

3745-65-19

Construction quality assurance (CQA) program.

(A) CQA program.

(1) A CQA program is required for all surface impoundment, waste pile, and landfill units that are required to comply with rule 3745-67-54, paragraph (A) of rule 3745-67-21, and paragraph (A) of rule 3745-68-05 of the Administrative Code. The program must ensure that the constructed unit meets or exceeds all design criteria and specifications in the permit. The program must be developed and implemented under the direction of a CQA officer who is a ~~registered~~ professional engineer.

(2) The CQA program must address the following physical components, where applicable:

(a) Foundations;

(b) Dikes;

(c) Low-permeability soil liners;

(d) Geomembranes (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 paragraph (A) of this rule, the owner or operator must develop a written CQA plan. The plan must 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 must 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 paragraph (A)(2) of this rule, 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 must cover:

- (a) Sampling size and locations;
- (b) Frequency of testing;
- (c) Data evaluation procedures;
- (d) Acceptance and rejection criteria for construction materials;
- (e) Plans for implementing corrective measures; and
- (f) Data or other information to be recorded and retained in the operating record under rule 3745-65-73 of the Administrative Code.

(C) Contents of program.

- (1) The CQA program must include observations, inspections, tests, and measurements sufficient to ensure:
 - (a) Structural stability and integrity of all components of the unit identified in paragraph (A)(2) of this rule;
 - (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 rules 3745-56-21, 3745-56-51, and 3745-57-03 of the Administrative Code.
- (2) The CQA program must 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 paragraph (C)(1) of rule 3745-56-21, paragraph (C)(1) of rule 3745-56-51, and paragraph (C)(1) of rule 3745-57-03 of the Administrative Code in the field. Compliance with the hydraulic conductivity requirements must 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 paragraph (C)(1) of rule 3745-56-21, paragraph (C)(1) of rule 3745-56-51, and paragraph (C)(1) of rule 3745-57-03 of the Administrative Code in the field.

- (D) Certification. The owner or operator of units subject to this rule must submit to the director by certified mail or hand delivery, at least thirty 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 rule 3745-67-54, paragraph (A) of rule 3745-67-21, or paragraph (A) of rule 3745-68-05 of the Administrative Code. The owner or operator may receive waste in the unit after thirty days from the director's receipt of the CQA certification unless the director determines in writing that the construction is not acceptable, or extends the review period for a maximum of thirty more days, or seeks additional information from the owner or operator during this period. Documentation supporting the CQA officer's certification must be furnished to the director upon request.

Effective: 03/17/2012

R.C. 119.032 review dates: Exempt

CERTIFIED ELECTRONICALLY

Certification

03/06/2012

Date

Promulgated Under: 119.03
Statutory Authority: 3734.12
Rule Amplifies: 3734.12
Prior Effective Dates: 12/07/2004