

SUBCHAPTER M: LOCATION RESTRICTIONS
§§330.541, 330.543, 330.545, 330.547, 330.549, 330.551,
330.553, 330.555, 330.557, 330.559, 330.561, 330.563
Effective March 27, 2006

§330.541. Applicability.

This subchapter applies in accordance with the conditions specified in §330.1 and §330.451 of this title (relating to Purpose and Applicability; and Applicability).

Adopted March 1, 2006

Effective March 27, 2006

§330.543. Easements and Buffer Zones.

(a) Easement protection. No solid waste unloading, storage, disposal, or processing operations shall occur within any easement, buffer zone, or right-of-way that crosses the facility. No solid waste disposal shall occur within 25 feet of the center line of any utility line or pipeline easement but no closer than the easement, unless otherwise authorized by the executive director. All pipeline and utility easements shall be clearly marked with posts that extend at least six feet above ground level, spaced at intervals no greater than 300 feet.

(b) Buffer zones.

(1) Except for facilities that are authorized by a notification, the owner or operator shall maintain a minimum separating distance of 50 feet between feedstock or final product storage areas; solid waste storage, processing, Type IAE landfill units, Type IV landfill units, and Type IVAE landfill units within and adjacent to the facility boundary on property owned or controlled by the owner or operator. The buffer zone shall not be narrower than that necessary to provide for safe passage for fire fighting and other emergency vehicles. The executive director may consider alternatives to buffer zone requirements for permitted and registered storage and processing municipal solid waste facilities.

(2) For landfill permits that existed before the comprehensive rule revisions of this chapter as adopted in 2006 became effective, the owner or operator is subject to the former rules and shall establish and maintain a buffer zone in compliance with the permit. For new Type I landfills, vertical or lateral expansions of existing Type I landfills, and existing Type IAE landfills that subsequently no longer satisfy the conditions specified in §330.5(b)(1) of this title (relating to Classification of Municipal Solid Waste Facilities), the owner or operator shall establish and maintain the buffer zone prescribed by this paragraph. All buffer zones must be within and adjacent to the facility boundary on property owned or controlled by the owner or operator.

(A) For any new Type I landfill, the owner or operator shall establish and maintain a 125-foot buffer zone.

(B) For any vertical expansion, the owner or operator shall establish and maintain a 125-foot buffer zone. A vertical expansion is any height increase that exceeds the maximum permitted final contour for any cell or unit for which an increase is requested. For a vertical expansion, the buffer distance must be measured from the outermost edge of the newly permitted solid waste disposal airspace.

(C) For any lateral expansion to areas not previously permitted, the owner or operator shall establish and maintain a 125-foot buffer zone. For a lateral expansion, the buffer distance must be measured from the edge of the horizontally expanded portion of the landfill.

(D) For vertical or lateral expansions of existing landfills, the new buffer zone requirements shall apply only to newly permitted airspace and shall not apply to any previously permitted airspace, regardless of whether or not the previously permitted airspace has been constructed or filled with solid waste. The new buffer zone may include any previously permitted airspace.

(3) The executive director may consider alternatives to buffer zone requirements in paragraph (2) of this subsection. Alternatives may be approved where the owner or operator demonstrates that:

(A) the prescribed buffer zone standard is not feasible; and

(B) there is a specific engineered design alternative that:

(i) is consistent with the performance goal of providing a visual screening of solid waste processing and disposal activities;

(ii) affords ready access for emergency response, maintenance, and monitoring;

(iii) affords equivalent control of odors and windblown waste as the prescribed buffer zone; and

(iv) provides sufficient distance to meet the drainage and sediment control requirements applicable to the facility.

Adopted March 1, 2006

Effective March 27, 2006

§330.545. Airport Safety.

(a) Owners or operators of new municipal solid waste landfill units, existing municipal solid waste landfill units, vertical or lateral expansions, and landfill mining operations that are located within 10,000 feet of any airport runway end used by turbojet aircraft or within 5,000 feet of any airport runway end used by only piston-type aircraft shall demonstrate that the units are designed and operated so that the municipal solid waste landfill unit does not pose a bird hazard to aircraft.

(b) Owners or operators proposing to site new municipal solid waste landfill units and lateral expansions located within a six-mile radius of any small general service airport runway end used by turbojet or piston-type aircraft shall notify the affected airport and the Federal Aviation Administration. Owners or operators proposing to site new municipal solid waste landfill units and lateral expansions located within a five-mile radius of any large general public commercial airport runway end used by turbojet or piston-type aircraft shall notify the affected airport and the Federal Aviation Administration.

(c) The owner or operator shall submit the demonstration in subsection (a) of this section with a permit application or a permit amendment application. The demonstration will be considered a part of the operating record once approved.

(d) Landfills disposing of putrescible waste shall not be located in areas where the attraction of birds can cause a significant bird hazard to low-flying aircraft. Guidelines regarding location of landfills near airports can be found in Federal Aviation Administration Order 5200.5(A), January 31, 1990. All landfill facilities within a six-mile radius of any small general service airport runway or within a five-mile radius of any large general public commercial airport runway shall be critically evaluated to determine if an incompatibility exists.

Adopted March 1, 2006

Effective March 27, 2006

§330.547. Floodplains.

(a) No solid waste disposal operations shall be permitted in areas that are located in a 100-year floodway as defined by the Federal Emergency Management Administration.

(b) New municipal solid waste management units, existing municipal solid waste units, and lateral expansions located in 100-year floodplains shall not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in washout of solid waste so as to pose a hazard to human health and the environment.

(c) Municipal solid waste storage and processing facilities shall be located outside of the 100-year floodplain unless the owner or operator can demonstrate that the facility is designed and will operate to prevent washout during a 100-year storm event, or obtains a conditional letter of map amendment from the Federal Emergency Management Administration administrator.

Adopted March 1, 2006

Effective March 27, 2006

§330.549. Groundwater.

(a) If located over the recharge zone of the Edwards Aquifer, a municipal solid waste facility is subject to Chapter 213 of this title (relating to Edwards Aquifer). The Edwards Aquifer Recharge Zone is specifically that area delineated on maps maintained by the executive director. In accordance with §213.8(a)(5) of this title (relating to Prohibited Activities), a Type I or Type IAE landfill is prohibited on the recharge zone of the Edwards Aquifer.

(b) Unless the executive director approves an engineered design that the applicant has demonstrated will provide equal or greater protection to human health and the environment, a new landfill cell or an areal expansion of an existing landfill cell managing Class 1 industrial solid waste may not be located in areas described in §335.584(b)(1) and (2) of this title (relating to Location Restrictions).

Adopted March 1, 2006

Effective March 27, 2006

§330.551. Endangered or Threatened Species.

(a) A facility and the operation of a facility shall not result in the destruction or adverse modification of the critical habitat of endangered or threatened species, or cause or contribute to the taking of any endangered or threatened species.

(b) The following words and terms have the following meanings, unless the context clearly indicates otherwise.

(1) **Harassing**--An intentional or negligent act or omission that creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns that include, but are not limited to, breeding, feeding, or sheltering.

(2) **Harming**--An act of omission that actually injures or kills wildlife, including acts that annoy it to such an extent as to significantly disrupt essential behavioral patterns, that include, but are not limited to, breeding, feeding, or sheltering; significant environmental modification or degradation that has such effects is included within the meaning of harming.

(3) **Taking**--Harassing, harming, pursuing, hunting, wounding, trapping, capturing, or collecting an endangered or threatened species or attempting to engage in such conduct.

Adopted March 1, 2006

Effective March 27, 2006

§330.553. Wetlands.

(a) Municipal solid waste storage or processing facilities shall not be located in wetlands unless the owner or operator makes each of the demonstrations identified in subsection (b)(1) - (5) of this section.

(b) New municipal solid waste landfill units, lateral expansions, and material recovery operations from a landfill shall not be located in wetlands, unless the owner or operator makes each of the demonstrations identified in paragraphs (1) - (5) of this subsection to the executive director. The owner or operator shall submit the demonstrations with a permit application, a permit major amendment application, or a registration application, as appropriate. The demonstration shall become part of the operating record once approved.

(1) Where applicable under Clean Water Act, §404 or applicable state wetlands laws, the presumption that a practicable alternative to the proposed landfill or recovery operation is available that does not involve wetlands shall be clearly rebutted.

(2) The construction and operation of the municipal solid waste landfill unit or recovery operation shall not:

(A) cause or contribute to violations of any applicable state water quality standard;

(B) violate any applicable toxic effluent standard or prohibition under the Clean Water Act, §307;

(C) jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of a critical habitat, protected under the Endangered Species Act of 1973; and

(D) violate any requirement under the Marine Protection, Research, and Sanctuaries Act of 1972 for the protection of a marine sanctuary.

(3) The municipal solid waste landfill unit or recovery operation shall not cause or contribute to significant degradation of wetlands. The owner/operator shall demonstrate the integrity of the landfill unit and its ability to protect ecological resources by addressing the following factors:

(A) erosion, stability, and migration potential of native wetland soils, muds, and deposits used to support the landfill unit;

(B) erosion, stability, and migration potential of dredged and fill materials used to support the landfill unit;

(C) the volume and chemical nature of the waste managed in the landfill unit;

(D) impacts on fish, wildlife, and other aquatic resources and their habitat from release of the solid waste;

(E) the potential effects of catastrophic release of waste to the wetland and the resulting impacts on the environment; and

(F) any additional factors, as necessary, to demonstrate that ecological resources in the wetland are sufficiently protected.

(4) To the extent required under Clean Water Act, §404 or applicable state wetlands laws, steps have been taken to attempt to achieve no net loss of wetlands (as defined by acreage and function) by first avoiding impacts to wetlands to the maximum extent practicable as required by paragraph (1) of this subsection, then minimizing unavoidable impacts to the maximum extent

practicable, and finally offsetting remaining unavoidable wetland impacts through all appropriate and practicable compensatory mitigation actions (e.g., restoration of existing degraded wetlands or creation of man-made wetlands).

(5) Sufficient information shall be made available to the executive director to make a reasonable determination with respect to these demonstrations.

Adopted March 1, 2006

Effective March 27, 2006

§330.555. Fault Areas.

(a) New municipal solid waste landfill units and lateral expansions shall not be located within 200 feet of a fault that has had displacement in Holocene time unless the owner or operator demonstrates to the executive director that an alternative setback distance of less than 200 feet will prevent damage to the structural integrity of the landfill unit and will be protective of human health and the environment. The owner or operator shall submit the demonstration with a permit application or a permit amendment application.

(b) Applications submitted for the operation of sites located within areas that may be subject to differential subsidence or active geological faulting must include detailed fault studies. When an active fault is known to exist within 1/2 mile of the site, the site must be investigated for unknown faults. Areas experiencing withdrawal of crude oil, natural gas, sulfur, etc., or significant amounts of groundwater must be investigated in detail for the possibility of differential subsidence or faulting that could adversely affect the integrity of landfill liners. Studies of differential subsidence or faulting shall be conducted under the direct supervision of a licensed professional engineer experienced in geotechnical engineering or a licensed professional geoscientist qualified to evaluate conditions of differential subsidence or faulting. The studies must establish the limits (both upthrown and downthrown) of the zones of influence of all active faulted areas within the site vicinity. Unless the owner or operator can provide substantial evidence that the zone of influence will not affect the site, no solid waste disposal shall be accomplished within a zone of influence of active geological faulting or differential subsidence because active faulting results in slippage along failure planes, thus creating preferred seepage paths for liquids. The studies must include information or data on the items in paragraphs (1) - (12) of this subsection, as applicable:

- (1) structural damage to constructed facilities (roadways, railways, and buildings);
- (2) scarps in natural ground;
- (3) presence of surface depressions (sag ponds and ponded water);
- (4) lineations noted on aerial maps and topographic sheets;
- (5) structural control of natural streams;
- (6) vegetation changes;

- (7) crude oil and natural gas accumulations;
- (8) electrical spontaneous potential and resistivity logs (correlation of subsurface strata to check for stratigraphic offsets);
- (9) earth electrical resistivity surveys (indications of anomalies that may represent fault planes);
- (10) open cell excavations (visual examinations to detect changes in subsoil texturing and/or weathering indicating stratigraphic offsets);
- (11) changes in elevations of established benchmarks; and
- (12) references to published geological literature pertaining to area conditions.

Adopted March 1, 2006

Effective March 27, 2006

§330.557. Seismic Impact Zones.

For the purposes of this section, a seismic impact zone is defined as an area with a 10% or greater probability that the maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth's gravitational pull, will exceed 0.10g in 250 years. Maximum horizontal acceleration is defined as the maximum expected horizontal acceleration depicted on a seismic hazard map, with a 90% or greater probability that the acceleration will not be exceeded in 250 years, or the maximum expected horizontal acceleration based on a site-specific seismic risk assessment. Lithified earth material is defined as all rocks, including all naturally occurring and naturally formed aggregates or masses of minerals or small particles of older rock that formed by crystallization of magma or by induration of loose sediments. This term does not include man-made materials, such as fill, concrete, and asphalt, or unconsolidated earth materials, soil, or regolith lying at or near the earth surface. New municipal solid waste landfill units and lateral expansions shall not be located in seismic impact zones, unless the owner or operator demonstrates to the executive director that all containment structures, including liners, leachate collection systems, and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site. The owner or operator shall submit the demonstration with a permit application or a permit amendment application. The demonstration must become part of the operating record once approved.

Adopted March 1, 2006

Effective March 27, 2006

§330.559. Unstable Areas.

For the purposes of this section, an unstable area is defined to be a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of a landfill's structural components responsible for preventing releases from the landfill; unstable areas can include poor foundation conditions, areas susceptible to mass movement, and karst terrains. Owners or operators of new municipal solid waste landfill units, existing landfill units, and lateral expansions

located in an unstable area shall demonstrate that engineering measures have been incorporated into the landfill unit's design to ensure that the integrity of the structural components of the landfill unit will not be disrupted. The owner or operator shall submit the demonstration with a permit application or a permit amendment application. The demonstration must become part of the operating record once approved. The owner or operator shall consider the following factors, at a minimum, when determining whether an area is unstable:

- (1) on-site or local soil conditions that may result in significant differential settling;
- (2) on-site or local geologic or geomorphologic features; and
- (3) on-site or local human-made features or events (both surface and subsurface).

Adopted March 1, 2006

Effective March 27, 2006

§330.561. Coastal Areas.

A new landfill cell or an areal expansion of an existing landfill cell managing Class 1 industrial solid waste may not be located in areas described in §335.584(b)(3) and (4) of this title (relating to Location Restrictions).

Adopted March 1, 2006

Effective March 27, 2006

§330.563. Type I and Type IV Landfill Permit Issuance Prohibited.

(a) The commission may not issue a permit for a Type IV landfill that is subject to the conditions specified in Texas Health and Safety Code, §361.122, Denial of Certain Landfill Permits.

(b) The commission may not issue a permit for a Type I or Type IV landfill that is subject to the conditions specified in Texas Health and Safety Code, §361.123, Limitation on Location of Municipal Solid Waste Landfills.

Adopted March 1, 2006

Effective March 27, 2006