

Informal Comment Period

WAC 173-351, Criteria for Municipal Solid Waste Landfills, draft rule amendments are available for informal review and comment beginning June 15 through July 29, 2011.

Ecology is proposing amendments to:

- Adopt new federal regulations in 40 CFR Part 258 and allow for issuance of Research, Development and Demonstration (RD&D) permits
- Eliminate equivalent and arid liner designs
- Extend greater flexibility for alternate liner designs consistent with federal regulations
- Address “general housekeeping” issues such as providing clarifications, making formatting changes, and ensuring that the rule is consistent with WAC 173-350, Solid Waste Handling Standards and the applicable federal regulation, 40 CFR Part 258.

Requested feedback

Ecology is particularly interested in stakeholder feedback on the following three topics:

Permit Renewal. Should WAC 173-351 include an application for permit renewal as a requirement or should it be changed to match WAC-173-350 and RCW 70.95 to allow permit renewals without an application being submitted?

- WAC 173-351-720(1)(i) requires owners or operators to apply for permit renewals. No change was made to this provision; however, it was moved to its own subsection in - 720(5).
- WAC 173-304-600(2)(j) requires owners or operators to apply for permit renewals. WAC 173-350-710(3) and RCW 70.95.190(1) are similar by providing procedures that do not require an owner or operator to submit an actual application prior to renewal.
- Many MSWLF units are co-located with closed 304 landfill units and/or 350 solid waste handling activities. There will be conflicting processes regardless of how WAC 173-351 is written because these units have different requirements.

MORE INFORMATION

Informal Comment Period 1
6/15/2011 - 7/29/2011

Public Workshop # 1: Lacey
July 12, 2011
10:00 AM - 12:00 PM
Ecology HQ Auditorium Rm. ROA-32
300 Desmond Drive
Olympia, WA 98504

Public Workshop # 2: Moses Lake
July 19, 2011
1:00 PM - 3:00 PM
Big Bend Community College
Masto Conference Ctr. Rm. 1870
7611 Bolling Street NE
Moses Lake, WA 98837

Contact Information:

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On the web:

<http://www.ecy.wa.gov/programs/swfa/rules/ruleMSW.html>

Special accommodations:

If you need this document in a version for the visually impaired, call the Waste 2 Resources at (360) 407-6900.

Persons with hearing loss, call 711 for Washington Relay Service. Persons with a speech disability, call 877-833-6341.

Liner Separation. Should the current WAC 173-351-140(1)(a) be changed to a non-contact standard when using a hydraulic gradient control system?

- WAC 173-351-140(1)(a) requires a 10 ft. separation from the bottom of the liner to the seasonal high level of groundwater, unless a hydraulic gradient control system is installed that maintains a 5 ft. separation.
- WAC 173-350-400(3)(b)(iv) requires the same 10 ft. separation from the bottom of the liner but only requires a hydraulic gradient control system to maintain separation.
- This requirement was changed in this draft from a location restriction to design criteria. Location generally refers to where a landfill is located, not how it is designed to maintain a vertical separation.

Metals Analysis. The current rule (last updated October 1993) has variable procedures for metals analysis in ground water in Appendix I and III. Nickel and mercury are 'total metals' while all others are 'dissolved metals'. The following options are being considered to address the inconsistency: Option 1: Nickel and mercury could be changed to dissolved, or Option 2: All other metals could be changed to total. The draft rule amendments include Option 2.

- 40 CFR Part 258 Appendix I and II use total metals.
- Chapter 173-200 WAC, Water Quality Standards for Ground Waters for the State of Washington use total metals. This was the basis for the proposed changes to all total metals in this rule. *Note: This change will likely result in an increase in concentrations for some metals over current levels at some facilities.*

How to submit your comments

The informal comment period ends July 29, 2011. You can give us your comments in the following ways:

1. In-person at the public workshops in Lacey July 12, 2011 and at Moses Lake July 19, 2011.
2. Email your comments to: kathleen.scanlan@ecy.wa.gov.
3. Mail comments to:

Department of Ecology, Waste 2 Resources Program
Kathleen Scanlan
PO Box 47600
Olympia, WA 98504-7600

On the web

WAC 173-351 rule update web site (draft rule, including underline-strikeout edits)

<http://www.ecy.wa.gov/programs/swfa/rules/ruleMSW.html>

The current rule, last updated October 1993

<http://www.ecy.wa.gov/biblio/wac173351.html>

Detailed list of amendments

Global changes throughout rule

- “Corrective action” changed to “remedial action” to align with MTCA terminology.
- “Effective date of this chapter” changed to November 26, 1993 to avoid confusion when revised rule becomes effective.
- “Shall” changed to “must”
- Some long sentences rewritten to make the rule more readable.
- References to qualified ground water scientist are changed to licensed professional in accordance with Chapter 18.220 RCW.

WAC 173-351-010 Purpose, applicability

(2)(a) Note modified to update 304 to 350.

WAC 173-351-100 Definitions

All defined terms listed below are now located in section 100.

“Active life” - deleted “of operation” to eliminate confusion and corrected the reference to match 40 CFR Part 258.2.

“Active portion” - corrected reference to match 40 CFR Part 258.2.

“Arid” - deleted because arid design standards were deleted.

“Cleanup action plan” - definition added for financial assurance for remedial actions. Defines when requirements apply.

“Contaminate” - deleted. The actual term was not used in the rule.

“Contaminant” and “Contaminated or contamination” - added to serve the purpose of “contaminate”.

“Demolition” - deleted because the word is not used in rule.

“Existing MSWLF unit” - Last paragraph eliminated for consistency with EPA rule. This is the “Cathcart clause” that conflicted with the CFR definition.

“Free liquids” and “Liquid waste - the test method is updated from SW-846 9095 to 9095B.

“Inert waste” - changed to 350 reference.

“MSWLF unit” - updated to 350.



“Non-arid” – deleted because non-arid design standards were deleted.

“Point of compliance” – reference added to WAC 173-351-300(6).

“Qualified ground water scientist” – deleted because references are changed to licensed professional in accordance with Chapter 18.220 RCW throughout the rule.

“Woodwaste” – deleted because 350 no longer has specific requirements for woodwaste landfills.

WAC 173-351-130 Location restrictions

Various locations – “and be issued a solid waste permit by ...” deleted because it could be interpreted to require a JHD to issue a permit.

(2) Airport safety. Distance changed from five miles to six to conform with newer FAA requirements.

WAC 173-351-140 Other location restrictions

Deleted various locations: “and be issued a solid waste permit by ...” It could be interpreted to require a Jurisdictional Health District (JHD) to issue a permit.

(1)(a) The liner separation above ground water is deleted as a location restriction and moved to design criteria. The vertical separation of a landfill liner from the uppermost saturated zone is a design, not location element.

(1)(c) Reference to drinking water supply wells “in use and existing at the time of the purchase of the property” eliminated. This has been difficult to determine and difficult to administer at many county facilities where the county has owned the property for a very long time prior to considering locating a landfill.

Subsections (4) – (8) deleted. These were not location standards.

WAC 173-351-200 Operating criteria

(1)(b)(i) Definition of regulated DW corrected.

(4) Explosive gasses. The requirement is added for owners or operators to control landfill gasses.

(4)(b)(i) Note clarifies that Ecology has jurisdiction to approve variances from Ch. 173-160 WAC, but still requires JHD’s approval.

(7) Reference added for RD&D exclusion from Run-on/run-off control systems.

(9) Reference added for RD&D exclusion from liquids restriction. Corrected contradictory language regarding leachate and gas condensate and aligned it with 40 CFR Part 258.28. The existing requirements are less stringent than the federal rule by allowing water other than leachate and gas condensate to be placed in a landfill.

(11) Deleted outdated reference to pre- groundwater effective date requirements for annual reports; they are no longer needed.

(11) Financial assurance information added to annual reports to match WAC 173-350 requirements. The current rule requires owner/operators to perform updates but not file with JHD or Ecology.

WAC 173-351-210 Plan of operations

(7) New subsection added to clarify that the plan of operation needs to include elements for conformance with operating requirements.

WAC 173-351-220 Additional operating criteria

Minor clarifications to existing requirements. No substantive changes.

WAC 173-351-300 Design criteria

There are significant changes to this section. The current requirements are a standard design (geomembrane with 2' compacted clay) or an "equivalent" design that apply to non-arid locations, and a performance standard that applies to arid locations. The proposed requirements align with 40 CFR Part 258.40 requirements for a composite liner (identical to current "standard design") or an "alternative" design meeting performance standards that apply to all locations. The approach for the alternative design is very similar to the existing arid design standard. The equivalent design and arid subsections are eliminated.

Proposed (2)(b) alternative design adds Washington's ground water quality standards, Chapter 173-200 WAC and the requirement to control landfill gas to the federal design requirements. Ecology's concurrence with proposed alternative design approvals is part of the language to ensure we can meet our responsibilities as a delegated state under the federal program.

New (7). The current liner separation from ground water standards in section 140(1)(a) are moved here.

Table 1. Contaminant concentrations updated to meet Table 1 limits in WAC 173-200-040 and current drinking water standards.

WAC 173-351-400 Ground water monitoring systems and remedial action

Updated in accordance with Chapter 18.220 RCW.

WAC 173-351-405 Performance standards for ground water monitoring system designs

(5) Terms changed to match revised contamination definition.

WAC 173-351-410 Ground water sampling and analysis requirements

(1)(f) Term changed to match revised contamination definition.

(2) Ground water samples must not be filtered with the draft rule change to total metals analysis.

(3)(b) Updated GIS vertical datum to conform with Ecology's updated standard. Reference to WAC 332-130-060 is deleted because it addresses horizontal, not vertical control.

WAC 173-351-415 Ground water reporting

(2) Ecology developed groundwater report forms to make it easier for facility operators and consultants to provide the required ground water information.

(2)(b) The intent for reporting statistical results is clarified.

(3) New subsection added so that ground water results are submitted in electronic format for entry into Ecology Environmental Information Management database and statistical software such as Sanitas.

WAC 173-351-420 Statistical methods for ground water monitoring

(2) Specific statistical test methods (tolerance interval, ANOVA, control charts, etc.) are eliminated because they are no longer considered the best methods. Owners or operators may use any appropriate statistical method that meets the unchanged performance standards.

WAC 173-351-430 Detection monitoring program

Several clarifications without substantive changes.

Deleted paragraph (4)(d) because it conflicted with (4)(b) and 40 CFR Part 258.54(c)(2), which require implementation within 90 days – not submittal of plan for approval within 90 days.

WAC 173-351-440 Assessment monitoring program

(2) Requirement for “quarterly thereafter” corrected to align with 40 CFR Part 258.55(b) and original intent.

(2) Appendix III sampling is applied to all wells (background and down-gradient) to determine if contaminants originate from a source other than the MSWLF unit or if volatile organic compounds are transported by landfill gas.

(6)(d) Requirement to continue assessment monitoring during remedial action added to conform to 40 CFR Part 258.56(b).

WAC 173-351-450 Alternative ground water monitoring

Several clarifying edits and reference updates.

(3)(a) Facilities monitoring leachate must analyze for normal ground water monitoring constituents instead of existing Appendix IV, which has been deleted. The change will provide the information needed to make decisions for approving alternate ground water monitoring programs.

WAC 173-351-460 Role of the jurisdictional health department in remedial action

Clarified JHD’s role in remedial actions. The existing language could be interpreted to mean Ecology would be required to allow for JHD participation in every meeting, letter, and e-mail. This is overly burdensome and would prevent Ecology from performing its duties under the Model Toxics Control Act in a timely fashion.

WAC 173-351-465 Role of the department of ecology in remedial action

The note was deleted because it both duplicates language in MTCA and conflicts with TCP policies because the level of support was undefined.

WAC 173-351-480 Ground water modeling

No substantive changes.

WAC 173-351-490 The hydrogeologic report contents

(2)(b)(iii) Appropriate landfill design and monitoring depend on a quality characterization of the geology and hydrogeology of a site. Ecology believes it is necessary to approve alternatives to borehole programs.

(2)(f) Updated GIS vertical datum to conform with Ecology IT Standard, revised 10/01/2009.

WAC 173-351-500 Closure and post-closure care

(1)(a) Non-arid is deleted as the standards will apply statewide. Ecology's concurrence with proposed alternative cover design approvals is part of the language to ensure we can meet our responsibilities as a delegated state under the federal program.

(1)(b) Arid closure standard is deleted to conform with the same changes under the design standards in section 300 and EPA approach in Part 258.60 with a prescriptive design with alternatives allowed.

(2)(b)(iii) This language is added to provide criteria for the JHD to consider when establishing the post-closure care period. The standard, derived from 40 CFR Part 258.61(a) and (b) is 30 years with the ability to increase or decrease the time while protecting human health and the environment. This language clarifies what is needed to protect human health and the environment.

(2)(c)(ii) An estimate of the time required for care is added to post-closure plan to provide the JHD information needed to establish the post-closure period.

Old (2)(d) The old transition post-closure plan requirement is deleted because its effective date is long past.

New (2)(d) The JHD will notify the financial assurance trustee to ensure funds are not released prematurely.

WAC 173-351-600 Financial assurance criteria

All cost estimates include the requirement to include consideration of contracts issued under the prevailing wage law. All local governments must contract using prevailing wages. If a corporation fails to meet its closure, post-closure, or remedial action obligations, the burden will fall to the JHD or Ecology--also subject to prevailing wage requirements.

All annual cost estimate review findings must be reported to JHD or Ecology for approval.

All financial assurance mechanisms must be approved by the JHD for closure and post-closure care (under permit) and by Ecology for remedial actions (under Ecology's jurisdiction).

(4)(a) and (b) The requirement for financial assurance of interim actions is clarified.

(5) The allowable mechanisms for financial assurance are significantly expanded in the rule to align with existing policy. The current rule only allowed reserve accounts and trust funds, but surety bonds and letters of credit have been acceptable methods to fund a trust account. The changes clarify existing conditions and conform with RCW 70.95215.

WAC 173-351-700 Permitting requirements

No substantive changes.

(5) This subsection is deleted as it was addressed in previously WAC 173-351-720(1)(i), new WAC 173-351-720(5)

WAC 173-351-710 Research, development, and demonstration permits

This new section of the rule is the primary reason for amending WAC 173-351. It implements 40 CFR Part 258.4 and allows introduction of water or other liquid wastes.

WAC 173-351-720 Permit application procedures

(1)(b)(iii) Introduction deleted because it is addressed in renewal and modified permit procedures. Transition permit applications are no longer applicable.

(1)(h) Language inserted to align with the requirement for Ecology to review permits in RCW 70.95.185. previously (1)(i), new (5) Permit renewal procedures are moved from initial procedures to its own subsection for clarification.

(4)(a) The text regarding permit application requirements for phased construction is moved to contents of permit application in new WAC 173-351-730(1)(a)(iii). The text regarding what the permit includes for phased construction is moved to WAC 173-351-750(8) design capacity and construction.

(4)(b) The text regarding phased construction is deleted. It is addressed in WAC 173-351-750(4) - (6).

New (6)(a) The timeframe for submitting permit modifications is increased from 30 to 45 days to allow for Ecology review. The subsection is expanded with procedures to eliminate the existing conflict of following the procedures in subsection (1) for initial permits (45 day Ecology review & 90 day JHD approve/deny) with the shortened application timeframe for modifications. This assumes modifications can be reviewed quicker than initial permit applications.

New (6)(d) Added for clarity. This comes from existing definition of "modification".

New (7) Transition language deleted because it is no longer needed. Procedures for JHD are clarified.

WAC 173-351-730 Contents of applications

Clarifying edits, including:

(1)(a)(iii) Text from existing 720(4)(a)

(1)(b)(viii) Language changed to clarify that facility must have a legal way to handle leachate.

(1)(b)(ix), (x), & (xii) Language added to clarify the need to supply information in the permit application and allow JHD to request additional information.

(3)(a)(v) Language added to allow JHD to request additional information.

(3)(b)(iii) Language deleted because JHD and Ecology should know conformance with annual reporting requirements.

(3)(b)(v) Language added to allow JHD to request additional information.

(5)(a)(iii)(A) Changes in response to FAA rules.

(5)(a)(iii)(C) Updated GIS vertical datum to conform with Ecology's updated standard. Reference to WAC 332-130-060 deleted because it addresses horizontal, not vertical control. Reference in following "note" to 1991 in NAD 83 deleted because the datum has had several more recent versions.

(5)(c)(iii)(D) Inserted gas well materials and construction methods.

(5)(d)(v) - (viii) Language inserted to provide the JHD the information to make post-closure period determinations under new 500(b)(iii).

WAC 173-351-740 Permit issuance criteria

(4) Language inserted to ensure JHD has required financial assurance documents to meet requirements.

WAC 173-351-750 Permit provisions

(3) The ten-year limit on permit duration is eliminated. It provided a timeframe for defining the pay-in period for funding trust accounts under new(6)(a)(ii). The ten year limit on permit duration required regular burdensome reissuance procedures and did not add to environmental protection. The ten year limit does not make sense for MSWLFs where a facility may operate over fifty years and perform post-closure for thirty plus years, especially when very few actually used cash in a trust fund for financial assurance. This deletion allows the JHD to determine the permit duration at its discretion.

Incorporated five year renewal periods included in the 1998 RCW 70.95.190(1) revision.

(8) Inserted language moved from WAC 173-351-720(4)(a). The name is changed to reflect the added text.

WAC 173-351-760 Appeals

No substantive changes.

WAC 173-351-990 Appendices

Appendix I, #43 CAS for 2-hexanone corrected.

Appendix I, II, and III, all metals except nickel and mercury are changed from dissolved to total to conform with 40 CFR Part 258 Appendix I and II and to the requirements of Chapter 173-200 WAC.

Appendix II, Total suspended solids is added to the list of indicator parameters because of the change to total metals.

Appendix III, PQLs are deleted from table because methods are continually being improved and PQLs change over time. Note 6 regarding PQLs is also deleted.

Appendix IV, parameters for leachate analysis are deleted because the proposed rule will direct leachate to be tested the same as ground water.