

AUTHENTICATED, OHIO LEGISLATIVE SERVICE COMMISSION DOCUMENT #331730

Ohio Administrative Code

Rule 3745-267-191 Design and construction standards for new tank systems or components - tank systems - standardized permitting.

Effective: March 7, 2025

The owner or operator shall ensure that thefoundation, structural support, seams, connections, and pressure controls (ifapplicable) are adequately designed and that the tank system has sufficientstructural strength, compatibility with the wastes to be stored or treated, and corrosion protection to ensure that the tank system will not collapse, rupture, or fail. The owner or operator shall obtain a written assessment, reviewed and certified by an independent, qualified registered professional engineer, following paragraph (D) of rule 3745-50-42 of the Administrative Code, attesting that the tank system has sufficient structural integrity and isacceptable for the storing and treating of hazardous waste. This assessmentshall include, at a minimum, the following information:

(A) Design standards for the construction of tanks and the ancillary equipment;

(B) Hazardous characteristics of the wastes to be handled;

(C) For new tank systems or components in which the external shell of a metal tank or any external metal component of the tank system will be in contact with the soil or with water, a determination by a corrosion expert of:

(1) Factors affecting the potential for corrosion, such as:

(a) Soil moisture content;

(b) Soil pH;

(c) Soil sulfides level;

(d) Soil resistivity;



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- (e) Structure to soil potential;
- (f) Existence of stray electric current; and

(g) Existing corrosion-protection measures (for example, coating, cathodic protection);

(2) The type and degree of external corrosion protection needed to ensure the integrity of the tank system during the use of the tank system or component, consisting of one or more of the following:

(a) Corrosion-resistant materials of construction such as special alloys, fiberglass reinforced plastic, etc.;

(b) Corrosion-resistant coating (such as epoxy, fiberglass, etc.) with cathodic protection (for example, impressed current or sacrificial anodes); and

(c) Electrical isolation devices such as insulating joints, flanges, etc.;

(D) Design considerations to ensure that:

(1) Tank foundations will maintain the load of a full tank;

(2) Tank systems will be anchored to prevent flotation or dislodgement where the tank system is placed in a saturated zone, or is located within a seismic fault zone subject to the standards of paragraph (A) of rule 3745-267-18 of the Administrative Code; and

(3) Tank systems will withstand the effects of frost heave.