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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 15@ Interim Status Standards for Owners and Operators of Hazardous Waste Transfer, Treatment, Storage, and Disposal Facilities

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Article 2@ General Facility Standards

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Section 66265.19@ Construction Quality Assurance Program

66265.19 Construction Quality Assurance Program

(a)

CQA program. (1) A construction quality assurance (CQA) program is required for all surface impoundment, waste pile, and landfill units that are required to comply with sections 66265.221(a), 66265.254, and 66265.301(a). The program shall ensure that the constructed unit meets or exceeds all design criteria and specifications in the permit. The program shall be developed and implemented under the direction of a CQA officer who is a California state registered professional Civil engineer. (2) The CQA program shall address the following physical components, where applicable: (A) Foundations; (B) Dikes; (C) Low-permeability soil liners; (D) Geomembrane (flexible membrane liners); (E) Leachate collection and removal systems and leak detection systems; and (F) Final cover systems.

(1)

A construction quality assurance (CQA) program is required for all surface impoundment, waste pile, and landfill units—that are required to comply with sections 66265.221(a), 66265.254, and 66265.301(a). The program shall ensure that the constructed unit meets or exceeds all design—criteria and specifications in the permit. The program shall be developed and—implemented under the direction of a CQA officer who is a California state—registered professional Civil engineer.

(2)

The CQA program shall address the following physical components, where applicable: (A) Foundations; (B) Dikes; (C) Low-permeability soil liners; (D) Geomembrane (flexible membrane liners); (E) Leachate collection and removal systems and leak detection systems; and (F) Final cover systems.

(A)

Foundations;

(B)

Dikes;

(C)

Low-permeability soil liners;

(D)

Geomembrane (flexible membrane liners);

(E)

Leachate collection and removal systems and leak detection systems; and

(F)

Final cover systems.

(b)

Written CQA plan. Before construction begins on a unit subject to the CQA program under subsection (a) of this section, the owner or operator shall develop a written CQA plan. The plan shall identify steps that will be used to monitor and document the quality of materials and the condition and manner of their installation. The CQA plan shall include: (1) Identification of applicable units, and a description of how they will be constructed. (2) Identification of key personnel in the development and implementation of the CQA plan, and CQA officer qualifications. (3) A description of inspection and sampling activities for all unit components identified in subsection (a)(2) of this section, including observations

and tests that will be used before, during, and after construction to ensure that the construction materials and the installed unit components meet the design specifications. The description shall cover: Sampling size and locations; frequency of testing; data evaluation procedures; acceptance and rejection criteria for construction materials; plans for implementing corrective measures; and data or other information to be recorded and retained in the operating record under section 66265.73.

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A description of inspection and sampling activities for all unit components identified in subsection (a)(2) of this section, including observations and tests that will be used before, during, and after construction to ensure that the construction materials and the installed unit components meet the design specifications. The description shall cover: Sampling size and locations; frequency of testing; data evaluation procedures; acceptance and rejection criteria for construction materials; plans for implementing corrective measures; and data or other information to be recorded and retained in the operating record under section 66265.73.

(c)

Contents of program. (1) The CQA program shall include observations, inspections, tests, and measurements sufficient to ensure: (A) Structural stability and integrity of all components of the unit identified in subsection (a)(2) of this section; (B) Proper construction of all components of the liners, leachate collection

and removal system, leak—detection system, and final cover system, according to permit specifications—and good engineering practices, and proper installation of all components—(e.g., pipes) according to design specifications; (C) Conformity of all materials used with—design and other material specifications under sections 66264.221, 66264.251, and 66264.301 of this—chapter. (2) The CQA—program shall include test fills for compacted soil liners, using the same—compaction methods as in the full-scale unit, to ensure that the liners are—constructed to meet the hydraulic conductivity requirements of sections—66264.221(c)(1), 66264.251(c)(1), and 66264.301(c)(1)—of this chapter in the field. Compliance with the hydraulic conductivity—requirements shall be verified by using in-situ testing on the constructed test—fill. The test fill requirement is waived where data are sufficient to show—that a constructed soil liner meets the hydraulic conductivity requirements of Sections 66264.221(c)(1), 66264.251(c)(1), and 66264.301(c)(1)—of this chapter in the field.

(1)

The CQA program shall include observations, inspections, tests, and measurements sufficient to ensure: (A) Structural stability and integrity of all components of the unit identified in subsection (a)(2) of this section; (B) Proper construction of all components of the liners, leachate collection and removal system, leak detection system, and final cover system, according to permit specifications and good engineering practices, and proper installation of all components (e.g., pipes) according to design specifications; (C) Conformity of all materials used with design and other material specifications under sections 66264.221, 66264.251, and 66264.301 of this chapter.

(A)

Structural stability and integrity of all components of the unit identified in subsection (a)(2) of

this section;

(B)

Proper construction of all components of the liners, leachate collection and removal system, leak detection system, and final cover system, according to permit specifications and good engineering practices, and proper installation of all components (e.g., pipes) according to design specifications;

(C)

Conformity of all materials used with design and other material specifications under sections 66264.221, 66264.251, and 66264.301 of this chapter.

(2)

The CQA program shall include test fills for compacted soil liners, using the same compaction methods as in the full-scale unit, to ensure that the liners are constructed to meet the hydraulic conductivity requirements of sections 66264.221(c)(1), 66264.251(c)(1), and 66264.301(c)(1) of this chapter in the field. Compliance with the hydraulic conductivity requirements shall be verified by using in-situ testing on the constructed test fill. The test fill requirement is waived where data are sufficient to show that a constructed soil liner meets the hydraulic conductivity requirements of sections 66264.221(c)(1), 66264.251(c)(1), and 66264.301(c)(1) of this chapter in the field.

(d)

Certification. The owner or operator of units subject to section 66265.19 shall submit to the Department by certified mail or hand delivery, at least 30 days prior to receiving waste, a certification signed by the CQA officer that the CQA plan has been successfully carried out and that the unit meets the requirements of sections 66265.221(a), 66265.254, or 66265.301(a). The owner or operator may receive waste in the unit after 30 days from the Department's receipt of the

CQA certification unless the Department determines in writing that the construction is not acceptable, or extends the review period for a maximum of 30 more days, or seeks additional information from the owner or operator during this period. Documentation supporting the CQA officer's certification shall be furnished to the Department upon request.