health department's written approval. Upon completing changes, all documentation, including date of change, new monitoring well location maps, boring logs, and monitoring well diagrams, shall must be submitted to the jurisdictional health department and shall must be placed in the operating record.

(f) All monitoring wells, piezometers, and other measurement, sampling, and analytical devices shall must be operated and maintained so that they perform to design specifications throughout the life of the monitoring program.

## (4) Groundwater monitoring - Sampling and analysis plan.

(a) The groundwater monitoring program shall must include consistent sampling and analysis procedures that are designed to provide monitoring results that are representative of groundwater quality at the upgradient and downgradientwithin site monitoring wells. In addition to monitoring wells, facilities with hydraulic gradient control and/or leak detection systems will provide representative groundwater samples from those systems. The owner or operator shall must submit a compliance sampling and analysis plan as part of the permit application. The plan shall must include procedures and techniques for:

- (i) Sample collection and handling;
- (ii) Sample preservation and shipment;
- (iii) Analytical constituents and procedures;
- (iv) Chain-of-custody control;
- (v) Quality assurance and quality control;
- (vi) Decontamination of drilling and sampling equipment;
- (vii) Procedures to ensure employee health and safety during well installation and monitoring; and
  - (viii) Well operation and maintenance procedures-; and
  - (ix) Statistical analysis methods.
- (b) Facilities collecting leachate shall must include leachate sampling and analysis as part of compliance monitoring the plan in (a) of this subsection.
- (c) The groundwater monitoring program shall must include sampling and analytical methods that are appropriate for groundwater samples. The sampling and analytical methods shall must provide sufficient sensitivity, precision, selectivity and limited bias such so that changes in groundwater quality can be detected and quantified. All samples shall must be sent to an accredited laboratory for analyses in accordance with chapter 173-50 WAC, Accreditation of environmental laboratories.

- (d) Groundwater elevations shall must be measured in each monitoring well immediately prior to sampling purging, each time groundwater is sampled. The owner or operator shall must determine the rate and direction of groundwater flow each time groundwater is sampled. All groundwater elevations shall must be determined by a method that ensures measurement to the one hundredth of a foot (3 mm) relative to the top of the well casing.
- (e) Groundwater elevations in monitored wells that monitor the same landfill unit shallmust be measured within a period of time short enough to avoid any groundwater fluctuations which could preclude the accurate determination of groundwater flow rate and direction.
- (f) The owner or operator shall must establish background groundwater quality in each all upgradient and downgradient monitoring wells, and all future downgradient monitoring wells at landfill sites where waste has not yet been deposited. Background groundwater quality shall must be based upon a minimum of eight independent samples. Samples shall must be collected for each monitoring well and shall must be analyzed for parameters required in the permit for the first year of groundwater monitoring. Each independent sampling event shall must be no less later than one month after the previous sampling event.

- (g) Groundwater quality shall must be determined at each monitoring well at least quarterly during the active life of the solid waste facilitylandfill or impoundment, including closure and the postclosure period. More frequent monitoring may be required to protect downgradient water supply wells. Groundwater monitoring shall must begin after background groundwater quality has been established. Laboratory analysis methods must have sufficiently low detection limits, when practical, to determine whether constituent concentrations exceed chapter 173-200 WAC, Water quality standards for groundwaters of the state of Washington, criteria. The owner or operator may propose an alternate groundwater monitoring frequency...; however, gGroundwater monitoring frequency must be no less than semiannually. The owner or operator must apply for a permit modification or must apply during the renewal process for changes in groundwater monitoring frequency making a demonstration based on the following information:
- (i) A characterization of the hydrostratigraphic unit(s) including the unsaturated zone, transmissive and confining units and include the following:
  - (A) Hydraulic conductivity; and
  - (B) Groundwater flow rates<del>;</del>.

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(ii) Minimum distance between upgradient edge of the solid waste
landfill and/or the impoundmenthandling unit and downgradient monitor-
ing wells (minimum distance of travel); and
     (iii) Contaminant fate and transport characteristics.
     (h) All facilities shall must test for the following parameters:
     (i) Field parameters:
     (A) pH;
     (B) Specific conductance;
     (C) Temperature; and
     (D) Static water level<del>;</del>.
     (ii) Geochemical indicator parameters:
     (A) Alkalinity (as Ca CO<sub>3</sub>);
     (B) Bicarbonate (HCO3);
     (C) Dissolved cCalcium (Ca);
     (D) Chloride (Cl);
     (E) Total and dissolved i#ron (Fe);
     (F) Total and dissolved mMagnesium (Mg);
     (G) Total and dissolved mManganese (Mn);
     (H) Nitrate(NO₃);
     (I) Dissolved potassium;
     (±J) Dissolved sSodium (Na); and
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- (JK) Sulfate  $(SO_4)$ .
- (iii) Leachate indicators:
- (A) Ammonia  $(NH_3-N)$ ;
- (B) Total organic carbon (TOC); and
- (C) Total dissolved solids (TDS).
- (i) If other pertinent constituents are identified bBased upon the site specific waste profile and/or also the leachate characteristics for lined facilities, if tested, the owner or operator shall must propose those additional constituents to include in the monitoring program. The jurisdictional health department shall will specify the additional constituents in the solid waste permit.
- (j) Testing shall at landfills must be performed in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," U.S. EPA Publication SW-846, or other testing methods approved by the jurisdictional health department.
- (k) Maximum contaminant levels (MCL) for groundwater are those specified in chapter 173-200 WAC, Water quality standards for groundwaters of the state of Washington.
- (5) Groundwater monitoring Data analysis, notification and reporting.

- (a) The results of monitoring well sample analyses as required by subsections (4)(h) and (i) of this section shall must be evaluated using an appropriate statistical procedure(s), as approved by the jurisdictional health department. Statistical procedure(s) used must be proposed in the sampling and analysis plan, and must be capable of determining whether during the permitting process, to determine if a significant increase over background has occurred. Selection of parameters undergoing statistical analysis, as specified in the solid waste permit, must be based on site-specific leachate analyses, synthetic precipitation leaching procedure (SPLP) results, or toxicity characteristic leaching procedure (TCLP) results, if available, and typically at least include pH, specific conductance, chloride, iron, manganese, nitrate, sulfate, ammonia, and total dissolved solids. The statistical procedure(s) used shall be proposed in the sampling and analysis plan and be designed specifically for the intended site, or prescriptive statistical procedures from appropriate state and federal guidance may be used.
- (b) If statistical analyses determine a significant increase over background:
  - (i) The owner or operator shallmust:

- (A) Notify the jurisdictional health department and the department of this finding within thirty days of receipt of the sampling data. The notification shall must indicate what parameters or constituents have shown statistically significant increases;
- (B) Immediately resample the groundwater for the Within thirty days, resample parameter(s) showing statistically significant increase(s) in the monitoring well(s) where the statistically significant increase has occurred; and
- (C) Establish a groundwater protection standard using based on the groundwater quality criteria of chapter 173-200 WAC, Water quality standards for groundwaters of the state of Washington. If the background concentration level established in the facility's monitoring record for a constituent is greater than the numeric criterion for the constituent in chapter 173-200 WAC, Water quality standards for the state of Washington, the owner or operator must use the background concentration as the protection standard; Constituents for which the background concentration level is higher than the protection standard, the owner or operator shall use background concentration for constituents established in the facility's monitoring record.
- (ii) The owner or operator may demonstrate that a source other than a landfill unit or solid waste facilitysurface impoundment caused

the contamination, or the statistically significant increase resulted from error in sampling, analyses, statistical evaluation, or natural variation in groundwater quality. If such a demonstration cannot be made and the concentrations or levels of the constituents exceed the criteria established by chapter 173-200 WAC, Water quality standards for groundwaters of the state of Washington, the owner or operator must:

- (A) Meet the criteria established by chapter 173-200 WAC, Water quality standards for groundwaters of the state of Washington, the owner or operator shall:
  - (I) Assess and evaluate sources of contamination; and
- (II) Implement remedial measures in consultation with the juris dictional health department and the department.
- (B) Exceed the criteria established by chapter 173-200 WAC, Water quality standards for groundwaters of the state of Washington, the owner or operator shall:
- $(\pm A)$  Characterize the chemical composition of the release and the contaminant fate and transport characteristics by installing additional monitoring wells;

- (<del>IIB</del>) Assess and, if necessary, implement appropriate intermediate measures to remedy the release. The measures shall must be approved by the jurisdictional health department and the department; and
- (IIIC) Evaluate, select, and implement remedial actions in accordance with measures as required by chapter 173-340 WAC, the Model Toxics - toxics - Control - Control - Cleanup . Act - cleanup - regulation , where applicable. The roles of the jurisdictional health department and the department in remedial action are further defined by WAC 173-350-900.
- (c) The owner or operator shall must submit a copy of an annual report to the jurisdictional health department and the department by April 1st of each year. However, The jurisdictional health department may require more frequent reporting may be required. Reports may be submitted to the department in either digital format or hard copy. based on the results of groundwater monitoring. The annual report shall must summarize and interpret the following information:
- (i) All groundwater monitoring data, including laboratory and field data for the sampling periods;
- (ii) Statistical results and/or any statistical trends including findings of any statistical increases for any the year time/concentration series plots;

- (iii) A summary of concentrations above the maximum contaminant levels of chapter 173-200 WAC, Water quality standards for groundwaters of the state of Washington;
- (iv) Static water level readings for each monitoring well for each sampling event;
- (v) Potentiometric surface elevation maps depicting groundwater flow rate and direction for each sampling event, noting any trends or changes during the year;
- (vi) Groundwater flow velocity calculations for each sampling event, and a discussion of any trends or changes during the year;
- (vii) Geochemical evaluation including cation-anion balancing and trilinear and/or stiff diagraming for each sampling event noting any changes or trends in water chemistry for each well during the year; and
- (viii) Leachate, hydraulic gradient control and/or leak detection system results, if applicable, analyses where appropriate for each sampling event.
- (d) All groundwater monitoring data must be submitted consistent with procedures specified by the department. Unless otherwise specified by the department, all groundwater monitoring data for the previous year must be submitted by April 1st of each year in an electronic

form capable of being transferred into the department's data management system.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-500, filed 1/10/03, effective 2/10/03.]

WAC 173-350-600 Financial assurance requirements.

- (1) Financial assurance requirements Applicability.
- (a) This section is applicable to:
- (ai) Waste tires storage facilities regulated undersubject to WAC 173-350-350;
- (bii) Moderate risk waste facilities storing more than nine thousand gallons of MRW on-site, excluding used oil, subject to regulated under WAC 173-350-360; and
- (ciii) Limited purpose landfills regulated undersubject to WAC 173-350-400.
- (2) Financial assurance requirements Definitions. For the purposes of this section, the following definitions apply:
- (a) Public facility means a publicly or privately owned facility that accepts solid waste generated by other persons.

- (b) Private facility means a privately owned facility maintained on private property solely for the purpose of managing waste generated by the entity owning the site.
- (32) Financial assurance requirements Instrument options. Financial assurance options are available, based on facility type as defined specified in WAC 173-350-600(23), ownership and permittee. Contents of all instruments must be acceptable to the jurisdictional health department. The following instrument options exist:
- (a) Reserve accounts consisting of cash that are managed as either:(i) Cash and investments accumulated and in a reserve fund restricted for the purpose of activities identified in the closure or post-closure care; plans, with the equivalent amount of fund balance reserved in the fund; or
- (iib) Cash and investments in a trust fund held in a nonexpendable trust fund.(b) Trust funds to receive, manage, and disburse funds for activities identified in the approved closure and post-closure plans. Trust funds shall must be established with an entity that has authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency-;
- (c) Surety bond(s) issued by a surety company listed as acceptable in Circular 570 of the United States Treasury Department. A

standby trust fund for closure or post-closure shall must also be established by the owner or operator to receive any funds that may be paid by the operator or surety company. The surety shall must become liable for the bond obligation if the owner or operator fails to perform as guaranteed by the bond. The surety may not cancel the bond until at least one hundred twenty days after the owner or operator, the jurisdictional health department, and the department have received notice of cancellation. If the owner or operator has not provided alternate financial assurance acceptable under this section within ninety days of the cancellation notice, the surety shall must pay the amount of the bond into the standby closure or post-closure trust account. The following types of surety bonds are options:

- (i) Surety bond; or
- (ii) Surety bond guaranteeing that the owner or operator will perform final closure or post-closure activities.
- (d) Irrevocable letter of credit issued by an entity which that has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by a federal or state agency. Standby trust funds for closure and post-closure shall must also be established by the owner or operator to receive any funds deposited by the issuing institution resulting from a draw on the letter of credit.

The letter of credit shall must be irrevocable and issued for a period of at least one year, and automatically renewed annually, unless the issuing institution notifies the owner or operator, the jurisdictional health department, and the department at least one hundred twenty days before the current expiration date. If the owner or operator fails to perform activities according to the closure or post-closure plan and permit requirements, or if the owner or operator fails to provide alternate financial assurance acceptable to the jurisdictional health department within ninety days after notification that the letter of credit will not be extended, the jurisdictional health department may require that the financial institution provide the funds from the letter of credit to the jurisdictional health department to be used to complete the required closure and post-closure activities;

- (e) Insurance policies issued by an insurer who is licensed to transact the business of insurance or is eligible as an excess or surplus line insurer in one or more states, the content of whichand meeting the following:
- (i) Guarantees that the funds will be available to complete those activities identified in the approved closure or post-closure plans;
- (ii) Guarantees that the insurer will be responsible for paying out funds for those activities;

- (iii) Provides that the insurance is automatically renewable and that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium;
- (iv) Provides that if there is a failure to pay the premium, the insurer may not terminate the policy until at least one hundred twenty days after the notice of cancellation has been received by the owner or operator, the jurisdictional health department and the department;
- (v) Provides that termination of the policy may not occur and the policy shall must remain in full force and effect if:
- (A) The jurisdictional health department determines the facility has been abandoned;
- (B) Closure has been ordered by the jurisdictional health department or a court of competent jurisdiction;
- (C) The owner or operator has been named as debtor in a voluntary or involuntary proceeding under Title 11 U.S.C., Bankruptcy; or
  - (D) The premium due is paid.
- (vi) The owner or operator is required to maintain the policy in full force and until an alternative financial assurance guarantee is provided or when the jurisdictional health department has verified that closure, and/or post-closure, as appropriate, have been completed in accordance with the approved closure or post-closure plan; and

- (vii) For purposes of this rule, "captive" insurance companies as defined in WAC 173-350-100, are not an acceptable insurance company.
- (f) Financial Test/corporate guarantee allows for a private corporation meeting the financial test to provide a corporate guarantee those activities identified in the closure and post-closure plans will be completed-;
- (i) To qualify, a private corporation owner or operator shall meet the criteria of either option A or B:
- (A) Option A to pass the financial test under this option the private corporation shall must have:
- (I) Two of the following three ratios: A ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; or a ratio of current assets to current liabilities greater than 1.5;
- (II) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates;
  - (III) Tangible net worth of at least ten million dollars; and
- (IV) Assets in the United States amounting to at least ninety percent of its total assets or at least six times the sum of the current closure and post-closure cost estimates.

- (B) Option B to pass this alternative financial test, the private corporation shall must have:
- (I) A current rating of AAA, AA, A, or BBB as issued by Standard and Poor's or AaaAAA, AaAA, A, or Baa as issued by Moody's;
- (II) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates;
  - (III) Tangible net worth of at least ten million dollars; and
- (IV) Assets in the United States amounting to at least ninety percent of its total assets or at least six times the sum of the current closure and post-closure cost estimates.
- (ii) The owner or operator's chief financial officer shall must provide a corporate guarantee that the corporation passes the financial test at the time the closure plan is filed. This corporate quarantee shall must be reconfirmed annually ninety days after the end of the corporation's fiscal year by submitting to the jurisdictional health department a letter signed by the chief financial officer that:
- (A) Provides the information necessary to document that the owner or operator passes the financial test;
- (B) Guarantees that the funds to finance closure and post-closure activities according to the closure or post-closure plan and permit requirements are available;

- (C) Guarantees that closure and post-closure activities will be completed according to the closure or post-closure plan and permit requirements;
- (D) Guarantees that within thirty days if written notification is received from the jurisdictional health department that the owner or operator no longer meets the criteria of the financial test, the owner or operator shall must provide an alternative form of financial assurance consistent with the requirements of this section;
- (E) Guarantees that the owner or operator's chief financial officer will notify in writing the jurisdictional health department and the department within fifteen days any time that the owner or operator no longer meets the criteria of the financial test or is named as debtor in a voluntary or involuntary proceeding under Title 11 U.S.C., Bankruptcy;
- (F) Acknowledges that the corporate guarantee is a binding obligation on the corporation and that the chief financial officer has the authority to bind the corporation to the guarantee;
- (G) Attaches a copy of the independent certified public accountant's report on examination of the owner or operator's financial statements for the latest completed fiscal year; and

- (H) Attaches a special report from the owner or operator's independent certified public accountant (CPA) stating that the CPA has reviewed the information in the letter from the owner or operator's chief financial officer and has determined that the information is true and accurate.
- (iii) The jurisdictional health department may, based on a reasonable belief that the owner or operator no longer meets the criteria of the financial test, require reports of the financial condition at any time in addition to the annual report. The jurisdictional health department will specify the information required in the report. If the jurisdictional health department finds, on the basis of such the reports or other information, that the owner or operator no longer meets the criteria of the financial test, the owner or operator shall must provide an alternative form of financial assurance consistent with the requirements of this section, within thirty days after notification by the jurisdictional health department.
- (iv) If the owner or operator fails to perform final closure and, where required, provide post-closure care of a facility covered by the guarantee in accordance with the approved closure and post-closure plans, the guarantor will be required to complete the appropriate activities.

- (v) The quarantee will remain in force unless the quarantor sends notice of cancellation by certified mail to the owner or operator, the jurisdictional health department, and the department. Cancellation may not occur, however, during the one hundred twenty days beginning on the date of receipt of the notice of cancellation by the owner or operator, the jurisdictional health department, and the department.
- (vi) If the owner or operator fails to provide alternate financial assurance as specified in this section and obtain the written approval of such alternate assurance from the jurisdictional health department within ninety days after receipt of a notice of cancellation of the guarantee from the guarantor, the guarantor will provide such alternative financial assurance in the name of the owner or operator.
- (43) Financial assurance requirements Eligible financial assurance instruments. The financial assurance instruments identified in subsection (32) of this section are available for use based on facility category and whether the permittee is a public or private entity as follows:
- (a) For a public facility, as defined in subsection (2) of this section, when the permittee is a public entity, the following options are available:
  - (i) Reserve account;

- (ii) Trust accountfund;
- (iii) Surety bond (payment or performance); or
- (iv) Insurance<del>;</del>.
- (b) For a public facility, when as defined in subsection (2) of this section, where the permittee is a private entity, the following options are available:
  - (i) Trust accountfund;
  - (ii) Surety bond (payment or performance);
  - (iii) Letter of credit; or
  - (iv) Insurance<del>;</del>.
- (c) For private facilities, as defined in subsection (2) of this section, the following options are available:
  - (i) Trust accountfund;
  - (ii) Surety bond (payment or performance);
  - (iii) Letter of credit;
  - (iv) Insurance; or
  - (v) Financial test/corporate guarantee.
- (54) Financial assurance requirements Cost estimate for closure. The owner or operator shallmust:
- (a) Prepare a detailed written closure cost estimate as part of the facility closure plan. The closure cost estimate shallmust:

- (i) Be stated in current dollars and represent the cost of closing the facility; (ii) Provide a detailed written estimate, in current dollars, of the cost of hiring a third party under a contract subject to chapter 39.12 RCW, Prevailing wages on public works, to close the facility at any time during the active life when the extent and manner of its operation would make closure the most expensive in accordance with the approved closure plan;
- (iii) Project a schedule intervals for withdrawal of closure funds from the closure financial assurance instrument to complete the activities identified in the approved closure plan; and
- (iviii) Not use any sale value of salvage, equipment, or property or land to offset or reduce the estimated costs of activities conducted in compliance with the approved closure plan. reduce by allowance for salvage value of equipment, solid waste, or the resale value of property or land;
- (b) Prepare a new closure cost estimate in accordance with (a) of this subsection whenever:
- (i) Changes in plans of operation operating plans or facility design affect the closure plan; or
- (ii) There is a change in the expected year of closure that affects the closure plan+.

- (c) Review the closure cost estimate annually. by March 1st of each calendar year. The review shall must be submitted to the jurisdictional health department, with a copy to the department, by April 1st of each calendar year stating that the review was completed and the findings of the review. The review will examine all factors, including inflation, involved in estimating the closure cost. Any cost changes shall must be factored into a revised closure cost estimate and submitted the revised cost estimate to the jurisdictional health department for review and approval. The jurisdictional health department shall must evaluate each cost estimate for completeness, and may accept, or require a revision of the cost estimate in accordance with its evaluation. If the jurisdictional health department approves a change in the closure cost estimate, the financial assurance instrument must be revised accordingly and submitted to the jurisdictional health department.
- (65) Financial assurance requirements Cost estimate for postclosure. The owner or operator shallmust:
- (a) Prepare a detailed written post-closure cost estimate as part of the facility post-closure plan. The post-closure cost estimate <del>shall</del>must:

- (i) Be stated in current dollars and represent the total cost of hiring a third party under a contract subject to chapter 39.12 RCW, Prevailing wages on public works, to conduct completing post-closure care activities in compliance with the approved post-closure plan for the facility; for a twenty-year post-closure period or a time frame determined by the jurisdictional health department;
- (ii) Provide a detailed written estimate, in current dollars, of the cost of hiring a third party to conduct post-closure care for the facility in compliance with the post closure plan;
- (iii) Project a schedule intervals for withdrawal of post-closure funds from the post-closure financial assurance instrument to complete the activities identified in the approved post-closure plan; and
- (iviii) Not use the sale value of reduce by allowance for salvage, value of equipment, or resale value of property or land to offset or reduce the estimated costs of activities conducted in compliance with the post-closure plan.
- (b) Prepare a new post-closure cost estimate for the remainder of the post-closure care period in accordance with (a) of this subsection, whenever a change in the post-closure plan increases or decreases the cost of post-closure care-; and

- (c) During the operating life of the facility, the owner or operator must review the post-closure cost estimate annually. by March 1st of each calendar year. The review will must be submitted to the jurisdictional health department, with a copy to the department, by April 1st of each calendar year stating that the review was completed and the finding of the review. The review shall must examine all factors, including inflation, involved in estimating the post-closure cost estimate. Any cost changes in costs shallmust be factored into a revised post-closure cost estimate. The new estimate shall be and submitted to the jurisdictional health department for review approval. The jurisdictional health department shall will evaluate each cost estimate for completeness, and may accept, or require a revision of the cost estimate in accordance with its evaluation. If the jurisdictional health department approves a change in the post-closure cost estimate, the financial assurance instrument must be revised accordingly and submitted to the jurisdictional health department and a copy sent to the department.
- (76) Financial assurance requirements Closure/post-closure financial assurance account establishment and reporting.
- (a) Closure and post-closure financial assurance funds generated shall must be provided to the selected financial assurance instrument

at the schedule specified in the closure and post-closure plans, such that adequate closure and post-closure funds will be generated available to ensure full implementation of the approved closure and postclosure plans.

- (b) The facility owner or operator with systematic deposits shall must establish a procedure with the financial assurance instruments trustee for notification of nonpayment of funds to be sent to the jurisdictional health department and the department.
- (c) Except for item (i) of this subdivision, tThe owner or operator satisfying the requirements of this section using a reserve or trust fund mustshall file with the jurisdictional health department and the department, no later than April 1st of each year, an annual audit report of the financial assurance accounts established for closure and post-closure activities, and a statement of the percentage of user fees, as applicable, diverted to the financial assurance instruments, for the previous calendar year, including during each of the post-closure years.÷
- (i) For facilities owned and operated by municipal corporationsa public entity, the financial assurance accounts shall be audited audit must be conducted according to the audit schedule of the office of state auditor. The annual audit report filed with the jurisdictional

health department and the department must include aA certification of audit completion and summary findings. shall be filed with the jurisdictional health department and the department, including during each of the post-closure care years.

- (ii) For facilities not owned or operated by municipal corporations a public entity:
- (A) The aAnnual audits shall must be conducted by a certified public accountant licensed in the state of Washington. The annual audit report filed with the jurisdictional health department and the department must include aA certification of audit completion and summary findings; and shall be filed with the jurisdictional health department and the department, including during each of the post closure care <del>years.</del>
- (B) The annual audit report mustshall also include, as applicable, calculations demonstrating the proportion of closure or postclosure, completed during the preceding year as specified in the closure and post-closure plans.
- (d) Established financial assurance accounts shall must not constitute an asset of the facility owner or operator.

- (e) Any income accruing toin the established financial assurance account(s) will may be used at the owner's discretion upon approval of by the jurisdictional health department.
- (87) Financial assurance requirements Fund withdrawal for closure and post-closure activities.
- (a) The owner or operator will withdraw funds from the closure and/or post-closure financial assurance instrument as specified in the approved closure/post-closure plans +.
- (b) If the withdrawal of funds from the financial assurance instrument exceeds by more than five percent the withdrawal schedule stated in the approved closure and/or post-closure plan over the life of the permit, the closure and/or post-closure plan shall must be amended.
- (c) After verification by the jurisdictional health department of facility closure, excess funds remaining for closure in a financial assurance account shall must be released to the facility owner or operator.
- (d) After verification by the jurisdictional health department of facility post-closure, excess funds remaining for post-closure in a financial assurance account **shall** must be released to the facility owner or operator.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 and 03-04-103 (Order 99-24 and Order 99-24A), § 173-350-600, filed 1/10/03 and 2/4/03, effective 3/7/03 and 3/31/03.]

### WAC 173-350-700 Permits and local ordinances.

# (1) Permit required.

(a) Except for (b) and (c) of this subsection, nNo solid waste storage, treatment, processing, handling, recycling, or disposal facility shall may be maintained, established, substantially altered,  $expanded_{\underline{\prime}}$  or improved until the person operating or owning  $\frac{such}{c}$  the site has obtained a permit or permit deferral from the jurisdictional health department, or a beneficial use exemption from the department pursuant to the provisions of this chapter, or is operating in compliance with all terms of a conditionally exempt solid waste handling activity identified in this chapter. Facilities operating under categorical conditional exemptions established by this chapter shall must meet all the conditions of such the exemptions or will may be required to obtain a permit under this chapter and may be subject to the enforcement provisions of chapter 70.95.315. Facilities that meet the terms and conditions for exemption under one standard may require permitting for other non-exempt activities on-site. Facilities may operate under multiple exemptions from permitting if they meet all conditions for each section. In addition, presons dumping or depositing solid waste without a permit in violation of this chapter shall are be subject to the penalty provisions of RCW 70.95.240.

- (b) Pursuant to RCW 70.105D.090, permits issued under this chapter are not required for remedial actions performed by the department under chapter 70.105D RCW, Hazardous waste cleanup-Model toxics control act, or by a potentially liable person under a consent decree, order, or agreed order issued under chapter 70.105D RCW, Hazardous waste cleanup-Model toxics control act. However, such remedial actions must still comply with the substantive requirements of this chapter. Permits issued under this chapter are still required for independent remedial actions, as defined in chapter 70.105D.020, including those performed under the voluntary cleanup program authorized under RCW 70.95.105D.030(1)(i).
- (bc) Pursuant to section 121(1)(e) of Permits issued under this chapter are not required for remedial actions performed by the state and/or in conjunction with the United States Environmental Protection Agency to implement the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA), 42 U.S.C. Sec. 9621(1)(e),

permits issued under this chapter are not required for any removal or remedial actions performed by the U.S. Environmental Protection Agency under CERCLA or by a potentially responsible party under a consent decree or administrative order issued under CERCLA. However, such removal or remedial actions must still comply with the substantive requirements of this chapter. taken by others to comply with a state and/or federal cleanup order or consent decree.

- (ed) Any jurisdictional health department and the department may enter into an agreement providing for the exercise by the department of any power that is specified in the contract and that is granted to the jurisdictional health department under chapter 70.95 RCW, Solid waste management—Reduction and recycling. However, the jurisdictional health department shall must have the approval of the legislative authority or authorities it serves before entering into any such agreement with the department.
- (2) Local ordinances. Each jurisdictional health department shall must adopt local ordinances implementing this chapter not later than one year after the effective date of this chapter, and shall must file the ordinances with the department within ninety days following local adoption. Local ordinances shall must not be less stringent than this

chapter, but may include additional requirements provided additional requirements do not conflict with state or federal statutes.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-700, filed 1/10/03, effective 2/10/03.]

WAC 173-350-710 Permit application and issuance.

- (1) Permit application process.
- (a) Any owner or operator required to obtain a solid waste permit shall must apply for a permit fromto the jurisdictional health department on forms prescribed by the department. All permit application filings shall must include two copies of the application. An application shall may not be considered complete by the jurisdictional health department until all the information required under WAC 173-350-715 and the applicable section(s) of this chapter has been submitted.
- (b) The jurisdictional board of health department may establish reasonable fees for permits, permit modifications, and renewal of permits. All permit fees collected by the health department shall must be deposited in the account from which the health department's operating expenses are paid.

- (c) Once the jurisdictional health department determines that an application for a permit is complete, it shallmust:
- (i) Refer one copy to the appropriate regional office of the department for review and comment and include correspondence indicating that the jurisdictional health department has determined that the application is complete;
- (ii) Investigate every application to determine whether the facilities facility meets all applicable laws and regulations, conform is not in conflict to with the approved comprehensive solid waste management plan and/or the approved hazardous waste management plan, and comply complies with all zoning requirements; and
- (iii) When the application is for a permit to establish or modify a solid waste handling facility located in an area that is not under a quarantine, as defined in RCW 17.24.007, and when the facility will receive material for composting, from an area under a quarantine, the jurisdictional health department must also provide a copy of the application to the Washington state department of agriculture. The Washington state department of agriculture will review the application to determine whether it contains information demonstrating that the proposed facility presents a risk of spreading disease, plan pathogens, or pests to areas that are not under a quarantine. Within forty-five

days, the Washington state department of agriculture will report its findings to the jurisdictional health department and department.

- (d) Once the department has received a complete application for review, it shallwill:
- (i) Ensure that the proposed site or facility conforms with all applicable laws and regulations including the minimum functional standards for solid waste handlingthis chapter;
- (ii) Ensure that the proposed site or facility is not in conflict with conforms to the approved comprehensive solid waste management plan and/or the approved hazardous waste management plan; and
- (iii) Recommend for or against the issuance of each the permit by the jurisdictional health department within forty-five days of receipt of a complete application.
- (e) Application procedures for statewide beneficial use exemptions and permit deferrals are contained in WAC 173 350 200 and 173 350-710(8), respectively.

#### (2) Permit issuance.

(a) When the jurisdictional health department has evaluated all pertinent information, it may issue or deny a permit. The jurisdictional health department must approve or disapprove every complete solid waste permit application within ninety days of its determination that the application is complete. Every solid waste permit application shall be approved or disapproved within ninety days after its receipt by the jurisdictional health department. Every permit issued by a jurisdictional health department shall must contain specific requirements necessary for the proper operation of the permitted site or facility.

- (b) Every permit issued shall may be valid for a period not to exceed five years at the discretion of the jurisdictional health department. If a permit is to be issued for longer than one year, the jurisdictional health department may hold a public hearing before making a decision.
- (c) Jurisdictional health departments shall must file all issued permits with the appropriate regional office of the department no more than seven days after the date of issuance. No solid waste permit issued pursuant to RCW 70.95.180 will be considered valid unless it has been reviewed by the department.
- (d) The department shall will review the each permit in accordance with RCW 70.95.185 and report its findings to the jurisdictional health department in writing within thirty days of permit issuance.
- (e) The jJurisdictional health departments is authorized tomay issue one solid waste handling permit covering for a location where

multiple solid waste handling activities at the same site, or multiple solid waste handling permits may be issued for a single facility with multiple activities. occur, provided all activities meet the applicable requirements of this chapter.

#### (3) Permit renewals.

- (a) Prior to renewing a permit, the jurisdictional health department shall will conduct a review as it deems necessary to ensure that the solid waste handling activity(ies) facility or facilities located on the site continue to:
  - (i) Meet the solid waste handling standards of the department;
  - (ii) Comply with all applicable local laws and regulations; and
- (iii) Conform to Not conflict with the approved solid waste management plan and/or the approved hazardous waste management plan.
- (b) A jurisdictional health department shall must approve or deny a permit renewal within forty-five days of conducting its review.
- (c) Every permit renewal shall will be valid for a period not to exceed five years at the discretion of the jurisdictional health department. If a permit is to be renewed for longer than one year, the jurisdictional health department may hold a public hearing before making a decision.

- (d) Jurisdictional health departments must file all issued permit renewals with the appropriate regional office of the department not more than seven days after the date of issuance. No permit renewal issued pursuant to RCW 70.95.190 will be considered valid unless it has been reviewed by the department.
- (de) The department shall will review the renewal in accordance with RCW 70.95.190 and report its findings to the jurisdictional health department in writing within thirty days of issuance of the permit renewal.
- (e) The jurisdictional board of health may establish reasonable fees for permits reviewed under this section. All permit fees collected by the health department shall be deposited in the treasury and to the account from which the health department's operating expenses are paid.

## (4) Permit modifications.

(a) Any significant change to the operation, design, site or processing capacity, performance, or monitoring of a permitted facility may requires a modification to the permit when such a change is tied to a regulatory design or operating standard in this chapter. A modification request must include the following information: The following

procedures shall be followed by an owner or operator prior to making any change in facility operation, design, performance or monitoring:

- (i) A description of the proposed modification;
- (ii) The reasons for the proposed modification;
- (iii) A description of the impacts from the proposed modification upon the solid waste facility as presently permitted;
- (iv) A showing that, as modified, the solid waste facility will be capable of compliance with the applicable requirements of this regulation; and
- (v) Any other information as required by the jurisdictional health department.
- (b) If the jurisdictional health department and the department determine that the proposed modification is significant, the procedures of subsection (1) of this section will be followed except that:
- (i) The department will report its findings to the jurisdictional health department within thirty days;
- (ii) The jurisdictional health department will approve or disapprove the modification request within forty-five days after its receipt; and
- (iii) If the jurisdictional health department and the department determine that the procedures of section (1) of this section are not

necessary, any written form of communication documenting the deliberation and decision related to the permit modification request is sufficient.

- (c) The jurisdictional health departments must file approved modifications with the appropriate regional office of the department no more than seven days after the date of issuance. No solid waste permit modification issued pursuant to RCW 70.95.180 will be considered valid unless it has been reviewed by the department.
- (a) The facility owner or operator shall consult with the juris dictional health department regarding the need for a permit modification;
- (b) The jurisdictional health department shall determine whether the proposed modification is significant. Upon such a determination, the owner or operator shall make application for a permit modification, using the process outlined in subsections (1) through (3) of this section; and
- (c) If a proposed change is determined to not be significant and not require a modification to the permit, the department shall be notified.
  - (5) Inspections.

- (a) At a minimum, jurisdictional health departments must conduct annual inspections of all permitted solid waste facilities. shall be performed by the jurisdictional health department, unless otherwise specified in this chapter.
- (b) All facilities and sites shall msut be physically inspected prior to issuing a permit, permit renewal, or permit modification.
- (c) Any duly authorized representative of the jurisdictional health department may enter and inspect any property, premises or place at any reasonable time for the purpose of determining compliance with this chapter, and relevant laws and regulations. Findings shall must be noted and kept on file. A copy of the inspection report or annual summary shall must be furnished to the site operator.

#### (6) Permit transfers.

- (a) No solid waste permit may be transferred to a new owner or operator without first obtaining approval from the jurisdictional health department by submitting an application specified by the jurisdictional health department and the department pursuant to WAC 173-350-710(1).
  - (b) The application must include at least the following:
- (i) The name and all contact information of the new owner or operator (applicant);

- (ii) A demonstration that a new owner or operator is capable of operating the facility in compliance with all the applicable requirements of this regulation and the solid waste permit conditions;
- (iii) If applicable, financial assurance pursuant to WAC 173-350-600. Existing financial assurance must remain in place by the currently permitted owner or operator until this requirement is met;
  - (iv) An original signature pursuant to WAC 173-350-715(3); and
- (v) Any other information as required by the jurisdictional health department.
- (c) The jurisdictional health department is authorized to require a new solid waste permit application pursuant to all procedures of subsection (1) of this section if it determines the requirement is warranted.
  - (67) Permit suspension and appeals.
- (a) Any permit for a solid waste handling facility shall isbe subject to suspension at any time the jurisdictional health department determines that the site or the solid waste handling facility is being operated in violation of this chapter, conditions of the solid waste permit, the rules of the Washington state department of agriculture, or local laws and regulations.

- (b) Whenever the jurisdictional health department denies a permit or suspends a permit for a solid waste handling facility, it shallmust:
- (i) Upon request of the applicant or holder of the permit, grant a hearing on <a href="mailto:such-the">such-the</a> denial or suspension within thirty days after the request;
- (ii) Provide notice of the hearing to all interested parties including the county or city having jurisdiction over the site and the department; and
- (iii) Within thirty days after the hearing, notify the applicant or the holder of the permit in writing of the determination and the reasons therefore. Any party aggrieved by such the determination may appeal to the pollution control hearings board by filing with the board a notice of appeal within thirty days after receipt of notice of the determination of the health officer.
- (c) If the jurisdictional health department denies a permit renewal or suspends a permit for an operating waste recycling facility that receives waste from more than one city or county, and the applicant or holder of the permit requests a hearing or files an appeal under this section, the permit denial or suspension shall will not be effective until the completion of the appeal process under this sec-

tion, unless the jurisdictional health department declares that continued operation of the waste recycling facility poses a very probable threat to human health and the environment.

(d) Procedures for appealing beneficial use exemption determinations are contained in WAC 173-350-200 (5)(g).

# (<del>78</del>) Variances.

- (a) Any person subject to the solid waste permitting requirements of this section who owns or operates a solid waste handling facility subject to a solid waste permit under WAC 173 350 700, may apply to the jurisdictional health department for a variance from any section of this chapter except that no. No variance shall will be granted for requirements specific to chapter 70.95 RCW, Solid waste management— Reduction and recycling. Requests for variances must be made during the application process in subsection (1) or the permit modification process in subsection (4) of this section. The application shall be accompanied by such information as the jurisdictional health department may require. The jurisdictional health department may grant such variance, but only after due notice or a public hearing if requested, if it finds that:
- (b) Any variance request must contain sufficient information and justification for the jurisdictional health department and department

to determine if a variance request should be approved including a demonstration that compliance with the section from which variance is sought would produce hardship without equal or greater benefits to the public.

- (c) Any variance request granted by the jurisdictional health department requires written concurrence by the department.
- (d) Variances may be granted for a limited time period if deemed appropriate by the jurisdictional health department and department.
- (e) All variances must be reviewed annually as part of the permit review process in 5(a) above.
- (i) The solid waste handling practices or location do not endanger public health, safety or the environment; and
- (ii) Compliance with the section from which variance is sought would produce hardship without equal or greater benefits to the pub-<del>lic.</del>
- (b) No variance shall be granted pursuant to this section until the jurisdictional health department has considered the relative interests of the applicant, other owners of property likely to be affected by the handling practices and the general public.
- (c) Any variance or renewal shall be granted within the requirements of subsections (1) through (3) of this section and for time pe-

riod and conditions consistent with the reasons therefore, and within the following limitations:

- (i) If the variance is granted on the grounds that there is no practicable means known or available for the adequate prevention, abatement, or control of pollution involved, it shall be only until the necessary means for prevention, abatement or control become known and available and subject to the taking of any substitute or alternative measures that the jurisdictional health department may prescribe;
- (ii) The jurisdictional health department may grant a variance conditioned by a timetable if:
- (A) Compliance with this chapter will require spreading of costs over a considerable time period; and
- (B) The timetable is for a period that is needed to comply with the chapter.
- (d) An application for a variance, or for the renewal thereof, submitted to the jurisdictional health department shall be approved or disapproved by the jurisdictional health department within ninety days of receipt unless the applicant and the jurisdictional health depart ment agree to a continuance.
- (e) No variance shall be granted by a jurisdictional health department except with the approval and written concurrence of the de-

partment prior to action on the variance by the jurisdictional health department.

## (89) Permit deferral.

- (a) A jurisdictional health department may, at its discretion and with the concurrence of the department, waive the requirement that a solid waste permit be issued for a facility under this chapter by deferring to other air, water, or environmental permits issued for the facility which provide an equivalent or superior level of environmental protection.
- (b) The requirement to obtain a solid waste permit from the jurisdictional health department shall will not be waived for any transfer station, landfill, or incinerator that receives municipal solid waste destined for final disposal.
- (c) Any deferral of permitting or regulation of a solid waste facility granted by the department or a jurisdictional health department prior to June 11, 1998, shall will remain valid and shall will not be affected by this subsection.
- (d) Any person who owns or operates an applicable solid waste handling facility subject to obtaining a solid waste permit may apply to the jurisdictional health department for permit deferral. Two copies of an application for permit deferral shall must be signed by the

owner or operator and submitted to the jurisdictional health department. Each application for permit deferral shall must include:

- (i) A description of the solid waste handling units for which the facility is requesting deferral;
- (ii) A list of the other environmental permits issued for the facility;
- (iii) A demonstration that identifies each requirement of this chapter and a detailed description detailed description of how the other environmental permits will provide an equivalent or superior level of environmental protection;
- (iv) Evidence that the facility is in conformance not in conflict with the approved comprehensive solid waste management plan and/or the approved hazardous waste management plan;
- (v) Evidence of compliance with chapter 197-11 WAC, SEPA rules \_\_\_\_ including the SEPA lead agency's determination; and
- (vi) Other information that the jurisdictional health department or the department may require.
- (e) When the permit deferral application is for a solid waste handling facility located in an area that is not under a quarantine, as defined in RCW 17.24.007, and when the facility will receive material for composting, from an area under a quarantine, the jurisdic-

tional health department must also provide a copy of the application to the Washington state department of agriculture. The Washington state department of agriculture will review the application to determine whether it contains information demonstrating that the proposed facility presents a risk of spreading disease, plant pathogens, or pests to areas that are not under a quarantine. Within forty-five days, the Washington state department of agriculture must report its findings to the jurisdictional health department and department.

- (ef) The jurisdictional health department shall must notify the applicant if it elects not to waive the requirement that a solid waste permit must be issued for a facility under this chapter. If the jurisdictional health department elects to proceed with permit deferral, it shall must:
- (i) Forward Refer one copy of the complete deferral application to the appropriate regional office of the department for review and written concurrence;
- (ii) Notify the permit issuing authority or authorities for the other environmental permits described in (d)(ii) of this subsection and allow a thirty day an opportunity for comment; and
- (iii) Determine if the proposed permit deferral provides an equivalent or superior level of environmental protection.

- (fg) The department shall will provide a written report of its findings to the jurisdictional health department and recommend for or against the permit deferral. The department shall provide its findings concurrence or denial for the permit deferral within forty-five days of receipt of a complete permit deferral application or inform the jurisdictional health department as to the status with a schedule for its determination.
- (gh) No solid waste permit deferral shall will be effective unless the department has provided written concurrence. All requirements for solid waste permitting shall remain in effect until the department has provided written concurrence.
- (hi) When the jurisdictional health department has evaluated all information, it shall must provide written notification to the applicant and the department whether or not it elects to waive the requirement that a solid waste permit be issued for a facility under this chapter by deferring to other environmental permits issued for the facility. Every complete permit deferral application shall must be approved or denied within ninety days after its receipt by the jurisdictional health department or the owner or operator shall must be informed as to the status of the application with a schedule for final determination.

- (j) The jurisdictional health department must send any approval for a permit deferral to the appropriate regional office of the department within seven days of issuance.
- (ik) The jurisdictional health department shall must revoke any permit deferral if it or the department determines that the other environmental permits are providing a lower level of environmental protection than a solid waste permit. Jurisdictional health departments shall must notify the facility's owner or operator of intent to revoke the permit deferral and direct the owner or operator to take measures necessary to protect human health and the environment and to comply with the permit requirements of this chapter.
- (jl) Facilities which are operating under the a solid waste permit deferral of solid waste permitting to other environmental permits shallmust:
- (i) Allow the jurisdictional health department or the department, at any reasonable time, to inspect the solid waste handling units—facility which have has been granted a permit deferral;
- (ii) Notify the jurisdictional health department and the department whenever changes are made to the other environmental permits identified in (d)(ii) of this subsection. This notification shall must include a detailed description of how the changes will affect the fa-

cility's operation and a demonstrationhow, as described in (d)(iii) of this subsection, that the amended permits continue to provide an equivalent or superior level of environmental protection to the deferred solid waste permits. If the amended permits no longer provide an equivalent or superior level of environmental protection, the facility owner or operator shall must close the solid waste handling unit facility or apply for a solid waste permit from the jurisdictional health department according to procedures of subsection (1) of this section;

- (iii) Notify the jurisdictional health department and the department within seven days of discovery of any violation of, or failure to comply with, the conditions of the other environmental permits identified in (d)(ii) of this subsection;
- (iv) Notify the jurisdictional health department of any enforcement actions taken as a result of non-compliance with the permit(s) that have been deferred to;
- (ivv) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st as required under the appropriate annual reporting sections of this chapter;

- (vi) Operate in accordance with any other written conditions that the jurisdictional health department deems appropriate; and
- (vii) Shall tTake any measures deemed necessary by the jurisdictional health department when the permit deferral has been revoked. [Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-710, filed 1/10/03, effective 2/10/03.]

## WAC 173-350-715 General permit application requirements.

- (1) Every permit application shall must be on in a format supplied prescribed by the department and shall must contain at a minimum the following information:
- (a) Contact information for the facility owner, and the facility operator, and property owner if different, including contact name, company name, mailing address, uniform business identifier number, phone number, fax number, and e-mail;
- (b) Identification of the type of **facility** solid waste handling activity(ies) that is to be permitted;
- (c) Identification of any other permit (local, state, or federal) in effect at the site;

- (d) A vicinity plan or map (having a minimum scale of 1:24,000) that shall shows the area within one mile (1.6 km) of the property boundaries of the facility in terms of the existing and proposed zoning and land uses within that area, residences, and access roads, and other existing and proposed man-made or natural features that may impact the operation of the facility;
- (e) Evidence of compliance with chapter 197-11 WAC, SEPA rules, including the SEPA lead agency's determination;
- (f) Information as required under the appropriate facility permit application subsections of this chapter; and
- (g) Any additional information as requested by the jurisdictional health department or the department.
- (2) Engineering plans, reports, specifications, programs, and manuals submitted to the jurisdictional health department or the department shall must be prepared and certified by a professional engineer registered n individual licensed to practice engineering in the state of Washington, in an engineering discipline appropriate for the solid waste facility type or activity.
  - (3) Signature and verification of applicants:

- (a) All applications for permits shall must be accompanied by evidence of authority to sign the application and shall must be signed by the owner or operator as follows:
- (i) In the case of corporations, by a duly authorized principal executive officer of at least the level of vice-president; in the case of a partnership or limited partnership, by:
  - (A) A general partner;
  - (B) Proprietor; or
  - (C) In case of sole proprietorship, by the proprietor.
- (ii) In the case of a municipal, state, or other government entity, by a duly authorized principal executive officer or elected official.
- (b) Applications shall must be signed or attested to by, or on behalf of, the owner or operator, in respect to the veracity of all statements therein; or shall must bear an executed statement by, or on behalf of, the owner or operator to the effect that false statements made therein are made under penalty of perjury.
- (c) The signature of the applicant shall must be notarized on the permit application form.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-715, filed 1/10/03, effective 2/10/03.]

WAC 173-350-900 Remedial action. When the owner or operator of a solid waste facility permitted under this chapter is subject to remedial action under the authority of chapter 70.105D, Hazardous wate cleanup-Model toxics control act, and measures in compliance with chapter 173-340 WAC, the Model Toxics toxics Control Actact-Cleanup, the roles of the jurisdictional health department and the department shall beare as follows:

- (1) The jurisdictional health department:
- (a) May participate in all negotiations, meetings, and correspondence between the owner and operator and the department in implementing the model toxics controlremedial action;
- (b) May comment upon and participate in all decisions made by the department in assessing, choosing, and implementing a remedial action <del>program</del>;
- (c) Shall Must require the owner or operator to continue any remaining activities for the operation, closure, and post-closure of the facility activities as appropriate under this chapter, after remedial actions measures are completed; and
- (d) Must exercise its authority for permitting any solid waste handling activities at the facility that are not addressed through requirements of a remedial action conducted under any consent decree,

order, or agreed order issued by the department for the implementation of the remedial action, including permit modifications that may be necessary to address impacts on solid waste handling activities due to remedial actions.

(d) Shall continue to regulate all solid waste facilities during construction, operation, closure and post closure, that are not directly impacted by chapter 173-340 WAC.

### (2) The department:

- (a) Must follow the requirements of chapter 173-340, Model toxics control act-Cleanup, regarding permits and exemptions from applicable local, state, and federal laws to ensure that the remedial action complies with the substantive provisions of chapter 70.95 RCW, Solid waste management-Reduction and recycling, and the substantive provision of any laws requiring or authorizing local government permits or approvals; and
- (b) Must review and comment on any solid waste permitting activities conducted by the jurisdictional health department regarding the facility. shall carry out all the responsibilities assigned to it by chapter 70.105D RCW, Hazardous waste cleanup Model Toxics Control Act.

(3) Nothing in this section is intended to prohibit a jurisdictional health department from charging a fee to the person conducting the remedial action to defray the costs of services rendered relating to the substantive requirements for the remedial action.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173-350-900, filed 1/10/03, effective 2/10/03.]

WAC 173-350-990 Criteria for inert waste. (1) Criteria for inert waste - Applicability. This section provides the criteria for determining if a solid waste is an inert waste. Dangerous wastes regulated under chapter 173-303 WAC, Dangerous waste regulation, PCB wastes regulated under 40 C.F.R. Part 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions, and asbestos-containing waste regulated under federal 40 C.F.R. Part 61 rules are not inert waste. For the purposes of determining if a solid waste meets the criteria for an inert waste a person shall:

- (a) Apply knowledge of the waste in light of the materials or process used and potential chemical, physical, biological, or radiological substances that may be present; or
- (b) Test the waste for those potential substances that may exceed the applicable criteria. A jurisdictional health department may re-

quire a person to test a waste to determine if it meets the applicable criteria. Such testing may be required if the jurisdictional health department has reason to believe that a waste does not meet the applicable criteria or has not been adequately characterized. Testing shall be performed in accordance with:

- (i) "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, " U.S. EPA Publication SW-846; or
- (ii) Other testing methods approved by the jurisdictional health department.
- (2) Criteria for inert waste Listed inert wastes. For the purpose of this chapter, the following solid wastes are inert wastes, provided that the waste has not been tainted, through exposure from chemical, physical, biological, or radiological substances, such that it presents a threat to human health or the environment greater than that inherent to the material:
- (a) Cured concrete that has been used for structural and construction purposes, including embedded steel reinforcing and wood, that was produced from mixtures of Portland cement and sand, gravel or other similar materials;
- (b) Asphaltic materials that have been used for structural and construction purposes (e.g., roads, dikes, paving) that were produced

from mixtures of petroleum asphalt and sand, gravel or other similar materials. Waste roofing materials are not presumed to be inert;

- (c) Brick and masonry that have been used for structural and construction purposes;
  - (d) Ceramic materials produced from fired clay or porcelain;
- (e) Glass, composed primarily of sodium, calcium, silica, boric oxide, magnesium oxide, lithium oxide or aluminum oxide. Glass presumed to be inert includes, but is not limited to, window glass, glass containers, glass fiber, glasses resistant to thermal shock, and glass-ceramics. Glass containing significant concentrations of lead, mercury, or other toxic substance is not presumed to be inert; and
  - (f) Stainless steel and aluminum.
- (3) Criteria for inert waste Inert waste characteristics. This subsection provides the criteria for determining if a solid waste not listed in subsection (2) of this section is an inert waste. Solid wastes meeting the criteria below shall have comparable physical characteristics and comparable or lower level of risk to human health and the environment as those listed in subsection (2) of this section.
- (a) Inert waste shall have physical characteristics that meet the following criteria. Inert waste shall:

- (i) Not be capable of catching fire and burning from contact with flames;
- (ii) Maintain its physical and chemical structure under expected conditions of storage or disposal including resistance to biological and chemical degradation; and
- (iii) Have sufficient structural integrity and strength to prevent settling and unstable situations under expected conditions of storage or disposal.
- (b) Inert waste shall not contain chemical, physical, biological, or radiological substances at concentrations that exceed the following criteria. Inert waste shall not:
- (i) Be capable of producing leachate or emissions that have the potential to negatively impact soil, groundwater, surface water, or air quality;
- (ii) Pose a health threat to humans or other living organisms through direct or indirect exposure; or
- (iii) Result in applicable air quality standards to be exceeded, or pose a threat to human health or the environment under potential conditions during handling, storage, or disposal.

[Statutory Authority: Chapter 70.95 RCW. WSR 03-03-043 (Order 99-24), § 173 350 990, filed 1/10/03, effective 2/10/03.]