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Title 22@ Social Security

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Division 4.5@ Environmental Health Standards for the Management of Hazardous Waste

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Chapter 14@ Standards for Owners and Operators of Hazardous Waste Transfer, Treatment, Storage, and Disposal Facilities

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Article 13@ Land Treatment

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Section 66264.273@ Design and Operating Requirements

66264.273 Design and Operating Requirements

The Department will specify in the facility permit how the owner or operator will design, construct, operate and maintain the land treatment unit in compliance with this section.

(a)

The owner or operator shall design, construct, operate and maintain the unit to maximize the degradation, transformation and immobilization of constituents of concern in the treatment zone. The owner or operator shall design, construct, operate and maintain the unit in accord with all design and operating conditions that were used in the treatment demonstration under section 66264.272. At a minimum, the Department will specify the following in the facility permit: (1) the rate and method of waste application to the treatment zone; (2) measures to control soil pH; (3) measures to enhance microbial or chemical reactions (e.g., fertilization, tilling); and (4) measures to control the moisture content of the treatment zone.

(1)

the rate and method of waste application to the treatment zone;

(2)

measures to control soil pH;

(3)

measures to enhance microbial or chemical reactions (e.g., fertilization, tilling); and

(4)

measures to control the moisture content of the treatment zone.

(b)

The owner or operator shall design, construct, operate and maintain the treatment zone to prevent run-off of constituents of concern during the active life of the land treatment unit.

(c)

The owner or operator shall design, construct, operate and maintain a run-on control system capable of preventing flow onto the treatment zone during peak discharge from at least a 25-year storm.

(d)

The owner or operator shall design, construct, operate and maintain a run-off management system to collect, control and properly manage at least the water volume resulting from a 24-hour, 25-year storm.

(e)

Collection and holding facilities (e.g., tanks or basins) associated with run-on and run-off control systems shall be emptied or otherwise managed expeditiously after storms to maintain the design capacity of the system.

(f)

If the treatment zone contains particulate matter which may be subject to wind dispersal, the owner or operator shall manage the unit to control wind dispersal.

(g)

The owner or operator shall inspect the unit weekly and after storms to detect evidence of: (1) deterioration, malfunctions or improper operation of run-on and run-off control systems; and (2) improper functioning of wind dispersal control measures.

(1)

deterioration, malfunctions or improper operation of run-on and run-off control systems; and

(2)

improper functioning of wind dispersal control measures.

(h)

The growth of food-chain crops in or on the treatment zone is prohibited.

(i)

The owner or operator shall manage the unit to keep the release of airborne contaminants below nuisance levels or other levels necessary to protect human health or the environment.

(j)

(1) Unless granted a variance pursuant to subsection (j)(2) of this section, or exempted pursuant to subsection (l) of this section, every new land treatment unit at a new or existing facility, every land treatment unit which replaces an existing land treatment unit, and every laterally expanded portion of an existing land treatment unit is required to be equipped with two or more liners and a leachate collection system meeting the requirements established in section 66264.301(c) for new landfills. (2) The Department shall grant a variance from the requirements of subsection (j)(1) or subsection (k) of this section if the owner or operator demonstrates to the Department and the Department finds all of the following: (A) the land treatment unit was an existing land treatment unit as of January 1, 1988, and no hazardous constituents identified in Appendix VIII to chapter 11 of this division have migrated from the treatment zone of the land treatment unit into the vadose zone or into the waters of the State, and no other hazardous constituents have migrated from the land treatment unit into the

vadose zone or into the waters of the State in concentrations which pollute or threaten to pollute the vadose zone or the waters of the State. In making this demonstration the owner or operator shall take a sufficient number of core samples in, beneath and surrounding the treatment zone of the land treatment unit to characterize the chemical constituents in the treatment zone, in the immediate area of the vadose zone surrounding the treatment zone, and in the area of the vadose zone beneath the treatment zone and shall submit groundwater monitoring data sufficient in scope to demonstrate that there has been no migration of hazardous constituents in the vadose zone or into the waters of the State in concentrations which pollute or threaten to pollute the waters of the State. The owner or operator, as an alternative to taking these core samples, may use the data obtained from any land treatment demonstration required by the department pursuant to section 66264.272 if the data were obtained not more than two years prior to the application for the variance and were sufficient in scope to demonstrate that there has been no migration of hazardous constituents into the vadose zone or into the waters of the State in concentrations which pollute or threaten to pollute the vadose zone or waters of the State. (B)

Notwithstanding the date that the land treatment unit commenced operations, the design and operating practices will prevent the migration of hazardous constituents identified in Appendix VIII to chapter 11 of this division from the treatment zone of the land treatment unit into the vadose zone or into the waters of the State, and no other hazardous constituents have migrated from the land treatment unit into the vadose zone or into the waters of the State in concentrations which pollute or threaten to pollute the vadose zone or the waters of the State. (C) Notwithstanding the date that the land treatment unit commenced operations, the design and operating practices provide for rapid

detection and removal or remediation of any hazardous constituents that migrate from the treatment zone of the land treatment unit into the vadose zone or the waters of the State in concentrations that pollute or threaten to pollute the vadose zone or the waters of the State. (3) (A) The Department shall renew a variance only in those cases where an owner or operator demonstrates to the Department and the Department finds, both of the following: 1. no hazardous constituents have migrated from the treatment zone of the land treatment unit into the vadose zone or into the waters of the State concentrations which pollute or threaten to pollute the vadose zone or the waters of the State; 2. continuing the operation of the land treatment unit does not pose a significant threat of hazardous constituents migrating from the land treatment unit into the vadose zone or into the waters of the State in concentrations which pollute or threaten to pollute the vadose zone or the waters of the State. (B) In making the demonstration for the renewal of a variance pursuant to this subsection, the owner or operator may use field tests, laboratory analysis or operating data. (4) A variance or a renewal of a variance may be issued for a period not to exceed three years. (5) Neither the requirements of this section nor the variance provisions of subsection (j)(2) shall relieve the owner or operator from responsibility to comply with all other existing laws and regulations pertinent to land treatment units.

(1)

Unless granted a variance pursuant to subsection (j)(2) of this section, or exempted pursuant to subsection (l) of this section, every new land treatment unit at a new or existing facility, every land treatment unit which replaces an existing land treatment unit, and every laterally expanded portion of an existing land treatment unit is required to be equipped with two or more liners and a leachate collection system meeting the requirements established in section 66264.301(c) for new landfills.

(2)

The Department shall grant a variance from the requirements of subsection (j)(1) or subsection (k) of this section if the owner or operator demonstrates to the Department and the Department finds all of the following: (A) the land treatment unit was an existing land treatment unit as of January 1, 1988, and no hazardous constituents identified in Appendix VIII to chapter 11 of this division have migrated from the treatment zone of the land treatment unit into the vadose zone or into the waters of the State, and no other hazardous constituents have migrated from the land treatment unit into the vadose zone or into the waters of the State in concentrations which pollute or threaten to pollute the vadose zone or the waters of the State. In making this demonstration the owner or operator shall take a sufficient number of core samples in, beneath and surrounding the treatment zone of the land treatment unit to characterize the chemical constituents in the treatment zone, in the immediate area of the vadose zone surrounding the treatment zone, and in the area of the vadose zone beneath the treatment zone and shall submit groundwater monitoring data sufficient in scope to demonstrate that there has been no migration of hazardous constituents in the vadose zone or into the waters of the State in concentrations which pollute or threaten to pollute the waters of the State. The owner or operator, as an alternative to taking these core samples, may use the data obtained from any land treatment demonstration required by the department pursuant to section 66264.272 if the data were obtained not more than two years prior to the application for the variance and were sufficient in scope to demonstrate that there has been no migration of hazardous constituents into the vadose zone or into the waters of the State in concentrations which pollute or threaten to pollute the vadose zone or waters of the State. (B) Notwithstanding the date that the land treatment unit commenced operations, the design and operating practices will prevent the migration of hazardous constituents identified in Appendix

VIII to chapter 11 of this division from the treatment zone of the land treatment unit into the vadose zone or into the waters of the State, and no other hazardous constituents have migrated from the land treatment unit into the vadose zone or into the waters of the State in concentrations which pollute or threaten to pollute the vadose zone or the waters of the State. (C) Notwithstanding the date that the land treatment unit commenced operations, the design and operating practices provide for rapid detection and removal or remediation of any hazardous constituents that migrate from the treatment zone of the land treatment unit into the vadose zone or the waters of the State in concentrations that pollute or threaten to pollute the vadose zone or the waters of the State.

(A)

the land treatment unit was an existing land treatment unit as of January 1, 1988, and no hazardous constituents identified in Appendix VIII to chapter 11 of this division have migrated from the treatment zone of the land treatment unit into the vadose zone or into the waters of the State, and no other hazardous constituents have migrated from the land treatment unit into the vadose zone or into the waters of the State in concentrations which pollute or threaten to pollute the vadose zone or the waters of the State. In making this demonstration the owner or operator shall take a sufficient number of core samples in, beneath and surrounding the treatment zone of the land treatment unit to characterize the chemical constituents in the treatment zone, in the immediate area of the vadose zone surrounding the treatment zone, and in the area of the vadose zone beneath the treatment zone and shall submit groundwater monitoring data sufficient in scope to demonstrate that there has been no migration of hazardous constituents in the vadose zone or into the waters of the State in concentrations which pollute or threaten to pollute the waters of the State. The owner or operator, as an alternative to taking these core samples, may use the data obtained from any land treatment demonstration required by the department pursuant to section 66264.272 if

the data were obtained not more than two years prior to the application for the variance and were sufficient in scope to demonstrate that there has been no migration of hazardous constituents into the vadose zone or into the waters of the State in concentrations which pollute or threaten to pollute the vadose zone or waters of the State.

(B)

Notwithstanding the date that the land treatment unit commenced operations, the design and operating practices will prevent the migration of hazardous constituents identified in Appendix VIII to chapter 11 of this division from the treatment zone of the land treatment unit into the vadose zone or into the waters of the State, and no other hazardous constituents have migrated from the land treatment unit into the vadose zone or into the waters of the State in concentrations which pollute or threaten to pollute the vadose zone or the waters of the State.

(C)

Notwithstanding the date that the land treatment unit commenced operations, the design and operating practices provide for rapid detection and removal or remediation of any hazardous constituents that migrate from the treatment zone of the land treatment unit into the vadose zone or the waters of the State in concentrations that pollute or threaten to pollute the vadose zone or the waters of the State.

(3)

(A) The Department shall renew a variance only in those cases where an owner or operator demonstrates to the Department and the Department finds, both of the following: 1. no hazardous constituents have migrated from the treatment zone of the land treatment unit into the vadose zone or into the waters of the State concentrations which pollute or threaten to pollute the vadose zone or the waters of the State; 2. continuing the operation of the land treatment unit does not pose a significant threat of hazardous constituents migrating from the land treatment unit into the vadose zone or

into the waters of the State in concentrations which pollute or threaten to pollute the vadose zone or the waters of the State. (B) In making the demonstration for the renewal of a variance pursuant to this subsection, the owner or operator may use field tests, laboratory analysis or operating data.

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The Department shall renew a variance only in those cases where an owner or operator demonstrates to the Department and the Department finds, both of the following: 1. no hazardous constituents have migrated from the treatment zone of the land treatment unit into the vadose zone or into the waters of the State concentrations which pollute or threaten to pollute the vadose zone or the waters of the State; 2. continuing the operation of the land treatment unit does not pose a significant threat of hazardous constituents migrating from the land treatment unit into the vadose zone or into the waters of the State in concentrations which pollute or threaten to pollute the vadose zone or the waters of the State.

1.

no hazardous constituents have migrated from the treatment zone of the land treatment unit into the vadose zone or into the waters of the State concentrations which pollute or threaten to pollute the vadose zone or the waters of the State;

2.

continuing the operation of the land treatment unit does not pose a significant threat of hazardous constituents migrating from the land treatment unit into the vadose zone or into the waters of the State in concentrations which pollute or threaten to pollute the vadose zone or the waters of the State.

(B)

In making the demonstration for the renewal of a variance pursuant to this subsection, the owner or operator may use field tests, laboratory analysis or operating data.

(4)

A variance or a renewal of a variance may be issued for a period not to exceed three years.

(5)

Neither the requirements of this section nor the variance provisions of subsection (j)(2) shall relieve the owner or operator from responsibility to comply with all other existing laws and regulations pertinent to land treatment units.

(k)

Unless granted a variance pursuant to subsection (j)(2) or exempted under subsection (l) of this section, after January 1, 1990, no person shall discharge hazardous waste into a land treatment unit which has not been equipped with liners and a leachate collection and removal system which satisfy the requirements of subsection (j)(1) of this section.

(l)

Land treatment of soil contaminated only with non-RCRA hazardous waste which has been excavated as part of a removal or remedial action at any hazardous substance release site is exempt from the requirements of subsection (j) of this section if all of the following apply: (1) the Department determines that the land treatment does not pose a threat to public health or safety or the environment; (2) the land treatment is conducted pursuant to a plan approved by the Department or a cleanup and abatement order issued by a regional water quality control board; (3) the land treatment is not conducted at an offsite commercial facility; (4) the land treatment is used only for purposes of removal or remedial action and, upon completion of the land treatment portion of the removal or remedial action, the land treatment unit is closed.

(1)

the Department determines that the land treatment does not pose a threat to public

health or safety or the environment;

(2)

the land treatment is conducted pursuant to a plan approved by the Department or a cleanup and abatement order issued by a regional water quality control board;

(3)

the land treatment is not conducted at an offsite commercial facility;

(4)

the land treatment is used only for purposes of removal or remedial action and, upon completion of the land treatment portion of the removal or remedial action, the land treatment unit is closed.

(m)

For purposes of this section, the terms "removal," "remedial action," "hazardous substance" and "release" shall be defined in accordance with article 2 (commencing with section 25310) of chapter 6.8 division 20 of the Health and Safety Code.