Ohio Administrative Code

Rule 3745-400-08 Construction and final closure certification.

Effective: November 7, 2024

(A) Upon completion of construction of an engineered component specified in rule 3745-400-07 of the Administrative Code, the owner or operator shall submit to the licensing authority a construction certification report certifying that the construction complies with the construction and performance specifications contained in rules 3745-400-07 and 3745-400-10 of the Administrative Code.

[Comment: Certification follows the facility design plan of rule 3745-400-07 of the Administrative Code, in that there are certification reports to certify the construction of engineered components of the soil liner, leachate collection system, and final cap system, and a certification report to certify the ground water monitoring well system. In addition, a final certification report certifies final closure in accordance with rule 3745-400-12 of the Administrative Code.]

(1) Certification of installation of ground water monitoring wells, as specified in paragraph (A) of rule 3745-400-10 of the Administrative Code, shall be submitted to the licensing authority prior to or with the annual ground water report specified in paragraph (B) of rule 3745-400-10 of the Administrative Code if the ground water monitoring report identifies new ground water monitoring wells.

[Comment: The licensing authority does not approve the certification report. However for new areas that are to be licensed for disposal, disposal cannot take place until the monitoring wells necessary to monitor the active licensed disposal area are installed and the first ground water sampling has occurred, as indicated in paragraph (D)(4) of rule 3745-400-11 of the Administrative Code.]

(2) Certification of construction of the engineered components shall be submitted to the licensing authority not later than sixty days after completion of construction. Engineered components needing construction certification are those components contained in the facility construction design plan specified in paragraph (F) of rule 3745-400-07 of the Administrative Code and any barrier layer designed and shown in the license application for a facility in accordance with rule 3745-501-10 of the Administrative Code.

[Comment: The licensing authority does not approve the certification report. However for areas that are to be licensed for disposal, disposal cannot take place until the report is received and the licensing authority inspects the area as indicated in paragraph (D)(3) of rule 3745-400-11 of the Administrative Code. The leachate collection system, when constructed in phases ahead of the working face, needs certification and inspection for each construction phase.]

(3) Certification that the engineered components of the final cap system, pursuant to paragraph (G) of rule 3745-400-07 of the Administrative Code and contained in the final cap system design plan, have been constructed shall be submitted to the licensing authority not later than sixty days after completion of construction. The owner or operator may construct portions of the final cap system as active licensed disposal areas are brought to final grade. The licensing authority shall review the certification report and either approve or deny the construction.

[Comment: The release of final closure financial assurance by the licensing authority upon construction certification of engineered components of the final cap system is addressed in paragraph (A)(1)(f)(ii) of rule 3745-400-13 of the Administrative Code.]

(B) Except for the construction certification report on the installation of ground water monitoring wells, which shall be certified by a qualified ground water scientist, each construction certification report shall be signed and sealed by a professional engineer registered in Ohio and include the following:

(1) Identification of the constructed engineered component for certification. Plan sheets showing the appropriate views and cross-sections from the facility design plan shall be used to prepare record drawings of what and how the engineered component was constructed and include the testing locations. Details of the engineered component shall be redrawn. Record drawings of a barrier layer shall consist of a plan drawing and cross sections and use the drawing formats described in paragraphs (F)(3) and (F)(4) of rule 3745-400-07 of the Administrative Code.

(2) Sampling and testing procedures used to verify the construction of the engineered components.

(3) Parameters and testing locations.

(4) Results of all testing specified in paragraph (C) of this rule.

(5) Identification of any deviations from the specifications contained in rule 3745-400-07 of the Administrative Code. Any significant differences between the test results shall be justified by the owner or operator.

[Comment: A significant change to a specification of rule 3745-400-07 of the Administrative Code is a modification as described in paragraph (A) of rule 3745-400-15 of the Administrative Code.]

(6) The management structure and the experience and training of the testing personnel.

(7) For the construction certification of the survey marks, a certified statement prepared by a professional surveyor that the requirements of paragraph (F)(3)(i) of rule 3745-400-07 of the Administrative Code have been met.

(C) The owner or operator shall verify the following at the frequencies or in the manner specified in this paragraph:

(1) Prior to use in construction, soil materials used for the following are tested for recompacted permeability at construction specifications at a frequency of least once for every ten thousand cubic yards of soil to show that the materials are suitable for use:

(a) Recompacted soil liner.

(b) Any soil barrier layer.

(c) Recompacted soil in the standard cap system for soils that meet only the specification in paragraph (G)(2)(a)(i)(d)(ii) of rule 3745-400-07 of the Administrative Code, pertaining to a maximum permeability of 1×10^{-6} cm/sec for each lift of the recompacted soil.

(2) The permeability of each lift of the recompacted soil liner, soil barrier layer, or added geologic material are verified on undisturbed samples at least once per every two acres. Any penetrations shall

be repaired using methods acceptable to the licensing authority.

(3) Prior to being used in the leachate collection system, the proposed drainage medium is tested for permeability at least once for every five thousand cubic yards of material.

(4) Prior to use in the construction of the standard cap system, the soil materials to be recompacted are classified by texture according to paragraph (G)(2)(a)(i) of rule 3745-400-07 of the Administrative Code at least once for every five thousand cubic yards of soil to demonstrate the materials are suitable for use.

(5) After construction, the compacted density of the recompacted soil of the standard cap system and the subbase of any soil barrier layer meet at least one of the following:

(a) For soils that meet the specification in paragraph (G)(2)(a)(i)(d)(i) of rule 3745-400-07 of the Administrative Code of at least fifty per cent of the soil particles, by weight, passing the number two hundred sieve, documentation of proof rolling with a pneumatic tire or smooth steel drum roller providing at least sixty-five psi contact pressure.

(b) For soils that meet only the specification in paragraph (G)(2)(a)(i)(d)(ii) of rule 3745-400-07 of the Administrative Code of a maximum permeability of 1×10^{-6} cm/sec for each lift of the recompacted soil, demonstrate at a frequency of at least five times per acre per lift the achievement of either at least ninety five per cent of the maximum standard Proctor density or at least ninety per cent of the maximum modified Proctor density.

(6) If the standard or modified Proctor density is to be used as the standard for recompaction as described in paragraph (C)(5)(b) of this rule, the maximum dry density and optimum moisture content are also established by method ASTM D698 or ASTM D1557 at least once for every five thousand cubic yards of soil prior to use.

(D) Final closure certification report. The final closure certification report shall verify that the following activities have been completed in accordance with paragraph (E) of rule 3745-400-12 of the Administrative Code:

(1) The facility has been blocked, by locked gates, fencing, or other sturdy obstacles.

(2) Signs are posted.

(3) All areas within the limits of debris placement that have been certified for final cap system construction in accordance with paragraphs (D) and (E) of rule 3745-400-07 of the Administrative Code as applicable are shown on a copy of a plan sheet specified in paragraph (G)(1) of rule 3745-400-07 of the Administrative Code. Each certified capped area shall identify the certified engineered components and include the date of the licensing authority approval pursuant to paragraph (A)(3) of this rule.

(4) Areas within the limits of debris placement for which a construction certification report is included with the final closure certification report are shown on a copy of a plan sheet specified in paragraph (G)(1) of rule 3745-400-07 of the Administrative Code. Each area shall identify the engineered components for which a construction certification report is included with the final closure certification report.

Construction certification reports for engineered components of the final cap system included with the final closure certification report shall be in accordance with paragraph (A)(3) of this rule with the exception of the attainment of complete and dense vegetative cover specified in paragraph (G)(2)(a)(iii) or (G)(2)(b)(ii) of rule 3745-400-07 of the Administrative Code. The construction certification reports for engineered components of the final cap system included with the final closure certification report shall verify that seeding to establish vegetative cover has been completed prior to submittal of the final closure certification report.

(5) A copy of the plat filed with the appropriate county recorder.

(6) A copy of the notation on the deed to the facility property.