



Ohio Administrative Code

Rule 3745-65-19 Construction quality assurance (CQA) program.

Effective: September 29, 2021

(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 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 professional engineer.

(2) The CQA program shall 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 shall develop a written CQA plan. The CQA plan shall identify steps that will be used to monitor and document the quality of materials and the condition and manner of installation of the materials. The CQA plan shall include:

(1) Identification of applicable units, and a description of how the units 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 to 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:

(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 shall 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 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 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 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 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. At least thirty days prior to waste receipt, the owner or operator of units subject to this rule shall submit to the director by certified mail or hand delivery a certification signed by the CQA officer that the CQA plan was 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 thirty days after 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 shall be furnished to the director upon request.