

WAC 173-303-140 Land disposal restrictions. (1) Purpose.

(a) The purpose of this section is to encourage the best management practices for dangerous wastes according to the priorities of RCW 70.105.150 which are, in order of priority:

- (i) Reduction;
- (ii) Recycling;
- (iii) Physical, chemical, and biological treatment;
- (iv) Incineration;
- (v) Stabilization and solidification; and
- (vi) Landfill.

(b) This section identifies dangerous wastes that are restricted from land disposal, describes requirements for restricted wastes, and defines the circumstances under which a prohibited waste may continue to be land disposed.

(c) For the purposes of this section, the term "landfill," as stated in the priorities of RCW 70.105.150, will be the same as the term "land disposal." Land disposal will be used in this section to identify the lowest waste management priority.

(2) Applicability.

The land disposal restrictions of this section apply to any person who owns or operates a dangerous waste treatment, storage, or disposal facility in Washington state and to any person who generates or transports dangerous waste.

(a) Land disposal restrictions for wastes designated in accordance with WAC 173-303-070 (3)(a)(i), (ii), and (iii) are the restrictions set forth by the Environmental Protection Agency in 40 C.F.R. Part 268 which are incorporated by reference into this regulation, as modified in (c) through (f) of this subsection, and the restrictions set forth in subsections (3) through (7) of this section. The words "regional administrator" (in 40 C.F.R.) will mean the "department," except for 40 C.F.R. Parts 268.5 and 268.6; 268 Subpart B; 268.42(b) and 268.44 (a) through (g). The authority for implementing these excluded C.F.R. sections remains with the U.S. Environmental Protection Agency. The word "EPA" (in 40 C.F.R.) means "Ecology" at 40 C.F.R. 268.44(m) and 268.45(a). The exemption and exception provisions of subsections (3) through (7) of this section are not applicable to the federal land disposal restrictions.

Where the federal regulations that have been incorporated by reference refer to 40 C.F.R. 260.11, data provided under this section must instead meet the requirements of WAC 173-303-110.

(b) Land disposal restrictions for state-only dangerous waste are the restrictions set forth in subsections (3) through (7) of this section.

(c) Where 40 C.F.R. 268.7 (a)(1) is incorporated by reference, delete the sentence "Alternatively, the generator must send the waste to a RCRA-permitted dangerous waste treatment facility, where the waste treatment facility must comply with the requirements of 264.13 of this chapter and 268.7(b) of this section."

(d) Where 40 C.F.R. 268.7 (a)(2) is incorporated by reference:

(i) Delete the words "or if the generator chooses not to make the determination of whether their waste must be treated" from the first sentence; and

(ii) Delete the sentence "(Alternatively, if the generator chooses not to make the determination of whether the waste must be treated, the notification must include the EPA Hazardous Waste Numbers and Manifest Number of the first shipment and must state 'This hazardous

waste may or may not be subject to the LDR treatment standards. The treatment facility must make the determination'.)"

(e) Where 40 C.F.R. 268.7 (b)(6) is incorporated by reference, replace the words "for the initial shipment of waste, prepare a one-time certification described in paragraph (b)(4) of this section, and a one-time notice which includes the information in paragraph (b)(3) of this section (except the manifest number)" with the words "submit a certification described in paragraph (b)(4) of this section, and a notice which includes the information listed in paragraph (b)(3) of this section (except for the manifest number) to the department for each shipment".

(f) Where 40 C.F.R. 268.9(d) is incorporated by reference, replace paragraph (d) with the following: Wastes that exhibit a characteristic are also subject to Section 268.7 requirements, except that once the waste is no longer dangerous, a one-time notification and certification must be placed in the generators or treaters files and sent to the department. The notification and certification that is placed in the generators or treaters files must be updated if the process or operation generating the waste changes and/or if the subtitle D facility receiving the waste changes. However, the generator or treater need only notify the department on an annual basis if such changes occur. Such notification and certification should be sent to the department by the end of the calendar year, but no later than December 31.

(i) The notification must include the following information:

(A) Name and address of the RCRA Subtitle D facility receiving the waste shipment; and

(B) A description of the waste as initially generated, including the applicable dangerous waste code(s), treatability group(s), and underlying hazardous constituents (as defined in Sec. 268.2(i)), unless the waste will be treated and monitored for all underlying hazardous constituents. If all underlying hazardous constituents will be treated and monitored, there is no requirement to list any of the underlying hazardous constituents on the notice.

(ii) The certification must be signed by an authorized representative and must state the language found in Section 268.7 (b)(4).

If treatment removes the characteristic but does not meet standards applicable to underlying hazardous constituents, then the certification found in Sec. 268.7 (b)(4)(iv) applies.

(3) Definitions.

When used in this section the following terms have the meaning provided in this subsection. All other terms have the meanings given under WAC 173-303-040.

(a) "Dangerous waste constituents" means those constituents listed in WAC 173-303-9905 and any other constituents which have caused a waste to be a dangerous waste under this chapter.

(b) "Land disposal" means placement in a facility or on the land with the intent of leaving the dangerous waste at closure, and includes, but is not limited to, placement for disposal purposes in a: Landfill; surface impoundment; waste pile; injection well; land treatment facility; salt dome or salt bed formation; underground cave or mine; concrete vault or bunker.

(c) "Organic/carbonaceous waste" means a dangerous waste that contains combined concentrations of greater than ten percent organic/carbonaceous constituents in the waste; organic/carbonaceous constituents are those substances that contain carbon-hydrogen, carbon-halogen, or carbon-carbon chemical bonding.

(d) "Solid acid waste" means a dangerous waste that exhibits the characteristic of low pH under the corrosivity test of WAC 173-303-090 (6) (a) (iii).

(e) "Stabilization" and "solidification" mean a technique that limits the solubility and mobility of dangerous waste constituents. Solidification immobilizes a waste through physical means and stabilization immobilizes the waste by bonding or chemically reacting with the stabilizing material.

(4) Land disposal restrictions and prohibitions. The land disposal requirements of this subsection apply to land disposal in Washington state.

(a) Disposal of extremely hazardous waste (EHW). No person may land dispose of EHW, except as provided in subsection (5) of this section, at any land disposal facility in the state. No person may land dispose of EHW at the facility established under RCW 70.105.050, except as provided by subsections (5), (6), and (7) of this section. A person is encouraged to reclaim, recycle, recover, treat, detoxify, neutralize, or otherwise process EHW to remove or reduce its harmful properties or characteristics, provided that such processing is performed in accordance with the requirements of this chapter.

(b) Disposal of liquid waste. Special requirements for bulk and containerized liquids.

(i) The placement of bulk or noncontainerized liquid dangerous waste or dangerous waste containing free liquids (whether or not sorbents have been added) in any landfill is prohibited.

(ii) Containers holding free liquids must not be placed in a landfill unless:

(A) All free-standing liquid:

(I) Has been removed by decanting, or other methods; or

(II) Has been mixed with sorbent or stabilized (solidified) so that free-standing liquid is no longer observed; or

(III) Has been otherwise eliminated; or

(B) The container is very small, such as an ampule; or

(C) The container is designed to hold free liquids for use other than storage, such as a battery or capacitor; or

(D) The container is a labpack and is disposed of in accordance with WAC 173-303-161 and this chapter.

(iii) To demonstrate the absence or presence of free liquids in either a containerized or a bulk waste, the following tests must be used: Method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" EPA Publication SW-846 as incorporated by reference in WAC 173-303-110 (3) (a).

(iv) Sorbents used to treat free liquids to be disposed of in landfills must be nonbiodegradable. Nonbiodegradable sorbents are: Materials listed or described in (b) (iv) (A) of this subsection; materials that pass one of the tests in (b) (iv) (B) of this subsection; or materials that are determined by the department to be nonbiodegradable through WAC 173-303-910.

(A) Nonbiodegradable sorbents.

(I) Inorganic minerals, other inorganic materials, and elemental carbon (e.g., aluminosilicates, clays, smectites, Fuller's earth, bentonite, calcium bentonite, montmorillonite, calcined montmorillonite, kaolinite, micas (illite), vermiculites, zeolites; calcium carbonate (organic free limestone); oxides/hydroxides, alumina, lime, silica (sand), diatomaceous earth; perlite (volcanic glass); expanded volcan-

ic rock; volcanic ash; cement kiln dust; fly ash; rice hull ash; activated charcoal/activated carbon); or

(II) High molecular weight synthetic polymers (e.g., polyethylene, high density polyethylene (HDPE), polypropylene, polystyrene, polyurethane, polyacrylate, polynorborene, polyisobutylene, ground synthetic rubber, cross-linked allylstyrene and tertiary butyl copolymers). This does not include polymers derived from biological material or polymers specifically designed to be degradable; or

(III) Mixtures of these nonbiodegradable materials.

(B) Tests for nonbiodegradable sorbents.

(I) The sorbent material is determined to be nonbiodegradable under ASTM Method G21-96 (2002) - Standard Practice for Determining Resistance of Synthetic Polymer Materials to Fungi; or

(II) The sorbent material is determined to be nonbiodegradable under OECD (Organization for Economic Cooperation and Development) test 301B: [CO₂ Evolution (Modified Sturm Test)].

(v) The placement of any liquid which is not a dangerous waste in a landfill is prohibited unless the owner or operator of such landfill demonstrates to the department, or the department determines, that:

(A) The only reasonably available alternative to the placement in such landfill is placement in a landfill or unlined surface impoundment, whether or not permitted or operating under interim status, which contains, or may reasonably be anticipated to contain, hazardous waste; and

(B) Placement in such owner or operator's landfill will not present a risk of contamination of any underground source of drinking water (as that term is defined in WAC 173-303-040).

(c) Disposal of solid acid waste. No person may land dispose solid acid waste, except as provided in subsection (5), (6), or (7) of this section. A person is encouraged to reclaim, recycle, recover, treat, detoxify, neutralize, or otherwise process these wastes to remove or reduce their harmful properties or characteristics, provided that such processing is performed in accordance with the requirements of this chapter.

(d) Disposal of organic/carbonaceous waste.

(i) No person may land dispose organic/carbonaceous waste, except as provided in subsection (5), (6), or (7) of this section. A person is encouraged to reclaim, recycle, recover, treat, detoxify, or otherwise process these wastes to remove or reduce their harmful properties or characteristics, provided that such processing is performed in accordance with the requirements of this chapter. Organic/carbonaceous wastes must be incinerated as a minimum management method according to the dangerous waste management priorities as defined in subsection (1)(a) of this section.

(ii) This prohibition against the land disposal of organic/carbonaceous waste does not apply to black mud generated from the caustic leach recovery of cryolite at primary aluminum smelting plants.

(iii) This prohibition against the land disposal of organic/carbonaceous waste does not apply to any person who certifies to the department that recycling, treatment and incineration facilities are not available within a radius of one thousand miles from Washington state's borders. Such certification must be sent to the department by certified mail or other means that establish proof of receipt (including applicable electronic means) and must include: The name, address and telephone number of the person certifying; a brief description of the organic/carbonaceous waste covered by the certification; a discus-

sion of the efforts undertaken to identify available recycling, treatment and incineration facilities; and the signature of the person responsible for the certification and development of information used to support the certification. Records and information supporting the certification must be retained by the certifying person and must be made available to the department upon request.

A certification that has been properly submitted to the department will remain valid until the department determines that a recycling, treatment or incineration facility is available within a radius of one thousand miles from Washington state's borders and the person who submitted the certification is unable to demonstrate otherwise. A recycling, treatment or incineration facility will be considered by the department to be available if such facility: Is operating, and; can safely and legally recycle, treat or incinerate the organic/carbonaceous waste, and; has sufficient capacity to receive and handle significant amounts of the waste, and; agrees to accept the waste.

(5) Treatment in land disposal facilities. The land disposal restrictions in subsection (4) of this section do not apply to persons treating dangerous wastes in surface impoundments, waste piles, or land treatment facilities provided that such treatment is performed in accordance with the requirements of this subsection and this chapter.

(a) Surface impoundment treatment.

Liquid waste, extremely hazardous waste (EHW), solid acid waste, and organic/carbonaceous waste may be placed in surface impoundments for purposes of treatment provided the owner/operator can demonstrate that effective treatment of the dangerous waste constituents will occur and at closure the owner/operator complies with the prohibitions and restrictions of subsection (4) of this section.

(b) Waste pile treatment.

Liquid waste, extremely hazardous waste (EHW), solid acid waste, and organic/carbonaceous waste may be placed in waste piles for purposes of treatment provided the owner/operator can demonstrate that effective treatment of dangerous waste constituents will occur and that at closure the owner/operator will be in compliance with the prohibitions and restrictions of subsection (4) of this section.

(c) Land treatment.

Liquid waste, extremely hazardous waste (EHW), and organic/carbonaceous waste may be land treated provided that the owner/operator can demonstrate that effective treatment of dangerous waste constituents will occur, and at the end of the post-closure care period the owner/operator will be in compliance with subsection (4) of this section.

(6) Case-by-case exemptions to a land disposal prohibition. Any person may petition the department for an exemption from a prohibition in subsection (4) of this section for the land disposal of a dangerous waste. The procedures to submit a petition to the department are specified in WAC 173-303-910(6). The department may deny any petition if it determines that there is a potential for dangerous waste constituents to migrate from the land disposal facility where the waste is to be placed. The department will deny any petition when exemption would result in a substantial or imminent threat to public health or the environment. The department will deny any petition when exemption would result in a violation of applicable state laws.

The department may grant an exemption from the prohibitions and restrictions of subsection (4) of this section based on the demonstrations specified in (a), (b) or (c) of this subsection.

(a) Land disposal exemption for treatment residuals. Any person may request an exemption from a land disposal prohibition in subsec-

tion (4) of this section for treatment residuals by demonstrating to the department that:

(i) The person has applied the best achievable management method to the original waste; and

(ii) Application of additional management methods to the treatment residuals would prevent the person from utilizing the best achievable management methods for the original dangerous waste; and

(iii) The land disposal of the treatment residuals does not pose a greater risk to the public health and the environment than land disposal of the original dangerous waste would pose.

(b) Economic hardship exemption. Any person may request an exemption from a prohibition in subsection (4) of this section for the land disposal of a dangerous waste by demonstrating to the department that alternative management of the dangerous waste will impose an unreasonable economic burden in relation to the threat of harm to public health and the environment. It will be solely within the discretion of the department to approve or deny the requests for exemptions based on economic hardship.

(c) Organic/carbonaceous waste exemption. Any person may request an exemption from the requirements in subsection (4) of this section by demonstrating to the department that:

(i) Alternative management methods for organic/carbonaceous waste are less protective of public health and the environment than stabilization or landfilling; or

(ii)(A) The organic/carbonaceous waste has a heat content less than 3,000 BTU/LB or contains greater than sixty-five percent water or other noncombustible moisture; and

(B) Incineration is the only management method available within a radius of one thousand miles from Washington state's border (i.e., recycling or treatment are not available).

(7) Emergency cleanup provision. The department may, on a case-by-case basis, grant an exception to the land disposal restrictions in subsection (4) of this section for an emergency cleanup where an imminent threat to public health and the environment exists. Any exception will require compliance with applicable state law and will require (consistent with the nature of the emergency and imminent threat) application of the waste management priorities of RCW 70.105.150.

[Statutory Authority: Chapters 70.105, 70.105D RCW and RCRA. WSR 19-04-038 (Order 16-03), § 173-303-140, filed 1/28/19, effective 4/28/19. Statutory Authority: Chapter 70.105 RCW. WSR 15-01-123 (Order 13-07), § 173-303-140, filed 12/18/14, effective 1/18/15. Statutory Authority: Chapters 70.105 and 70.105D RCW. WSR 09-14-105 (Order 07-12), § 173-303-140, filed 6/30/09, effective 7/31/09; WSR 03-07-049 (Order 02-03), § 173-303-140, filed 3/13/03, effective 4/13/03; WSR 98-03-018 (Order 97-03), § 173-303-140, filed 1/12/98, effective 2/12/98; WSR 95-22-008 (Order 94-30), § 173-303-140, filed 10/19/95, effective 11/19/95; WSR 94-01-060 (Order 92-33), § 173-303-140, filed 12/8/93, effective 1/8/94. Statutory Authority: Chapter 70.105 RCW. WSR 88-02-057 (Order DE 83-36), § 173-303-140, filed 1/5/88, effective 2/5/88; WSR 84-09-088 (Order DE 83-36), § 173-303-140, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. WSR 82-05-023 (Order DE 81-33), § 173-303-140, filed 2/10/82.]

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.