The Texas Commission on Environmental Quality (TCEQ, agency, or commission) adopts the amendment to §§330.1, 330.3, 330.5, 330.7, 330.13, 330.15, 330.23, 330.57, 330.63, 330.65, 330.69, 330.103, 330.125, 330.147, 330.165, 330.171, 330.173, 330.217, 330.421, 330.545, 330.613, 330.615, 330.633, 330.635, 330.951, 330.953, 330.959, 330.987, 330.991, 330.993, and 330.995.

Amended §§330.1, 330.3, 330.5, 330.7, 330.13, 330.15, 330.23, 330.57, 330.63, 330.65, 330.69, 330.103, 330.125, 330.147, 330.165, 330.171, 330.173, 330.217, 330.421, 330.545, 330.613, 330.615, 330.633, 330.635, 330.951, 330.953, 330.959, 330.987, 330.991, 330.993, and 330.995 are adopted *without changes* to the proposed text as published in the May 24, 2024 issue of the *Texas Register* (49 TexReg 3713) and therefore will not be republished.

Amendments to §330.954 have been withdrawn.

Background and Summary of the Factual Basis for the Adopted Rules

Promulgation of House Bill 3060

The commission adopts this rulemaking to implement House Bill (HB) 3060, 88th Texas Legislature, 2023. HB 3060 amended Texas Health and Safety Code (THSC), §361.003 (Definitions), §361.041 (Treatment of Post-Use Polymers and Recoverable Feedstocks as Solid Waste), and §361.119 (Regulation of Certain Facilities as Solid Waste Facilities). These statutory enactments expanded existing conditional exclusions from the definition of solid waste and regulations applicable to owners and operators of facilities that convert plastics and certain other nonhazardous recyclable material through pyrolysis and gasification to include the processes of depolymerization and solvolysis. The conditional exclusion is dependent upon two conditions being satisfied: (1) an advanced recycling facility owner or operator must

demonstrate that the primary function of the facility is to convert materials into products for subsequent beneficial use; and (2) that all solid waste generated from converting the materials is disposed of at a solid waste management facility authorized by the commission. The commission's implementation of HB 3060 in Chapter 330 is only applicable to material that is classified as nonhazardous municipal solid waste if discarded. Implementation of provisions enacted by HB 3060 applicable to material that will be classified as industrial solid waste if discarded is adopted in Chapter 335 (Industrial Solid Waste and Municipal Hazardous Waste).

Electronic Application Submittal

The commission also adopts this rulemaking to implement Senate Bill (SB) 1397, 88th Texas Legislature, 2023. SB 1397 enacted Texas Water Code, §5.1734 which requires the commission to post on its website an electronic copy of an administratively complete permit application and subsequent revisions to the application. The adopted rulemaking amends §330.57 by reducing the number of paper applications an applicant is required to submit from four to two, and replacing the requirement for the applicant to post the initial application on a publicly accessible website with the requirement that the commission will post an electronic copy of the application on the commission's website.

Rule Citation Corrections

This rulemaking makes minor and non-substantive updates to incorrect rule citations or references.

Correcting use of and reference to Conditionally Exempt Small Quantity Generator which has changed to Very Small Quantity Generator

The adopted rulemaking corrects the name of the lowest tier hazardous waste generator

category which the Environmental Protection Agency (EPA) changed from "conditionally exempt small quantity generator" (CESQG) to "very small quantity generator" (VSQG) as part of the Hazardous Waste Generator Improvements Rule promulgated in the November 28, 2016, issue of the Federal Register (81 FR 85732). The commission adopted the Generator Improvements Rule in Chapter 335 of this title effective February 3, 2022. The Generator Improvements Rule also introduced alternative standards applicable to VSQGs who generate greater amounts of hazardous waste during an "episodic event" as defined in 40 Code of Federal Regulations (CFR) Part 262, Subpart L. The commission adopted by reference in 30 Texas Administrative Code (TAC) §335.60 the alternative standards applicable to VSQGs who generate hazardous waste during an "episodic event" (47 TexReg 318). Under the new conditional exclusion, a VSQG may generate greater than a VSQG quantity of hazardous waste in a calendar month during an episodic event, manage the hazardous waste as regulated hazardous waste, and avoid being upclassified to a small quantity generator or a large quantity generator by complying with all of the conditions for exclusion for an episodic event which among other things include consigning the hazardous waste to be transported by a registered hazardous waste transporter accompanied by a manifest to an authorized hazardous waste facility. A VSQG may qualify for up to two episodic events per year. A second episodic event must be approved by the executive director. If a VSQG complies with the conditional exclusion for an episodic event, hazardous waste generated during a month in which a VSQG has an episodic event is classified as regulated hazardous waste and is not authorized to be disposed of in any Type of Class I Municipal Solid Waste (MSW) landfill. Additionally, delivery to a Type I MSW landfill of hazardous waste generated during a month in which a VSQG has an episodic event is prohibited for the landfill operator, the generator, and the transporter, would defeat the VSQG's conditional exclusion, and result in the VSQG being up-classified to a small quantity generator or a large quantity generator.

As part of this rulemaking, the commission is also adopting amendments of 30 TAC Chapter 281 (Applications Processing); Chapter 328 (Waste Minimization and Recycling); and Chapter 335 (Industrial Solid Waste and Municipal Hazardous Waste), concurrently in this issue of the *Texas Register*.

Section by Section Discussion

Subchapter A: General Information

§330.1, Purpose and Applicability

The commission amends §330.1(c) by revising the 30 TAC §312.121 title to read "Purpose and Applicability." The title was revised in a separate rulemaking (45 TexReg 2542).

§330.3, Definitions

The commission amends §330.3 to add four new definitions as paragraphs in alphabetical order, remove two definition paragraphs, and renumber the subsequent definition paragraphs accordingly to account for these amendments.

The commission adopts §330.3(5) to add the definition of "Advanced recycling facility." This amendment implements HB 3060 by adding the definition of "Advanced recycling facility" to implement the new definition of "Advanced recycling facility" in THSC, §361.003.

The commission amends renumbered §330.3(11)(A) and (B), the definition of "Asbestoscontaining materials," by replacing the citation to Appendix A, Subpart F in 40 CFR Part 763 with a reference to Appendix E, Subpart E in 40 CFR Part 763. The appendix was moved in a federal rulemaking (60 FR 31917).

The commission amends renumbered §330.3(33), the definition of "Conditionally exempt small-quantity generator," by replacing the definition with a reference to the definition of "Very small quantity generator" in this section. EPA changed the name of the lowest tier hazardous waste generator category from "conditionally exempt small quantity generator" to "very small quantity generator" in the Hazardous Waste Generator Improvements Rule promulgated in the *Federal Register* on November 28, 2016 (81 FR 85732). This change is consistent with the commission's adoption of the Hazardous Waste Generator Improvements Rule in Chapter 335 (47 TexReg 318). Additional information is available under the Background and Summary of the Factual Basis for the Adopted Rules.

The commission adopts §330.3(39) to add the definition of "Depolymerization." This amendment implements HB 3060 by adding the definition of "Depolymerization" to implement the definition of "Depolymerization" in THSC, §361.003.

The commission amends renumbered §330.3(60), the definition of "Gasification," to implement the definition of "Gasification" in THSC, §361.003, as amended by HB 3060. The definition of "Gasification" in §361.003 was amended to remove crude oil, diesel, gasoline, diesel blend stock, gasoline blend stock, home heating oil, ethanol, or other fuels from the list of valuable raw materials, valuable intermediate products, and valuable final products that the process of gasification may convert recoverable feedstocks into.

The commission deletes existing §330.3(59) to remove the definition of "Gasification facility." This amendment implements HB 3060 which removed the definition of "Gasification facility" from THSC, §361.003.

The commission amends renumbered §330.3(93), the definition of "Municipal solid waste landfill unit," by replacing the reference to a conditionally exempt small-quantity generator with hazardous waste generated by a very small quantity generator not experiencing an episodic event. This change is necessary to conform with the commission's adoption of EPA's Hazardous Waste Generator Improvements Rule promulgated in the *Federal Register* on November 28, 2016, (81 FR 85732) in Chapter 335 of this title (47 TexReg 318). Additional information is available under the Background and Summary of the Factual Basis for the Adopted Rules.

The commission amends renumbered §330.3(118) to revise the definition of "Post-use polymers" to implement the definition of "Post-use polymers" in THSC, §361.003, as amended by HB 3060, and clarify that post-use polymers will be classified as nonhazardous waste if discarded. HB 3060 amended the definition of "Post-use polymers" in §361.003 by: replacing the term plastic polymers with the term plastics; adding agricultural, preconsumer recovered materials and postconsumer materials to the sources of plastics that post-use polymers may be derived from; removing a list of wastes, including medical waste, electronic waste, tires, and construction or demolition debris, that when mixed with used polymers will not meet the definition of post-use polymers; identifying that post-use polymers are sorted from solid waste and other regulated waste and may contain residual amounts of organic material; specifying that plastics mixed with solid waste or hazardous waste onsite or during processing at an advanced recycling facility do not meet the definition of post-use polymers; identifying that post-use polymers are used or intended for use as a feedstock or for the production of feedstocks, raw materials, intermediate products or final products using advanced recycling; and adding that post-use polymers are processed or held prior to processing at an advanced recycling facility.

The commission amends renumbered §330.3(121) to revise the definition of "Processing" consistent with the definition of "Processing" in THSC, §361.003, as amended by HB 3060. The definition of "Processing" in §361.003 was amended to except two additional activities, "Solvolysis" and "Depolymerization," from the definition.

The commission amends renumbered §330.3(124) to revise the definition of "Pyrolysis" to implement the definition of "Pyrolysis" in THSC, §361.003, as amended by HB 3060. The definition of "Pyrolysis" in §361.003 was amended to clarify which materials are included and excluded in the list of valuable raw materials, valuable intermediate products, and valuable final products that the process of pyrolysis converts post-use polymers into. The amended definition clarified this list by adding the term "polymers," and by removing a comma between the terms "plastic" and "monomer" which omitted "plastic" from the list; and by removing "crude oil, diesel, gasoline, diesel and gasoline blendstock, home heating oil, ethanol, or another fuel" from the list.

The commission deletes existing §330.3(124) to remove the definition of "Pyrolysis facility." This amendment implements HB 3060 which removed the definition of "Pyrolysis facility" from THSC, §361.003.

The commission amends §330.3(127) to revise the definition of "Recoverable feedstock" to implement the definition of "Recoverable feedstock" in THSC, §361.003, as amended by HB 3060, and clarify that recoverable feedstock may be derived from recoverable nonhazardous waste, including nonhazardous municipal solid waste and other post-industrial nonhazardous waste. The definition of "Recoverable feedstock" in §361.003 was amended to clarify that

recoverable feedstock may be processed to be used as feedstock in an advanced recycling facility or through gasification and removing the term gasification facility, excluding materials and post-industrial wastes containing post-use polymers that have been processed into a fuel, and including post-industrial waste the commission or EPA has determined are feedstocks and not solid waste.

The commission amends §330.3(128) to revise the definition of "Recyclable material" to implement the definition of "Recyclable material" in THSC, §361.421, as amended by HB 3060.

The commission amends §330.3(129) to revise the definition of "Recycling" to implement the definition of "Recycling" in THSC, §361.421, as amended by HB 3060. The definition of "Recycling" in §361.421 was revised by adding the terms "feedstocks" to the materials used in the "manufacture" of new products, excluding applicability to incineration of plastics or waste-to-energy processes, and by adding the conversion of post-use polymers and recoverable feedstocks through solvolysis or depolymerization.

The commission amends §330.3(133), the definition of "Regulated hazardous waste," by replacing the reference to a conditionally exempt small-quantity generator with a very small quantity generator not experiencing an episodic event. This change is necessary to conform with EPA's Hazardous Waste Generator Improvements Rule and will be consistent with the commission's adoption of the Hazardous Waste Generator Improvements Rule in Chapter 335 of this title (47 TexReg 318). EPA introduced a new conditional exclusion applicable to the lowest and middle tier of hazardous waste generator categories, very small quantity generator (VSQG) and small quantity generator (SQG). The new conditional exemption for episodic events allows hazardous waste generators who comply with the conjunctive requirements of the

conditional episodic exclusion to avoid being up-classified as the next highest category of hazardous waste generator. A VSQG and a SQG who manage hazardous waste generated during an episodic event must temporarily comply with the conditions for exclusion for the generator category that will be applicable if the generator is not taking advantage of the episodic exclusion. Such conditions for exclusion include packaging, placarding, and transporting the hazardous waste to an authorized hazardous waste facility accompanied by a uniform hazardous waste manifest. Therefore, the exception from being classified as regulated hazardous waste that was previously applicable to hazardous waste generated by a CESQG is now only applicable to hazardous waste generated by a VSQG during a calendar month in which the VSQG did not generate hazardous waste from an episodic event. Hazardous waste generated by a VSQG during a calendar month that the VSQG generated hazardous waste from an episodic event must be managed as regulated hazardous waste and is not eligible to be managed as special waste, or to be disposed at a Type I MSW landfill authorized to accept hazardous waste as special waste, or a Type I AE MSW landfill authorized to accept hazardous waste as special waste.

The commission amends §330.3(151)(D) to revise the definition of "Solid waste" to implement revisions to the definition of "Solid waste" in THSC, §361.003, as amended by HB 3060. HB 3060 expanded the existing conditional exclusions from the definition of "Solid waste" applicable to post-use polymers and recovered feedstocks processed through pyrolysis and gasification that are not classified as hazardous waste to also include post-use polymers and recovered feedstocks processed through solvolysis or depolymerization that are not classified as hazardous waste. The conditional exclusion requires post-use polymers and recovered feedstocks to be converted into products for subsequent beneficial reuse and that solid waste generated from converting the materials be disposed of in a solid waste management facility

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authorized by the commission under THSC, Chapter 361.

The commission adopts §330.3(153) to add the definition of "Solvolysis." This amendment will implement HB 3060 by adding a new definition of "Solvolysis" to implement the new definition of "Solvolysis" in THSC, §361.003. The adopted definition will also implement HB 3060 by clarifying that the conditional exclusions from classification and regulation as solid waste applicable to plastics recycling is not applicable to a solvolysis manufacturing process that produces fuel products.

The commission amends renumbered §330.3(155), the definition of "Special Waste," by replacing the reference in subparagraph (A) to conditionally exempt small-quantity generators with very small quantity generators not experiencing an episodic event. This change is necessary to conform with the commission's adoption of EPA's Hazardous Waste Generator Improvements Rule in Chapter 335 of this title (47 TexReg 318). Additional information is available under the Background and Summary for the Adopted rules.

The commission adopts §330.3(177) to add the definition of "Very small quantity generator" consistent with the commission's adoption in 30 TAC §335.1 of EPA's new term describing the lowest tier hazardous waste generator category (47 TexReg 318). EPA changed the name of the lowest tier hazardous waste generator category from "conditionally exempt small quantity generator" in 40 CFR §260.10 (81 FR 85732). Additional information is available under the Background and Summary for the Adopted rules.

§330.5, Classification of Municipal Solid Waste Facilities

The commission amends §330.5(a) and (a)(2) by replacing the reference to "conditionally

exempt small quantity generators" in subsection (a), and "conditionally exempt small-quantity generator" in paragraph (a)(2) with "very small quantity generators" and "very small quantity generator" respectively. This change is necessary to conform with EPA's Hazardous Waste Generator Improvements Rule and is consistent with the commission's adoption of the Hazardous Waste Generator Improvements Rule in Chapter 335 (47 TexReg 318). Additional information is available under the Background and Summary for the Adopted rules.

The commission amends §330.5(a)(1) - (3) by removing the reference to Chapter 330, Subchapter F. Subchapter F was determined to be obsolete in the Chapter 330 Quadrennial Rules Review (44 TexReg 6383) and subsequently repealed in a separate rulemaking (45 TexReg 7605). MSW facilities remain subject to National Environmental Laboratory Accreditation Conference (NELAC) standards.

The commission amends §330.5(a)(2) by removing §330.467 from the list of applicable design and operational standards and properly listing the section titles. Section 330.467 does not exist and the inclusion of the section in the list of applicable design and operational standards was a typographical error.

The commission amends §330.5(a)(7) by replacing the reference to §330.9(k) with §330.9(j). Subsection (k) was relettered in a separate rulemaking (41 TexReg 3735).

§330.7, Permit Required

The commission amends §330.7(e)(2) by revising the title for 30 TAC §106.494 to read "Non-commercial Incinerators and Crematories." The title was revised in a separate rulemaking (43 TexReg 4758).

The commission amends §330.7(i)(1)(E)(i) by replacing the reference to 25 TAC Chapter 295, Subchapter C with 25 TAC Chapter 296. The provisions from Chapter 295, Subchapter C were moved to Chapter 296 in a separate rulemaking (46 TexReg 3880).

\$330.13, Waste Management Activities Exempt from Permitting, Registration, or Notification

The commission amends §330.13(g) by replacing "a gasification or pyrolysis facility" with "an advanced recycling facility," updating the conditions for exclusion in §330.13(g)(1) and (2) by removing the requirement that the facility must keep records on-site to demonstrate that the primary purpose of the facility is to convert materials into products "that have a resale value greater than the cost of converting the materials for beneficial use," adding that the facility must keep records on-site to demonstrate that the primary purpose of the facility is to convert materials "into products for beneficial use" and that "all solid waste generated from converting materials has been disposed of at a disposal facility authorized by the commission to accept and dispose of the solid waste, with the exception of small amounts of solid waste that may be inadvertently and unintentionally disposed of in another manner," and adding a list of information that must be included in such documentation. These revisions will implement revised THSC, §361.003 and §361.119(c-1), as amended by HB 3060.

§330.15, General Prohibitions

The commission amends §330.15(e)(5) by removing subsection (f) from the 40 CFR §82.156 reference. The federal regulations regarding air conditioning and refrigeration equipment were revised in a federal rulemaking (81 FR 82272).

§330.23, Relationships with Other Governmental Entities

The commission amends §330.23(c) by replacing the reference to FAA Advisory Circular 150/5200.33A with the most recent version of the document, FAA Advisory Circular 150/5200-33C, "Hazardous Wildlife Attractants on or near Airports," February 21, 2020.

Subchapter B: Permit and Registration Application Procedures

§330.57, Permit and Registration Applications for Municipal Solid Waste Facilities

The commission amends §330.57(e)(1) by replacing the requirement that an applicant provide four initial copies of an application with a requirement that an applicant provide two paper copies and one accurate duplicate in electronic format, and by removing the phrase "up to 18." Additional information about the adopted changes to §330.57 is available under the Background and Summary of the Factual Basis for the Adopted Rules.

The commission adopts new §330.57(e)(2) to require the electronic copy of the application to meet the formatting and drawing requirements of the paper copy. The rulemaking adoption renumbers the subsequent paragraphs accordingly to account for the added paragraph.

The commission amends §330.57(g)(1) by clarifying paper applications shall be submitted in binders.

The commission amends renumbered §330.57(g)(7) by replacing the sentence "Dividers and tabs are encouraged" with the sentence "Use dividers and tabs."

The commission deletes §330.57(i)(1) and renumbers the subsequent paragraphs accordingly to account for the deleted paragraph, including the replacement of paragraphs "(3), (4), and (5)" with "(2), (3), and (4)" in renumbered §330.57(i)(5). Additionally, the exception applicable to

Type IAE and Type IVAE landfill facilities is removed under the adopted requirement and these facilities will be required to submit an accurate duplicate of an application in an electronic format.

The commission amends renumbered §330.57(i)(1) by adding that the commission will post the electronic accurate duplicate of applications on its website and removing the requirement that applicants post their identity and web address where the application is available. The commission's implementation of SB 1397 will replace the requirement that owners and operators post applications on a publicly accessible internet website.

The commission amends renumbered §330.57(i)(4) by replacing the reference to 30 TAC §39.405(h)(2) with §39.426. The provisions from §39.405(h) were moved to §39.426 in a separate rulemaking (46 TexReg 5784).

§330.63, Contents of Part III of the Application

The commission amends $\S 330.63(e)(3)(A)$ by replacing the reference to $\S 330.63(e)(2)$ with a reference to $\S 330.63(e)(1)(B)$, the location of the provision related to regional geologic units. The reference to $\S 330.63(e)(2)$ was made in error.

§330.65, Contents of Part IV of the Application

The commission amends §330.65(b) by replacing the reference to 30 TAC §90.32 with §90.30, replacing the reference to 30 TAC §90.36 with §90.31, and removing the reference to the National Environmental Performance Track (NEPT). The provisions from §90.32 and §90.36 were moved in a separate rulemaking (37 TexReg 5310), and the NEPT was terminated May 14, 2009.

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§330.69, Public Notice for Registrations

The commission amends §330.69(b)(3) by replacing the reference to 30 TAC §39.405(h)(2) with §39.426. The provisions from §39.405(h) were moved to §39.426 in a separate rulemaking (46 TexReg 5784).

Subchapter C: Municipal Solid Waste Collection and Transportation

§330.103, Collection and Transportation Requirements

The commission amends §330.103(b)(4) by revising the 30 TAC Chapter 312, Subchapter B title to read "Land Application And Storage of Biosolids and Domestic Septage." The title was revised in a separate rulemaking (45 TexReg 5784).

Subchapter D: Operational Standards for Municipal Solid Waste Landfill Facilities §330.125, Recordkeeping Requirements

The commission amends §330.125(h) by replacing the reference to 30 TAC §305.70(k) with §305.70(l) because annual waste acceptance rate exceedance is not listed in §305.70(k). Public notice will continue to be required for modifications to increase waste acceptance rates.

§330.147, Disposal of Large Items

The commission amends §330.147(c) by removing subsection (f) from the 40 CFR §82.156 reference. The federal regulations regarding air conditioning and refrigeration equipment were revised in a federal rulemaking (81 FR 82272).

§330.165, Landfill Cover

The commission amends §330.165(d) by replacing the reference to 30 TAC §305.70(m) with

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§305.62(k). The provisions from §305.70(m) were moved to §305.62(k) in a separate rulemaking (33 TexReg 4157).

§330.171, Disposal of Special Wastes

The commission amends §330.171(b)(2) by replacing "plan" with "Special Waste Management Plan" for clarity.

The commission amends §330.171(b)(2)(B) by replacing the reference to 30 TAC §335.6(c) with §335.504, the accurate location for the hazardous waste determination requirement.

The commission amends §330.171(c)(6) by replacing the reference to a "conditionally exempt small quantity generator" with "very small quantity generator" and by clarifying that the ability to accept hazardous waste is not applicable to regulated hazardous waste including hazardous waste generated by a VSQG during a calendar month in which the VSQG generated hazardous waste during an episodic event. This change is necessary to conform with EPA's Hazardous Waste Generator Improvements Rule and is consistent with the commission's adoption of the Hazardous Waste Generator Improvements Rule in Chapter 335 (47 TexReg 318). Additional information about this adopted amendment is available under the Background and Summary for the Adopted Rules.

§330.173, Disposal of Industrial Wastes

The commission amends §330.173(b) by revising the 30 TAC §335.10 title to read "Shipping and Reporting Procedures Applicable to Generators of Hazardous Waste or Class 1 Waste." The title was revised in a separate rulemaking (45 TexReg 3780).

The commission amends §330.173(g) by deleting an outdated term "waste-shipping control ticket," and by requiring a facility operator to comply with the manifest requirements in §335.10(c) and in §335.15(1) and (3). The commission has updated Class 1 industrial waste manifesting requirements to reflect current federal electronic manifest system and user fees requirements applicable when a Uniform Hazardous Waste Manifest accompanies shipments of state-regulated waste (47 TexReg 318).

Subchapter E: Operational Standards for Municipal Solid Waste Storage and Processing Units §330.217, Pre-Operation Notice

The commission amends §330.217(a)(1) by replacing the reference to §330.207(h) with §330.207(g). This amendment corrects a typographical error.

Subchapter J: Groundwater Monitoring and Corrective Action

§330.421, Monitor Well Construction Specifications

The commission amends §330.421(a)(2)(A) by replacing the reference to "National Science Foundation-certified polyvinyl chloride" with "National Sanitation Foundation-certified polyvinyl chloride." This amendment corrects a typographical error.

The commission amends §330.421(g) by replacing the reference to 16 TAC §76.702 with 16 TAC §76.72, replacing the reference to 16 TAC §76.1004 with 16 TAC §76.104, and identifying the §76.104 title as "Technical Requirements--Standards for Capping and Plugging of Wells and Plugging Wells that Penetrate Injurious Water Zones." These revisions were made in a separate rulemaking (38 TexReg 1142).

Subchapter M: Location Restrictions

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§330.545, Airport Safety

The commission amends §330.545(d) by removing the statement "Guidelines regarding location of landfills near airports can be found in Federal Aviation Administration Order 5200.5(A), January 31, 1990." This amendment removes a reference to obsolete guidance cancelled on July 1, 1997.

Subchapter N: Landfill Mining

§330.613, Sampling and Analysis Requirements for Final Soil Product

The commission amends §330.613(c), (f), and (h) by replacing the reference to Chapter 330, Subchapter F with a reference to the NELAC standards. Subchapter F was repealed in a separate rulemaking (45 TexReg 7605), and MSW facilities remain subject to NELAC standards.

§330.615, Final Soil Product Grades and Allowable Uses

The commission amends §330.615(b) by replacing the reference to Chapter 330, Subchapter F with a reference to the NELAC standards. Subchapter F was repealed in a separate rulemaking (45 TexReg 7605), and MSW facilities remain subject to NELAC standards.

Subchapter O: Regional and Local Solid Waste Management Planning and Financial Assistance General Provisions

§330.633, Definitions of Terms and Abbreviations

The commission amends §330.633(3) by replacing the reference to a "conditionally exempt small-quantity generator" with "very small quantity generator." This change is necessary to conform with EPA's Hazardous Waste Generator Improvements Rule. Additional information about this adopted amendment is available under the Background and Summary of the Factual Basis for the Adopted Rules.

§330.635, Regional and Local Solid Waste Management Plan Requirements

The commission amends §330.635(a)(2)(C)(v) by replacing the reference to Texas Health and Safety Code (THSC) §363.0635 with §363.064(10). The reference to THSC §363.0635 was a typographical error.

Subchapter T: Use of Land Over Closed Municipal Solid Waste Landfills §330.951, Definitions

The commission amends §330.951(8) by replacing the reference to a "conditionally exempt small-quantity generator" with "very small quantity generator." This change is necessary to conform with EPA's Hazardous Waste Generator Improvements Rule. Additional information regarding this adopted amendment is available under the Background and Summary of the Factual Basis for the Adopted Rules.

The commission further amends§330.951(8) by replacing "§330.3 (relating to Definitions)" with "40 Code of Federal Regulations §257.2." The reference to §330.3 was a typographical error.

§330.953, Soil Test Required before Development

The commission amends §330.953(e) by replacing the reference to 22 TAC §131.166 with 22 TAC §137.33. The provisions regarding sealing procedures were reorganized to 22 TAC Chapter 137 in a separate rulemaking (29 TexReg 4878).

§330.954, Development Permit, Development Authorization, and Registration Requirements, Procedures, and Processing

The commission does not adopt the proposed amendment of §330.954(c)(1), (2), and (3) that

would have replaced the references to 30 TAC §305.70(j)(6) with references to §305.70(k)(12). While the commission recognizes that §305.70 was reorganized in a separate rulemaking (33 TexReg 4157) and that §305.70(j)(6) is not applicable to §330.954, upon further consideration the commission has determined that 30 TAC §305.70(k)(12) is not globally applicable to the three references in 30 TAC §330.954(c)(1), (2), and (3) and elects to not adopt this proposed amendment.

§330.959, Contents of Registration Application for an Existing Structure Built Over a Closed Municipal Solid Waste Landfill Unit

The commission amends §330.959(b)(1) by replacing the reference to §330.957(e) with §330.957(h). The reference to §330.957(e) was a typographical error.

Subchapter U: Standard Air Permits for Municipal Solid Waste Landfill Facilities and Transfer Stations

§330.987, Certification Requirements

The commission amends §330.987(e) by removing paragraph (1) and renumbering the remaining paragraphs. The provisions from §116.621 were replaced with Chapter 330, Subchapter U in a separate rulemaking (31 TexReg 2490).

§330.991, Technical and Operational Requirements for all Municipal Solid Waste Landfill Sites

The commission amends §330.991(a)(11)(E) by revising the 30 TAC §116.617 title to read "State

Pollution Control Project Standard Permit." The title was revised in a separate rulemaking (31 TexReg 516).

§330.993, Additional Requirements for Owners or Operators of Category 3 Municipal Solid Waste

Landfills

The commission amends §330.993(a)(2) by replacing the reference to 40 CFR §60.752(2)(b)(v) with §60.752(b)(2)(v). The reference to §60.752(2)(b)(v) was a typographical error.

§330.995, Recordkeeping and Reporting Requirements for all Municipal Solid Waste Landfill Sites The commission amends §330.995(d) by replacing the reference to 40 CFR §63.1980 with §63.1981. The provisions from §63.1980 were replaced by §63.1981 in a separate rulemaking (85 FR 17261).

Final Regulatory Impact Determination

The commission reviewed the adopted rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225 and determined that the rulemaking is not subject to Texas Government Code, §2001.0225. Texas Government Code, §2001.0225 applies to a "Major environmental rule" which is defined in Texas Government Code, §2001.0225(g)(3) as a rule with a specific intent "to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state."

First, the adopted rulemaking does not meet the statutory definition of a "Major environmental rule" because its specific intent is not to protect the environment or reduce risks to human health from environmental exposure. The specific intent of the adopted rulemaking is to add, remove, revise, and renumber definitions in Chapter 330 so that they are consistent with the commission's adoption of the Hazardous Waste Generator Improvements Rule in Chapter 335 (47 TexReg 318) and the definitions in THSC Chapter 361 and to make minor and non-

substantive updates to incorrect rule citations or references in Chapter 330. Therefore, the intent is not to protect the environment or reduce risks to human health from environmental exposure.

Second, the adopted rulemaking does not meet the statutory definition of a "Major environmental rule" because the adopted rules will not adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. It is not anticipated that the cost of complying with the adopted rules will be significant with respect to the economy as a whole or with respect to a sector of the economy; therefore, the adopted rulemaking will not adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state.

Finally, the adopted rulemaking does not meet any of the four applicability requirements for a "Major environmental rule" listed in Texas Government Code, §2001.0225(a). Texas Government Code, §2001.0225 only applies to a major environmental rule, the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state law. This adopted rulemaking does not meet any of the four preceding applicability requirements.

This adopted rulemaking does not meet the statutory definition of a "Major environmental

rule," nor does it meet any of the four applicability requirements for a "Major environmental rule." Therefore, this rulemaking is not subject to Texas Government Code, §2001.0225.

The commission invited public comment regarding the draft regulatory impact analysis determination during the public comment period. No public comments were received regarding the regulatory impact analysis determination.

Takings Impact Assessment

The commission has prepared a takings impact assessment for these adopted rules in accordance with Texas Government Code, §2007.043. The commission's preliminary assessment is that implementation of these adopted rules will not constitute a taking of real property. The commission adopts this rulemaking for the purpose of adding, removing, revising, and renumbering definitions in Chapter 330 so that they are consistent with the commission's adoption of the Hazardous Waste Generator Improvements Rule in Chapter 335 (47 TexReg 318) and the definitions in THSC Chapter 361 and making minor and non-substantive updates to incorrect rule citations or references in Chapter 330.

The commission's analysis indicates that Texas Government Code, Chapter 2007, does not apply to these adopted rules based upon an exception to applicability in Texas Government Code, §2007.003(b)(5). The adopted rules will add, remove, revise, and renumber definitions in Chapter 330 so that they are consistent with the commission's adoption of the Hazardous Waste Generator Improvements Rule in Chapter 335 (47 TexReg 318) and the definitions in THSC Chapter 361 and to make minor and non-substantive updates to incorrect rule citations or references in Chapter 330., which provides a unilateral expectation that does not rise to the level of a recognized interest in private real property. Therefore, Texas Government Code,

Chapter 2007 does not apply to these adopted rule changes because the adopted rulemaking falls within the exception under Texas Government Code, §2007.003(b)(5).

Further, the commission determined that promulgation of these adopted rules will be neither a statutory nor a constitutional taking of private real property. Specifically, there are no burdens imposed on private real property under the rulemaking because the adopted rules neither relate to, nor have any impact on, the use or enjoyment of private real property, and there will be no reduction in property value as a result of these rules. Therefore, the adopted rules will not constitute a taking under Texas Government Code, Chapter 2007.

Consistency with the Coastal Management Program

The commission reviewed the adopted rulemaking and found the adoption is a rulemaking identified in the Coastal Coordination Act Implementation Rules, 31 TAC §505.11(b)(4) relating to rules subject to the Coastal Management Program, and will, therefore, require that goals and policies of the Texas Coastal Management Program (CMP) be considered during the rulemaking process.

The commission reviewed this rulemaking for consistency with the CMP goals and policies in accordance with the regulations of the Coastal Coordination Advisory Committee and determined that the amendments are consistent with CMP goals and policies because the rulemaking will not have direct or significant adverse effect on any coastal natural resource areas; will not have a substantive effect on commission actions subject to the CMP; and promulgation and enforcement of the amendments will not violate (exceed) any standards identified in the applicable CMP goals and policies.

The commission invited public comment regarding the consistency with the CMP during the public comment period. No public comments were received regarding the CMP.

Public Comment

The commission offered a public hearing on June 20, 2024. The comment period closed on June 25, 2024. No public comments were received.

SUBCHAPTER A: GENERAL INFORMATION

§§330.1, 330.3, 330.5, 330.7, 330.13, 330.15, 330.23

Statutory Authority

The amendments are adopted under the authority of Texas Water Code (TWC), §5.013, which establishes the general jurisdiction of the commission; TWC, §5.102, which provides the commission with the authority to carry out its duties and general powers under its jurisdictional authority as provided by TWC; TWC, §5.103, which requires the commission to adopt any rule necessary to carry out its powers and duties under TWC and other laws of the state; TWC, §5.105, which authorizes the commission to establish and approve all general policy of the commission by rule; Texas Health and Safety Code (THSC), §361.011, which grants the commission authority over municipal solid waste; THSC, §361.017, which grants the commission jurisdiction over industrial solid waste and hazardous municipal waste; and THSC, §361.024, which authorizes the commission to adopt rules consistent with the general purposes of the Solid Waste Disposal Act.

The adopted amendments implement House Bill 3060, 88th Texas Legislature, 2023.

§330.1. Purpose and Applicability.

(a) The regulations promulgated in this chapter cover aspects of municipal solid waste (MSW) management and air emissions from MSW landfills and transfer stations under the authority of the commission and are based primarily on the stated purpose of Texas Health and Safety Code, Chapter 361 and Chapter 382. The provisions of this chapter apply to any person as defined in §3.2 of this title (relating to Definitions) involved in any aspect of the

management and control of MSW and MSW facilities including, but not limited to, storage, collection, handling, transportation, processing, and disposal. Furthermore, these regulations apply to any person that by contract, agreement, or otherwise arranges to process, store, or dispose of, or arranges with a transporter for transport to process, store, or dispose of, solid waste owned or possessed by the person, or by any other person or entity. The comprehensive rule revisions in this chapter as adopted in 2006 (2006 Revisions) are effective 20 days after they are filed with the Office of the Secretary of State.

(1) Permits and registrations, issued by the commission and it predecessors, that existed before the 2006 Revisions became effective, remain valid until suspended or revoked except as expressly provided otherwise in this chapter. Facilities may operate under existing permits and registrations subject to: requirements in the 2006 Revisions, which expressly supersede provisions contained in existing authorizations or require revisions to existing authorizations; and those requirements mandated by the United States Environmental Protection Agency in 40 Code of Federal Regulations (CFR) Parts 257 and 258, as amended, which implement certain requirements of Resource Conservation and Recovery Act, Subtitle D. For those federally mandated requirements and the equivalent state requirements, the effective dates listed in 40 CFR Parts 257 and 258, as amended, shall apply. For those federally mandated requirements, the permittee is under an obligation to apply for a permit change in accordance with §305.62 of this title (relating to Amendments) or §305.70 of this title (relating to Municipal Solid Waste Permit and Registration Modifications), as applicable, to incorporate the required standard. The application shall be submitted no later than six months from the effective date of the required standard.

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- (2) Applications for new permits and major amendments to existing permits that are administratively complete and registration applications for which the executive director has completed a technical review, as of the effective date of the 2006 Revisions, shall be considered under the former rules of this chapter unless the applicant elects otherwise. Existing authorizations are subject to the 2006 Revisions, which expressly supersede provisions contained in existing authorizations or require modifications of existing authorizations regardless of whether a major amendment is being considered for the same facility under the former rules. For new permits and major amendments to increase solid waste disposal capacity, only complete applications (Parts I IV), which are submitted and declared administratively complete before the effective date of the 2006 Revisions, may be considered under existing Chapter 330 rules. Such applications are not subject to §305.127(4)(B) of this title (relating to Conditions to be Determined for Individual Permits) and the owner or operator must submit the modifications required by the 2006 Revisions within one year after the commission's decision on the application has become final and appealable, unless a longer period of time is specified in the rules.
- (3) Authorizations, other than permits and registrations, that existed before the 2006 Revisions became effective shall comply with the 2006 Revisions within 120 days of the 2006 Revisions becoming effective unless expressly provided otherwise in this chapter. These authorizations include notifications, exemptions, permits by rule, and registrations by rule.
- (4) Authorizations, other than permits and registrations, that had not been claimed or did not exist before the 2006 Revisions became effective shall comply with the 2006 Revisions.

- (5) Applications for modifications or for amendments that do not increase solid waste disposal capacity that are filed before the 2006 Revisions become effective, or filed within 180 days after the 2006 Revisions become effective, are subject to the former rules. Such applications are not subject to §305.127(4)(B) of this title, and the owner or operator must submit the modifications required by the 2006 Revisions within 180 days after the effective date of the 2006 Revisions, unless a longer period of time is specified in the rules.
- (b) The commission at its discretion, may include one or more different types of units in a single permit if the units are located at the same facility with the exception of a facility authorized by an MSW permit by rule. Persons shall seek separate authorizations at a facility that qualifies for an MSW permit by rule.
- (c) This chapter does not apply to any person that prepares sewage sludge or domestic septage, fires sewage sludge in a sewage sludge incinerator, applies sewage sludge or domestic septage to the land, or to the owner/operator of a surface disposal site as applicable under Chapter 312 of this title (relating to Sludge Use, Disposal, and Transportation); to sewage sludge or domestic septage applied to the land or placed on a surface disposal site, to sewage sludge fired in a sewage sludge incinerator, to land where sewage sludge or domestic septage is applied to a surface disposal site or to a sewage sludge incinerator as applicable under Chapter 312 of this title; any person that transports sewage sludge, water treatment sludge, domestic septage, chemical toilet waste, grit trap waste, or grease trap waste; to any person that applies water treatment sludge for disposal in a land application unit, as defined in §312.121 of this title (relating to Purpose and Applicability) [(relating to Purpose, Scope, and Standards)] to water treatment sludge that is disposed of in a land application unit, as defined in §312.121 of

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this title. Persons managing such wastes shall comply with the requirements of Chapter 312 of this title.

- (d) This chapter does not apply to any person that composts MSW in accordance with the requirements of Chapter 332 of this title (relating to Composting), except for those persons that must apply for a permit in accordance with §332.3(a) of this title (relating to Applicability). Those persons that must submit a permit application for a compost operation shall follow the applicable requirements of Subchapter B of this chapter (relating to Permit and Registration Application Procedures).
- (e) This chapter does not apply to any person that manages medical waste in accordance with the requirements of Chapter 326 of this title (relating to Medical Waste Management). Persons disposing of medical waste at municipal solid waste landfills shall comply with applicable provisions of this chapter. The medical waste provisions being relocated from this chapter to Chapter 326 of this title will remain in effect and continue to apply to permits, registrations, and registrations by rule issued under this chapter until the later of two years from the effective date of Chapter 326 of this title or until a final decision is made on a timely request for an authorization to be updated to comply with Chapter 326 of this title. Permits, registrations, and registrations by rule issued under the existing Chapter 330 rules must be updated by filing a new application within two years or upon renewal to comply with Chapter 326 of this title. The executive director is authorized to extend this deadline based on an authorized entity making a request supported by good cause. A person who has an application for the management of medical waste pending before the effective date of Chapter 326 of this title shall be considered under the former Chapter 330 rules unless the applicant elects otherwise.

§330.3. Definitions.

Unless otherwise noted, all terms contained in this section are defined by their plain meaning. This section contains definitions for terms that appear throughout this chapter. Additional definitions may appear in the specific section to which they apply. The following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise.

- (1) 100-year flood--A flood that has a 1.0% or greater chance of recurring in any given year or a flood of a magnitude equaled or exceeded once in 100 years on the average over a significantly long period.
- (2) Active disposal area--All landfill working faces and areas covered with daily and alternative daily cover.
- (3) Active life--The period of operation beginning with the initial receipt of solid waste and ending at certification/completion of closure activities in accordance with \$§330.451, 330.453, 330.455, 330.457, and 330.459 of this title (relating to Applicability; Closure Requirements for Municipal Solid Waste Landfill Units that Stopped Receiving Waste Prior to October 9, 1991, Type IV Landfills, and Municipal Solid Waste Sites; Closure Requirements for Municipal Solid Waste Landfill Units that Received Waste on or after October 9, 1991, but Stopped Receiving Waste Prior to October 9, 1993; Closure Requirements for Municipal Solid Waste Landfill Units that Receive Waste on or after October 9, 1993; and Closure Requirements for Municipal Solid Waste Storage and Processing Units).

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- (4) Active portion--That part of a facility or unit that has received or is receiving wastes and that has not been closed in accordance with §§330.451, 330.453, 330.455, 330.457, and 330.459 of this title (relating to Applicability; Closure Requirements for Municipal Solid Waste Landfill Units that Stopped Receiving Waste Prior to October 9, 1991, Type IV Landfills, and Municipal Solid Waste Sites; Closure Requirements for Municipal Solid Waste Landfill Units that Received Waste on or after October 9, 1991, but Stopped Receiving Waste Prior to October 9, 1993; Closure Requirements for Municipal Solid Waste Landfill Units that Receive Waste on or after October 9, 1993; and Closure Requirements for Municipal Solid Waste Storage and Processing Units).
- (5) Advanced recycling facility--A manufacturing facility that receives, stores, and converts post-use polymers and recoverable feedstocks using advanced recycling technologies and processes including pyrolysis, gasification, solvolysis, and depolymerization. An advanced recycling facility is not a solid waste facility, final disposal facility, waste-to-energy facility, or incinerator.
- (6) [(5)] Airport--A public-use airport open to the public without prior permission and without restrictions within the physical capacities of available facilities.
- (7) [(6)] Ancillary equipment--Any device that is used to distribute, meter, or control the flow of solid waste from its point of generation to a storage or processing tank(s), between solid waste storage and processing tanks to a point of disposal on-site, or to a point of shipment for disposal off-site. Such devices include, but are not limited to, piping, fittings, flanges, valves, and pumps.

(8) [(7)] Animal crematory--A facility for the incineration of animal remains that meets the following criteria:

(A) control of combustion air to maintain adequate temperature for efficient combustion;

(B) containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion; and

(C) control of the emission of the combustion products.

(9) [(8)] Aquifer--A geological formation, group of formations, or portion of a formation capable of yielding significant quantities of groundwater to wells or springs.

(10) [(9)] Areas susceptible to mass movements--Areas of influence (i.e., areas characterized as having an active or substantial possibility of mass movement) where the movement of earth material at, beneath, or adjacent to the municipal solid waste landfill unit, because of natural or man-induced events, results in the downslope transport of soil and rock material by means of gravitational influence. Areas of mass movement include, but are not limited to, landslides, avalanches, debris slides and flows, soil fluctuation, block sliding, and rock fall.

(11) [(10)] Asbestos-containing materials--Include the following.

- (A) Category I nonfriable asbestos-containing material means asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than 1.0% asbestos as determined using the method specified in <u>Appendix E to Subpart E of</u> [Appendix A, Subpart F,] 40 Code of Federal Regulations (CFR) Part 763, §1, Polarized Light Microscopy.
- (B) Category II nonfriable asbestos-containing material means any material, excluding Category I nonfriable asbestos-containing material, containing more than 1.0% asbestos as determined using the methods specified in <u>Appendix E to Subpart E of</u> [Appendix A, Subpart F,] 40 CFR Part 763, §1, Polarized Light Microscopy, that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
- (C) Friable asbestos-containing material means any material containing more than 1.0% asbestos that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure.
- (D) Nonfriable asbestos-containing material means any material containing more than 1.0% asbestos that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
 - (12) [(11)] ASTM--The American Society for Testing and Materials.
- (13) [(12)] Battery--An electrochemical device that generates electric current by converting chemical energy. Its essential components are positive and negative electrodes made

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of more or less electrically conductive materials, a separate medium, and an electrolyte. There are four major types:

- (A) primary batteries (dry cells);
- (B) storage or secondary batteries;
- (C) nuclear and solar cells or energy converters; and
- (D) fuel cells.

(14) [(13)] Battery acid (also known as electrolyte acid)--A solution of not more than 47% sulfuric acid in water suitable for use in storage batteries, which is water white, odorless, and practically free from iron.

(15) [(14)] Battery retailer--A person or business location that sells lead-acid batteries to the general public, without restrictions to limit purchases to institutional or industrial clients only.

(16) [(15)] Battery wholesaler--A person or business location that sells lead-acid batteries directly to battery retailers, to government entities by contract sale, or to large-volume users, either directly or by contract sale.

(17) [(16)] Bird hazard--An increase in the likelihood of bird/aircraft collisions that may cause damage to an aircraft or injury to its occupants.

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(18) [(17)] Boiler--An enclosed device using controlled flame combustion and having the following characteristics.

(A) The unit must have physical provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases.

(B) The unit's combustion chamber and primary energy recovery section(s) must be of integral design. To be of integral design, the combustion chamber and the primary energy recovery section(s) (such as waterwalls and superheaters) must be physically formed into one manufactured or assembled unit. A unit in which the combustion chamber and the primary energy recovery section(s) are joined only by ducts or connections carrying flue gas is not integrally designed; however, secondary energy recovery equipment (such as economizers or air preheaters) need not be physically formed into the same unit as the combustion chamber and the primary energy recovery section. The following units are not precluded from being boilers solely because they are not of integral design:

(i) process heaters (units that transfer energy directly to a process stream); and

(ii) fluidized bed combustion units.

(C) While in operation, the unit must maintain a thermal energy recovery efficiency of at least 60%, calculated in terms of the recovered energy compared with the thermal value of the fuel.

(D) The unit must export and utilize at least 75% of the recovered energy, calculated on an annual basis. In this calculation, no credit shall be given for recovered heat used internally in the same unit. Examples of internal use are the preheating of fuel or combustion air, and the driving of induced or forced draft fans or feedwater pumps.

(19) [(18)] Brush--Cuttings or trimmings from trees, shrubs, or lawns and similar materials.

(20) [(19)] Buffer zone--A zone free of municipal solid waste processing and disposal activities within and adjacent to the facility boundary on property owned or controlled by the owner or operator.

(21) [(20)] Citizens' collection station--A facility established for the convenience and exclusive use of residents (not commercial or industrial users or collection vehicles), except that in small communities where regular collections are not available, small quantities of commercial waste may be deposited by the generator of the waste. The facility may consist of one or more storage containers, bins, or trailers.

(22) [(21)] Class 1 wastes--Any industrial solid waste or mixture of industrial solid wastes that because of its concentration, or physical or chemical characteristics is toxic, corrosive, flammable, a strong sensitizer or irritant, a generator of sudden pressure by decomposition, heat, or other means, or may pose a substantial present or potential danger to human health or the environment when improperly processed, stored, transported, or disposed

of or otherwise managed, as further defined in §335.505 of this title (relating to Class 1 Waste Determination).

(23) [(22)] Class 2 wastes--Any individual solid waste or combination of industrial solid waste that are not described as Hazardous, Class 1, or Class 3 as defined in §335.506 of this title (relating to Class 2 Waste Determination).

(24) [(23)] Class 3 wastes--Inert and essentially insoluble industrial solid waste, usually including, but not limited to, materials such as rock, brick, glass, dirt, and certain plastics and rubber, etc., that are not readily decomposable, as further defined in §335.507 of this title (relating to Class 3 Waste Determination).

(25) [(24)] Collection--The act of removing solid waste (or materials that have been separated for the purpose of recycling) for transport elsewhere.

(26) [(25)] Collection system--The total process of collecting and transporting solid waste. It includes storage containers; collection crews, vehicles, equipment, and management; and operating procedures. Systems are classified as municipal, contractor, or private.

(27) [(26)] Commence physical construction--The initiation of physical on-site construction on a site for which an application to authorize a municipal solid waste management unit is pending, the construction of which requires approval of the commission. Construction of actual waste management units and necessary appurtenances requires

approval of the commission, but other features not specific to waste management are allowed without commission approval.

(28) [(27)] Commercial solid waste--All types of solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding residential and industrial wastes.

(29) [(28)] Compacted waste--Waste that has been reduced in volume by a collection vehicle or other means including, but not limited to, dewatering, composting, incineration, and similar processes, with the exception of waste that has been reduced in volume by a small, in-house compactor device owned and/or operated by the generator of the waste.

(30) [(29)] Composite liner--A liner system consisting of two components: the upper component must consist of a minimum 30-mil geomembrane liner or minimum 60-mil high-density polyethylene, and the lower component must consist of at least a two-foot layer of re-compacted soil deposited in lifts with a hydraulic conductivity of no more than 1×10 -7 centimeters/second. The geomembrane liner component must be installed in direct and uniform contact with the compacted soil component.

(31) [(30)] Compost--The stabilized product of the decomposition process that is used or sold for use as a soil amendment, artificial top soil, growing medium amendment, or other similar uses.

(32) [(31)] Composting--The controlled biological decomposition of organic materials through microbial activity.

(33) [(32)] Conditionally exempt small-quantity generator--A conditionally exempt small quantity generator (CESOG) is a very small quantity generator (VSOG) as defined in this section that meets the independent requirements and the conditions for exemption for a VSOG under §335.53 of this title (relating to General Standards Applicable to Generators of Hazardous Waste). A reference to a conditionally exempt small quantity generator, "CESOG", or a person who generates no more than 100 kilograms (220 pounds) of non-acute hazardous waste or no more than 1 kilogram (2.2 pounds) of acute hazardous waste in a calendar month is a reference to a VSOG [A person that generates no more than 220 pounds of hazardous waste in a calendar month].

(34) [(33)] Construction or demolition waste--Waste resulting from construction or demolition projects; includes all materials that are directly or indirectly the by-products of construction work or that result from demolition of buildings and other structures, including, but not limited to, paper, cartons, gypsum board, wood, excelsior, rubber, and plastics.

(35) [(34)] Container--Any portable device in which a material is stored, transported, or processed.

(36) [(35)] Contaminate--To alter the chemical, physical, biological, or radiological integrity of ground or surface water by man-made or man-induced means.

(37) [(36)] Contaminated water--Leachate, gas condensate, or water that has come into contact with waste.

(38) [(37)] Controlled burning--The combustion of solid waste with control of combustion air to maintain adequate temperature for efficient combustion; containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion; and control of the emission of the combustion products, i.e., incineration in an incinerator.

(39) Depolymerization--A manufacturing process through which post-use polymers are broken down into:

(A) smaller molecules, including monomers and oligomers; or

(B) raw materials, intermediate products, or final products, including plastic feedstocks, chemical feedstocks, basic and unfinished chemicals, waxes, lubricants, or coatings; and

(C) does not include crude oil, diesel, gasoline, diesel blend stock, gasoline blend stock, home heating oil, ethanol, or another fuel.

(40) [(38)] Discard--To abandon a material and not use, re-use, reclaim, or recycle it. A material is abandoned by being disposed of; burned or incinerated (except where the material is being burned as a fuel for the purpose of recovering usable energy); or physically,

chemically, or biologically treated (other than burned or incinerated) in lieu of or prior to being disposed.

(41) [(39)] Discharge--Includes deposit, conduct, drain, emit, throw, run, allow to seep, or otherwise release, or to allow, permit, or suffer any of these acts or omissions.

(42) [(40)] Discharge of dredged material--Any addition of dredged material into the waters of the United States. The term includes, without limitation, the addition of dredged material to a specified disposal site located in waters of the United States and the runoff or overflow from a contained land or water disposal area.

(43) [(41)] Discharge of fill material--The addition of fill material into waters of the United States. The term generally includes placement of fill necessary to the construction of any structure in waters of the United States: the building of any structure or improvement requiring rock, sand, dirt, or other inert material for its construction; the building of dams, dikes, levees, and riprap.

(44) [(42)] Discharge of pollutant--Any addition of any pollutant to navigable waters from any point source or any addition of any pollutant to the waters of the contiguous zone or the ocean from any point source.

(45) [(43)] Displacement--The measured or estimated distance between two formerly adjacent points situated on opposite walls of a fault (synonymous with net slip).

(46) [(44)] Disposal--The discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste (whether containerized or uncontainerized) into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including groundwater.

(47) [(45)] Dredged material--Material that is excavated or dredged from waters of the United States.

(48) [(46)] Drinking-water intake--The point at which water is withdrawn from any water well, spring, or surface water body for use as drinking water for humans, including standby public water supplies.

(49) [(47)] Elements of nature--Rainfall, snow, sleet, hail, wind, sunlight, or other natural phenomenon.

(50) [(48)] Endangered or threatened species--Any species listed as such under the Federal Endangered Species Act, §4, 16 United States Code, §1536, as amended or under the Texas Endangered Species Act.

(51) [(49)] Essentially insoluble--Any material that, if representatively sampled and placed in static or dynamic contact with deionized water at ambient temperature for seven days, will not leach any quantity of any constituent of the material into the water in excess of the maximum contaminant levels in 40 Code of Federal Regulations (CFR) Part 141, Subparts B and G, and 40 CFR Part 143 for total dissolved solids.

(52) [(50)] Existing municipal solid waste landfill unit--Any municipal solid waste landfill unit that received solid waste as of October 9, 1993.

(53) [(51)] Experimental project--Any new proposed method of managing municipal solid waste, including resource and energy recovery projects, that appears to have sufficient merit to warrant commission approval.

(54) [(52)] Facility--All contiguous land and structures, other appurtenances, and improvements on the land used for the storage, processing, or disposal of solid waste.

(55) [(53)] Fault--A fracture or a zone of fractures in any material along which strata, rocks, or soils on one side have been displaced with respect to those on the other side.

(56) [(54)] Fill material--Any material used for the primary purpose of filling an excavation.

(57) [(55)] Floodplain--The lowland and relatively flat areas adjoining inland and coastal waters, including flood-prone areas of offshore islands, that are inundated by the 100-year flood.

(58) [(56)] Garbage--Solid waste consisting of putrescible animal and vegetable waste materials resulting from the handling, preparation, cooking, and consumption of food, including waste materials from markets, storage facilities, handling, and sale of produce and other food products.

(59) [(57)] Gas condensate--The liquid generated as a result of any gas recovery process at a municipal solid waste facility.

(60) [(58)] Gasification--A process through which recoverable feedstocks are heated and converted into a fuel-gas mixture in an oxygen-deficient atmosphere and the mixture is converted into valuable raw materials, valuable intermediate products, or valuable final products, which include plastic monomers, chemicals, waxes, lubricants, or chemical feedstocks; and do not include crude oil, diesel, gasoline, diesel blend stock, gasoline blend stock, home heating oil, ethanol, or another fuel. [a valuable raw, intermediate, or final product, including a plastic, monomer, chemical, wax, lubricant, or chemical feedstock or crude oil, diesel, gasoline, diesel and gasoline blendstock, home heating oil, ethanol, or another fuel.] The term does not include incineration.

[(59) Gasification facility--A facility that receives, separates, stores, and converts post-use polymers and recoverable feedstocks using gasification. The commission may not consider a gasification facility to be a hazardous waste management facility, a solid waste management facility, or an incinerator.]

(61) [(60)] Generator--Any person, by site or location, that produces solid waste to be shipped to any other person, or whose act or process produces a solid waste or first causes it to become regulated.

(62) [(61)] Grease trap waste--Material collected in and from a grease interceptor in the sanitary sewer service line of a commercial, institutional, or industrial food service or processing establishment, including the solids resulting from dewatering processes.

(63) [(62)] Grit trap waste--Grit trap waste includes waste from interceptors placed in the drains prior to entering the sewer system at maintenance and repair shops, automobile service stations, car washes, laundries, and other similar establishments.

(64) [(63)] Groundwater--Water below the land surface in a zone of saturation.

(65) [(64)] Hazardous waste--Any solid waste identified or listed as a hazardous waste by the administrator of the United States Environmental Protection Agency under the federal Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, 42 United States Code, §§6901 *et seq.*, as amended.

(66) [(65)] Holocene--The most recent epoch of the Quaternary Period, extending from the end of the Pleistocene Epoch to the present.

(67) [(66)] Household waste--Any solid waste (including garbage, trash, and sanitary waste in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas); does not include brush.

(68) [(67)] Incinerator--Any enclosed device that:

(A) uses controlled flame combustion and neither meets the criteria for classification as a boiler, sludge dryer, or carbon regeneration unit, nor is listed as an industrial furnace, as defined in §335.1 of this title (relating to Definitions); or

(B) meets the definition of infrared incinerator or plasma arc incinerator.

(69) [(68)] Industrial solid waste--Solid waste resulting from or incidental to any process of industry or manufacturing, or mining or agricultural operations.

(70) [(69)] Inert material--A natural or man-made nonputrescible, nonhazardous material that is essentially insoluble, usually including, but not limited to, soil, dirt, clay, sand, gravel, brick, glass, concrete with reinforcing steel, and rock.

(71) [(70)] Infrared incinerator--Any enclosed device that uses electric-powered resistance heaters as a source of radiant heat followed by an afterburner using controlled flame combustion and is not listed as an industrial furnace as defined in §335.1 of this title (relating to Definitions).

(72) [(71)] Injection well--A well into which fluids are injected.

(73) [(72)] In situ--In natural or original position.

(74) [(73)] Karst terrain--An area where karst topography, with its characteristic surface and/or subterranean features, is developed principally as the result of dissolution of limestone, dolomite, or other soluble rock. Characteristic physiographic features present in

karst terrains include, but are not limited to, sinkholes, sinking streams, caves, large springs, and blind valleys.

(75) [(74)] Lateral expansion--A horizontal expansion of the waste boundaries of an existing municipal solid waste landfill unit.

(<u>76</u>) [(75)] Land application of solid waste--The disposal or use of solid waste (including, but not limited to, sludge or septic tank pumpings or mixture of shredded waste and sludge) in which the solid waste is applied within three feet of the surface of the land.

(77) [(76)] Land treatment unit--A solid waste management unit at which solid waste is applied onto or incorporated into the soil surface and that is not a corrective action management unit; such units are disposal units if the waste will remain after closure.

(78) [(77)] Landfill--A solid waste management unit where solid waste is placed in or on land and which is not a pile, a land treatment unit, a surface impoundment, an injection well, a salt dome formation, a salt bed formation, an underground mine, a cave, or a corrective action management unit.

(79) [(78)] Landfill cell--A discrete area of a landfill.

(80) [(79)] Landfill mining--The physical procedures associated with the excavation of buried municipal solid waste and processing of the material to recover material for beneficial use.

(81) [(80)] Leachate--A liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such waste.

(82) [(81)] Lead acid battery--A secondary or storage battery that uses lead as the electrode and dilute sulfuric acid as the electrolyte and is used to generate electrical current.

(83) [(82)] License—

(A) A document issued by an approved county authorizing and governing the operation and maintenance of a municipal solid waste facility used to process, treat, store, or dispose of municipal solid waste, other than hazardous waste, in an area not in the territorial limits or extraterritorial jurisdiction of a municipality.

(B) An occupational license as defined in Chapter 30 of this title (relating to Occupational Licenses and Registrations).

(84) [(83)] Liquid waste--Any waste material that is determined to contain "free liquids" as defined by United States Environmental Protection Agency (EPA) Method 9095 (Paint Filter Test), as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Publication Number SW-846).

(85) [(84)] Litter--Rubbish and putrescible waste.

(86) [(85)] Low volume transfer station--A transfer station used for the storage of collected household waste limited to a total storage capacity of 40 cubic yards located in an unincorporated area that is not within the extraterritorial jurisdiction of a city.

(87) [(86)] Lower explosive limit--The lowest percent by volume of a mixture of explosive gases in air that will propagate a flame at 25 degrees Celsius and atmospheric pressure.

(88) [(87)] Medical waste--Treated and untreated special waste from health care-related facilities that is comprised of animal waste, bulk blood, bulk human blood, bulk human body fluids, microbiological waste, pathological waste, and sharps as those terms are defined in 25 TAC §1.132 (relating to Definitions) from the sources specified in 25 TAC §1.134 (relating to Application), as well as regulated medical waste as defined in 49 Code of Federal Regulations §173.134(a)(5), except that the term does not include medical waste produced on a farm or ranch as defined in 34 TAC §3.296(f) (relating to Agriculture, Animal Life, Feed, Seed, Plants, and Fertilizer), nor does the term include artificial, nonhuman materials removed from a patient and requested by the patient, including, but not limited to, orthopedic devices and breast implants. Health care-related facilities do not include:

- (A) single or multi-family dwellings; and
- (B) hotels, motels, or other establishments that provide lodging and related services for the public.

(89) [(88)] Monofill--A landfill or landfill cell into which only one type of waste is placed.

(90) [(89)] Municipal hazardous waste--Any municipal solid waste or mixture of municipal solid wastes that has been identified or listed as a hazardous waste by the administrator, United States Environmental Protection Agency.

(91) [(90)] Municipal solid waste--Solid waste resulting from or incidental to municipal, community, commercial, institutional, and recreational activities, including garbage, rubbish, ashes, street cleanings, dead animals, abandoned automobiles, and all other solid waste other than industrial solid waste.

(92) [(91)] Municipal solid waste facility--All contiguous land, structures, other appurtenances, and improvements on the land used for processing, storing, or disposing of solid waste. A facility may be publicly or privately owned and may consist of several processing, storage, or disposal operational units, e.g., one or more landfills, surface impoundments, or combinations of them.

(93) [(92)] Municipal solid waste landfill unit--A discrete area of land or an excavation that receives household waste and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined under 40 Code of Federal Regulations §257.2. A municipal solid waste (MSW) landfill unit also may receive other types of Resource Conservation and Recovery Act Subtitle D wastes, such as commercial solid waste, nonhazardous sludge, hazardous waste generated by a very small quantity generator (VSQG) during a month in which the VSQG did not generate hazardous waste during an episodic

<u>event[conditionally exempt small-quantity generator waste]</u>, and industrial solid waste. Such a landfill may be publicly or privately owned. An MSW landfill unit may be a new MSW landfill unit, an existing MSW landfill unit, a vertical expansion, or a lateral expansion.

(94) [(93)] New facility--A municipal solid waste facility that has not begun construction.

(95) [(94)] Nonpoint source--Any origin from which pollutants emanate in an unconfined and unchanneled manner, including, but not limited to, surface runoff and leachate seeps.

(96) [(95)] Non-regulated asbestos-containing material--Non-regulated asbestos-containing material as defined in 40 Code of Federal Regulations Part 61. This is asbestos material in a form such that potential health risks resulting from exposure to it are minimal.

(97) [(96)] Notification--The act of filing information with the commission for specific solid waste management activities that do not require a permit or a registration, as determined by this chapter.

(98) [(97)] Nuisance--Municipal solid waste that is stored, processed, or disposed of in a manner that causes the pollution of the surrounding land, the contamination of groundwater or surface water, the breeding of insects or rodents, or the creation of odors adverse to human health, safety, or welfare. A nuisance is further set forth in Texas Health and Safety Code, Chapters 341 and 382; Texas Water Code, Chapter 26; and any other applicable regulation or statute.

(99) [(98)] Open burning--The combustion of solid waste without:

(A) control of combustion air to maintain adequate temperature for efficient combustion;

(B) containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion; and

(C) control of the emission of the combustion products.

(100) [(99)] Operate--To conduct, work, run, manage, or control.

(101) [(100)] Operating hours--The hours when the facility is open to receive waste, operate heavy equipment, and transport materials on- or off-site.

(102) [(101)] Operating record--All plans, submittals, and correspondence for a municipal solid waste facility required under this chapter; required to be maintained at the facility or at a nearby site acceptable to the executive director.

(103) [(102)] Operation--A municipal solid waste (MSW) site or facility is considered to be in operation from the date that solid waste is first received or deposited at the MSW site or facility until the date that the site or facility is properly closed in accordance with this chapter.

(104) [(103)] Operator--The person(s) responsible for operating the facility or part of a facility.

(105) [(104)] Owner--The person that owns a facility or part of a facility.

(106) [(105)] Permitted landfill--Any type of municipal solid waste landfill that received a permit from the State of Texas to operate and has not completed post-closure operations.

(107) [(106)] Physical construction--The first placement of permanent construction on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, the laying of underground pipework, or any work beyond the stage of excavation. Physical construction does not include land preparation, such as clearing, grading, excavating, and filling; nor does it include the installation of roads and/or walkways. Physical construction includes issuance of a building or other construction permit, provided that permanent construction commences within 180 days of the date that the building permit was issued.

(108) [(107)] Plasma arc incinerator--Any enclosed device using a high intensity electrical discharge or arc as a source of heat followed by an afterburner using controlled flame combustion and not listed as an industrial furnace as defined by §335.1 of this title (relating to Definitions).

(109) [(108)] Point of compliance--A vertical surface located no more than 500 feet from the hydraulically downgradient limit of the waste management unit boundary,

extending down through the uppermost aquifer underlying the regulated units, and located on land owned by the owner of the facility.

(110) [(109)] Point source--Any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, or discrete fissure from which pollutants are or may be discharged.

(111) [(110)] Pollutant--Contaminated dredged spoil, solid waste, contaminated incinerator residue, sewage, sewage sludge, munitions, chemical wastes, or biological materials discharged into water.

(112) [(111)] Pollution--The man-made or man-induced alteration of the chemical, physical, biological, or radiological integrity of an aquatic ecosystem.

(113) [(112)] Polychlorinated biphenyl (PCB)--Any chemical substance that is limited to the biphenyl molecule that has been chlorinated to varying degrees or any combination of substances that contains such substance.

(114) [(113)] Polychlorinated biphenyl (PCB) waste(s)--Those PCBs and PCB items that are subject to the disposal requirements of 40 Code of Federal Regulations (CFR) Part 761. Substances that are regulated by 40 CFR Part 761 include, but are not limited to: PCB articles, PCB article containers, PCB containers, PCB-contaminated electrical equipment, PCB equipment, PCB transformers, recycled PCBs, capacitors, microwave ovens, electronic equipment, and light ballasts and fixtures.

(115) [(114)] Poor foundation conditions--Areas where features exist, indicating that a natural or man-induced event may result in inadequate foundation support for the structural components of a municipal solid waste landfill unit.

(116) [(115)] Population equivalent—The hypothetical population that would generate an amount of solid waste equivalent to that actually being managed based on a generation rate of five pounds per capita per day and applied to situations involving solid waste not necessarily generated by individuals. It is assumed, for the purpose of these sections, that the average volume per ton of waste entering a municipal solid waste disposal facility is three cubic yards.

(117) [(116)] Post-consumer waste--A material or product that has served its intended use and has been discarded after passing through the hands of a final user. For the purposes of this subchapter, the term does not include industrial or hazardous waste.

(118) [(117)] Post-use polymers--Plastics:

(A) derived from an industrial, commercial, agricultural, or domestic activity, including preconsumer recovered materials and postconsumer materials;

(B) that would be classified as nonhazardous solid waste if discarded;

(C) that have been sorted from solid waste and other regulated waste and may contain residual amounts of organic material and incidental contaminants or impurities such as paper labels or metal rings;

(D) not mixed with solid waste or hazardous waste on-site or while being processed at an advanced recycling facility;

(E) used or intended for use as a feedstock or for the production of feedstocks, raw materials, intermediate products, or final products using advanced recycling; and

(F) processed or held prior to being processed at an advanced recycling facility. [Plastic polymers that derive from any household, industrial, community, commercial, or other sources of operations or activities that might otherwise become waste if not converted into a valuable raw, intermediate, or final product. Post-use polymers include used polymers that contain incidental contaminants or impurities such as paper labels or metal rings but do not include used polymers mixed with solid waste, medical waste, hazardous waste, electronic waste, tires, or construction or demolition debris.]

(119) [(118)] Premises--A tract of land with the buildings thereon, or a building or part of a building with its grounds or other appurtenances.

(120) [(119)] Process to further reduce pathogens--The process to further reduce pathogens as described in 40 Code of Federal Regulations Part 503, Appendix B.

(121) [(120)] Processing--Activities including, but not limited to, the extraction of materials, transfer, volume reduction, conversion to energy, or other separation and preparation of solid waste for reuse or disposal, including the treatment or neutralization of

waste, designed to change the physical, chemical, or biological character or composition of any waste to neutralize such waste, or to recover energy or material from the waste, or render the waste safer to transport, store, dispose of, or make it amenable for recovery, amenable for storage, or reduced in volume. The term does not include pyrolysis, gasification, solvolysis, or depolymerization. [or gasification.]

(122) [(121)] Public highway--The entire width between property lines of any road, street, way, thoroughfare, bridge, public beach, or park in this state, not privately owned or controlled, if any part of the road, street, way, thoroughfare, bridge, public beach, or park is opened to the public for vehicular traffic, is used as a public recreational area, or is under the state's legislative jurisdiction through its police power.

(123) [(122)] Putrescible waste--Organic wastes, such as garbage, wastewater treatment plant sludge, and grease trap waste, that are capable of being decomposed by microorganisms with sufficient rapidity as to cause odors or gases or are capable of providing food for or attracting birds, animals, and disease vectors.

(124) [(123)] Pyrolysis--A manufacturing process through which post-use polymers are heated in an oxygen-deficient atmosphere and the pyrolysis product is converted into valuable raw materials, valuable intermediate products, or valuable final products, which include plastic monomers, chemicals, naphtha, waxes, polymers, plastic feedstocks, or chemical feedstocks; and do not include crude oil, diesel, gasoline, diesel blend stock, gasoline blend stock, home heating oil, ethanol, or another fuel. [until melted and thermally decomposed and then cooled, condensed, and converted into a valuable raw, intermediate, or final product, including a plastic, monomer, chemical, wax, lubricant, or chemical feedstock or crude oil,

diesel, gasoline, diesel and gasoline blendstock, home heating oil, ethanol, or another fuel.] The term does not include incineration.

[(124) Pyrolysis facility--A manufacturing facility that receives, separates, stores, and converts post-use polymers using pyrolysis. The commission may not consider a pyrolysis facility to be a hazardous waste management facility, a solid waste management facility, or an incinerator.]

(125) Qualified groundwater scientist--A licensed geoscientist or licensed engineer who has received a baccalaureate or post-graduate degree in the natural sciences or engineering and has sufficient training in groundwater hydrology and related fields as may be demonstrated by state registration, professional certifications, or completion of accredited university programs that enable the individual to make sound professional judgments regarding groundwater monitoring, contaminant fate and transport, and corrective action.

(126) Radioactive waste--Waste that requires specific licensing under 25 TAC Chapter 289 (relating to Radiation Control), and the rules adopted by the commission under the Texas Health and Safety Code.

(127) Recoverable feedstock--One or more of the following materials, derived from recoverable <u>nonhazardous</u> waste other than coal refuse, that has been processed so that it may be used as feedstock in <u>an "Advanced recycling facility" or through "Gasification" as these terms are defined in this section</u> [a gasification facility]:

(A) post-use polymers; [and]

(B) material, including municipal solid waste <u>and other post-industrial</u> waste:

(i) for which the commission or the United States Environmental

Protection Agency has made a non-waste determination under 40 Code of Federal Regulations

§241.3(c); or

(ii) that the commission or the United States Environmental

Protection Agency has otherwise determined are feedstocks and not solid waste; and

(C) excluding fuels. [containing post-use polymers and other post-industrial waste containing post-use polymers, that has been processed into a fuel or feedstock for which the commission or the United States Environmental Protection Agency has made a non-waste determination under 40 Code of Federal Regulations §241.3(c).]

(128) Recyclable material--A material that <u>can be or</u> has been recovered or diverted from the nonhazardous waste stream for purposes of reuse, recycling, or reclamation, a substantial portion of which is consistently used in the manufacture of products that may otherwise be produced using raw or virgin materials. The term includes <u>any nonhazardous</u> <u>waste stream, including</u> post-use polymers and recoverable feedstocks that are converted through pyrolysis, <u>gasification</u>, <u>solvolysis</u>, <u>or depolymerization into valuable raw materials</u>, <u>valuable intermediate products</u>, <u>or valuable final products</u>. [or gasification into valuable raw, intermediate, and final products.] Recyclable material is not solid waste. However, recyclable material may become solid waste at such time, if any, as it is abandoned or disposed of rather

than recycled, whereupon it will be solid waste with respect only to the party actually abandoning or disposing of the material.

(129) Recycling--A process by which materials that have served their intended use or are scrapped, discarded, used, surplus, or obsolete are collected, separated, or processed and returned to use in the form of raw materials or feedstocks used in the manufacture [in the production] of new products. Except for mixed municipal solid waste composting, that is, composting of the typical mixed solid waste stream generated by residential, commercial, and/or institutional sources, recycling includes the composting process if the compost material is put to beneficial use. Recycling includes the conversion of post-use polymers and recoverable feedstocks through pyrolysis, gasification, solvolysis, or depolymerization, but does not include incineration of plastics or waste-to-energy processes.

(130) Refuse--Same as rubbish.

(131) Registration--The act of filing information with the commission for review and approval for specific solid waste management activities that do not require a permit, as determined by this chapter.

(132) Regulated asbestos-containing material--Regulated asbestos-containing material as defined in 40 Code of Federal Regulations Part 61, as amended, includes: friable asbestos material, Category I nonfriable asbestos-containing material that has become friable; Category I nonfriable asbestos-containing material that will be or has been subjected to sanding, grinding, cutting, or abrading; or Category II nonfriable asbestos-containing material that has a high probability of becoming or has become crumbled, pulverized, or reduced to

powder by the forces expected to act on the material in the course of demolition or renovation operations.

(133) Regulated hazardous waste--A solid waste that is a hazardous waste as defined in 40 Code of Federal Regulations (CFR) §261.3 and that is not excluded from regulation as a hazardous waste under 40 CFR §261.4(b), or that was not generated by a very small quantity generator (VSQG) during a month in which the VSQG did not generate hazardous waste during an episodic event [conditionally exempt small-quantity generator].

- (134) Resource recovery--The recovery of material or energy from solid waste.
- (135) Resource recovery facility--A solid waste processing facility at which solid waste is processed for the purpose of extracting, converting to energy, or otherwise separating and preparing solid waste for reuse.
- (136) Rubbish--Nonputrescible solid waste (excluding ashes), consisting of both combustible and noncombustible waste materials. Combustible rubbish includes paper, rags, cartons, wood, excelsior, furniture, rubber, plastics, brush, or similar materials; noncombustible rubbish includes glass, crockery, tin cans, aluminum cans, and similar materials that will not burn at ordinary incinerator temperatures (1,600 degrees Fahrenheit to 1,800 degrees Fahrenheit).
- (137) Run-off--Any rainwater, leachate, or other liquid that drains over land from any part of a facility.

- (138) Run-on--Any rainwater, leachate, or other liquid that drains over land onto any part of a facility.
- (139) Salvaging--The controlled removal of waste materials for utilization, recycling, or sale.
- (140) Saturated zone--That part of the earth's crust in which all voids are filled with water.
- (141) Scavenging--The uncontrolled and unauthorized removal of materials at any point in the solid waste management system.
- (142) Scrap tire--Any tire that can no longer be used for its original intended purpose.
- (143) Seasonal high-water level--The highest measured or calculated water level in an aquifer during investigations for a permit application and/or any groundwater characterization studies at a facility.
- (144) Septage--The liquid and solid material pumped from a septic tank, cesspool, or similar sewage treatment system.
 - (145) Site--Same as facility.

(146) Site development plan--A document, prepared by the design engineer, that provides a detailed design with supporting calculations and data for the development and operation of a solid waste site.

(147) Site operating plan--A document, prepared by the design engineer in collaboration with the facility operator, that provides general instruction to facility management and operating personnel throughout the operating life of the facility in a manner consistent with the engineer's design and the commission's regulations to protect human health and the environment and prevent nuisances.

(148) Site operator--The holder of, or the applicant for, an authorization (or license) for a municipal solid waste facility.

(149) Sludge--Any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water-supply treatment plant, or air pollution control facility, exclusive of the treated effluent from a wastewater treatment plant.

(150) Small municipal solid waste landfill--A municipal solid waste landfill unit (Type IAE) at which less than 20 tons of authorized types of waste are disposed of daily based on an annual average and/or a Type IVAE landfill unit at which less than 20 tons of authorized types of waste are disposed of daily based on an annual average. A Type IAE landfill permit may include additional authorization for a separate Type IVAE landfill unit. If a permit contains dual authorization for Type IAE and Type IVAE landfill units, the permit must designate separate areas for the units and where all disposal cells will be located within each unit.

(151) Solid waste--Garbage, rubbish, refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility, and other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, municipal, commercial, mining, and agricultural operations and from community and institutional activities. The term does not include:

(A) solid or dissolved material in domestic sewage, or solid or dissolved material in irrigation return flows, or industrial discharges subject to regulation by permit issued under Texas Water Code, Chapter 26;

(B) soil, dirt, rock, sand, and other natural or man-made inert solid materials used to fill land if the object of the fill is to make the land suitable for the construction of surface improvements;

(C) waste materials that result from activities associated with the exploration, development, or production of oil or gas or geothermal resources and other substance or material regulated by the Railroad Commission of Texas under Natural Resources Code, §91.101, unless the waste, substance, or material results from activities associated with gasoline plants, natural gas liquids processing plants, pressure maintenance plants, or repressurizing plants and is hazardous waste as defined by the administrator of the United States Environmental Protection Agency under the federal Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, as amended (42 United States Code (USC), §§6901 *et seq.*); or

(D) post-use polymers or recoverable feedstocks that have been converted through pyrolysis, gasification, solvolysis, or depolymerization into valuable raw materials, valuable intermediate products, or valuable final products, which include plastic monomers, chemicals, waxes, lubricants, or chemical feedstocks pyrolysis, [processed through pyrolysis or gasification] that do not qualify as hazardous waste under the Resource Conservation and Recovery Act of 1976 (42 USC, §§6901 *et seq.*).]

(152) Solid waste management unit--A landfill, surface impoundment, waste pile, furnace, incinerator, kiln, injection well, container, drum, salt dome waste containment cavern, land treatment unit, tank, container storage area, or any other structure, vessel, appurtenance, or other improvement on land used to manage solid waste.

(153) Solvolysis--A manufacturing process that includes hydrolysis, aminolysis, ammonolysis, methanolysis, and glycolysis through which post-use polymers are purified with the aid of solvents while heated at low temperatures, pressurized, or both heated at low temperatures and pressurized, to remove additives and contaminants and make useful products, which include monomers, intermediates, valuable chemicals, plastic feedstocks, chemical feedstocks, and raw materials; and do not include crude oil, diesel, gasoline, diesel blend stock, gasoline blend stock, home heating oil, ethanol, or another fuel.

(154) [(153)] Source-separated recyclable material--Recyclable material from residential, commercial, municipal, institutional, recreational, industrial, and other community activities, that at the point of generation has been separated, collected, and transported separately from municipal solid waste (MSW), or transported in the same vehicle as MSW, but in

separate containers or compartments. Source-separation does not require the recovery or separation of non-recyclable components that are integral to a recyclable product, including:

(A) the non-recyclable components of white goods, whole computers, whole automobiles, or other manufactured items for which dismantling and separation of recyclable from non-recyclable components by the generator are impractical, such as insulation or electronic components in white goods;

(B) source-separated recyclable material rendered unmarketable by damage during collection, unloading, and sorting, such as broken recyclable glass; and

- (C) tramp materials, such as:
 - (i) glass from recyclable metal windows;
 - (ii) nails and roofing felt attached to recyclable shingles;
- (iii) nails and sheetrock attached to recyclable lumber generated through the demolition of buildings; and
 - (iv) pallets and packaging materials.

(155) [(154)] Special waste--Any solid waste or combination of solid wastes that because of its quantity, concentration, physical or chemical characteristics, or biological properties requires special handling and disposal to protect the human health or the

environment. If improperly handled, transported, stored, processed, or disposed of or otherwise managed, it may pose a present or potential danger to the human health or the environment. Special wastes are:

- (A) hazardous waste generated by a very small quantity generator (VSOG) during a calendar month in which the VSOG did not generate hazardous waste during an episodic event that may be exempt from full regulation under Chapter 335, Subchapters A and C of this title (relating to Industrial Solid Waste and Municipal Hazardous Waste in General and Standards Applicable to Generators of Hazardous Waste, respectively) [from conditionally exempt small-quantity generators that may be exempt from full controls under Chapter 335, Subchapter N of this title (relating to Household Hazardous Wastes)];
 - (B) Class 1 industrial nonhazardous waste;
 - (C) untreated medical waste;
- (D) municipal wastewater treatment plant sludges, other types of domestic sewage treatment plant sludges, and water-supply treatment plant sludges;
 - (E) septic tank pumpings;
 - (F) grease and grit trap wastes;
- (G) wastes from commercial or industrial wastewater treatment plants; air pollution control facilities; and tanks, drums, or containers used for shipping or storing any

material that has been listed as a hazardous constituent in 40 Code of Federal Regulations (CFR) Part 261, Appendix VIII but has not been listed as a commercial chemical product in 40 CFR §261.33(e) or (f);

- (H) slaughterhouse wastes;
- (I) dead animals;
- (J) drugs, contaminated foods, or contaminated beverages, other than those contained in normal household waste;
 - (K) pesticide (insecticide, herbicide, fungicide, or rodenticide) containers;
 - (L) discarded materials containing asbestos;
 - (M) incinerator ash;
- (N) soil contaminated by petroleum products, crude oils, or chemicals in concentrations of greater than 1,500 milligrams per kilogram total petroleum hydrocarbons; or contaminated by constituents of concern that exceed the concentrations listed in Table 1 of §335.521(a)(1) of this title (relating to Appendices);
 - (O) used oil;

- (P) waste from oil, gas, and geothermal activities subject to regulation by the Railroad Commission of Texas when those wastes are to be processed, treated, or disposed of at a solid waste management facility authorized under this chapter;
 - (Q) waste generated outside the boundaries of Texas that contains:
 - (i) any industrial waste;
- (ii) any waste associated with oil, gas, and geothermal exploration, production, or development activities; or
 - (iii) any item listed as a special waste in this paragraph;
 - (R) lead acid storage batteries; and
 - (S) used-oil filters from internal combustion engines.
- (156) [(155)] Stabilized sludges--Those sludges processed to significantly reduce pathogens, by processes specified in 40 Code of Federal Regulations Part 257, Appendix II.
- (157) [(156)] Storage--The keeping, holding, accumulating, or aggregating of solid waste for a temporary period, at the end of which the solid waste is processed, disposed, or stored elsewhere.
 - (A) Examples of storage facilities are collection points for:

- (i) only nonputrescible source-separated recyclable material;
- (ii) consolidation of parking lot or street sweepings or wastes collected and received in sealed plastic bags from such activities as periodic citywide cleanup campaigns and cleanup of rights-of-way or roadside parks; and
- (iii) accumulation of used or scrap tires prior to transportation to a processing or disposal facility.
- (B) Storage includes operation of pre-collection or post-collection as follows:
- (i) pre-collection--that storage by the generator, normally on his premises, prior to initial collection; or
- (ii) post-collection--that storage by a transporter or processor, at a processing facility, while the waste is awaiting processing or transfer to another storage, disposal, or recovery facility.
- (158) [(157)] Storage battery--A secondary battery, so called because the conversion from chemical to electrical energy is reversible and the battery is thus rechargeable. Secondary or storage batteries contain an electrode made of sponge lead and lead dioxide, nickel-iron, nickel-cadmium, silver-zinc, or silver-cadmium. The electrolyte used is sulfuric acid.

Other types of storage batteries contain lithium, sodium-liquid sulfur, or chlorine-zinc using titanium electrodes.

(159) [(158)] Structural components--Liners, leachate collection systems, final covers, run-on/run-off systems, and any other component used in the construction and operation of the municipal solid waste landfill that is necessary for protection of human health and the environment.

(160) [(159)] Surface impoundment--A natural topographic depression, manmade excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials) that is designed to hold an accumulation of liquids; examples include holding, storage, settling, and aeration pits, ponds, and lagoons.

(161) [(160)] Surface water--Surface water as included in water in the state.

(162) [(161)] Tank--A stationary device, designed to contain an accumulation of solid waste, which is constructed primarily of non-earthen materials (e.g., wood, concrete, steel, plastic) that provide structural support.

(163) [(162)] Tank system--A solid waste storage or processing tank and its associated ancillary equipment and containment system.

(164) [(163)] Transfer station--A facility used for transferring solid waste from collection vehicles to long-haul vehicles (one transportation unit to another transportation

unit). It is not a storage facility such as one where individual residents can dispose of their wastes in bulk storage containers that are serviced by collection vehicles.

(165) [(164)] Transportation unit--A truck, trailer, open-top box, enclosed container, rail car, piggy-back trailer, ship, barge, or other transportation vehicle used to contain solid waste being transported from one geographical area to another.

(166) [(165)] Transporter--A person that collects, conveys, or transports solid waste; does not include a person transporting his or her household waste.

(167) [(166)] Trash--Same as Rubbish.

(168) [(167)] Treatment--Same as Processing.

(169) [(168)] Triple rinse--To rinse a container three times using a volume of solvent capable of removing the contents equal to 10% of the volume of the container or liner for each rinse.

(170) [(169)] Uncompacted waste--Any waste that is not a liquid or a sludge, has not been mechanically compacted by a collection vehicle, has not been driven over by heavy equipment prior to collection, or has not been compacted prior to collection by any type of mechanical device other than small, in-house compactor devices owned and/or operated by the generator of the waste.

(171) [(170)] Unified soil classification system--The standardized system devised by the United States Army Corps of Engineers for classifying soil types.

(172) [(171)] Universal waste--Any of the following hazardous wastes that are subject to the universal waste requirements of Chapter 335, Subchapter H, Division 5 of this title (relating to Universal Waste Rule):

(A) batteries, as described in 40 Code of Federal Regulations (CFR)

§273.2;

- (B) pesticides, as described in 40 CFR §273.3;
- (C) thermostats, as described in 40 CFR §273.4;
- (D) paint and paint-related waste, as described in §335.262(b) of this title (relating to Standards for Management of Paint and Paint-Related Waste); and
 - (E) lamps, as described in 40 CFR §273.5.

(173) [(172)] Unloading areas--Areas designated for unloading, including all working faces, active disposal areas, storage areas, and other processing areas.

(174) [(173)] Unstable area--A location that is susceptible to natural or humaninduced events or forces capable of impairing the integrity of some or all of the landfill structural components responsible for preventing releases from a landfill. Unstable areas can include poor foundation conditions, areas susceptible to mass movements, and karst terrains.

(175) [(174)] Uppermost aquifer--The geologic formation nearest the natural ground surface that is an aquifer; includes lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary.

(176) [(175)] Vector--An agent, such as an insect, snake, rodent, bird, or animal capable of mechanically or biologically transferring a pathogen from one organism to another.

(177) Very small quantity generator--A generator who generates less than or equal to the following amounts of hazardous waste in a calendar month:

(A) 100 kilograms (220 pounds) of non-acute hazardous waste; and

(B) 1 kilogram (2.2 pounds) of acute hazardous waste listed in 40 Code of Federal Regulations (CFR) §261.31 or §261.33(e); and

(C) 100 kilograms (220 pounds) of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste listed in 40 CFR §261.31 or §261.33(e).

(178) [(176)] Washout--The carrying away of solid waste by waters.

(179) [(177)] Waste acceptance hours--Those hours when waste is received from off-site.

(180) [(178)] Waste management unit boundary--A vertical surface located at the perimeter of the unit. This vertical surface extends down into the uppermost aquifer.

(181) [(179)] Waste-separation/intermediate-processing center--A facility, sometimes referred to as a materials recovery facility, to which recyclable materials arrive as source-separated materials, or where recyclable materials are separated from the municipal waste stream and processed for transport off-site for reuse, recycling, or other beneficial use.

(182) [(180)] Waste-separation/recycling facility--A facility, sometimes referred to as a material recovery facility, in which recyclable materials are removed from the waste stream for transport off-site for reuse, recycling, or other beneficial use.

(183) [(181)] Water in the state--Groundwater, percolating or otherwise, lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Gulf of Mexico inside the territorial limits of the state, and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or non-navigable, and including the beds and banks of all watercourses and bodies of surface water, that are wholly or partially inside or bordering the state or inside the jurisdiction of the state.

(184) [(182)] Water table--The upper surface of the zone of saturation at which water pressure is equal to atmospheric pressure, except where that surface is formed by a confining unit.

(185) [(183)] Waters of the United States--All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide, with their tributaries and adjacent wetlands, interstate waters and their tributaries, including interstate wetlands; all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, and wetlands, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters that are or could be used by interstate or foreign travelers for recreational or other purposes; from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; that are used or could be used for industrial purposes by industries in interstate commerce; and all impoundments of waters otherwise considered as navigable waters; including tributaries of and wetlands adjacent to waters identified herein.

(186) [(184)] Wetlands--As defined in Chapter 307 of this title (relating to Texas Surface Water Quality Standards).

(187) [(185)] White goods--Discarded large household appliances such as refrigerators, stoves, washing machines, or dishwashers.

(188) [(186)] Working face--Areas in a landfill where waste has been deposited for disposal but has not been covered.

(189) [(187)] Yard waste--Leaves, grass clippings, yard and garden debris, and brush, including clean woody vegetative material not greater than six inches in diameter, that

results from landscaping maintenance and land-clearing operations. The term does not include stumps, roots, or shrubs with intact root balls.

§330.5. Classification of Municipal Solid Waste Facilities.

(a) The commission has classified all municipal solid waste (MSW) facilities according to the method of processing or disposal of MSW. Subject to the limitations in §§330.15, 330.171, and 330.173 of this title (relating to General Prohibitions; Disposal of Special Wastes; and Disposal of Industrial Wastes), and with the written approval of the executive director, Type I, IV, V, and VI MSW facilities may also receive special wastes, including Class 1 industrial solid waste and hazardous waste from very small quantity generators [conditionally exempt small quantity generators], if properly handled and safeguarded in the facility.

(1) MSW facility - Type I. A Type I landfill unit is the standard landfill for the disposal of MSW. The commission may authorize the designation of special-use areas for processing, storage, and disposal or any other functions involving solid waste. Except as allowed in subsections (b) - (e) of this section, owners or operators shall follow the permit application requirements prescribed in Subchapter B of this chapter (relating to Permit and Registration Application Procedures) and the minimum design and operational requirements of Subchapter D of this chapter (relating to Operational Standards for Municipal Solid Waste Landfill Facilities); [Subchapter F of this chapter (relating to Analytical Quality Assurance and Quality Control);] Subchapter G of this chapter (relating to Surface Water Drainage); Subchapter H of this chapter (relating to Liner System Design and Operation); Subchapter I of this chapter (relating to Landfill Gas Management); Subchapter J of this chapter (relating to Groundwater Monitoring and Corrective Action); Subchapter K of this chapter (relating to Closure and Post-

Closure); Subchapter L of this chapter (relating to Closure, Post-Closure, and Corrective Action Cost Estimates); Subchapter M of this chapter (relating to Location Restrictions); Subchapter T of this chapter (relating to Use of Land Over Closed Municipal Solid Waste Landfills); and Chapter 37, Subchapter R of this title (relating to Financial Assurance for Municipal Solid Waste Facilities). Those landfill units meeting the requirements of subsection (b) of this section shall be referred to as Type IAE landfill units. Type IAE landfill units are authorized to accept the same types of waste as Type I landfill units subject to the limitations in §330.173 of this title, and are exempt from Subchapters H and J of this chapter. Owners or operators of Type I landfill facilities that are authorized to operate a Type IV cell or trench shall operate the cell or trench in accordance with paragraph (2) of this subsection.

(2) MSW facility - Type IV. A Type IV landfill unit may only accept brush, construction, or demolition waste, and/or rubbish. A Type IV landfill unit may not accept putrescible wastes, very small quantity generator [conditionally exempt small-quantity generator] waste, or household wastes. Except as allowed in subsection (b) of this section, owners or operators shall follow the permit application requirements prescribed in Subchapter B of this chapter and the minimum design and operational standards prescribed in Subchapters D[, F,] and G of this chapter; §§330.331(d), 330.335, 330.337, 330.339, and 330.341 of this title (relating to Liner System Design and Operation); §330.417 of this title (relating to Groundwater Monitoring at Type IV Landfills); §§330.453, 330.463(a), and 330.465 of this title (relating to Closure Requirements for Municipal Solid Waste Landfill Units that Stopped Receiving Waste Prior to October 9, 1991, Type IV Landfills, and Municipal Solid Waste Sites, Post-Closure Care Requirements, and Certification of Completion of Post-Closure Care) [330.465, and 330.467 of this title (relating to Closure and Post-Closure)]; Subchapter M of this chapter; and Chapter 37, Subchapter R of this title. Those landfill units meeting the requirements of subsection (b) of

this section shall be referred to as Type IVAE landfill units. Type IVAE landfill units are authorized to accept the same types of waste as Type IV landfill units and are exempt from Subchapters H and J of this chapter.

- (3) MSW facility Type V. Separate solid waste processing facilities are classified as Type V. These facilities include processing plants that transfer, incinerate, shred, grind, bale, salvage, separate, dewater, reclaim, and/or provide other storage or processing of solid waste. Owners or operators shall follow the minimum design and operational requirements prescribed in Subchapter E of this chapter (relating to Operational Standards for Municipal Solid Waste Storage and Processing Units); [Subchapter F of this chapter;]Subchapter G of this chapter; Subchapter H of this chapter, if required; Subchapter K of this chapter; Subchapter L of this chapter, if financial assurance is required; Subchapter M of this chapter; and Chapter 37, Subchapter R of this title, except that owners and operators of recycling facilities who store combustible material are required to comply with Chapter 37, Subchapter J of this title (relating to Financial Assurance for Recycling Facilities). Groundwater monitoring may be required by the executive director and shall be maintained in accordance with the requirements of Subchapter J of this chapter.
- (4) MSW facility Type VI. A Type VI facility or operation is a facility using a new or unproven method of managing or utilizing MSW, including resource and energy recovery projects for processes that are not currently in use in Texas. The commission may limit the size of these facilities until the method is proven. The minimum operational standards are prescribed in Subchapter E of this chapter.

- (5) MSW facility Type VII. A Type VII facility or operation is a facility for the land management of sludges and/or similar wastes. Operational standards, depending on the particular waste, facility purpose, and method of operation (land application for beneficial use, land disposal to include landfilling and land treatment, etc.) are contained in Chapter 312 of this title (relating to Sludge Use, Disposal, and Transportation).
- (6) MSW facility Type VIII. Facilities for the management of used or scrap tires are classified as Type VIII. Standards are prescribed in Chapter 328, Subchapter F of this title (relating to Management of Used or Scrap Tires).
- (7) MSW facility Type IX. A Type IX facility is an energy, material, gas recovery for beneficial use, or landfill mining facility located within or adjacent to a closed disposal facility, an inactive portion of a disposal facility, or an active disposal facility, used for extracting materials for energy and material recovery or for gas recovery for beneficial use. Registration by rule requirements for facilities that recover landfill gas for beneficial use are prescribed in §330.9(j) [§330.9(k)] of this title (relating to Registration Required). Owners or operators of other Type IX facilities shall follow the registration application requirements prescribed in Subchapter B of this chapter. All owners and operators shall follow the minimum design and operational requirements of Subchapter E of this chapter; §330.459 of this title (relating to Closure Requirements for Municipal Solid Waste Storage and Processing Units); §330.461 of this title (relating to Certification of Final Facility Closure); §330.505 of this title (relating to Closure Cost Estimates for Storage and Processing Units); and Chapter 37, Subchapter R of this title. Waste mining activities shall also follow the minimum design and operation requirements of §330.149 of this title (relating to Odor Management Plan); §330.151 of this title (relating to Disease Vector Control); §330.165 of this title (relating to Landfill

Cover); and §330.167 of this title (relating to Ponded Water). Owners or operators of an MSW landfill facility applying for a non-beneficial use gas control system for any area within the facility's permit boundary shall apply for a permit modification under §305.70 of this title (relating to Municipal Solid Waste Permit and Registration Modifications). Type IX facility permits and registrations previously issued for the recovery and beneficial use of landfill gas are considered to remain valid under applicable permit provisions until amended, modified, or revoked by the commission. The owner or operator must submit all information necessary to complete the air quality review as prescribed by the commission and be approved by the executive director prior to the Type IX registration by rule becoming effective.

- (b) Owners or operators of a Type IAE or Type IVAE landfill facility may qualify for an arid exemption, as follows.
- (1) Owners or operators of new, existing, and lateral expansions of Type IAE or Type IVAE landfill units may qualify for an arid exemption and be exempt from Subchapters H and J of this chapter, provided all of the following conditions are met:
- (A) the facility disposes less than 20 tons per day based on an annual average of authorized waste in a Type IAE landfill unit and/or less than 20 tons per day based on an annual average of authorized waste in a Type IVAE landfill unit for a total waste acceptance rate less than 40 tons per day for the facility considering all waste streams based on an annual average;
- (B) there is no evidence of existing groundwater contamination from the facility;

(C) the facility serves a community that has no practicable waste management alternative; and

(D) the facility is located in an area that receives less than or equal to 25 inches of annual average precipitation based on precipitation data from the nearest official precipitation recording station for the most recent 30-year reporting period.

(2) Requests for exemptions under §330.63(d)(5) of this title (relating to Contents of Part III of the Application) may be approved administratively by the executive director, upon demonstration of compliance with all applicable criteria. The executive director may deny an exemption request if the available information indicates that granting the exemption could result in a substantial threat of groundwater contamination. Existing Type IAE landfill permits. which include a 20 tons per day waste disposal limit, may be revised via a major amendment to allow for disposal of an additional less than 20 tons of authorized waste in a Type IVAE landfill unit located in a separate area of the same facility. Existing Type IAE landfill permits, which do not include a waste disposal limit or include a waste disposal limit in excess of limits allowed for Type IAE landfill units, may be modified consistent with the restrictions for small MSW landfills. Within 180 days of the effective date of the comprehensive rule revisions in this chapter as adopted in 2006 (2006 Revisions), owners and operators of such a permit shall comply with the waste acceptance rate limit for a Type IAE landfill unit or apply to modify such permit to include a Type IVAE landfill unit located in a separate area of the facility. Such permits remain valid until a final decision is made on the modification application. Such a modification must be processed in accordance with §305.70(l) of this title as a modification subject to public notice. Such a modification application must be submitted in conjunction with a corresponding application to modify the revised estimated waste acceptance rate under §330.125(h) of this title (relating to Recordkeeping Requirements).

- (3) Owners or operators may appeal denials of a request for exemption to the commission for decision.
- (4) If the owner or operator of a new, existing, or lateral expansion of a Type IAE or Type IVAE landfill facility who has previously asserted eligibility for the arid exemption has knowledge or becomes aware of groundwater contamination from the facility within a one-mile radius of the unit, the facility no longer meets the definition of a Type IAE or Type IVAE landfill facility, the waste reduction program is ineffective (based upon an evaluation of trends established after a minimum period of a year), or a practicable alternative becomes available, the owner or operator shall notify in writing the executive director of such condition(s) and thereafter comply with Subchapter B, Subchapter H, and Subchapter J of this chapter on a schedule specified by the executive director.
- (5) The executive director may consider the economic investment made by the owner or operator in establishing the schedule for compliance.
- (6) The minimum time allowed for compliance necessitated by loss of Type IAE or Type IVAE landfill facility status or availability of a practicable alternative shall be 18 months.

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(7) A Type IAE or Type IVAE landfill facility that meets the requirements of this

subsection shall maintain the integrity of any existing on-site groundwater monitor wells and

make them available to the executive director for the collection of groundwater samples.

(c) For MSW landfills that stopped receiving waste before October 9, 1991, and

unauthorized MSW sites, the closure provisions of §330.453 of this title (relating to Closure

Requirements for Municipal Solid Waste Landfill Units that Stopped Receiving Waste Prior to

October 9, 1991, Type IV Landfills, and Municipal Solid Waste Sites) apply. If not previously

submitted, owners or operators shall submit a closure report that documents that MSW landfill

units or unauthorized MSW sites, or portions thereof, have received final cover.

(d) MSW landfill units that receive waste after October 9, 1991, but stop receiving waste

before October 9, 1993, are subject to the final cover requirements specified in §330.455 of this

title (relating to Closure Requirements for Municipal Solid Waste Landfill Units that Received

Waste on or after October 9, 1991, but Stopped Receiving Waste Prior to October 9, 1993). The

final cover must be installed and certified in accordance with the requirements contained in

§§330.451, 330.453, 330.455, and 330.457 of this title (relating to Closure and Post-Closure).

Owners or operators of MSW landfill units described in this subsection that fail to complete

cover installation and certification within the time limits specified in Subchapter K of this

chapter will be subject to all the requirements of these regulations.

(e) All MSW landfill units that receive waste on or after October 9, 1993, must comply

with all requirements of these regulations, unless otherwise specified.

§330.7. Permit Required.

- (a) Except as provided in §§330.9, 330.11, 330.13, or 330.25 of this title (relating to Registration Required; Notification Required; Waste Management Activities Exempt from Permitting, Registration, or Notification; and Relationship with County Licensing System), no person may cause, suffer, allow, or permit any activity of storage, processing, removal, or disposal of any solid waste unless such activity is authorized by a permit or other authorization from the commission. In the event this requirement is violated, the executive director may seek recourse against not only the person that stored, processed, or disposed of the waste but also against the generator, transporter, owner or operator, or other person who caused, suffered, allowed, or permitted its waste to be stored, processed, or disposed. No person may commence physical construction of a new municipal solid waste (MSW) management facility, a vertical expansion, or a lateral expansion without first having submitted a permit application in accordance with §§330.57, 330.59, 330.61, 330.63, and 330.65 of this title (relating to Permit and Registration Applications for Municipal Solid Waste Facilities; Contents of Part I of the Application; Contents of Part II of the Application; Contents of Part III of the Application; and Contents of Part IV of the Application, respectively) and received a permit from the commission, except as provided otherwise in this section.
- (b) A separate permit is required for the storage, transportation, or handling of used oil mixtures collected from oil/water separators. Any person that intends to conduct such activity shall comply with the regulatory requirements of Chapter 324 of this title (relating to Used Oil Standards).
- (c) Permits by rule may be granted for persons that compact or transport waste in enclosed containers or enclosed transportation units to a Type IV facility.

(1) A permi	it by rule is granted for a generator operating a static	onary compactor
that is only used to comp	act waste to be disposed of at a Type IV landfill, if al	l of the following
conditions are met.		
(A)	The generator submits the following information and	d any requested
additional information on	forms provided by the executive director:	
	(i) generator contact person, company name, ma	iling address,
street address, city, state,	ZIP code, and telephone number;	
	(ii) contract renewal date, if applicable;	
	(iii) rated compaction capability in pounds per co	abic yard;
	(iv) container eige	
	(iv) container size;	
	(v) description of waste stream to enter compact	or.
	(i) description of waste stream to enter compact	· · ·
	(vi) receiving MSW Type IV disposal facility name	e, permit number
mailing address, street ad	ldress, city, state, ZIP code, telephone number, and co	ontact person;
and		
	(vii) a certification from the generator that states	s the following: I,
(name)	(title)	of

(company name)	, located at (street address) in
(city)	, certify that the contents of the compactor
located at the location	stated herein are free of and shall be maintained free of putrescible,
hazardous, infectious,	and any other waste not allowed in an MSW Type IV landfill.
by rule.	(B) The generator submits a \$75 fee along with the claim for the permi
	(C) The generator complies with the operational requirements of relating to Requirements for Stationary Compactors).

- (D) A stationary compactor permit by rule expires after one year. The generator must submit an annual renewal fee in the amount of \$75. Failure to timely pay the annual fee eliminates the option of disposal of these wastes at a Type IV landfill until the generator claims a new or renewed permit by rule.
- (2) A permit by rule is granted for transporters using enclosed containers or enclosed vehicles to collect and transport brush, construction or demolition wastes, and rubbish along special collection routes to MSW Type IV landfill facilities if all of the following conditions are met.
- (A) The owner or operator seeking a special collection route permit by rule submits to the executive director the following information and any requested additional information on forms provided by the executive director:

	(i) name of owner and operator	r, mailing address	, street address,
city, state, ZIP code, name an	d title of a contact person, and	telephone number	r;

- (ii) receiving MSW Type IV disposal facility name, permit number, mailing address, street address, city, state, ZIP code, telephone number, and contact person;
- (iii) information on each transportation unit, including, at a minimum, license number, vehicle identification number, year model, make, capacity in cubic yards, and rated compaction capability in pounds per cubic yard;
- (iv) route information, which shall include as a minimum the collection frequency, the day of the week the route is to be collected, and the day and time span within which the route is to arrive at the MSW Type IV landfill;
 - (v) a description of the wastes to be transported;
- (vi) an alternative contingency disposal plan to include alternate trucks to be used or alternative disposal facilities; and
- (vii) a signed and notarized certification from the owner or operator that states the following: I, (name) _____, (title) ____, of _____ operating in _____ County, certify that the contents of the vehicles described above will be free of putrescible, household, hazardous, infectious, or any other waste not allowed in an MSW Type IV landfill.

- (B) The transporter submits a \$100 per vehicle fee along with the claim for a permit by rule.
- (C) The transporter documents each load delivered with a trip ticket form provided by the executive director, and provides the trip ticket to the landfill operator prior to discharging the load.
- (D) A special collection route permit by rule expires after one year. The owner or operator must submit an annual renewal fee in the amount of \$100 per vehicle.

 Failure to timely pay the annual fee eliminates the option of disposal of these wastes at a Type IV landfill until the owner or operator claims a new or renewed permit by rule.
- (E) This paragraph does not apply if the waste load is from a single collection point that is a stationary compactor authorized in accordance with paragraph (1) of this subsection.
- (3) Revision requirements for stationary compactor permits or special collection route permits by rule identified in paragraphs (1) and (2) of this subsection are as follows.
- (A) An update must be submitted if any information within the original permit by rule submittal changes.
- (B) A submittal to update an existing permit by rule must include all of the same documentation required for an original permit by rule submittal.

- (d) A major permit amendment, as defined by §305.62 of this title (relating to Amendments), is required to reopen a Type I, Type IAE, Type IV, or Type IVAE MSW facility permitted by the commission or any of its predecessor or successor agencies that has either stopped accepting waste, or only accepted waste in accordance with an emergency authorization, for a period of five years or longer. The MSW facilities covered by this subsection may not be reopened to accept waste again unless the permittee demonstrates compliance with all applicable requirements of the Resource Conservation and Recovery Act, Subtitle D and the implementing Texas state regulations. If an MSW facility was subject to a contract of sale on January 1, 2001, the scope of any public hearing held on the permit amendment required by this subsection is limited to land use compatibility, as provided by §330.57(a) of this title. This subsection does not apply to any MSW facility that has received a permit but never received waste, or that received an approved Subtitle D permit modification before September 1, 2001.
- (e) A permit by rule is granted for an animal crematory that meets the following criteria. For facilities that do not meet all the requirements of this subsection, the owner or operator shall submit a permit application under §§330.57, 330.59, 330.61, 330.63, and 330.65 of this title and obtain a permit. To qualify for a permit by rule under this subsection, the following requirements must be met.
- (1) General prohibitions. An animal crematory facility shall comply with §330.15(a) of this title (relating to General Prohibitions).
- (2) Incineration limits. Incineration of carcasses shall be limited to the conditions specified in §106.494 of this title (<u>relating to Non-commercial Incinerators and Crematories</u>)

 [(relating to Pathological Waste Incinerators (Previously SE 90))]. The facility shall not accept

animal carcasses that weigh more than the capacity of the largest incinerator at the facility and shall not dismember any carcasses during processing.

- (3) Ash control. Ash disposal must be at an authorized facility unless the ash is returned to the animal owner or sent to a pet cemetery. Ash shall be stored in an enclosed container that will prevent release of the ash to the environment. There shall be no more than 2,000 pounds of ash stored at an animal crematory at any given time.
- (4) Air pollution control. Air emissions from the facility shall not cause or contribute to a condition of air pollution as defined in Texas Clean Air Act, §382.003. All animal crematories, prior to construction or modification, must have an air permit issued under Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification), or qualify for a permit by rule under §106.494 of this title.
- (5) Fire protection. The facility shall prepare, maintain, and follow a fire protection plan. This fire protection plan shall describe fire protection resources (a local fire department, fire hydrants, fire extinguishers, water tanks, water well, etc.), and employee training and safety procedures. The fire protection plan shall comply with local fire codes.
- (6) Storage limits. Carcasses must be incinerated within two hours of receipt, unless stored at or below a temperature of 29 degrees Fahrenheit. Storage of carcasses shall be in a manner that minimizes the release of odors. Storage of carcasses shall be limited to the lesser of 3,200 pounds or the amount that can be incinerated at the maximum loading rate for the incinerators at the facility in a two-day period.

- (7) Unauthorized waste. Only carcasses or animal parts, with any associated packaging, shall be processed. Carcasses shall not be accepted in packaging that includes any chlorinated plastics. Carcasses or animal parts that are either hazardous waste or medical waste are prohibited.
- (8) Cleaning. Storage and processing units must be properly cleaned on a routine basis to prevent odors and the breeding of flies.
- (9) Nuisance prevention. The facility shall be designed and operated in a manner so as to prevent nuisance conditions, including, but not limited to, dust from ashes, disease vectors, odors, and liquids from spills, from being released from the property boundary of the authorized facility.
- (10) Diseased animals. The facility shall be equipped with appropriate protective equipment and clothing for personnel handling diseased animals that may be received at the facility. Facility owners or operators must inform customers and local veterinarians of the need to identify diseased animals for the protection of personnel handling the animals.
- (11) Buffer zone. An animal crematory, including unloading and storage areas, constructed after March 2, 2003, must be at least 50 feet from the property boundary of the facility.
- (12) Operating hours. A crematory shall operate within the time frames allowed by §111.129 of this title (relating to Operating Requirements).

- (13) Documentation. The operator of an animal crematory shall document the carcasses' weight, date and time when carcasses are received, and when carcasses are loaded into the incinerator. A separate entry in the records for loading into the incinerator is not required if a carcass is loaded within two hours of receipt. This information will be maintained in records on site.
- (14) Breakdown. The facility is subject to §330.241 of this title (relating to Overloading and Breakdown).
 - (15) Records management. The owner or operator must retain records as follows:
- (A) maintain a copy of all requirements of this subsection that apply to the facility;
- (B) maintain records for the previous consecutive 12-month period containing sufficient information to demonstrate compliance with all requirements of this subsection;
 - (C) keep all required records at the facility; and
- (D) make the records available upon request to personnel from the commission or from local governments with jurisdiction over the facility.
- (16) Fees. An animal crematory facility authorized under this section is exempt from the fee requirements of Subchapter P of this chapter (relating to Fees and Reporting).

- (17) Other requirements. No other requirements under this chapter are applicable to a facility that meets all of the requirements of this subsection.
- (f) A permit by rule is granted for a dual chamber incinerator if the owner or operator complies with §106.491 of this title (relating to Dual-Chamber Incinerators).
- (g) A permit by rule is granted for an air curtain incinerator if the owner or operator complies with §106.496 of this title (relating to Air Curtain Incinerators). An air curtain incinerator may not be located within 300 feet of an active or closed MSW landfill unit boundary.
- (h) A standard air permit is granted for facilities that comply with Subchapter U of this chapter (relating to Standard Air Permits for Municipal Solid Waste Landfill Facilities and Transfer Stations).
- (i) A permit by rule is granted for a period of up to five years to a county or municipality with a population of 12,000 people or less to dispose of demolition waste from properties with nuisance or abandoned buildings.
 - (1) Requirements. The following conditions must be met.
- (A) Form submittal. The county or municipality submits a form provided by the commission to the executive director for review and approval before construction begins.

- (B) Notice to regional office. The county or municipality notifies the applicable commission regional office of the intent to dispose of waste under this authorization at least 48 hours prior to accepting the first load of waste.
 - (C) Facility location. The location where disposal will occur:
 - (i) is owned or controlled by the county or municipality, and
- (ii) receives less than or equal to 25 inches average annual precipitation as determined from precipitation data for the nearest official precipitation recording station for at least the most recent 30-year reporting period or by another method approved by the executive director.
- (D) Sources of waste. The properties on which nuisance and abandoned buildings are located have been acquired by the county or municipality by means of bankruptcy, tax delinquency, or condemnation, and the previous owners are not financially capable of paying the costs of the disposal of demolition waste at a permitted solid waste disposal facility, including transportation of the waste to the facility.

(E) Waste acceptance.

(i) Prior to demolition, structures are surveyed and abated, if required, for asbestos-containing materials in accordance with <u>25 TAC Chapter 296</u> [25 TAC Chapter 295, Subchapter C] (relating to Texas Asbestos Health Protection).

(ii) The facility may accept non-regulated asbestos-containing materials (non-RACM) for disposal. The wastes are placed on the active working face and covered at the end of the operating day with at least six inches of soil. Under no circumstances may any of the material containing non-RACM be placed on a surface that is subject to vehicular traffic or disposed of by any other means by which the material could be crumbled into a friable state.

(iii) The facility may accept regulated asbestos-containing materials (RACM) if the following conditions are met.

(I) The county or municipality notifies the executive director on a form provided by the commission in accordance with subparagraph (A) of this paragraph.

(II) All waste trenches are identified as receiving RACM, and deed records required under subparagraph (Q) of this paragraph include an indication that the waste trench(es) received RACM.

(III) RACM is transported and received at the facility in tightly closed and unruptured containers or bags or wrapped with at least six-mil polyethylene.

(IV) Bags or containers holding RACM are carefully unloaded and placed in the final disposal location. RACM is then covered immediately with at least six inches of soil. Care is taken during unloading and placement of RACM and during application of the cover so that the bags or containers are not ruptured.

(iv) Waste is limited to the abandoned or nuisance buildings and materials from the property on which the buildings are located. All waste disposed under this authorization must meet the limitations of §330.5(a)(2) of this title (relating to Classification of Municipal Solid Waste Facilities) and may not include waste prohibited under §330.15(e) of this title.

- (F) Access control. Access to the disposal facility is controlled by means of fences, other artificial barriers, natural barriers, or a combination of these methods, and includes a locking gate.
- (G) Buffers and easements. The county or municipality maintains a minimum distance of 50 feet as a buffer between the permit boundary and waste storage, processing and disposal areas. No disposal occurs within a utility or pipeline easement or within 25 feet of the center of a utility or pipeline easement.
- (H) Below-grade placement. Waste is placed only below grade. The top of final cover is placed at pre-existing grade or up to three feet above pre-existing grade to ensure that natural drainage patterns are not altered and ponding of water over waste is prevented.
- (I) Weekly cover. Waste is covered at least weekly with six inches of earthen material not previously mixed with waste, or by tarps. Use of tarps as cover is limited to a seven-day period after which the county or municipality must replace the tarp with either waste or a six-inch layer of earthen material not previously mixed with waste. Tarps may not be used in place of soil cover requirements relating to non-RACM and RACM in subparagraph (E)(ii)

and (iii) of this paragraph. Any trench that has received waste but will be inactive for more than 180 days receives intermediate cover in accordance with subparagraph (J) of this paragraph, or final cover in accordance with subparagraph (P) of this paragraph.

- (J) Intermediate cover. Waste is covered, including any soil weekly cover, with twelve inches of well compacted earthen material not previously mixed with waste.
- (K) Maximum volume. The design waste disposal volume is less than 2.5 million cubic meters in accordance with §106.534(3) of this title (relating to Municipal Solid Waste Landfills and Transfer Stations).
- (L) Facility signs. At all entrances through which waste is received, the facility conspicuously displays a sign with letters at least three inches in height providing a statement that the facility is "NOT FOR PUBLIC USE," an emergency 24-hour contact number that reaches an individual with the authority to obligate the facility at all times that the facility is not in operation, and the local emergency fire department number.
- (M) Stormwater and contaminated water. The county or municipality constructs berms to divert the 25-year/24-hour storm event from entering excavations containing waste. Water that has contacted waste is managed as contaminated water and disposed at an authorized treatment facility.
- (N) Reporting. The county or municipality, while not required to provide quarterly reporting, provides annual reporting in accordance with the annual reporting provisions of §330.675(a) of this title (relating to Reports).

(O) Reauthorization. Before reaching the permit by rule term limit of five years, the county or municipality may request reauthorization under the permit by rule by submitting a form that is current at the time of reauthorization, provided by the commission in accordance with subparagraph (A) of this paragraph, to the executive director at least 14 days before the end of the permit term.

(P) Final cover. The following conditions are met.

(i) Within 60 days after a trench reaches its capacity or waste deposition activities are complete in a trench, the county or municipality installs final cover over waste in the trench. Final cover shall be composed of no less than two feet of soil. The first 18 inches or more of cover shall be of compacted clayey soil, classification sand clay (SC) or low plasticity clay (CL) as defined in the "Unified Soils Classification System" developed by the United States Army Corps of Engineers, and placed and compacted in layers of no more than six inches to minimize the potential for water infiltration. A high plasticity clayey (CH) soil may be used; however, this soil may experience excessive cracking and shall therefore be covered by a minimum of 12 inches of topsoil to retain moisture. Other types of soil may be used with prior written approval from the executive director. The final six inches of cover shall be of suitable topsoil that is capable of sustaining native plant growth and shall be seeded or sodded as soon as practicable following the application of the final cover in order to minimize erosion.

(ii) The trench final cover procedures listed in clause (i) of this subparagraph are completed before facility closure, as described in subparagraph (Q) of this paragraph. If these procedures cannot be performed before the permit by rule term limit is

reached, the county or municipality submits a current application form for reauthorization of the permit by rule to the executive director at least 14 days before the end of the permit term.

(Q) Facility closure. The county or municipality notifies the executive director and the applicable regional office at least 60 days before the anticipated closure date of the facility. Within ten days after closure, submit to the executive director by registered mail a certified copy of an "affidavit to the public" in accordance with the requirements of §330.19 of this title (relating to Deed Recordation). In addition, record a certified notation of the deed to the facility property, or on some other instrument that is normally examined during title search, that will in perpetuity notify any potential purchaser of the property that the land has been used as a landfill facility and use of the land is restricted. Submit a certified deed to the executive director.

(2) Other provisions. The following provisions also apply to this authorization.

(A) Processing. This permit by rule also authorizes the processing of waste destined for the disposal unit. Authorized processing is limited to volume reduction, such as chipping or grinding, but not burning. Processing must occur within the permit boundary and may not occur within a buffer zone or right-of-way. Tires, RACM and non-RACM may not be processed. If required, the county or municipality must obtain authorization for air emissions resulting from this processing.

(B) Fees. Waste that is disposed under this authorization is not subject to the fee requirements of Subchapter P of this chapter.

(C) Other requirements. No other requirements under this chapter are applicable to a facility that meets all the requirements of this subsection.

§330.13. Waste Management Activities Exempt from Permitting, Registration, or Notification.

- (a) A permit, registration, notification, or other authorization is not required for the disposal of up to 2,000 pounds per year of litter or other solid waste generated by an individual on that individual's own land and is not required to comply with §330.19 of this title (relating to Deed Recordation) provided that:
 - (1) the litter or waste is generated on land that the individual owns;
- (2) the litter or waste is not generated as a result of an activity related to a commercial purpose;
 - (3) the disposal occurs on land that the individual owns;
 - (4) the disposal is not for a commercial purpose;
 - (5) the waste disposed of is not hazardous waste or industrial waste;
- (6) the waste disposal method complies with Chapter 111, Subchapter B of this title (relating to Outdoor Burning); and

(7) the waste disposal method does not contribute to a nuisance and does not

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endanger the public health or the environment. Exceeding 2,000 pounds per individual's

residence per year is considered to be a nuisance.

(b) A permit, registration, notification, or other authorization is not required for the

disposal of animal carcasses from government roadway maintenance where:

(1) either of the following:

(A) the animals were killed on county or municipal roadways and the

carcasses are buried on property owned by the entity that is responsible for road maintenance;

or

(B) the animals were killed on state highway rights-of-way and the

carcasses are disposed of by the Texas Department of Transportation by burying the carcasses

on state highway rights-of-way; and

(2) the waste disposal method does not contribute to a nuisance and does not

endanger the public health or the environment; and

(3) the animal carcasses are covered with at least two feet of soil within 24 hours

of collection in accordance with §330.171(c)(2) of this title (relating to Disposal of Special

Wastes).

- (c) A permit, registration, notification, or other authorization is not required for veterinarians performing activities as authorized by Texas Occupations Code, §801.361, Disposal of Animal Remains. Disposal by burning under this section must comply only with §111.209(3) of this title (relating to Exception for Disposal Fires).
- (d) Except as required by §330.7(c)(2) and §330.9(a) of this title (relating to Permit Required; and Registration Required), a permit, registration, notification, or other authorization is not required for transporters of municipal solid waste.
- (e) A permit, registration, notification, or other authorization is not required for a collection point for parking lot or street sweepings or wastes collected and received in sealed plastic bags from such activities as periodic city-wide cleanup campaigns and cleanup of rights-of-way or roadside parks.
- (f) A permit, registration, notification, or other authorization is not required from a car wash facility for drying grit trap waste as long as these wastes are dried and disposed of in compliance with applicable federal, state, and local regulations. Grit trap waste from car wash facilities may be transported for drying purposes to other property if the car wash facility and the property with the drying bed have the same owner and if the facilities are located within 50 miles of each other. This subsection is not intended to preempt or supersede local government regulation of grit trap waste-drying facilities. Drying facilities must comply with Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification) if applicable.

- (g) A permit, registration, notification, or other authorization is not required for <u>an</u> advanced recycling facility that processes recoverable feedstocks into valuable raw materials, valuable intermediate products, or valuable final products through pyrolysis, gasification, solvolysis, or depolymerization [a gasification or pyrolysis facility]. The owner or operator <u>of an advanced recycling facility</u> shall keep records onsite to demonstrate:
- (1) that the primary function of the facility is to convert materials <u>into products</u> for subsequent beneficial use; and [that have a resale value greater than the cost of converting the materials for subsequent beneficial use. The demonstration may consist of the following information:]
- [(A) documentation to support all costs associated with processing materials versus the resale value for the intended beneficial use; or]
- [(B) published indices or buyer contracts, proposed turnover rates, and calculations to show a resale value greater than the costs associated with processing materials.]
- (2) that all solid waste generated from converting materials has been disposed of at a disposal facility authorized by the commission to accept and dispose of the solid waste, with the exception of small amounts of solid waste that may be inadvertently and unintentionally disposed of in another manner. Such documentation shall include a description of the type and volume of solid waste generated, the date(s) and volumes of waste transported off-site, the name and permit or other authorization number of each transporter and authorized disposal facility, and the address of each authorized disposal facility [identification]

of the disposal site(s) authorized by the commission where all solid waste generated from converting the materials will be disposed of].

§330.15. General Prohibitions.

- (a) A person may not cause, suffer, allow, or permit the collection, storage, transportation, processing, or disposal of municipal solid waste (MSW), or the use or operation of a solid waste facility to store, process, or dispose of solid waste, or to extract materials under Texas Health and Safety Code, §361.092, in violation of the Texas Health and Safety Code, or any regulations, rules, permit, license, order of the commission, or in such a manner that causes:
- (1) the discharge or imminent threat of discharge of MSW into or adjacent to the waters in the state without obtaining specific authorization for the discharge from the commission;
 - (2) the creation and maintenance of a nuisance; or
 - (3) the endangerment of the human health and welfare or the environment.
- (b) MSW land disposal facilities (Types I, IAE, IV, IVAE, and VI) failing to satisfy the applicable requirements of this chapter, unless exempted by this chapter, are considered open dumps for purposes of state solid waste management planning under the Resource Conservation and Recovery Act and are prohibited under Resource Conservation and Recovery Act, §4005(a).

- (c) Except as otherwise authorized by this chapter, a person may not cause, suffer, allow, or permit the dumping or disposal of MSW without the written authorization of the commission.
- (d) The open burning of solid waste, except for the infrequent burning of waste generated by land-clearing operations, agricultural waste, silvicultural waste, diseased trees, emergency cleanup operations as authorized by the commission or executive director as appropriate, is prohibited at any MSW landfill. The operation of an air curtain incinerator as allowed in §330.7(g) of this title (relating to Permit Required) other than for the exceptions noted in the previous sentence, is prohibited.
 - (e) The following wastes are prohibited from disposal in any MSW facility.
- (1) A lead acid storage battery shall not be intentionally or knowingly offered by a generator or transporter for disposal at an MSW landfill or incinerator, and/or shall not be intentionally or knowingly accepted for disposal at an MSW landfill or incinerator permitted under this chapter.
- (A) Each battery improperly disposed of constitutes a separate violation and offense.
- (B) A person that violates the provisions of this paragraph is subject to the criminal and/or civil penalties found in the Texas Health and Safety Code, as amended.

- (2) Do-it-yourself used motor vehicle oil shall not be intentionally or knowingly offered by a generator or transporter for disposal at an MSW landfill or MSW incinerator, either by itself or mixed with other solid waste, and/or shall not be intentionally or knowingly accepted for disposal at an MSW landfill or MSW incinerator permitted under this chapter.
- (A) It is an exception to this subsection if the mixing or commingling of used oil with solid waste that is to be disposed of in a landfill is incidental to, and the unavoidable result of, the mechanical shredding of motor vehicles; appliances; or other items of scrap, used, or obsolete metals.
- (B) A person that violates the provisions of this paragraph is subject to the criminal and/or civil penalties found in the Texas Health and Safety Code, as amended.
- (3) Used oil filters from internal combustion engines shall not be offered for landfill disposal by any generator and shall not be intentionally or knowingly accepted for disposal at a landfill permitted under this chapter.
- (4) Whole used or scrap tires shall not be accepted for disposal or disposed of in any MSW landfill, unless processed prior to disposal in a manner acceptable to the executive director.
- (5) Refrigerators, freezers, air conditioners, and any other items containing chlorinated fluorocarbon (CFC) must be handled in accordance with 40 Code of Federal Regulations §82.156 [§82.156(f)], as amended.

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- (6) Except as allowed in §330.177 of this title (relating to Leachate and Gas Condensate Recirculation), liquid waste as defined in §330.3 of this title (relating to Definitions) and as described in subparagraphs (A) and (B) of this paragraph below shall not be disposed of in any MSW landfill unit.
- (A) Bulk or noncontainerized liquid waste shall not be accepted for disposal or disposed of in an MSW landfill unless the waste is household waste other than septic waste.
- (B) Containers holding liquid waste shall not be accepted for disposal or disposed of in an MSW landfill unless:
- (i) the container is a small container similar in size to that normally found in household waste;
- (ii) the container is designated to hold liquids for use other than storage; or
 - (iii) the waste is household waste.
- (7) Regulated hazardous waste as defined in §330.3 of this title shall not be accepted at an MSW facility.

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- (8) Polychlorinated biphenyls (PCB) wastes, as defined under 40 Code of Federal Regulations Part 761, shall not be accepted for disposal or disposed of in an MSW facility unless authorized by the United States Environmental Protection Agency and the MSW permit.
- (9) Radioactive materials as defined in Chapter 336 of this title (relating to Radioactive Substance Rules), except as authorized in Chapter 336 of this title or that are subject to an exemption of the Department of State Health Services shall not be accepted at an MSW facility.
- (f) MSW facilities receiving sewage sludge and failing to satisfy the criteria of this chapter violate Federal Clean Water Act, §309 and §405(e).
- (g) The drilling of any test borings, for any reason, through previously deposited waste or cover material without prior written authorization from the executive director is prohibited.
 - (h) An MSW facility shall not cause:
- (1) a discharge of solid wastes or pollutants adjacent to or into waters of the state, including wetlands, that is in violation of the requirements of Texas Water Code, §26.121;
- (2) a discharge of pollutants into waters of the United States, including wetlands, that violates any requirements of the Federal Clean Water Act, including, but not limited to, the National Pollutant Discharge Elimination System requirements, under §402, as amended, or Texas Pollutant Discharge Elimination System requirements;

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(3) a discharge of dredged or fill material to waters of the United States,

including wetlands, that is in violation of the requirements under Federal Clean Water Act,

§404, as amended; and

(4) a discharge of a nonpoint source pollution into waters of the United States,

including wetlands, that violates any requirement of an area-wide or state-wide water quality

management plan that has been approved under Federal Clean Water Act, §208 or §319, as

amended.

(i) Processing of liquid waste as defined in §330.3 of this title, other than that incidental

to transfer and storage, at a transfer station without a specific Type V processing authorization

is prohibited.

§330.23. Relationships with Other Governmental Entities.

(a) Texas Department of Transportation (TxDOT). The executive director shall

coordinate with TxDOT on the review of all permit applications for municipal solid waste (MSW)

land disposal facilities existing or proposed within 1,000 feet of an interstate or primary

highway to determine the need for screening or special operating requirements. When primary

access to an MSW disposal facility is provided by state-maintained streets or highways, the

executive director shall solicit recommendations from TxDOT regarding the adequacy and

design capacity of such roadways to safely accommodate the additional volumes and weights of

traffic generated or expected to be generated by the facility operation.

- (b) United States Army Corps of Engineers. The executive director shall coordinate the review of all permit applications for MSW disposal facilities with the appropriate district engineer to determine the need for a permit from the Corps of Engineers.
- (c) Federal Aviation Administration (FAA). The executive director shall coordinate the review of permit applications for all MSW land disposal facilities existing or proposed in the vicinity of airports with the appropriate airports' district office of the FAA (FAA Advisory Circular 150/5200-33C, "Hazardous Wildlife Attractants on or Near Airports," February 21, 2020) [(FAA Advisory Circular 150/5200.33A, "Hazardous Wildlife Attractants on or Near Airports," July 27, 2004)].
- (d) Special districts. The Texas Health and Safety Code (THSC) applies to political subdivisions of the state to which the legislature has given waste handling authority for two or more counties. The relationship between the agency and any such waste handling authority will be similar to that between the agency and a county.
- (e) Regional planning agencies. The agency will provide educational, technical, and advisory assistance to the various councils of governments and regional planning commissions throughout the state.
- (f) Municipal governments. Municipalities may enforce the provisions of this chapter as provided for in the THSC and the Texas Water Code. The commission is committed to assisting municipal governments in an educational and advisory capacity. The commission is a necessary and indispensable party to any suit filed by a local government under the THSC and the Texas Water Code.

(g) County governments. County governments may exercise the authority provided in THSC, Chapters 361, 363, and 364, regarding the management of solid waste including the enforcement of the requirements of the THSC and this chapter. The provisions of THSC, Chapters 361, 363, and 364, allow county governments to require and issue licenses authorizing and governing the operation and maintenance of facilities used for the storage, processing, or disposal of solid waste not in the territorial or extraterritorial jurisdiction of a municipality. THSC, Chapters 361, 363, and 364, provide that no license for disposal of solid waste may be issued, renewed, or extended without the prior approval of the commission. Under Texas Water Code, Chapter 7, the commission is a necessary and indispensable party to any suit filed by a local government for the violation of any provision of the Solid Waste Disposal Act. If a permit is issued, renewed, or extended by the commission, the owner or operator of the facility does not need to obtain a separate license for the same facility from a county or from a political subdivision as defined in THSC, Chapters 361, 363, and 364. (h) Texas Parks and Wildlife Department (TPWD). TPWD has jurisdiction over certain environmental issues that may be affected by MSW facilities including, but not limited to, endangered species and wetlands. The executive director will solicit comments from, and consider information provided by, TPWD.

SUBCHAPTER B: PERMIT AND REGISTRATION APPLICATION PROCEDURES §330.57, §330.63, §330.65, §330.69

Statutory Authority

The amendments are adopted under the authority of Texas Water Code (TWC), §5.013, which establishes the general jurisdiction of the commission; TWC, §5.102, which provides the commission with the authority to carry out its duties and general powers under its jurisdictional authority as provided by TWC; TWC, §5.103, which requires the commission to adopt any rule necessary to carry out its powers and duties under TWC and other laws of the state; TWC §5.105, which authorizes the commission to establish and approve all general policy of the commission by rule; Texas Health and Safety Code (THSC), §361.011, which grants the commission authority over municipal solid waste; THSC, §361.017, which grants the commission jurisdiction over industrial solid waste and hazardous municipal waste; and THSC, §361.024, which authorizes the commission to adopt rules consistent with the general purposes of the Solid Waste Disposal Act.

The adopted amendments implement House Bill 3060, 88th Texas Legislature, 2023.

§330.57. Permit and Registration Applications for Municipal Solid Waste Facilities.

(a) Permit application. The application for a municipal solid waste facility is divided into Parts I - IV. Parts I - IV of the application shall be required before the application is declared administratively complete in accordance with Chapter 281 of this title (relating to Applications Processing). The owner or operator shall submit a complete application, containing Parts I - IV, before a hearing can be conducted on the technical design merits of the application. An owner

or operator applying for a permit may request a land-use only determination. If the executive director determines that a land-use only determination is appropriate, the owner or operator shall submit a partial application consisting of Parts I and II of the application. The executive director may process a partial permit application to the extent necessary to determine land-use compatibility alone. If the facility is determined to be acceptable on the basis of land use, the executive director will consider technical matters related to the permit application at a later time. When this procedure is followed, an opportunity for a public hearing will be offered for each determination in accordance with §39.419 of this title (relating to Notice of Application and Preliminary Decision). A complete application, consisting of Parts I - IV of the application, shall be submitted based upon the results of the land-use only public hearing. Owners or operators of Type IAE and Type IVAE municipal solid waste landfill units are required to submit all parts of the application except for those items pertaining to Subchapters H and J of this chapter (relating to Liner System Design and Operation; and Groundwater Monitoring and Corrective Action). Owners or operators of Type IAE and Type IVAE municipal solid waste landfill units are exempt from the geology report requirements of §330.63(e) of this title (relating to Contents of Part III of the Application) except for the requirement to submit a soil boring plan in accordance with §330.63(e)(4) and (e)(4)(A) of this title, and the information requested in §330.63(e)(6) of this title.

- (b) Registration application. A registration application for a municipal solid waste facility is also divided into Parts I IV, but is not subject to a hearing request or to the administrative completeness determinations of Chapter 281 of this title.
 - (c) Parts of the application.

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(1) Part I of the application consists of the information required in §281.5 of this

title (relating to Application for Wastewater Discharge, Underground Injection, Municipal Solid

Waste, Radioactive Material, Hazardous Waste, and Industrial Solid Waste Management Permits),

§305.45 of this title (relating to Contents of Application for Permit), and §330.59 of this title

(relating to Contents of Part I of the Application).

(2) Part II of the application describes the existing conditions and character of

the facility and surrounding area. Part II of the application shall consist of the information

contained in §330.61 of this title (relating to Contents of Part II of the Application). Parts I and

II of a permit application must provide information relating to land-use compatibility under the

provisions of Texas Health and Safety Code, §361.069. Part II may be combined with Part I of

the application or may be submitted as a separate document. An owner or operator must

submit Parts I and II of the permit application before a land-use determination is made in

accordance with subsection (a) of this section.

(3) Part III of the application contains design information, detailed investigative

reports, schematic designs of the facility, and required plans. Part III shall consist of the

documents required in §330.63 of this title.

(4) Part IV of the application contains the site operating plan that shall discuss

how the owner or operator plans to conduct daily operations at the facility. Part IV shall consist

of the documents required in §330.65 of this title (relating to Contents of Part IV of the

Application).

(d) Required information. The information required by this subchapter defines the basic elements for an application. All aspects of the application and design requirements must be addressed by the owner or operator, even if only to show why they are not applicable for that particular site. It is the responsibility of the applicant to provide the executive director data of sufficient completeness, accuracy, and clarity to provide assurance that operation of the site will pose no reasonable probability of adverse effects on the health, welfare, environment, or physical property of nearby residents or property owners. Failure of the owner or operator to provide complete information as required by this chapter may be cause for the executive director to return the application without further action in accordance with §281.18 and §281.19 of this title (relating to Applications Returned and Technical Review). Submission of false information shall constitute grounds for denial of the permit or registration application.

(e) Number of copies.

- (1) Applications shall be initially submitted in two paper copies and one accurate duplicate in electronic format [four copies]. The owner or operator shall furnish [up to 18] additional copies of the application for use by required reviewing agencies, upon request of the executive director.
- (2) The accurate duplicate in electronic format shall meet the application formatting and drawing requirements of the paper copy.
- (3) [(2)] For permit applications initially submitted to the executive director, the owner or operator shall also furnish Parts I and II, and any subsequent revisions to Parts I and II, to the regional council of governments.

- (f) Preparation. Preparation of the application must conform with Texas Occupations Code, Texas Engineering Practice Act, Chapter 1001 and Texas Geoscience Practice Act, Chapter 1002.
- (1) The responsible engineer shall seal, sign, and date the title page of each bound engineering report or individual engineering plan in the application and each engineering drawing as required by Texas Engineering Practice Act, §15c, and in accordance with 22 TAC §137.33 (relating to Sealing Procedures).
- (2) The responsible geoscientist shall seal, sign, and date applicable items as required by Texas Geoscience Practice Act, §6.13(b), and in accordance with 22 TAC §851.156 (relating to Professional Geoscientist Seals and Geoscience Firm Identification).
- (3) Applications that have not been sealed shall be considered incomplete for the intended purpose and shall be returned to the owner or operator.
 - (g) Application format.
- (1) <u>Paper applications</u> [Applications] shall be submitted in three-ring, "D"-ring, loose-leaf binders.
- (2) The title page shall show the name of the project; the municipal solid waste permit application number, if known; the name of the owner and operator; the location by city

and county; the date the part was prepared; and, if appropriate, the number and date of the revision. It shall be sealed as required by the Texas Engineering Practice Act.

- (3) The table of contents shall list and give the page numbers for the main sections of the application. It shall be sealed as required by the Texas Engineering Practice Act.
- (4) The narrative of the report shall be printed on 8-1/2 by 11 inches white paper. Drawings or other sheets shall be no larger than 11 by 17 inches so that they can be reproduced by standard office copy machines.
 - (5) All pages shall contain a page number and date.
- (6) Revisions shall have the revision date and note that the sheet is revised in the header or footer of each revised sheet. The revised text shall be marked to highlight the revision.
 - (7) Use dividers and tabs [Dividers and tabs are encouraged].
 - (h) Application drawings.
- (1) All information contained on a drawing shall be legible, even if it has been reduced. The drawings shall be 8-1/2 by 11 inches or 11 by 17 inches. Standard-sized drawings (24 by 36 inches) folded to 8-1/2 by 11 inches may be submitted or required if reduction would render them illegible or difficult to interpret.

(2) If color coding is used, it should be legible and the code distinct when reproduced on black and white photocopy machines.		
(3) Drawings shall be submitted at a standard engineering scale.		
(4) Each drawing shall have a:		
(A) dated title block;		
(B) bar scale at least one-inch long;		
(C) revision block;		
(D) responsible engineer's or geoscientist's seal, if required; and		
(E) drawing number and a page number.		
(5) Each map or plan drawing shall also have:		
(A) a north arrow. Preferred orientation is to have the north arrow pointing toward the top of the page;		

another map. The latest published edition of the base map should be used; and

(B) a reference to the base map source and date, if the map is based upon

(C) a legend.

- (6) Match lines and section lines shall reference the drawing where the match or section is shown. Section drawings should note from where the section was taken.
 - (i) Posting application information.
- [(1) Upon submittal of an application, the owner or operator shall provide a complete copy of any application that requires public notice, except for authorizations at Type IAE and Type IVAE landfill facilities, including all revisions and supplements to the application, on a publicly accessible internet website, and provide the commission with the Web address link for the application materials. This internet posting is for informational purposes only].
- (1) [(2)] The commission shall post on its website the <u>accurate duplicate</u> <u>electronic application(s)</u> [identity of all owners and operators filing such applications and the Web address link required by this subsection].
- (2) [(3)] For applications for new permits or major amendments, an owner or operator shall post notice signs at the site within 30 days of the executive director's receipt of an application. This sign posting is for informational purposes only. Signs must:
- (A) consist of dark lettering on a white background and must be no smaller than four feet by four feet with letters at least three inches in height and block printed capital lettering;

- (B) identify as appropriate that the application is for a proposed permitted facility or an amendment to a permitted facility;
- (C) include the words "For further information on how the public may participate in Texas Commission on Environmental Quality (TCEQ) permitting matters, contact TCEQ," the toll free telephone number for the Public Education Program, and the agency's website address;
 - (D) include the name and address of the owner or operator;
 - (E) include the telephone number of the owner or operator; and
- (F) remain in place and legible until the close of the final comment period.
- (3) [(4)] Signs must be located within ten feet of every property line bordering a public highway, street, or road. Signs must be visible from the street and spaced at not more than 1,500-foot intervals. A minimum of one sign, but no more than three signs, shall be required along any property line parallel to a public highway, street, or road. This paragraph's sign requirements do not apply to properties under the same ownership that are noncontiguous or separated by intervening public highway, street, or road, unless the property is part of the permitted facility.
- (4) [(5)] The owner or operator shall also post signs at the facility in an alternative language when the alternative language requirements in §39.426 of this title

(relating to Alternative Language Requirements) [§39.405(h)(2) of this title (relating to General Notice Provisions)] are met.

(5) [(6)] The executive director may approve variances from the requirements of paragraphs (2), (3), and (4) [(3), (4), and (5)] of this subsection if the owner or operator has demonstrated that it is not practical to comply with the specific requirements of those paragraphs and alternative sign posting plans proposed by the owner or operator are at least as effective in providing notice to the public. Approval from the executive director under this paragraph must be received before posting alternative signs for purposes of satisfying the requirements of this subsection.

§330.63. Contents of Part III of the Application.

(a) Site development plan. This plan must include criteria that in the selection and design of a facility will provide for the safeguarding of the health, welfare, and physical property of the people and the environment through consideration of geology, soil conditions, drainage, land use, zoning, adequacy of access roads and highways, and other considerations as the specific facility dictates. The site development plan must include the items listed in this section.

(b) General facility design.

(1) Facility access. The owner or operator shall describe how access will be controlled for the facility such as the type and location of fences or other suitable means of access control to prevent the entry of livestock, to protect the public from exposure to potential

health and safety hazards, and to discourage unauthorized entry or uncontrolled disposal of solid waste or hazardous materials.

- (2) Waste movement. The owner or operator shall submit a generalized process design and working plan of the overall facility that includes, at a minimum:
- (A) flow diagrams indicating the storage, processing, and disposal sequences for the various types of wastes and feedstocks received;
- (B) schematic view drawings showing the various phases of collection, separation, processing, and disposal as applicable for the types of wastes and feedstocks received at the facility;
- (C) proposed ventilation and odor control measures for each storage, separation, processing, and disposal unit;
- (D) generalized construction details of all storage and processing units and ancillary equipment (i.e., tanks, foundations, sumps, etc.) with regard to approximate dimensions and capacities, construction materials, vents, covers, enclosures, protective coatings of surfaces, etc. Performance data on all units shall be provided;
- (E) generalized construction details of slab and subsurface supports of all storage and processing components;

- (F) locations and engineering design details of all containment dikes or walls (with indicated freeboard) proposed to enclose all storage and processing components and all loading and unloading areas;
- (G) plans for the storage of grease, oil, and sludge on site including determinations of maximum periods of time all separated materials will remain on site and the ultimate disposition of such materials off site;
- (H) proposed disposition of effluent resulting from all processing operations; and
 - (I) for transfer stations, provide designs for noise pollution control.
- (3) Sanitation. The owner or operator shall describe how solid waste processing facilities will be designed to facilitate proper cleaning. This may be accomplished by:
- (A) controlling surface drainage in the vicinity of the facility to prevent surface water runoff onto, into, and off the treatment area;
- (B) constructing walls and floors in operating areas of masonry, concrete, or other hard-surfaced materials that can be hosed down and scrubbed;
- (C) providing necessary connections and equipment to permit thorough cleaning with water or steam; and
 - (D) providing adequate floor or sump drains to remove wash water.

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(4) Water pollution control. The owner or operator shall describe how all liquids

resulting from the operation of solid waste processing facilities will be disposed of in a manner

that will not cause surface water or groundwater pollution. The owner or operator shall provide

for the treatment of wastewaters resulting from the process or from cleaning and washing and

specify how the procedure for wastewater disposal is in compliance with the rules of the

commission.

(5) Endangered species protection. If necessary, the owner or operator shall

describe how the facility will be designed to protect endangered species.

(c) Facility surface water drainage report. The owner or operator of a municipal solid

waste (MSW) facility shall include a statement that the facility design complies with the

requirements of §330.303 of this title (relating to Surface Water Drainage for Municipal Solid

Waste Facilities). Additionally, applications for landfill and compost units shall include a

surface water drainage report to satisfy the requirements of Subchapter G of this chapter

(relating to Surface Water Drainage) and shall include the following.

(1) Drainage analyses. The owner or operator shall submit the following

information and analyses:

(A) drawing(s) showing the drainage areas and drainage calculations;

- (B) designs of all drainage facilities within the facility area, including such features as typical cross-sectional areas, ditch grades, flow rates, water surface elevation, velocities, and flowline elevations along the entire length of the ditch;
- (C) sample calculations provided to verify that existing drainage patterns will not be adversely altered;
- (D) a description of the hydrologic method and calculations used to estimate peak flow rates and runoff volumes including justification of necessary assumptions:
- (i) the 25-year rainfall intensity used for facility design including the source of the data; all other data and necessary input parameters used in conjunction with the selected hydrologic method and their sources should be documented and described;
- (ii) hydraulic calculations and designs for sizing the necessary collection, drainage, and/or detention facilities;
- (iii) discussion and analyses to demonstrate that existing drainage patterns will not be adversely altered as a result of the proposed landfill development; and
- (iv) structural designs of the collection, drainage, and/or storage facilities.
 - (2) Flood control and analyses. The owner or operator shall:

(A) identify whether the site is located within a 100-year floodplain. If applicable, indicate 100-year floodplain on the drawing in paragraph (1)(A) of this subsection;

(B) provide the source of all data for such determination and include a copy of the relevant Federal Emergency Management Agency (FEMA) flood map or the calculations and maps used where a FEMA map is not used. FEMA maps are prima facie evidence of floodplain locations. Information shall also be provided identifying the 100-year flood level and any other special flooding factors (e. g., wave action) that must be considered in designing, constructing, operating, or maintaining the proposed facility to withstand washout from a 100-year flood. The boundaries of the proposed landfill facility should be shown on the floodplain map;

(C) if the site is located within the 100-year floodplain, provide information detailing the specific flooding levels and other events (e.g., design hurricane projected by Corps of Engineers) that impact the flood protection of the facility. Data should be that required by §§301.33 - 301.36 of this title (relating to Preliminary Plans: Data To Be Submitted, Criteria For Approval of Preliminary Plans; Additional Information; Plans To Bear Seal of Engineer). The owner or operator shall include cross-sections or elevations of landfill levees shown tied into contours;

(D) for construction in a floodplain, submit, where applicable:

(i) approval from the governmental entity with jurisdiction under Texas Water Code, §16.236, as implemented by Chapter 301 of this title (relating to Levee Improvement Districts, District Plans of Reclamation, and Levees and Other Improvements);

(ii) a floodplain development permit from the city, county, or other agency with jurisdiction over the proposed improvements;

(iii) a Conditional Letter of Map Amendment from FEMA; and
(iv) a Corps of Engineers Section 404 Specification of Disposal
Sites for Dredged or Fill Material permit for construction of all necessary improvements.

- (d) Waste management unit design.
 - (1) Storage and transfer units. The owner or operator shall:

(A) describe how the solid waste management facility will be designed for the rapid processing and minimum detention of solid waste at the facility. The owner or operator shall specify that all solid waste capable of creating public health hazards or nuisances be stored indoors only and processed or transferred promptly and shall not be allowed to result in nuisances or public health hazards. If the facility is in continuous operation, such as for resource or energy recovery, the owner or operator shall provide design features for wastes storage units that will prevent the creation of nuisances or public health hazards due to odors, fly breeding, or harborage of other vectors;

(B) design the units to control and contain spills and contaminated water from leaving the facility. The design shall be sufficient to control and contain a worst-case spill or release from the unit. Unenclosed containment areas shall also account for precipitation from a 25-year, 24-hour rainfall event; and

- (C) specify the maximum allowable period of time that unprocessed and processed wastes are to remain on site.
- (2) Incineration units. The owner or operator shall provide waste feed rates, an estimate of the amount and planned method for testing and final disposal of incinerator ash, an estimate of the volume of quench or process water, and the planned method of treatment and disposal of such water.
 - (3) Surface impoundments. The owner or operator shall provide:
- (A) design specifications for surface impoundments, including a plan view and cross-section of the impoundment;
- (B) the minimum freeboard to be maintained and the basis of the design to prevent overtopping resulting from normal or abnormal operations; overfilling; wind and wave action; rainfall; run-on (if allowed); malfunctions of level controllers, alarms, and other equipment; and human error. The owner or operator shall show that adequate freeboard will be available to prevent overtopping from a 25-year, 24-hour rainfall event; and/or
- (C) in accordance with §330.339 of this title (relating to Liner Quality Control Plan), a liner quality control plan prepared in accordance with Subchapter H of this chapter (relating to Liner System Design and Operation).
 - (4) Landfill units. The owner or operator shall specify:

(A) provisions for all-weather operation, e.g., all-weather road, wetweather pit, alternative disposal facility, etc., and provisions for all-weather access from publicly owned routes to the disposal facility and from the entrance of the facility to unloading areas used during wet weather. Interior access road locations and the type of surfacing shall be indicated on a facility plan. The roads within the facility shall be designed so as to minimize the tracking of mud onto the public access road;

- (B) the landfill method proposed, e.g., moving-face cell or trench, area fill, or combination;
- (C) elevation of deepest excavation, maximum elevation of waste, maximum elevation of final cover;
- (D) a calculation of the estimated rate of solid waste deposition and operating life of the landfill unit. As a general rule, 10,000 people with a per capita collection rate of five pounds per day, dispose of 10 15 acre-feet of solid waste in one year;
- (E) landfill unit cross-sections consisting of plan profiles across the facility clearly showing the top of the levee, top of the proposed fill (top of the final cover), maximum elevation of proposed fill, top of the wastes, existing ground, bottom of the excavations, side slopes of trenches and fill areas, gas vents or wells, and groundwater monitoring wells, plus the initial and static levels of any water encountered. The owner or operator shall provide a sufficient number of cross-sections, both latitudinally and longitudinally, so as to accurately depict the existing and proposed depths of all fill areas within the site. The plan portion shall be shown on an inset key map. The fill cross-sections

shall go through or very near the soil borings in order that the boring logs obtained from the soils report can also be shown on the profile;

- (F) construction and design details of compacted perimeter or toe berms that are proposed in conjunction with aboveground (aerial-fill) waste disposal areas shall be included in the fill cross-sections; and
- (G) a liner quality control plan prepared in accordance with Subchapter H of this chapter.
- (5) Arid exemption landfill application information. Owners or operators of new, existing, and lateral expansions of small MSW landfill facilities that meet the criteria in §330.5(b) of this title (relating to Classification of Municipal Solid Waste Facilities) shall submit a certification of eligibility to the executive director and place a copy of the certification in the operating record. The certification shall be signed by a principal executive officer, a ranking elected official, or an independent professional engineer licensed to practice in the State of Texas. The certification must contain the following information:
- (A) a statement certifying that the small MSW landfill facility meets all requirements contained in §330.5(b) of this title for exemptions from Subchapter H of this chapter (relating to Liner System Design and Operation) and Subchapter J of this chapter (relating to Groundwater Monitoring and Corrective Action);
- (B) documentation that the small MSW landfill facility receives for disposal an annual average of less than 20 tons per day of authorized types of waste in a Type

IAE landfill unit and/or less than 20 tons per day of authorized types of waste in a Type IVAE landfill unit for a total waste acceptance rate less than 40 tons per day for the facility, based upon the most recent four reporting quarters or a certification that programs have been put in place, or will be implemented, to reduce the annual average to less than 20 tons per day based on an annual average for each landfill unit type within one year;

- (C) documentation that there are no practicable waste management alternatives available. The documentation shall demonstrate one of the following:
- (i) additional costs of available alternatives are estimated to exceed 1.0% of the owner's or operating community's budget for all public services;
 - (ii) haul distances to alternative sites are unreasonably long; or
- (iii) all other alternatives are not feasible to implement, given the community location and economic condition; and
- (D) documentation that the small MSW landfill unit receives less than or equal to 25 inches of average annual precipitation as determined from precipitation data for the nearest official precipitation recording station for the most recent 30-year reporting period.
- (6) Type V mobile liquid waste processing units. The owner or operator shall provide the following:

- (A) documentation of affirmative local government approval or acceptance of the mobile unit operation, including conformity with local ordinances, local rules, or requirements set forth by the treatment facility for the discharge, including local limits, zoning restrictions, permits, licenses, authorizations, etc. These regulations do not grant authorization for operation of mobile liquid waste processing units in noncompliance with local government ordinances and regulations or without the express approval of the local wastewater authority. Discharge from a mobile liquid waste processing unit is allowed only at selected disposal points selected by the local treatment facility permitted under Texas Water Code, Chapter 26, so that they can be monitored by the local treatment facility; and
- (B) written approval from the receiving treatment facility permitted under Texas Water Code, Chapter 26.
- (7) Type IX energy, material, gas recovery for beneficial use, or landfill mining waste processing units. The owner or operator shall provide:
- (A) For wastes to be excavated, a test pit evaluation report prepared by an engineer. Prior approval of a test pit plan must be obtained from the executive director before excavation of test pits including location and depth of all test pits, including a discussion and information on the following:
- (i) a description of the characteristics of waste observed in test pits excavated on the site to include the percent of paper, plastics, ferrous metal, other metal, glass, other constituents, and soil fraction by weight;

(ii) a design for the test pits to extend four feet beneath the waste or to a depth authorized by the executive director and information submitted to include a Toxicity Characteristic Leaching Procedure (TCLP) of the soil to characterize the soil beneath the site. Liners if present shall not be disrupted;

(iii) a TCLP analysis of each representative type of waste excavated. Additionally, waste excavated from each test pit must be analyzed for asbestos and polychlorinated biphenyls (PCBs). Consideration should be given to the analysis of waste material from each test pit for hazardous waste constituents;

(iv) a determination as to a sufficient number of test pits to establish the properties of the waste. A site of five acres or less must have a minimum of three test pits. Sites larger than five acres must have three test pits plus one for every additional five acres or fraction of an acre. The number of test pits shall be approved by the executive director prior to making the pits. The test pits should be sufficiently large enough to provide representative information;

(v) a description of how all test pits will be backfilled with clean high plasticity or low plasticity clay. The excavation shall be backfilled to exceed the existing grade and provide positive drainage;

(vi) a cross-section drawing using the information from the test pits to depict the top and bottom elevations of the landfill;

(vii) a plan view map depicting the location and extent (vertical and lateral) of the waste unit and proposed extent of mining/recovery operations. In areas with liners, mining operations should not extend below the top of the protective cover of the liner. In areas where no liner exists, excavation operations may extend below the waste;

(viii) an evaluation of historical records of landfill operations, where available, to determine such things as hazardous waste potential, receipt of special waste, types of waste received, special waste disposal areas, construction or demolition waste disposal areas, methane and leachate records, age, volume, disposal methods, existence of liners, gas collection systems, and leachate collection systems; and

(ix) a description of how all waste removed in test pit evaluation will be disposed of in a permitted landfill;

(B) a process description to include:

(i) a list of the typical materials intended for processing along with the anticipated volume to be processed. This description shall also contain an estimate of the daily quantity of material to be processed at the facility along with a description of the proposed process of screening for hazardous materials;

(ii) the methods of excavating the buried waste materials. The owner or operator shall indicate how the material will be handled, how long it will remain in the area, what equipment will be used, how the material will be moved from the excavation area, how the excavation area will be held to a minimum, the maximum side slopes in buried waste,

and the maximum excavation area at any one time. The owner or operator shall provide the sequence of excavation;

(iii) the processes used to recover reusable or recyclable material or energy. The narrative shall include any water addition, processing rates, equipment, and mass balance or energy balance calculations;

(iv) how any process water will be handled and disposed of if a wet mining process is to be used;

(v) a complete narrative on product distribution to include items such as disposition of material or energy recovered and probable use of soils on site and off site; and

(vi) a process diagram that depicts the general process;

(C) a description of liner system used for excavated waste storage, processing, and screening areas to control seepage and runoff. The liner shall be covered with a material designed to withstand normal traffic from the processing operations; and

(D) a description of how waste excavation activities will comply with the minimum design and operation requirements of:

(i) §330.149 (relating to Odor Management Plan);

- (ii) §330.151 (relating to Disease Vector Control);
- (iii) §330.165 (relating to Landfill Cover); and
- (iv) §330.167 (relating to Ponded Water).
- (8) Compost units. The owner or operator shall provide:
- (A) for mechanical composting systems, a detailed engineering description of the system and the manufacturer's performance data;
 - (B) facility layout, including calculations for area requirements;
- (C) a description of the movement of the material as it leaves the tipping area indicating how the material is incorporated into the composting process and what handling techniques are used all the way through to the post-processing area. The narrative must include:
 - (i) processing rates;
 - (ii) equipment;
 - (iii) mass balance calculations;
 - (iv) use of bulking agents, moisture control, or feed amendments;

- (v) process monitoring methods;
- (vi) temperature range and resident time;
- (vii) storage of compost for curing after the primary composting

operation; and

- (viii) provision for additional drying and screening;
- (D) a narrative on the post-processing process, including post-processing times, identification and segregation of product, storage of product, and quality assurance and quality control; and
- (E) a narrative on product distribution including items such as endproduct quantities, anticipated final grades, packaging, labeling, loading, marketing, distribution, tracking, and delivery of composted material.
 - (9) Type VI waste processing demonstration facilities.
- (A) The facility size shall be limited to a liquid waste processing rate no greater than 10,000 gallons per day.
- (B) The facility design and operation shall be coordinated with a consultant connected with an accredited college or university or with a consultant that has

demonstrated the ability to carry out scientific experiments for demonstrating new and unproven waste handling methods and submitted to the executive director. The owner or operator shall submit to the executive director an annual and final status report to document the viability of the method being demonstrated. The report, at a minimum, must document the effluent standards and solid waste standards achieved.

(C) The owner or operator may request a variance.

(i) In specific cases, the executive director may approve a variance from the requirements of this chapter if the variance is not contrary to safeguarding the health, welfare, and physical property of the people and to protecting the environment. A variance may not be approved concerning the procedural requirements of this chapter.

(ii) A request for a variance must be submitted in writing to the executive director. The request may be made in an application for a registration. Any approval of a variance must be in writing from the executive director.

(e) Geology report. This portion of the application applies to owners or operators of MSW landfills, compost units, and if otherwise requested by the executive director. The geology report shall be prepared and signed by a qualified groundwater scientist. Previously prepared documents may be submitted but must be supplemented as necessary to provide the requested information. Sources and references for information must be provided. The geology report must contain the following information:

(1) a description of the regional geology of the area that includes:

(A) a geologic map of the region with text describing the stratigraphy and lithology of the map units. An appropriate section of a published map series such as the Geologic Atlas of Texas prepared by the Bureau of Economic Geology is acceptable; and

(B) a description of the generalized stratigraphic column in the facility area from the base of the lowermost aquifer capable of providing usable groundwater, or from a depth of 1,000 feet, whichever is less, to the land surface. The geologic age, lithology, variations in lithology, thickness, depth, geometry, hydraulic conductivity, and depositional history of each geologic unit should be described based upon available geologic information. Regional stratigraphic cross-sections should be provided;

- (2) a description of the geologic processes active in the vicinity of the facility that includes an identification of any faults and subsidence in the area of the facility. The information about faulting and subsidence shall include at least that required in §330.555(b) and §330.559 of this title (relating to Fault Areas and Unstable Areas);
- (3) a description of the regional aquifers in the vicinity of the facility based upon published and open-file sources that provides:
- (A) aquifer names and their association with geologic units described in <u>subparagraph (1)(B)</u> [paragraph (2)] of this subsection;
 - (B) the composition of the aquifer(s);

- (C) the hydraulic properties of the aquifer(s);
- (D) information on whether the aquifers are under water table or artesian conditions;
 - (E) information on whether the aquifers are hydraulically connected;
- (F) a regional water-table contour map or potentiometric surface map for each aquifer, if available;
 - (G) an estimate of the rate of groundwater flow;
- (H) typical values or a range of values for total dissolved solids content of groundwater from the aquifers;
- (I) identification of areas of recharge to the aquifers within five miles of the site; and
- (J) the present use of groundwater withdrawn from aquifers in the vicinity of the facility. The identification, location, and aquifer of all water wells within one mile of the property boundaries of the facility shall be provided;
- (4) the results of investigations of subsurface conditions at a particular waste management unit. This report must describe all borings drilled on site to test soils and characterize groundwater and must include a site map drawn to scale showing the surveyed

locations and elevations of the borings. Boring logs must include a detailed description of materials encountered including any discontinuities such as fractures, fissures, slickensides, lenses, or seams. Geophysical logs of the boreholes may be useful in evaluating the stratigraphy. Each boring must be presented in the form of a log that contains, at a minimum, the boring number; surface elevation and location coordinates; and a columnar section with text showing the elevation of all contacts between soil and rock layers, description of each layer using the unified soil classification, color, degree of compaction, and moisture content. A key explaining the symbols used on the boring logs and the classification terminology for soil type, consistency, and structure must be provided. The boring plan, including locations and depths of all proposed borings, shall be approved by the executive director prior to initiation of the work.

(A) A sufficient number of borings shall be performed to establish subsurface stratigraphy and to determine geotechnical properties of the soils and rocks beneath the facility. Other types of samples may also be taken to provide geologic and geotechnical data. The number of borings necessary can only be determined after the general characteristics of a site are analyzed and will vary depending on the heterogeneity of subsurface materials. Locations with stratigraphic complexities such as non-uniform beds that pinch out, vary significantly in thickness, coalesce, or grade into other units, will require a significantly greater degree of subsurface investigation than areas with simple geologic frameworks.

(B) Borings shall be sufficiently deep enough to allow identification of the uppermost aquifer and underlying hydraulically interconnected aquifers. Borings shall penetrate the uppermost aquifer and all deeper hydraulically interconnected aquifers and be

deep enough to identify the aquiclude at the lower boundary. All the borings shall be at least five feet deeper than the elevation of the deepest excavation. In addition, at least the number of borings shown on the Table of Borings shall be drilled to a depth at least 30 feet below the deepest excavation planned at the waste management unit, unless the executive director approves a different depth. If no aquifers exist within 50 feet of the elevation of the deepest excavation, at least one test hole shall be drilled to the top of the first perennial aquifer beneath the site, if sufficient data does not exist to accurately locate it. The executive director may accept data equivalent to a deep boring on the site to determine information for aquifers more than 50 feet below the site. Aquifers more than 300 feet below the lowest excavation and where the estimated travel times for constituents to the aquifer are in excess of 30 years plus the estimated life of the site need not be identified through borings.

Figure: 30 TAC §330.63(e)(4)(B)

TABLE OF BORINGS

Size of Area in Acres	Number of Borings	Min. No. of Borings 30 Feet below the Elev. of Deepest Excavation
5 or less	2-4	2
5-10	4-6	3
10-20	6-10	5
20-50	10-15	7
50-100	15-20	7-12
100-150	20-23	12-13

150-200	23-26	13-15
200-250	26-29	15-16
250-300	29-32	16-17
300-350	32-35	17-18
350-400	35-38	18-20
400-450	38-42	20-21
450-500	42-44	21-22
500-550	44-47	22-24
550-600	47-50	24-26
More than 600	Determined in consultation with the executive director	

^{*} The executive director may approve different boring depths if site-specific conditions justify variances.

(C) All borings shall be conducted in accordance with established field exploration methods. The hollow-stem auger boring method is recommended for softer materials; coring may be required for harder rocks. Other methods shall be used as necessary to obtain adequate samples for soil testing required in this paragraph. Investigation procedures shall be discussed in the report.

(D) Installation, abandonment, and plugging of the borings in accordance with the rules of the commission.

(E) Both the number and depth of borings may be modified because of site conditions with approval of the executive director.

- (F) Geophysical methods, such as electrical resistivity, may be used with authorization of the executive director to reduce the number of borings that may be necessary or to provide additional information between borings.
- (G) Cross-sections must be prepared from the borings depicting the generalized strata at the facility. For small waste management units, two perpendicular cross-sections will normally suffice.
- (H) A narrative that describes the investigator's interpretations of the subsurface stratigraphy based upon the field investigation shall be provided;
- (5) geotechnical data that describes the geotechnical properties of the subsurface soil materials and a discussion with conclusions about the suitability of the soils and strata for the uses for which they are intended. All geotechnical tests shall be performed in accordance with industry practice and recognized procedures such as described below. A brief discussion of geotechnical test procedures including:
- (A) a laboratory report of soil characteristics determined from at least one sample from each soil layer or stratum that will form the bottom and side of the proposed excavation and from those that are less than 30 feet below the lowest elevation of the proposed excavation. Additional tests shall be performed, as necessary, to provide a typical profile of soil stratification within the site. No laboratory work need be performed on highly permeable soil layers such as sand or gravel. The samples shall be tested by a competent independent third-party soils laboratory;

(B) permeability tests performed according to one of the following standards on undisturbed soil samples. Permeability tests shall be performed using tap water or .05 Normal solution of calcium sulfate (CaSO 4), and not distilled water, as the permeant. Those undisturbed samples that represent the sidewall of any proposed cell, pit, or excavation shall be tested for the coefficient of permeability on the sample's in-situ horizontal axis; all others shall be tested on the in-situ vertical axis. All test results shall indicate the type of tests used and the orientation of each tested sample. All calculations for the final coefficient of permeability tests result for each sample tested shall be included in the report:

(i) constant head with back pressure per Appendix VII of Corps of Engineers Manual EM1110-2-1906, "Laboratory Soils Testing;" American Society for Testing and Materials (ASTM) D5084 "Saturated Porous Materials Using a Flexible Wall Permeameter";

(ii) falling head per Appendix VII of Corps of Engineers Manual EM1110-2-1906, "Laboratory Soils Testing";

(iii) sieve analysis for the 200, and less than 200 fraction per ASTM D1140;

- (iv) Atterberg limits per ASTM D4318; and
- (v) moisture content per ASTM D2216;

(C) the depth at which groundwater was encountered and records of after-equilibrium measurements in all borings. The cross-sections prepared in response to

paragraph (4)(*G*) of this subsection must be annotated to note the level at which groundwater was first encountered and the level of groundwater after equilibrium is reached or just prior to plugging, whichever is later. This water-level information must also be presented on all borings required by paragraph (4) of this subsection and presented in a table format in the report;

- (D) records of water-level measurements in monitoring wells. Historic water-level measurements made during any previous groundwater monitoring shall be presented in a table for each well;
- (E) a tabulation of all relevant groundwater monitoring data from wells on site or on adjacent MSW landfill unit(s); and
- (F) identification of the uppermost aquifer and any lower aquifers that are hydraulically connected to it beneath the facility, including groundwater flow direction and rate, and the basis for such identification (i.e., the information obtained from hydrogeologic investigations of the facility area);
- (6) for owners and operators seeking an arid exemption for their landfill unit designs, a groundwater certification process must be used for meeting the provisions for groundwater certification of the arid exemption, as described in §330.5(b) of this title:
- (A) locate and plot the facility accurately on a topographic map (7.5-minute or 15-minute United States Geological Survey quadrangle). Draw a line to enclose all of the area within one mile of the facility boundary;

- (B) visit the facility and locate by physical inspection water wells and springs in the facility area. Determine the locations and plot them on the topographic map:
- (i) if no wells or springs exist within the facility area, refer to subparagraph (I) of this paragraph. Otherwise, refer to clause (ii) of this subparagraph; and
- (ii) determine from appropriate records (for example, water-well drillers, pump installers, city records, underground water conservation district, Texas Water Development Board, Texas Commission on Environmental Quality, United States Geological Survey, etc.) which of the wells are completed in the shallowest aquifer. If no wells are completed in the shallowest aquifer or if the shallowest aquifer is more than 150 feet below the land surface at the facility, refer to subparagraph (I) of this paragraph. Otherwise, refer to subparagraph (C) of this paragraph;
- (C) determine the groundwater gradient of the shallowest aquifer in the vicinity of the facility. This can be done by measuring stabilized water levels in wells completed in the shallowest aquifer in the facility area (from subparagraph (B)(ii) of this paragraph) or from previous hydrogeologic studies using contemporaneous stabilized water-level measurements. Care should be taken to measure water levels when nearby high-volume wells, such as irrigation wells, have not been pumped for a long enough period to allow the water level to stabilize. Where no data exist or cannot be determined, the regional gradient can be used;
- (D) from springs and from the wells completed in the shallowest aquifer, select the two wells/springs downgradient of and nearest to the facility based on the findings

from subparagraph (C) of this paragraph. Select a well/spring upgradient or lateral to the

facility, where groundwater quality is not likely to have been affected by landfill activities and

preferably not by other human activities such as oil and gas operations, feedlots, sewage

treatment plants, septic systems, etc;

(E) sample the three selected wells/springs determined by subparagraphs

(C) and (D) of this paragraph in accordance with accepted practices, such as described in

technical guidance from the executive director. The owner or operator shall have the samples

analyzed by a qualified laboratory for the following parameters:

(i) chloride;

(ii) nitrate (as N);

(iii) sulfate;

(iv) total dissolved solids;

(v) specific conductance;

(vi) pH;

(vii) chromium;

(viii) non-purgeable organic carbon; and

(ix) volatile organic compounds listed in §330.419 of this title (relating to Constituents for Detection Monitoring);

(F) if permission cannot be obtained to sample one or more of the three selected wells/springs, select one or more alternate wells/springs, within the plotted area. If fewer than three wells/springs are available, sample those that are available;

(G) if permission cannot be obtained to sample any appropriately located wells/springs, submit written documentation of the facts to the executive director. If the executive director confirms that permission cannot be obtained for sampling, the well(s) may be eliminated from consideration;

 $\mbox{(H) compile the data from subparagraphs (A) - (F) of this paragraph in a} \label{eq:hamiltonian}$ report that includes:

- (i) a map showing all known wells, springs, facility boundaries, sampling points, etc.;
 - (ii) a map showing the groundwater gradient and data points;
 - (iii) chemical analyses, showing analytical methods used;
- (iv) logs and construction information for the sampled wells and description and flow rate for sampled springs;

- (v) text describing methods of investigation, such as sampling and water-level measurements; and
- (vi) conclusions with respect to presence or lack of evidence of groundwater contamination by the facility;
- (I) where no wells or springs are present in the facility area or the shallowest water level is more than 150 feet below land surface at the facility, submit a brief report describing the facility (with a map of the area) and the method(s) of determining the lack of appropriate sampling points or depth to the shallowest aquifer. Confirmed absence of sampling points will be deemed to be "no evidence of groundwater contamination";
- (J) the report shall be signed and sealed by the qualified groundwater scientist who reviewed the data and reached the conclusions:
- (K) if there is no evidence of groundwater contamination by the landfill, the qualified groundwater scientist who reviewed the data and reached the conclusions shall sign and seal a statement in the following format: "I (we) have reviewed the groundwater data described in a report submitted with this certification and have found no evidence that the _____ municipal solid waste landfill located at _____ has contaminated groundwater in the uppermost aquifer"; and
- (L) the executive director may accept information and data, other than described in this paragraph, as showing that there is no evidence of groundwater

contamination by the landfill, if the information and data are deemed to be adequate for such a determination.

- (f) Groundwater sampling and analysis plan. The groundwater sampling and analysis plan for landfills and if otherwise requested by the executive director for other MSW units must be prepared in accordance with Subchapter J of this chapter (relating to Groundwater Monitoring and Corrective Action). The groundwater sampling and analysis plan for composting operations that require a permit must be prepared in accordance with the groundwater monitoring requirements of §332.47(6)(C)(ii) of this title (relating to Permit Application Preparation). As part of this plan for Type I landfills, submit the following:
- (1) on a topographic map, a delineation of the waste management area, the property boundary, the proposed point of compliance as defined under §330.3 of this title (relating to Definitions), the proposed location of groundwater monitoring wells as required under §330.403 of this title (relating to Groundwater Monitoring Systems);
- (2) a description of any plume of contamination that has entered the groundwater from an MSW management unit at the time that the application was submitted. In addition:
- (A) delineate the extent of the plume on the topographic map required in paragraph (1) of this subsection; and

- (B) identify the concentration of each assessment constituent as defined in §330.409 of this title (relating to Assessment Monitoring Program) throughout the plume or identify the maximum concentration of each assessment constituent in the plume;
- (3) an analysis of the most likely pathway(s) for pollutant migration in the event that the primary barrier liner system is penetrated. This must include any groundwater modeling data and results as described in §330.403(e)(2) of this title and consider changes in groundwater flow that are expected to result from construction of the facility;
- (4) detailed plans and an engineering report describing the proposed groundwater monitoring program to be implemented to meet the requirements of §330.403 of this title;
- (5) if the hazardous constituents listed in the table located in 40 Code of Federal Regulations Part 258, Appendix I, and §330.419 of this title have not been detected in the groundwater at the time of permit application, the owner or operator shall submit sufficient information, supporting data, and analyses to establish a detection monitoring program that meets the requirements of §330.407 of this title (relating to Detection Monitoring Program for Type I Landfills). This submission must address the following items as specified in §330.407 of this title:
 - (A) a proposed groundwater monitoring system;
- (B) background values for each monitoring parameter or constituent listed in §330.419 of this title, or procedures to calculate such values; and

- (C) a description of proposed sampling, analysis, and statistical comparison procedures to be utilized in evaluating groundwater monitoring data;
- (6) if the presence of hazardous constituents listed in §330.419 of this title has been detected in the groundwater at the time of the permit application, the owner or operator shall submit sufficient information, supporting data, and analyses to establish an assessment monitoring program that meets the requirements of §330.409 of this title. To demonstrate compliance with §330.409 of this title, the owner or operator shall address the following items:
- (A) a description of any special wastes previously handled at the MSW facility;
- (B) a characterization of the contaminated groundwater, including concentration of assessment constituents as defined in §330.409 of this title;
- (C) a list of assessment constituents as defined in §330.409 of this title for which assessment monitoring will be undertaken in accordance with §330.405 of this title (relating to Groundwater Sampling and Analysis Requirements) and §330.409 of this title;
- (D) detailed plans and an engineering report describing the proposed groundwater monitoring system, in accordance with the requirements of §330.405 of this title; and
- (E) a description of proposed sampling, analysis, and statistical comparison procedures to be utilized in evaluating groundwater monitoring data; and

- (7) if hazardous constituents have been measured in the groundwater that exceed the concentration limits established in §330.409 of this title, the owner or operator shall submit sufficient information, supporting data, and analyses to establish a corrective action program that meets the requirements of §330.411 and §330.413 of this title (relating to Assessment of Corrective Measures and Selection of Remedy). To demonstrate compliance with §330.411 of this title, the owner or operator shall address, at a minimum, the following:
- (A) a characterization of the contaminated groundwater, including concentrations of assessment constituents as defined in §330.409 of this title;
 - (B) the concentration limit for each constituent found in the groundwater;
- (C) detailed plans and an engineering report describing the corrective action to be taken;
- (D) a description of how the groundwater monitoring program will demonstrate the adequacy of the corrective action; and
- (E) a schedule for submittal of the information required in subparagraphs
 (C) and (D) of this paragraph provided the owner or operator obtains written authorization
 from the executive director prior to submittal of the complete permit application.

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(g) Landfill gas management plan. A facility gas management plan shall be prepared to

address all of the requirements in Subchapter I of this chapter (relating to Landfill Gas

Management).

(h) Closure plan. The facility closure plan shall be prepared in accordance with

Subchapter K of this chapter (relating to Closure and Post-Closure). For a landfill unit, the

closure plan will include a contour map showing the final constructed contour of the entire

landfill to include internal drainage and side slopes plus accommodation of surface drainage

entering and departing the completed fill area plus areas subject to flooding due to a 100-year

frequency flood. Cross-sections shall be provided.

(i) Post-closure plan. The facility post-closure care plan shall be prepared in accordance

with Subchapter K of this chapter.

(j) Cost estimate for closure and post-closure care. The owner or operator shall submit a

cost estimate for closure and post-closure care in accordance with Subchapter L of this chapter

(relating to Closure, Post-Closure, and Corrective Action Cost Estimates). For an existing facility,

the owner or operator shall also submit a copy of the documentation required to demonstrate

financial assurance as specified in Chapter 37, Subchapter R of this title (relating to Financial

Assurance for Municipal Solid Waste Facilities). For a new facility, a copy of the required

documentation shall be submitted 60 days prior to the initial receipt of waste.

§330.65. Contents of Part IV of the Application.

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(a) The owner or operator shall submit a site operating plan. This plan will provide general operating procedures for facility management for day-to-day operations at the facility. The site operating plan must be retained during the active life of the facility. At a minimum, the site operating plan must include a description for how the items in Subchapters D and E of this chapter (relating to Operational Standards for Municipal Solid Waste Landfill Facilities; and Operational Standards for Municipal Solid Waste Storage and Processing Units) will be implemented.

- (b) A facility that has an environmental management system that meets [both] the minimum standards described in §90.30 [§90.32] of this title (relating to Minimum Standards for Environmental Management Systems) [and the United States Environmental Protection Agency's National Environmental Performance Track (NEPT) Program standards] and is approved to operate under an environmental management system in accordance with §90.31 of this title (relating to Review of Incentive Applications for Environmental Management Systems) [§90.36 of this title (relating to Evaluation of an Environmental Management System by the Executive Director)], is not subject to site operating plan requirements while the authorization to operate under the environmental management system remains in place. In the event the executive director terminates authorization to operate under an environmental management system, the facility will comply with the site operating plan requirements within 90 days.
- (c) The owner or operator shall specify procedures for recirculating leachate or gas condensate into a landfill unit as part of the site operating plan.
- (d) The owner or operator of a grease trap waste, grit trap waste, or septage processing facility shall submit information identifying any permit requirements under the Texas Pollutant

Discharge Elimination System and any permit requirements imposed by other agencies (e.g., local government pretreatment or discharge authorization requirements).

§330.69. Public Notice for Registrations.

- (a) Notice to local governments. For mobile liquid waste processing unit registration applications only, upon filing a registration application, the owner or operator shall mail notice to the city, county, and local health department of any local government in which operations will be conducted notifying local governments that an application has been filed. Proof of mailing shall be provided to the executive director in the form of return receipts for registered mail. Mobile liquid waste processing unit registration applications are not subject to public meeting or sign-posting requirements under subsection (b) of this section.
- (b) Opportunity for public meeting and posting notice signs. The owner or operator shall provide notice of the opportunity to request a public meeting and post notice signs for all registration applications not later than 45 days of the executive director's receipt of the application in accordance with the procedures contained in §39.501(c) of this title (relating to Application for Municipal Solid Waste Permit) and by posting signs at the proposed site. The owner or operator and the commission shall hold a public meeting in the local area, prior to facility authorization, if a public meeting is required based on the criteria contained in \$55.154(c) of this title (relating to Public Meetings) or by Texas Health and Safety Code, \$361.111(c). Notice of a public meeting shall be provided as specified in §39.501(e)(5) and (6) of this title. This section does not require the commission to respond to comments, and it does not create an opportunity for a contested case hearing. Applications for registrations filed after the comprehensive rule revisions in this chapter as adopted in 2006 (2006 Revisions) become

effective are subject to the 2006 Revisions requirements to provide notice of the opportunity to request a public meeting. The owner, operator, or a representative authorized to make decisions and act on behalf of the owner or operator shall attend the public meeting. A public meeting conducted under this section is not a contested case hearing under the Texas Government Code, Chapter 2001, Administrative Procedure Act. At the owner's or operator's expense, a sign or signs must be posted at the site of the proposed facility declaring that the application has been filed and stating the manner in which the commission and owner or operator may be contacted for further information. Such signs must be provided by the owner or operator and must substantially meet the following requirements.

(1) Signs must:

- (A) consist of dark lettering on a white background and must be no smaller than four feet by four feet with letters at least three inches in height and block printed capital lettering;
- (B) be headed by the words "PROPOSED MUNICIPAL SOLID WASTE FACILITY";
- (C) include the words "REGISTRATION NO.," the number of the registration, and the type of registration;
 - (D) include the words "for further information contact";

- (E) include the words "Texas Commission on Environmental Quality" and the address and telephone number of the appropriate commission permitting office;
- (F) include the name of the owner or operator, and the address of the appropriate responsible official;
 - (G) include the telephone number of the owner or operator;
- (H) remain in place and legible until the period for filing a motion to overturn has expired. The owner or operator shall provide a verification to the executive director that the sign posting was conducted according to the requirements of this section; and
- (I) describe how persons affected may request that the executive director and applicant conduct a public meeting.
- (2) Signs must be located within ten feet of every property line bordering a public highway, street, or road. Signs must be visible from the street and spaced at not more than 1,500-foot intervals. A minimum of one sign, but no more than three signs, shall be required along any property line paralleling a public highway, street, or road. This paragraph's sign requirements do not apply to properties under the same ownership that are noncontiguous or separated by intervening public highway, street, or road, unless the property is part of the registered facility.
- (3) The owner or operator shall also post signs at the facility in an alternative language when the alternative language requirements in §39.426 of this title (relating to

<u>Alternative Language Requirements</u>) [§39.405(h)(2) of this title (relating to General Notice Provisions)] are met.

- (4) The executive director may approve variances from the requirements of paragraphs (1) and (2) of this subsection if the owner or operator has demonstrated that it is not practical to comply with the specific requirements of those paragraphs and alternative sign posting plans proposed by the owner or operator are at least as effective in providing notice to the public. Approval from the executive director under this paragraph must be received before posting alternative signs for purposes of satisfying the requirements of this paragraph.
- (c) Notice of final determination. The executive director shall, after review of an application for registration, determine if the application will be approved or denied in whole or in part. In accordance with §50.133(b) of this title (relating to Executive Director Action on Application or WQMP Update), if the executive director acts on an application, the chief clerk shall mail or otherwise transmit notice of the action and an explanation of the opportunity to file a motion under §50.139 of this title (relating to Motion to Overturn Executive Director's Decision). The chief clerk shall mail this notice to the owner and operator, the public interest counsel, to adjacent landowners as shown on the land ownership map and landowners list required by §330.59 of this title (relating to Contents of Part I of the Application), and to other persons who timely filed public comment in response to public notice.
- (d) Motion to overturn. The owner or operator, or a person affected may file with the chief clerk a motion to overturn the executive director's action on a registration application, under §50.139 of this title. The criteria regarding motions to overturn shall be explained in

public notices given under Chapter 39 of this title (relating to Public Notice) and §50.133 of this title.

SUBCHAPTER C: MUNICIPAL SOLID WASTE COLLECTION AND TRANSPORTATION §330.103

Statutory Authority

The amendment is adopted under the authority of Texas Water Code (TWC), §5.013, which establishes the general jurisdiction of the commission; TWC, §5.102, which provides the commission with the authority to carry out its duties and general powers under its jurisdictional authority as provided by TWC; TWC, §5.103, which requires the commission to adopt any rule necessary to carry out its powers and duties under TWC and other laws of the state; TWC, §5.105, which authorizes the commission to establish and approve all general policy of the commission by rule; Texas Health and Safety Code (THSC), §361.011, which grants the commission authority over municipal solid waste; THSC, §361.017, which grants the commission jurisdiction over industrial solid waste and hazardous municipal waste; and THSC, §361.024, which authorizes the commission to adopt rules consistent with the general purposes of the Solid Waste Disposal Act.

The adopted amendment implements House Bill 3060, 88th Texas Legislature, 2023.

§330.103. Collection and Transportation Requirements.

(a) Municipal solid waste (MSW) containing putrescibles shall be collected a minimum of once weekly to prevent propagation and attraction of vectors and the creation of public health nuisances. Collection should be made more frequently in circumstances where vector breeding or harborage potential is significant.

- (b) Transporters of MSW shall be responsible for ensuring that all solid waste collected is unloaded only at facilities authorized to accept the type of waste being transported. Off-loading at an unauthorized location or at a facility not authorized to accept such waste is a violation of this subchapter. Allowable wastes at a particular solid waste management facility may be determined by reviewing the following regulations as applicable:
- (1) §330.5 of this title (relating to Classification of Municipal Solid Waste Facilities);
- (2) Subchapter D of this chapter (relating to Operational Standards for Municipal Solid Waste Landfill Facilities);
- (3) Subchapter E of this chapter (relating to Operational Standards for Municipal Solid Waste Storage and Processing Units);
- (4) Chapter 312, Subchapters A E of this title (relating to General Provisions; Land Application and Storage of Biosolids and Domestic Septage [Land Application for Beneficial Use and Storage at Beneficial Use Sites]; Surface Disposal; Pathogen and Vector Attraction Reduction; and Guidelines and Standards for Sludge Incineration); and
 - (5) §330.15(e) of this title (relating to General Prohibitions).
- (c) All transporters of solid waste shall maintain records for at least three years to document that waste was taken to an authorized MSW facility. Upon request of the executive director or of a local government with jurisdiction, a transporter is responsible for providing

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adequate documentation regarding the destination of all collected waste including billing documents to prove that the proper disposal procedure is being followed.

- (d) Each transporter delivering waste to a solid waste management facility shall immediately remove any non-allowable wastes delivered to the solid waste management facility or, at the option of the disposal facility operator, pay any applicable surcharges to have the disposal facility operator remove the non-allowable waste.
- (e) If non-allowable wastes are discovered in a load of waste being discharged at an MSW facility, the transporter shall immediately take all necessary steps to determine the origin of the non-allowable waste and to assure that non-allowable wastes are either not collected or are taken to a facility approved to accept such wastes.

SUBCHAPTER D: OPERATIONAL STANDARDS FOR MUNICIPAL SOLID WASTE LANDFILL FACILITIES

§§330.125, 330.147, 330.165, 330.171, 330.173

Statutory Authority

The amendments are adopted under the authority of Texas Water Code (TWC), §5.013, which establishes the general jurisdiction of the commission; TWC, §5.102, which provides the commission with the authority to carry out its duties and general powers under its jurisdictional authority as provided by TWC; TWC, §5.103, which requires the commission to adopt any rule necessary to carry out its powers and duties under TWC and other laws of the state; TWC, §5.105, which authorizes the commission to establish and approve all general policy of the commission by rule; Texas Health and Safety Code (THSC), §361.011, which grants the commission authority over municipal solid waste; THSC, §361.017, which grants the commission jurisdiction over industrial solid waste and hazardous municipal waste; and THSC, §361.024, which authorizes the commission to adopt rules consistent with the general purposes of the Solid Waste Disposal Act.

The adopted amendments implement House Bill 3060, 88th Texas Legislature, 2023.

§330.125. Recordkeeping Requirements.

(a) A copy of the permit, the approved site development plan, the site operating plan, the final closure plan, the post-closure maintenance plan, the landfill gas management plan, and any other required plan or other related document shall be maintained at the municipal

solid waste facility, or an alternate location approved by the executive director. This requirement shall be considered a part of the operating record for the facility.

- (b) The owner or operator shall within seven working days of completion or receipt of analytical data, as appropriate, record and retain in the operating record the following information:
 - (1) any and all location-restriction demonstrations;
- (2) inspection records, training procedures, and notification procedures relating to excluding the receipt of prohibited waste;
- (3) all results from gas monitoring and any remediation plans relating to explosive and other gases;
- (4) any and all unit design documentation for the placement of leachate or gas condensate in a municipal solid waste landfill;
- (5) any and all demonstration, certification, findings, monitoring, testing, and analytical data relating to groundwater monitoring and corrective action;
- (6) closure and post-closure care plans and any monitoring, testing, or analytical data relating to post-closure requirements;

- (7) any and all cost estimates and financial assurance documentation relating to financial assurance for closure and post-closure;
- (8) any and all information demonstrating compliance with the small community exemption criteria;
- (9) copies of all correspondence and responses relating to the operation of the facility, modifications to the permit, approvals, and other matters pertaining to technical assistance;
- (10) any and all documents, manifests, shipping documents, trip tickets, etc., involving special waste;
- (11) for any spray-applied alternative daily cover (ADC) material, records of the application rate and total amount ADC applied to the working face on those days in which ADC is applied; and
- (12) any other document(s) as specified by the approved permit or by the executive director.
- (c) The owner or operator shall place all information specified in subsections (a) and (b) of this section in the operating record. The owner or operator shall place this information in the operating record in accordance with the time period specified in subsection (b) of this section and maintain the operating record in an organized format which allows the information to be easily located and retrieved. All information contained in the operating record must be

furnished upon request to the executive director and must be made available for inspection by the executive director.

- (d) The owner or operator shall retain all information contained within the operating record and the different plans required for the facility for the life of the facility including the post-closure care period.
- (e) The owner or operator shall maintain training records in accordance with §335.586(d) and (e) of this title (relating to Personnel Training).
- (f) The owner or operator shall maintain personnel operator licenses issued in accordance with Chapter 30, Subchapter F of this title (relating to Municipal Solid Waste Facility Supervisors), as required.
- (g) The executive director may set alternative schedules for recordkeeping and notification requirements as specified in subsections (a) (f) of this section, except for notification requirements contained in Subchapter M of this chapter (relating to Location Restrictions) for any proposed lateral expansion located within a six-mile radius of any airport runway end used by turbojet or piston-type aircraft or notification relating to landowners whose property overlies any part of the plume of contamination, if contaminants have migrated off site as indicated by groundwater sampling.
- (h) The owner or operator shall maintain records to document the annual waste acceptance rate for the facility. Documentation must include maintaining the quarterly solid waste summary reports and the annual solid waste summary reports required by §330.675 of

this title (relating to Reports) in the operating record. After an updated site operating plan permit modification under §330.121(b) of this title (relating to General) is approved to comply with the rules that became effective December 2, 2004, if the annual waste acceptance rate exceeds the rate estimated in the landfill permit application and the waste increase is not due to a temporary occurrence, the owner or operator shall file an application to modify the permit application, including the revised estimated waste acceptance rate, in accordance with §305.70(l) [§305.70(k)] of this title (relating to Municipal Solid Waste Permit and Registration Modifications), within 90 days of the exceedance as established by the sum of the previous four quarterly summary reports. The application must propose any needed changes in the site operating plan to manage the increased waste acceptance rate to protect public health and the environment. The increased waste acceptance rate may justify requiring permit conditions that are different from or absent in the existing permit. This subsection is not intended to make an estimated waste acceptance rate a limiting parameter of a landfill permit.

§330.147. Disposal of Large Items.

(a) Large, heavy, or bulky items, that cannot be incorporated in the regular spreading, compaction, and covering operations at landfills should be recycled. A special area should be established to collect these items. This special collection area must be designated as a large-item salvage area. The owner or operator shall remove the items from the site often enough to prevent these items from becoming a nuisance and to preclude the discharge of any pollutants from the area.

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(b) Items that can be classified as large, heavy, or bulky can include, but are not limited

to, white goods (household appliances), air conditioner units, metal tanks, large metal pieces,

and automobiles.

(c) Refrigerators, freezers, air conditioners, and any other items containing chlorinated

fluorocarbon (CFC) must be handled in accordance with 40 Code of Federal Regulations §82.156

[\S 82.156(f)], as amended.

§330.165. Landfill Cover.

(a) Daily cover for Type I and Type IAE landfills. Type I and IAE landfills must apply six

inches of well-compacted earthen material not previously mixed with garbage, rubbish, or other

solid waste at the end of each operating day to control disease vectors, fires, odors, windblown

litter or waste, and scavenging, unless the executive director requires a more frequent interval

to control disease vectors, fires, odors, windblown litter or waste, and scavenging. Landfills that

operate on a 24-hour basis must cover the working face or active disposal area at least once

every 24 hours. The executive director may require a chemical analysis of any landfill cover

material. Runoff from areas that have intact daily cover is not considered as having come into

contact with the working face or leachate.

(b) Daily cover for Type IV and Type IVAE landfills. All Type IV facilities must follow the

requirements of this section except the rate of cover must be no less than weekly, unless the

executive director approves another schedule. The executive director may require a chemical

analysis of any landfill cover material. Runoff from areas that have intact weekly cover is not

considered as having come into contact with the working face or leachate.

(c) Intermediate cover. All areas that have received waste but will be inactive for longer than 180 days must provide intermediate or final cover. This intermediate cover must include six inches of suitable earthen material that is capable of sustaining native plant growth and must be seeded or sodded following its application in order to control erosion, or must be a material approved by the executive director that will otherwise control erosion. This intermediate cover must not be less than 12 inches of suitable earthen material. The intermediate cover must be graded to prevent ponding of water. Plant growth or other erosion

control features must be maintained. Runoff from areas that have intact intermediate cover is

not considered as having come into contact with the working face or leachate.

- (d) Alternative daily cover. Alternative daily cover may only be allowed by a temporary authorization under §305.62(k) of this title (relating to Amendments) [§305.70(m) of this title (relating to Municipal Solid Waste Permit and Registration Modifications)] followed by a major amendment or a modification in accordance with §305.70(k)(1) of this title. Use of alternative daily cover is limited to a 24-hour period after which either waste or daily cover as defined in subsection (a) of this section must be placed.
- (1) An alternative daily cover operating plan must be included in the request for temporary authorization or in a site development plan that includes the following:
- (A) a description and minimum thickness of the alternative material to be used;
 - (B) its effect on vectors, fires, odors, and windblown litter and waste;

- (C) the application and operational methods to be utilized at the site when using this alternative material;
- (D) chemical analysis of the material and/or the Material Safety Data Sheet(s) for the alternative material; and
- (E) any other pertinent characteristic, feature, or other factors related to the use of this alternative material.
- (2) A status report on the alternative daily cover must be submitted on a twomonth basis to the executive director during the temporary authorization period describing the effectiveness of the alternative material, any problems that may have occurred, and corrective actions required as a result of such problems. If no unresolved problems have occurred within the temporary authorization period, status reports may no longer be required.
- (3) Alternative daily cover must not be allowed when the landfill is closed for a period greater than 24 hours, unless the executive director approves an alternative length of time.
- (4) For contaminated soil proposed to be used as alternative daily cover in a municipal solid waste landfill, the constituents of concern shall not exceed the concentrations listed in Table 1, Constituents of Concern and Their Maximum Leachable Concentrations, located in §335.521(a)(1) of this title (relating to Appendices). Additionally, the contaminated soil must not contain:

(A) polychlorinated biphenyl wastes that are subject to the disposal requirements of 40 Code of Federal Regulations Part 761; or

(B) total petroleum hydrocarbons in concentrations greater than 1,500 milligrams per kilogram. The owner or operator may submit a demonstration for executive director approval that material exceeding 1,500 milligrams per kilogram (mg/kg) total petroleum hydrocarbons can be a suitable alternative daily cover. The demonstration shall include information regarding the risk to human health and the environment and the information required in paragraph (1) of this subsection. If approved, the executive director may impose additional permit requirements regarding the use of this material.

- (5) Alternative daily cover must not exceed constituent limitations imposed on waste authorized to be disposed at the facility.
- (6) The executive director may require the owner or operator to test runoff from areas that have alternative daily cover for compliance with Texas Pollutant Discharge Elimination System storm water discharge limits or manage the runoff as contaminated water.
- (e) Temporary waiver. The executive director may grant a temporary waiver from the requirements of subsections (a) (d) of this section if the owner or operator demonstrates that there are extreme seasonal climatic conditions that make meeting such requirements impractical.

- (f) Final cover. Final cover for the landfill must be in accordance with the site closure plan and Subchapter K of this chapter (relating to Closure and Post-Closure).
- (g) Erosion of cover. Erosion gullies or washed-out areas deep enough to jeopardize the final or intermediate cover must be repaired within five days of detection by restoring the cover material, grading, compacting, and seeding unless the commission's regional office approves otherwise, based on the extent of the damage requiring more time to repair or the repairs are delayed because of weather conditions. An eroded area is considered to be deep enough to jeopardize the final or intermediate cover if it exceeds four inches in depth as measured from the vertical plane from the erosion feature and the 90-degree intersection of this plane with the horizontal slope face or surface. The date of detection of erosion and date of completion of repairs, including reasons for any delays, must be documented in the cover inspection record required under subsection (h) of this section. The site operating plan must establish a frequency, and identify other occasions, for conducting inspections of the final and intermediate covers to detect the need for repairs. The periodic inspections and restorations are required during the entire operational life and for the post-closure maintenance period.
- (h) Cover inspection record. Each landfill must keep a cover application record on site readily available for inspection by commission representatives and authorized agents or employees of local governments having jurisdiction. This record must specify the date cover (no exposed waste) was accomplished, how it was accomplished, and the last area covered. This applies to daily, intermediate, and alternative daily cover. For final cover, this record must specify the area covered, the date cover was applied, and the thickness applied that date. Each entry must be certified by the signature of the on-site supervisor that the work was accomplished as stated in the record. The cover inspection record must document inspections

required under subsection (g) of this section, the findings, and corrective action taken when necessary.

§330.171. Disposal of Special Wastes.

- (a) Type IV and Type IVAE landfills may accept special wastes consistent with the limitations established in §330.5(a)(2) of this title (relating to Classification of Municipal Solid Waste Facilities) and the waste acceptance plan required by §330.61(b) of this title (relating to Contents of Part II of the Application).
- (b) The acceptance and/or disposal of a special waste as defined in §330.3 of this title (relating to Definitions), that is not specifically identified in subsection (c) or (d) of this section, or in §330.173 of this title (relating to Disposal of Industrial Wastes), requires prior written approval from the executive director.
- (1) Approvals will be waste-specific and/or site-specific and will be granted only to appropriate facilities operating in compliance with this chapter.
- (2) Requests for approval to accept special wastes must be submitted by the generator to the executive director or to a facility with an approved <u>Special Waste Management Plan</u> [plan] and must include, but are not limited to, the following:
- (A) a complete description of the chemical and physical characteristics of each waste, a statement as to whether or not each waste is a Class 1 industrial waste as defined

in §330.3 of this title, and the quantity and rate at which each waste is produced and/or the expected frequency of disposal;

- (B) for Class 1 industrial solid waste, a hazardous waste determination as required by §335.504 of this title (relating to Hazardous Waste Determination) [§335.6(c) of this title (relating to Notification Requirements)];
- (C) an operational plan containing the proposed procedures for handling each waste and listing required protective equipment for operating personnel and on-site emergency equipment; and
- (D) a contingency plan outlining responsibility for containment and cleanup of any accidental spills occurring during the delivery and/or disposal operation.
- (3) A vacuum truck, as used in this section, refers to any vehicle that transports liquid waste to a solid waste disposal or processing facility. A vacuum truck must transport liquid waste to a landfill that has a sludge stabilization and solidification process or to a Type V processing facility for sludge, grease trap, or grit trap waste. The owner or operator shall submit written notification to the executive director of the liquids-processing activity as required in §330.11 of this title (relating to Notification Required).
- (4) Soils contaminated by petroleum products, crude oils, or chemicals in concentrations of greater than 1,500 milligram per kilogram (mg/kg) total petroleum hydrocarbons; or contaminated by constituents of concern that exceed the concentrations listed in Table 1, Constituents of Concern and Their Maximum Leachable Concentrations in

§335.521(a)(1) of this title (relating to Appendices) must be disposed in dedicated cells that meet the requirements of §330.331(e) of this title (relating to Design Criteria).

- (5) The executive director may authorize the receipt of special waste with a written concurrence from the owner or operator; however, the facility operator is not required to accept the waste.
- (6) The executive director may revoke an authorization to accept special waste if the owner or operator does not maintain compliance with these rules or conditions imposed in the authorization to accept special waste.
- (c) Receipt of the following special wastes does not specifically require written authorization for acceptance provided the waste is handled in accordance with the noted provisions for each waste.
- (1) Medical wastes that have not been treated in accordance with the procedures specified in Chapter 326 of this title (relating to Medical Waste Management) must not be accepted at a landfill unless authorized in writing by the executive director. The executive director may provide this authorization when a situation exists that requires disposal of untreated medical wastes in order to protect the human health and the environment from the effects of a natural or man-made disaster.
- (2) Dead animals and/or slaughterhouse waste may be accepted at any Type I or Type IAE landfill without further approval from the executive director provided the carcasses

and/or slaughterhouse waste are covered by three feet of other solid waste or at least two feet of earthen material immediately upon receipt.

(3) Regulated asbestos-containing material (RACM) as defined in 40 Code of Federal Regulations Part 61 may be accepted at a Type I or Type IAE landfill in accordance with subparagraphs (A) - (I) of this paragraph provided the landfill has been authorized to accept RACM. The facility operator proposing to accept RACM shall provide written notification to the executive director of the intent to accept RACM.

(A) To receive authorization to accept RACM, the owner or operator shall dedicate a specific area or areas of the landfill to receive RACM and shall provide written notification to the executive director of the area or areas to be designated for receipt of RACM. After initial authorization to receive RACM is issued, additional areas may be designated by providing written notice to the executive director.

(B) The location of the area designated to receive the RACM must be surveyed and marked by a registered professional land surveyor and identified on a current site diagram that is maintained at the landfill. A copy of the current site diagram identifying the RACM area must be submitted to the executive director immediately upon completion of the diagram. The operator shall maintain a record of each load of RACM accepted as to its location, depth, and volume of material.

(C) Upon closure of the unit that accepted RACM, a specific notation that the facility accepted RACM must be placed in the deed records for the facility with a diagram identifying the RACM disposal areas. Concurrently, a notice of the deed recordation and a copy

of the diagram identifying the asbestos disposal areas must be submitted to the executive director.

- (D) Delivery of the RACM to the landfill unit must be coordinated with the on-site supervisor so the waste will arrive at a time it can be properly handled and covered.
- (E) RACM must only be accepted at the facility in tightly closed and unruptured containers or bags or must be wrapped with at least six-mil polyethylene.
- (F) The bags or containers holding the RACM must be placed below natural grade level. Where this is not possible or practical, provisions must be made to ensure that the waste will not be subject to future exposure through erosion or weathering of the intermediate and/or final cover. RACM that is placed above natural grade must be located in the landfill unit such that it is, at closure of the landfill unit, not less than 20 feet from any final side slope of the unit and must be at least ten feet below the final surface of the unit.
- (G) The bags or containers holding the RACM must be carefully unloaded and placed in the final disposal location. The RACM must be covered immediately with 12 inches of earthen material or three feet of solid waste containing no asbestos. Care must be exercised in the application of the cover so that the bags or containers are not ruptured.
- (H) A contingency plan in the event of accidental spills (e.g., ruptured bags or containers) shall be prepared by the owner or operator prior to accepting RACM. The plan must specify the responsible person(s) and the procedure for the collection and disposal of the spilled material.

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(I) RACM that has been designated as a Class 1 industrial waste may be accepted by a Type I landfill authorized to accept RACM provided the RACM waste is handled in accordance with the provisions of this paragraph and the landfill operator complies with the

provisions of §330.173(g) - (i) of this title.

(4) Nonregulated asbestos-containing materials (non-RACM) may be accepted for

disposal at a Type I, Type IAE, Type IV, or Type IVAE landfill provided the wastes are placed on

the active working face and covered in accordance with this chapter. Under no circumstances

may any material containing non-RACM be placed on any surface or roadway that is subject to

vehicular traffic or disposed of by any other means by which the material could be crumbled

into a friable state.

(5) Empty containers that have been used for pesticides, herbicides, fungicides,

or rodenticides must be disposed of in accordance with subparagraphs (A) and (B) of this

paragraph.

(A) These containers may be disposed of at any landfill provided that:

(i) the containers are triple-rinsed prior to receipt at the landfill;

(ii) the containers are rendered unusable prior to or upon receipt

at the landfill; and

(iii) the containers are covered by the end of the same working day they are received.

(B) Those containers for which triple-rinsing is not feasible or practical (e.g., paper bags, cardboard containers) may be disposed of under the provisions of paragraph (6) of this subsection or in accordance with §330.173 of this title, as applicable.

(6) Municipal hazardous waste from a <u>very small quantity generator (VSQG)</u>
[conditionally exempt small quantity generator] may be accepted at a Type I or Type IAE landfill without further approval from the executive director provided the <u>hazardous waste is not regulated hazardous waste</u>, was not generated by a VSQG during a calendar month in which the <u>VSQG generated hazardous waste during an episodic event</u>, and the amount of hazardous waste [amount of waste] does not exceed 220 pounds (100 kilograms) per month per generator, and provided the landfill owner or operator authorizes acceptance of the waste.

(7) Sludge, grease trap waste, grit trap waste, or liquid wastes from municipal sources can be accepted at a Type I or Type IAE landfill for disposal only if the material has been, or is to be, treated or processed and the treated/processed material has been tested, in accordance with Test Method 9095 (Paint Filter Liquids Test), as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (United States Environmental Protection Agency Publication Number SW-846), as amended, and is certified to contain no free liquids. Prior to treatment or processing of this waste at the landfill, the owner or operator shall submit written notification to the executive director of the liquids processing activity as required in §330.11 of this title.

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(d) Used oil filters from internal combustion engines must not be intentionally and knowingly accepted for disposal at landfills permitted under this chapter except as provided in paragraphs (1) and (2) of this subsection.

(1) Used oil filters must not be offered for disposal by a generator and/or be intentionally and knowingly accepted for landfill disposal unless the filter has been:

(A) crushed to less than 20% of its original volume to remove all freeflowing used oil; or

(B) processed by a method other than crushing to remove all free-flowing used oil. A filter is considered to have been processed if:

(i) the filter has been separated into component parts and the free-flowing used oil has been removed from the filter element by some means of compression in order to remove free-flowing used oil;

(ii) the used filter element of a filter consisting of a replaceable filtration element in a reusable or permanent housing has been removed from the housing and pressed to remove free-flowing used oil; or

(iii) the housing is punctured and the filter is drained for at least 24 hours.

(2) Used oil filters (to include filters that have been crushed and/or processed to remove free-flowing used oil) must not be offered for landfill disposal by any non-household generator and must not be intentionally or knowingly accepted by any landfill permitted and regulated under this chapter.

§330.173. Disposal of Industrial Wastes.

- (a) Except as specified in subsection (c) of this section, Class 1 industrial solid waste shall not be disposed in a Type IAE landfill unit.
- (b) Generators shall manifest Class 1 industrial solid waste as required by §335.10 of this title (relating to Shipping and Reporting Procedures Applicable to Generators of Hazardous Waste or Class 1 Waste [(relating to Shipping and Reporting Procedures Applicable to Generators of Hazardous Waste or Class 1 Waste and Primary Exporters of Hazardous Waste]). Owners or operators of municipal solid waste landfill facilities shall not accept such wastes without prior written approval from the executive director and specific authorization in the permit.
- (c) Wastes that are Class 1 only because of asbestos content may be accepted at any Type I or Type IAE landfill that is authorized to accept regulated asbestos-containing material (RACM) as stated in §330.171(c)(3)(I) of this title (relating to Disposal of Special Wastes). Authorization to accept this waste is implied in the authorization to accept RACM unless the acceptance of industrial wastes is prohibited by the permit. All Class 1 industrial asbestos wastes must be manifested and the owner or operator of the landfill facility shall comply with the requirements of subsections (g) and (h) of this section.

- (d) Unless the facility permit authorizes the acceptance of a specified type of Class 1 industrial waste, an authorization to accept specific types of Class 1 wastes will be wastespecific and site-specific and will be granted only to appropriate facilities that are operating in compliance with this chapter. Requests for authorization to accept Class 1 solid wastes must be submitted in writing to the executive director and must include, but are not limited to, the following:
- (1) a complete description of the chemical and physical characteristics of the waste in accordance with §335.587 of this title (relating to Waste Analysis), a statement as to whether or not the waste is a hazardous waste as defined in §330.3 of this title (relating to Definitions), and the quantity and rate at which the waste is produced and/or the expected frequency of disposal;
- (2) an operational plan containing the proposed procedures for handling the waste and a listing of required protective equipment for operating personnel and on-site emergency equipment. This plan must become a part of the site operating plan; and
- (3) a written contingency plan meeting the requirements of §335.589 of this title (relating to Contingency Plan). This plan shall become a part of the site operating plan.
- (e) Unless specifically authorized by the facility permit, a Type I or Type IAE landfill facility permitted after October 9, 1993, may not accept Class 1 industrial solid wastes in excess of 20% of the total amount of waste (not including Class 1 wastes) accepted during the current or previous year. The amount of waste may be determined by volume or by weight, but

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the same unit of measure must be used for each year, unless a variance is authorized by the executive director.

- (f) Any authorization to accept Class 1 waste is subject to the site operating in compliance with these rules and any specific conditions required under any letter(s) of authorization. Failure to operate the site in compliance with these rules or any special conditions imposed by the executive director may result in revocation of the authorization to accept a Class 1 waste.
- (g) All shipments of Class 1 waste must be accompanied by a manifest in compliance with §335.10(c) of this title (relating to Shipping and Reporting Procedures Applicable to Generators of Hazardous Waste or Class 1 Waste). The facility operator shall comply with the manifest requirements in §335.15(1) and (3) of this title (relating to Recordkeeping and Reporting Requirements Applicable to Owners or Operators of Treatment, Storage, or Disposal Facilities). [(waste-shipping control ticket) as required by the commission. The facility operator or a designated representative shall sign the manifest for any authorized shipments of Class 1 waste.] The facility operator shall not accept or sign for shipments of Class 1 waste for which the authorization to accept has not been granted by the executive director or has not been authorized by permit provisions. The facility operator shall retain the disposal facility copy of the manifest for a period of three years. This time period is automatically extended if any enforcement action involving the owner, operator, or landfill facility is initiated or pending by the executive director.
- (h) A facility that accepts any Class 1 waste must submit to the executive director a written report of Class 1 waste received. This report must be submitted no later than the 25th

day of the month following the month that the waste was received. Reports must be submitted on forms provided by the commission and must include all information required. Monthly reports must be submitted by facilities that have received Class 1 wastes including those months in which no Class 1 waste is received at the facility unless an exception is granted by the executive director. Failure to submit the reports required by this subsection in a timely manner is a violation of these rules.

- (i) Class 2 industrial solid waste, except special wastes as defined in §330.3 of this title, may be accepted at any Type I or Type IAE landfill provided the acceptance of this waste does not interfere with facility operation. Type IV and Type IVAE landfills may accept Class 2 industrial solid waste consistent with the limitations established in §330.5(a)(2) of this title (relating to Classification of Municipal Solid Waste Facilities) and the waste acceptance plan required by §330.61(b) of this title (relating to Contents of Part II of the Application).
- (j) Class 3 industrial solid waste may be disposed of at a Type I, Type IAE, Type IV, or Type IVAE landfill provided the acceptance of this waste does not interfere with facility operation.

SUBCHAPTER E: OPERATIONAL STANDARDS FOR MUNICIPAL SOLID WASTE STORAGE AND PROCESSING UNITS

§330.217

Statutory Authority

The amendment is adopted under the authority of Texas Water Code (TWC), §5.013, which establishes the general jurisdiction of the commission; TWC, §5.102, which provides the commission with the authority to carry out its duties and general powers under its jurisdictional authority as provided by TWC; TWC, §5.103, which requires the commission to adopt any rule necessary to carry out its powers and duties under TWC and other laws of the state; TWC, §5.105, which authorizes the commission to establish and approve all general policy of the commission by rule; Texas Health and Safety Code (THSC), §361.011, which grants the commission authority over municipal solid waste; THSC, §361.017, which grants the commission jurisdiction over industrial solid waste and hazardous municipal waste; and THSC, §361.024, which authorizes the commission to adopt rules consistent with the general purposes of the Solid Waste Disposal Act.

The adopted amendment implements House Bill 3060, 88th Texas Legislature, 2023.

§330.217. Pre-Operation Notice.

- (a) Type V mobile liquid waste processing unit demonstration of viability.
- (1) The owner or operator shall not initiate operation of each unit until a preoperation inspection of each mobile unit has been conducted and the executive director gives

written authorization to accept waste. The owner or operator shall demonstrate under field conditions that the process works. The demonstration shall be conducted under the supervision of experienced executive director staff and when appropriate, with local government staff. The viability demonstration shall be made by processing three traps in a single day representative of the traps normally serviced. The traps must have been in operation and not have been serviced for at least 30 days prior to the demonstration. The volume of material to be processed before unloading must be consistent with manufacturer's performance specifications and the operating plan, particularly as to the expected ratios between gross volumes processed and amounts discharged following processing. Multiple grab samples of effluent taken from the discharge outlet of the mobile processing unit must be tested for fats, oils, greases, and pH and be designed and operated to meet the effluent limits imposed by its treatment facility permitted under Texas Water Code, Chapter 26, Texas Pollutant Discharge Elimination System, or the liquid effluent limits specified in §330.207(g) [§330.207(h)] of this title (relating to Contaminated Water Management) if the discharge points do not require compliance with locally set limits.

- (2) Waste solids (sludges) produced by the mobile processing unit must be disposed of in a solid waste disposal facility regulated by the State of Texas or other location approved by the executive director. Solids should be dewatered to the point that they pass the United States Environmental Protection Agency (EPA) paint filter test, EPA Test Method 9095, or they should be taken to an authorized facility to be dewatered prior to landfilling.
- (3) The owner or operator shall remain responsible for making corrections or changes that are necessary to meet requirements prior to operating the mobile unit.

(b) Type VI demonstration projects for liquid waste processing facilities. The operation of the facility shall not begin until a pre-opening inspection has been conducted and written authorization to accept waste has been given by the executive director.

SUBCHAPTER J: GROUNDWATER MONITORING AND CORRECTIVE ACTION §330.421

Statutory Authority

The amendment is adopted under the authority of Texas Water Code (TWC), §5.013, which establishes the general jurisdiction of the commission; TWC, §5.102, which provides the commission with the authority to carry out its duties and general powers under its jurisdictional authority as provided by TWC; TWC, §5.103, which requires the commission to adopt any rule necessary to carry out its powers and duties under TWC and other laws of the state; TWC, §5.105, which authorizes the commission to establish and approve all general policy of the commission by rule; Texas Health and Safety Code (THSC), §361.011, which grants the commission authority over municipal solid waste; THSC, §361.017, which grants the commission jurisdiction over industrial solid waste and hazardous municipal waste; and THSC, §361.024, which authorizes the commission to adopt rules consistent with the general purposes of the Solid Waste Disposal Act.

The adopted amendment implements House Bill 3060, 88th Texas Legislature, 2023.

§330.421. Monitor Well Construction Specifications.

(a) Monitoring well construction. Monitoring well construction shall provide for maintenance of the integrity of the bore hole, collection of representative groundwater samples from the water-bearing zone(s) of concern, and prevention of migration of groundwater and surface water within the bore hole. The following specifications must be used for the installation of groundwater monitoring wells at municipal solid waste landfills. Equivalent

alternatives to these specifications may be used if prior written approval is obtained in advance from the executive director.

(1) Drilling.

(A) Monitoring wells must be drilled by a Texas-licensed driller who is qualified to drill and install monitoring wells. The installation and development shall be supervised by a licensed professional geoscientist or engineer who is familiar with the geology of the area.

(B) The well shall be drilled by a method that will allow installation of the casing, screen, etc., and that will not introduce contaminants into the borehole or casing. Drilling techniques used for boring shall take into account the materials to be drilled, depth to groundwater, total depth of the hole, adequate soil sampling, and other such factors that affect the selection of the drilling method. If any fluids are necessary in drilling or installation, then clean, treated city water shall be used; other fluids must be approved in writing by the executive director before use. If city water is used, a current chemical analysis of the city water shall be provided with the monitor-well report.

(C) The diameter of the boring shall be at least four inches larger than the diameter of the casing. When the boring is in hard rock, a smaller annulus may be approved by the executive director.

(D) A log of the boring shall be made by or under the supervision of a licensed professional geoscientist or engineer who is familiar with the geology of the area, and shall be sealed, signed, and dated by the licensed professional.

(2) Casing, screen, filter pack, and seals.

(A) The well casing shall be: two to four inches in diameter; National Sanitation Foundation-certified polyvinyl chloride [National Science Foundation-certified polyvinyl chloride] (PVC) Schedule 40 or 80 pipe, flush-thread, screw joint (no glue or solvents); polytetrafluorethylene (PTFE, such as Teflon) tape or O-rings in the joints; no collar couplings. The top of the casing shall be at least two feet above ground level. Where high levels of volatile organic compounds or corrosive compounds are anticipated, stainless steel or PTFE casing and screen may be used, subject to approval by the executive director. Four-inch diameter casing is recommended because it allows larger volume samples to be obtained and provides easier access for development, pumps, and repairs. The casing shall be cleaned and packaged at the place of manufacture; the packaging shall include a PVC wrapping on each section of casing to keep it from being contaminated prior to installation. The casing shall be free of ink, labels, or other markings. The casing (and screen) shall be centered in the hole to allow installation of a good filter pack and annular seal. Centralizers are recommended on wells over six meters (20 feet) in length, but may not be needed if the wells are installed through hollow-stem augers. The top of the casing shall be protected by a threaded or slip-on top cap or by a sealing cap or screw-plug seal inserted into the top of the casing. The cap shall be vented to prevent buildup of methane or other gases and shall be designed to prevent moisture from entering the well.

(B) The screen shall be compatible with the casing and should generally be of the same material. The screen shall not involve the use of any glues or solvents for construction. A wire-wound screen is recommended to provide maximum inflow area. Field-cut slots are not permitted for well screen. Filter cloth shall not be used. A blank-pipe sediment trap, typically one to two feet, should be installed below the screen. A bottom cap is typically placed on the bottom of the sediment trap. The sediment trap shall not extend through the lower confining layer of the water-bearing zone being tested. Screen sterilization methods are the same as those for casing. Selection of the size of the screen opening should be done by a person experienced with such work and shall include consideration of the distribution of particle sizes both in the water-bearing zone and in the filter pack surrounding the screen. The screen opening shall not be larger than the smallest fraction of the filter pack.

(C) The filter pack, placed between the screen and the well bore, shall consist of prepackaged, inert, clean silica sand or glass beads; it shall extend from one to four feet above the top of the screen. Open stockpile sources of sand or gravel are not permitted. The filter pack usually has a 30% finer grain size that is about four to ten times larger than the 30% finer grain size of the water-bearing zone; the filter pack should have a uniformity coefficient less than 2.5. The filter pack should be placed with a tremie pipe to ensure that the material completely surrounds the screen and casing without bridging. The tremie pipe shall be steam cleaned prior to the first well and before each subsequent well.

(D) The annular seal shall be placed on top of the filter pack and shall be at least two feet thick. It should be placed in the zone of saturation to maintain hydration. The seal should be composed of coarse-grain sodium bentonite, coarse-grit sodium bentonite, or bentonite grout. Special care should be taken to ensure that fine material or grout does not

plug the underlying filter pack. Placement of a few inches of prepackaged clean fine sand on top of the filter pack will help to prevent migration of the annular seal material into the filter pack. The seal should be placed on top of the filter pack with a steam-cleaned tremie pipe to ensure good distribution and should be tamped with a steam-cleaned rod to determine that the seal is thick enough. The bentonite shall be hydrated with clean water prior to any further activities on the well and left to stand until hydration is complete (eight to 12 hours, depending on the grain size of the bentonite). If a bentonite-grout (without cement) casing seal is used in the well bore, then it may replace the annular seal described in this paragraph.

- (E) A casing seal shall be placed on top of the annular seal to prevent fluids and contaminants from entering the borehole from the surface. The casing seal shall consist of a commercial bentonite grout or a cement-bentonite mixture. Drilling spoil, cuttings, or other native materials are not permitted for use as a casing seal. Quick-setting cements are not permitted for use because contaminants may leach from them into the groundwater. The top of the casing seal shall be between five and two feet from the surface.
- (3) Concrete pad. High-quality structural-type concrete shall be placed from the top of the casing seal (two to five feet below the surface) continuously to the top of the ground to form a pad at the surface. This formed surface pad shall be at least six inches thick and not less than four (preferably six) feet square or five (preferably six) feet in diameter. The pad shall contain sufficient reinforcing steel to ensure its structural integrity in the event that soil support is lost. The top of the pad shall slope away from the well bore to the edges to prevent ponding of water around the casing or collar.

- (4) Protective collar. A steel protective pipe collar shall be placed around the casing "stickup" to protect it from damage and unwanted entry. The collar shall be set at least one foot into the surface pad during its construction and should extend at least three inches above the top of the well casing (and top cap, if present). The top of the collar shall have a lockable hinged top flap or cover. A sturdy lock shall be installed, maintained in working order, and kept locked when the well is not being bailed/purged or sampled. The well number or other designation shall be marked permanently on the protective steel collar; it is useful to mark the total depth of the well and its elevation on the collar.
- (5) Protective barrier. Where monitoring wells are likely to be damaged by moving equipment or are located in heavily traveled areas, a protective barrier shall be installed. A typical barrier is three or four six- to 12-inch diameter pipes set in concrete just off the protective pad. The pipes can be joined by pipes welded between them, but consideration must be given to well access for sampling and other activities. Separation of such a pipe barrier from the pad means that the barrier can be damaged without risk to the pad and well. Other types of barriers may be approved by the executive director.
- (b) Unusual conditions. Where monitoring wells are installed in unusual conditions, all aspects of the installation shall be approved in writing in advance by the executive director. Such aspects include, for example, the use of cellar-type enclosures for the top-well equipment or multiple completions in a single hole.
- (c) Development. After a monitoring well is installed, it shall be developed to remove artifacts of drilling (clay films, bentonite pellets in the casing, etc.) and to open the water-bearing zone for maximum flow into the well. Development should continue until all of the

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water used or affected during drilling activities has been removed and field measurements of pH, specific conductance, and temperature have stabilized. Failure to develop a well properly may mean that it is not properly monitoring the water-bearing zone or may not yield adequate water for sampling even though the water-bearing zone is prolific.

- (d) Location and elevation. Upon completion of a monitoring well, the location of the well and all appropriate elevations associated with the top-well equipment shall be surveyed by a registered professional surveyor. The elevation shall be surveyed to the nearest 0.01 foot above mean sea level (with year of the sea-level datum shown). The point on the well casing for which the elevation was determined shall be permanently marked on the casing. The location shall be given in terms of the latitude and longitude at least to the nearest tenth of a second or shall be accurately located with respect to the landfill grid system described in §330.143(b)(5) of this title (relating to Landfill Markers and Benchmark).
- (e) Reporting. Monitoring well installation and construction details must be submitted on forms available from the commission and must be completed and submitted within 60 days of well completion. A copy of the detailed geologic log of the boring, a description of development procedures, any particle size or other sample data from the well, and a site map drawn to scale showing the location of all monitoring wells and the point of compliance must be submitted to the executive director at the same time. The licensed driller should be familiar with the forms required by other agencies; a copy of those forms must also be submitted to the commission.

- (f) Damaged wells. Any monitoring well that is damaged to the extent that it is no longer suitable for sampling shall be reported to the executive director, who may make a determination about whether to repair or replace the well.
- (g) Plugging and abandonment. Any monitoring well that is no longer used shall be properly abandoned and plugged in accordance with 16 TAC §76.72 [16 TAC §76.702] (relating to Responsibilities of the Licensee and Landowner--Well Drilling, Completion, Capping and Plugging) and §76.104 (relating to Technical Requirements--Standards for Capping and Plugging of Wells and Plugging Wells that Penetrate Injurious Water Zones) [§76.1004 (relating to Technical Requirements--Standards for Capping and Plugging of Wells and Plugging Wells that Penetrate Undesirable Water or Constituent Zones)]. No abandonment shall take place without prior authorization in writing by the executive director.

SUBCHAPTER M: LOCATION RESTRICTIONS §330.545

Statutory Authority

The amendment is adopted under the authority of Texas Water Code (TWC), §5.013, which establishes the general jurisdiction of the commission; TWC, §5.102, which provides the commission with the authority to carry out its duties and general powers under its jurisdictional authority as provided by TWC; TWC, §5.103, which requires the commission to adopt any rule necessary to carry out its powers and duties under TWC and other laws of the state; TWC, §5.105, which authorizes the commission to establish and approve all general policy of the commission by rule; Texas Health and Safety Code (THSC), §361.011, which grants the commission authority over municipal solid waste; THSC, §361.017, which grants the commission jurisdiction over industrial solid waste and hazardous municipal waste; and THSC, §361.024, which authorizes the commission to adopt rules consistent with the general purposes of the Solid Waste Disposal Act.

The adopted amendment implements House Bill 3060, 88th Texas Legislature, 2023.

§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.

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- (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.

SUBCHAPTER N: LANDFILL MINING

§§330.613, 330.615

Statutory Authority

The amendments are adopted under the authority of Texas Water Code (TWC), §5.013, which establishes the general jurisdiction of the commission; TWC, §5.102, which provides the commission with the authority to carry out its duties and general powers under its jurisdictional authority as provided by TWC; TWC, §5.103, which requires the commission to adopt any rule necessary to carry out its powers and duties under TWC and other laws of the state; TWC, §5.105, which authorizes the commission to establish and approve all general policy of the commission by rule; Texas Health and Safety Code (THSC), §361.011, which grants the commission authority over municipal solid waste; THSC, §361.017, which grants the commission jurisdiction over industrial solid waste and hazardous municipal waste; and THSC, §361.024, which authorizes the commission to adopt rules consistent with the general purposes of the Solid Waste Disposal Act.

The adopted amendments implement House Bill 3060, 88th Texas Legislature, 2023.

§330.613. Sampling and Analysis Requirements for Final Soil Product.

(a) Applicability. Facilities that receive a registration under this subchapter are required

to test their final product in accordance with this section.

(b) Analytical methods. Facilities that use analytical methods to characterize their final

product must use methods such as those described in the following publications.

- (1) Chemical and physical analysis shall utilize:
- (A) "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" (SW-846); or
 - (B) "Methods for Chemical Analysis of Water and Wastes" (EPA-600).
- (2) Analysis of pathogens shall utilize "Standard Methods for the Examination of Water and Wastewater" (Water Pollution Control Federation, 1995).
- (3) Analysis for salinity and pH shall utilize North Central Regional (NCR) Method 14 for Saturated Media Extract Method contained in "Recommended Test Procedure for Greenhouse Growth Media" NCR Publication Number 221 (Revised), Recommended Chemical Soil Test Procedures, Bulletin Number 49 (Revised), October 1988, pages 34-37.
- (4) Analysis of total, fixed, and volatile solids shall utilize Method 2540 G (Total, Fixed, and Volatile Solids in Solid and Semi-solid Samples) as described in "Standard Methods for the Examination of Water and Wastewater" (Water Pollution Control Federation, 1995).
- (c) Sample collection. Sample collection, preservation, and analysis shall assure valid and representative results in accordance with <u>National Environmental Laboratory Accreditation</u>

 <u>Conference (NELAC) standards</u> [Subchapter F of this chapter (relating to Analytical Quality Assurance and Quality Control)].
 - (d) Documentation.

- (1) Owners or operators of registered facilities shall record and maintain all of the following information regarding their activities of operation for three years after the final product is shipped off-site or upon facility closure:
 - (A) batch numbers identifying the final product sampling batch;
- (B) the quantities, types, and sources of materials processed and the dates processed;
- (C) the quantity and final product grade assigned described in §330.615 of this title (relating to Final Soil Product Grades and Allowable Uses);
 - (D) the date of sampling; and
- (E) all analytical data used to characterize the final product, including laboratory quality assurance/quality control data.
- (2) The following records shall be maintained on-site permanently or until facility closure:
 - (A) sampling plan and procedures;
 - (B) training and certification records of staff; and

- (C) final soil product test results.
- (3) Records shall be available for inspection by executive director representatives during normal business hours.
- (4) The executive director may at any time request by registered or certified mail that a soil generator submit copies of all documentation listed in paragraph (1) of this subsection for auditing the final soil product grade. Documentation requested under this section shall be submitted within ten working days of receipt of the request.
- (e) Sampling frequencies. All final soil product must be sampled and assigned a final product grade set forth in §330.615 of this title at a minimum rate of one sample for every 5,000 cubic yard batch of final soil product or annually, whichever is more frequent. Each sample will be a composite of nine grab samples as discussed in subsection (f) of this section.
- (f) Sampling requirements. The operator shall utilize the <u>sampling methods specified in NELAC standards</u> [protocol specified in Subchapter F of this chapter]. The executive director may at any time request that split samples be provided to an agency representative. Specific sampling requirements that must be satisfied include those listed in paragraphs (1) and (2) of this subsection.
- (1) Sampling from stockpiles. One-third of the grab samples shall be taken from the base of the stockpile (at least 12 inches into the pile at ground level), one-third from the exposed surface, and one-third from a depth of two feet from the exposed surface of the stockpile.

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(2) Sampling from conveyors. Sampling times shall be selected randomly at

frequencies that provide the same number of subsamples per volume of mined soil product as

is required in subsection (d) of this section.

(A) If samples are taken from a conveyor belt, the belt shall be stopped at

that time. Sampling shall be done along the entire width and depth of the belt.

(B) If samples are taken as the material falls from the end of a conveyor,

the conveyor does not need to be stopped. Free-falling samples need to be taken to minimize

the bias created as larger particles segregate or heavier particles sink to the bottom as the belt

moves. In order to minimize sampling bias, the sample container shall be moved in the shape

of a "D" under the falling product to be sampled. The flat portion of the "D" shall be

perpendicular to the beltline. The circular portion of the "D" shall be accomplished to return the

sampling container to the starting point in a manner so that no product to be sampled is

included.

(g) Analytical requirements. The final product subject to the sampling requirements of

this section will be tested for all of the following parameters. The executive director may at any

time request that additional parameters be tested. These parameters are intended to address

public health and environmental protection:

(1) total metals, to include:

(A) arsenic;

(B) cadmium;
(C) chromium;
(D) copper;
(E) lead;
(F) mercury;
(G) molybdenum;
(H) nickel;
(I) selenium; and
(J) zinc;
(2) weight percent of foreign matter, dry weight basis;
(3) pH by the saturated media extract method;
(4) salinity by the saturated media extract electrical conductivity method

(5) pathogens:
(A) salmonella; and
(B) fecal coliform;
(6) polychlorinated-biphenyls; and
(7) asbestos.
(h) Data precision and accuracy. Analytical data quality shall be established <u>in accordance with NELAC standards</u> [as specified in Subchapter F of this chapter].
(i) Reporting requirements.
(1) Facilities must report the following information to the executive director on a semiannual basis for each sampling batch of final soil product. Reports must include, but may not be limited to, all of the following information:
(A) batch numbers identifying the final soil product sampling batch;
(B) the quantities and types of waste materials processed and the dates processed;
(C) the quantity of final soil product;

- (D) the final soil product grade or permit number of the disposal facility receiving the final product if it is not Grade 1 or Grade 2 as established in §330.615 of this title;
- (E) all analytical results used to characterize the final soil product, including laboratory quality assurance/quality control data and chain-of-custody documentation; and
 - (F) the date of sampling.
- (2) Reports must be submitted to the executive director within two months after the reporting period ends.

§330.615. Final Soil Product Grades and Allowable Uses.

- (a) Applicability. Facilities that receive a registration under this subchapter are required to test final soil products in accordance with this section.
- (b) Final soil product testing. The final soil product shall be regularly tested under §330.613 of this title (relating to Sampling and Analysis Requirements for Final Soil Product) to determine the product's grade. Testing of final product and interpretation of test results shall be conducted in accordance with National Environmental Laboratory Accreditation Conference standards [Subchapter F of this chapter (relating to Analytical Quality Assurance and Quality Control)].

- (c) Final product classification and usage. The final soil product shall be classified according to the following classification system.
- (1) Grade 1 Soil. There are no restrictions on the use of Grade 1 Soil. To be considered Grade 1 Soil, the final product shall meet all of the following criteria:
- (A) shall contain no foreign matter of a size or shape that can cause human or animal injury;
- (B) shall not exceed all Maximum Allowable Concentrations for Grade $\bf 1$ Soil in Table $\bf 1$ of this subparagraph:

Figure: 30 TAC §330.615(c)(1)(B)

Table 1: Maximum Allowable Concentrations			
PARAMETER	Grade 1 Soil (mg/kg)	Grade 2 Soil (mg/kg)	
As	10	41	
Cd	16	39	
Cr (total)	180	1200	
Cu	1020	1500	
Pb	300	300	
Hg	11	17	
Мо	75	75	
Ni	160	420	
Se	36	36	
Zn	2190	2800	
PCBs	1	10	

(C) shall not contain foreign matter in quantities that cumulatively are greater than 1.5% dry weight on a four millimeter screen;

 $\mbox{(D) shall meet the requirements for pathogen reduction for Grade 1 Soil} \label{eq:D}$ as described in Table 2 of this subparagraph; and

Figure: 30 TAC §330.615(c)(1)(D)

Table 2: Additional Final Product Standards.			
PARAMETER	Grade 1 Soil	Grade 2 Soil	
Salinity (mmhos/cm)¹	10	10	
pH ¹	5.0 to 8.5	5.0 to 8.5	
Pathogens:			
Fecal Coliform	less than 1,000 MPN per gram of solid or meets PFRP	geometric mean density less than 2,000,000 MPN per gram of solids or meets PSRP	
Salmonella	less than 3 MPN per 4 grams total solid or meets PFRP	No value	

¹ A higher conductivity or pH outside the indicated range may be appropriate if the soil is specified for a special use.

(E) shall meet the requirements for salinity and pH for Grade 1 Soil as described in Table 2 of subparagraph (D) of this paragraph.

(2) Grade 2 Soil. To be considered Grade 2 Soil, the final product shall meet all of the following criteria:

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- (A) shall contain no foreign matter of a size or shape that can cause human or animal injury;
- (B) shall not exceed all Maximum Allowable Concentrations for Grade 2 Soil in Table 1 of paragraph (1)(B) of this subsection;
- (C) shall not contain foreign matter in quantities that cumulatively are greater than 1.5% dry weight on a four millimeter screen;
- (D) shall meet the requirements for pathogen reduction for Grade 2 Soil as described in Table 2 of paragraph (1)(D) of this subsection;
- (E) shall meet the requirements for salinity and pH for Grade 2 Soil as described in Table 2 of paragraph (1)(D) of this subsection; and
- (F) shall not be used at a residence, recreational area, or licensed childcare facility, or for food chain crops.
 - (3) Waste grade soil. Waste grade soil:
- (A) exceeds any one of the Maximum Allowable Concentrations for Grade 2 final product in Table 1 of paragraph (1)(B) of this subsection;
 - (B) does not meet the other requirements of Grade 1 or Grade 2 Soil; and

(C) shall be appropriately disposed at a permitted municipal solid waste

facility.

SUBCHAPTER O: REGIONAL AND LOCAL SOLID WASTE MANAGEMENT PLANNING AND FINANCIAL ASSISTANCE GENERAL PROVISIONS §§330.633, 330.635

Statutory Authority

The amendments are adopted under the authority of Texas Water Code (TWC), §5.013, which establishes the general jurisdiction of the commission; TWC, §5.102, which provides the commission with the authority to carry out its duties and general powers under its jurisdictional authority as provided by TWC; TWC, §5.103, which requires the commission to adopt any rule necessary to carry out its powers and duties under TWC and other laws of the state; TWC, §5.105, which authorizes the commission to establish and approve all general policy of the commission by rule; Texas Health and Safety Code (THSC), §361.011, which grants the commission authority over municipal solid waste; THSC, §361.017, which grants the commission jurisdiction over industrial solid waste and hazardous municipal waste; and THSC, §361.024, which authorizes the commission to adopt rules consistent with the general purposes of the Solid Waste Disposal Act.

The adopted amendments implement House Bill 3060, 88th Texas Legislature, 2023.

§330.633. Definitions of Terms and Abbreviations.

The following words and terms, when used in this subchapter, have the following meanings, unless the context clearly indicates otherwise.

(1) Advisory council--The Municipal Solid Waste Management and Resource Recovery Advisory Council.

- (2) City--An incorporated city or town in the state.
- (3) Closed municipal solid waste landfill unit--A discrete area of land or an excavation that has received only municipal solid waste or municipal solid waste combined with other solid wastes, including, but not limited to, construction/demolition waste, commercial solid waste, nonhazardous sludge, very small quantity generator [conditionally exempt small-quantity generator] hazardous waste, and industrial solid waste, and the area of land is not a land application unit, surface impoundment, injection well, or waste pile as those terms are defined by 40 Code of Federal Regulations §257.2.
- (4) Council of governments--A regional planning commission created under Local Government Code, Chapter 391.
- (5) Governing body--The city council, commissioners court, board of directors, trustees, or similar body charged by law with governing a public agency.
 - (6) Inactive facility--A facility that no longer receives solid waste.
- (7) Planning fund--The municipal solid waste management planning fund created in the state treasury by the Comprehensive Municipal Solid Waste Management, Resource Recovery, and Conservation Act (Texas Health and Safety Code, Chapter 363).
- (8) Planning period--The period of time that an adopted solid waste management plan is designed to remain effective.

- (9) Planning region--A region of the state identified by the governor as an appropriate region for municipal solid waste planning.
- (10) Private operator--A person, other than a government or governmental subdivision or agency, engaged in some aspect of operating a solid waste management system. The term includes any entity other than a government or governmental subdivision or agency, owned and operated by investment of private capital.
- (11) Property--Land, structures, interests in land, air rights, water rights, and rights that accompany interests in land, structures, water rights, and air rights and includes easements, rights of way, uses, leases, incorporeal hereditaments, legal and equitable estates, interest, or rights such as terms for years and liens.
- (12) Public agency--A city, county, district, or authority created and operating under the Texas Constitution, Article III, §52(b)(1) or (2), or Article XVI, §59, or a combination of two or more of these governmental entities acting under an interlocal agreement and having the authority under state laws to own and operate a solid waste management system.
- (13) Regional or local solid waste management plan--A plan adopted by a council of governments or local government under authority of the Municipal Solid Waste Management, Resource Recovery, and Conservation Act (Texas Health and Safety Code, Chapter 363).

- (14) Regional Solid Waste Grants Program--The program established to utilize funds dedicated under Texas Health and Safety Code, §361.014, for local and regional solid waste projects and to update and maintain regional solid waste management plans.
- (15) Resolution--A resolution, order, ordinance, or other action of a governing body.
- (16) Solid waste management--The systematic control of any or all of the following activities:
 - (A) generation;
 - (B) source separation;
 - (C) collection;
 - (D) handling;
 - (E) storage;
 - (F) transportation;
 - (G) processing;
 - (H) treatment;

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waste;

- (I) resource recovery; or
- (J) disposal of solid waste.

(17) Solid waste management system--Any plant, composting process plant, incinerator, sanitary landfill, transfer station, or other works and equipment acquired, installed, or operated for the purpose of collecting, handling, storing, processing, recovering material or energy, or disposing of solid waste and includes sites for these works and equipment.

(18) Solid waste resource recovery system--Any real property, buildings, structures, plants, works, facilities, equipment, pipelines, machinery, vehicles, vessels, rolling stock, licenses, or franchises used or useful in connection with the processing of solid waste to extract, recover, reclaim, salvage, reduce, concentrate, or convert to energy or useful matter or resources, whatever their form, including electricity, steam, or other forms of energy, and fertilizer, glass, or other forms of material and resources, from such solid waste, and includes any real property, buildings, structures, plants, works, facilities, pipelines, machinery, vehicles, vessels, rolling stock, licenses, or franchises used or useful in:

- (A) the transportation, receipt, storage, transfer, and handling of solid
- (B) the preparation, separation, or processing of solid waste for reuse;

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(C) the handling and transportation of recovered matter, resources, or energy; and

(D) the handling, transportation, and disposal of any nonrecoverable solid waste residue.

§330.635. Regional and Local Solid Waste Management Plan Requirements.

- (a) Regional solid waste management plans. A regional plan identifies the overriding concerns, goals, objectives, and recommended actions for solid waste management over a long-range period for the entire planning region. The details to implement a regional plan are provided in a Regional Solid Waste Management Implementation Plan Guideline that is approved by the executive director. A Regional Solid Waste Management Plan Implementation Guideline is a separate document. The requirements for the guidance document are found in §330.643 of this title (relating to Regional and Local Solid Waste Management Implementation Plan Guideline Requirements).
- (1) Geographic scope. The geographic scope of the regional planning process shall be the entire planning region designated by the governor.
- (2) Plan content. A regional plan shall be the result of a planning process related to the proper management of solid waste in the planning region. The process shall include identification of overriding concerns and collection and evaluation of the data necessary to provide a written public statement of goals and objectives and actions recommended to accomplish those goals and objectives. The regional plan shall include:

- (A) a statement of regional goals and objectives;
- (B) a description and assessment of efforts to minimize, reuse, and recycle waste, as follows:
- (i) include a brief description and an assessment of current efforts in the region to minimize municipal solid waste (MSW), including sludge, and efforts to reuse or recycle waste;
 - (ii) establish a recycling rate goal appropriate to the region;
- (iii) list any recommendations for encouraging and achieving a greater degree of waste minimization and waste reuse or recycling in the geographic area covered by the plan;
- (iv) include a description and assessment of existing or proposed community programs for the collection of household hazardous waste;
- (v) recommend composting programs for yard waste and related organic wastes that may include:
 - (I) creation and use of community composting centers;
- (II) adoption of the "Don't Bag It" program for lawn clippings developed by the Texas Agricultural Extension Service; and

(III) development and promotion of education programs on home composting, community composting, and the separation of yard waste for use as mulch; and

(vi) include a public education/outreach component in the solid waste program; and

(C) a commitment to the following, regarding the management of MSW facilities:

(i) encouraging cooperative efforts between local governments in the siting of landfills for the disposal of solid waste;

(ii) assessing the need for new waste disposal capacity;

(iii) considering the need to transport waste between municipalities, from a municipality to an area in the jurisdiction of a county, or between counties, particularly if a technically suitable site for a landfill does not exist in a particular area;

(iv) allowing a local government to justify the need for a landfill in its jurisdiction to dispose of the solid waste generated in the jurisdiction of another local government that does not have a technically suitable site for a landfill in its jurisdiction;

(v) completing and maintaining an inventory of MSW landfill units in accordance with Texas Health and Safety Code, §363.064(10) [§363.0635]. One copy of the inventory shall be provided to the commission and to the chief planning official of each municipality and county in which a unit is located; and

(vi) developing a guidance document to review MSW registration and permit applications to determine conformance with the goals and objectives outlined in Volume II: Regional Solid Waste Management Plan Implementation Guidelines as referenced in §330.643 of this title.

- (b) Local plans. A local plan addresses overriding short and long-range concerns and actions related to solid waste management within the jurisdiction of one or more local governments and may be developed regardless of whether a regional plan has been developed that will affect the local planning area. The details to implement a local plan are provided in a Regional Solid Waste Management Implementation Plan Guideline that is approved by the executive director. A Regional Solid Waste Management Plan Implementation Guideline is a separate document. The requirements for the guidance document are found in §330.643 of this title.
- (1) Geographic scope. The geographic scope of the local planning process shall be the jurisdiction of one or more local governments with common concerns or needs, but shall not include the entire planning region.
- (2) Plan content. A local plan shall be the result of a planning process that is related to the proper management of solid waste in the local planning area. The process shall

include identification of concerns and collection and evaluation of the data necessary to provide a written public statement of goals and objectives and the actions recommended to accomplish those goals and objectives. The local plan shall include:

- (A) a statement of local goals and objectives;
- (B) a description and assessment of efforts to minimize, reuse, and recycle waste, as follows:
- (i) include a brief description and an assessment of current efforts in the region to minimize MSW, including sludge, and efforts to reuse or recycle waste;
 - (ii) establish a recycling rate goal appropriate to the region;
- (iii) list any recommendations for encouraging and achieving a greater degree of waste minimization and waste reuse or recycling in the geographic area covered by the plan;
- (iv) include a description and assessment of existing or proposed community programs for the collection of household hazardous waste;
- (v) recommend composting programs for yard waste and related organic wastes that may include:
 - (I) creation and use of community composting centers;

(II) adoption of the "Don't Bag It" program for lawn clippings developed by the Texas Agricultural Extension Service; and

(III) development and promotion of education programs on home composting, community composting, and the separation of yard waste for use as mulch; and

(vi) include a public education/outreach component in the solid waste program; and

(C) commitment to the following, regarding the management of MSW facilities:

(i) encouraging cooperative efforts between local governments in the siting of landfills for the disposal of solid waste;

(ii) assessing the need for new waste disposal capacity;

(iii) considering the need to transport waste between municipalities, from a municipality to an area in the jurisdiction of a county, or between counties, particularly if a technically suitable site for a landfill does not exist in a particular area; and

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(iv) allowing a local government to justify the need for a landfill in its jurisdiction to dispose of the solid waste generated in the jurisdiction of another local government that does not have a technically suitable site for a landfill in its jurisdiction.

(3) Special considerations or restrictions. The local plan shall not prohibit, in fact or by effect, importation or exportation of waste from one political jurisdiction to another.

SUBCHAPTER T: USE OF LAND OVER CLOSED MUNICIPAL SOLID WASTE LANDFILLS §§330.951, 330.953, 330.959

Statutory Authority

The amendments are adopted under the authority of Texas Water Code (TWC), §5.013, which establishes the general jurisdiction of the commission; TWC, §5.102, which provides the commission with the authority to carry out its duties and general powers under its jurisdictional authority as provided by TWC; TWC, §5.103, which requires the commission to adopt any rule necessary to carry out its powers and duties under TWC and other laws of the state; TWC, §5.105, which authorizes the commission to establish and approve all general policy of the commission by rule; Texas Health and Safety Code (THSC), §361.011, which grants the commission authority over municipal solid waste; THSC, §361.017, which grants the commission jurisdiction over industrial solid waste and hazardous municipal waste; and THSC, §361.024, which authorizes the commission to adopt rules consistent with the general purposes of the Solid Waste Disposal Act.

The adopted amendments implement House Bill 3060, 88th Texas Legislature, 2023.

§330.951. Definitions.

Unless otherwise noted, all terms contained in this section are defined by their plain meaning. This section contains definitions that are applicable only to this subchapter and that supersede definitions in §330.3 of this title (relating to Definitions) where those terms appear in this subchapter. As used in this subchapter, words in the singular include the plural and words in the plural include the singular. The following words and terms, when used in this subchapter, have the following meanings.

- (1) Alteration--Minor changes and standard redesign activities common in residential and commercial structures, such as moving walls and doors, that will not affect the foundation or increase the horizontal extent of the foundation.
- (2) Authorization--A written approval issued by the executive director that, by its conditions, may allow the disturbance of the integrity of the final cover.
- (3) Closed municipal solid waste landfill--A permitted or previously permitted municipal solid waste landfill, a municipal solid waste landfill which has never been permitted, or a dumping area as defined in this section, which stopped receiving waste and completed the closure activities.
- (4) Closure plan--A plan addressing the placement of a final cap on a closed municipal solid waste landfill where waste is exposed or the existing cap is inadequate.
- (5) Construction--The inception of an activity that provides improvements necessary for the utilization of an enclosed structure.
- (6) Develop and/or development--Any activity on or related to real property that is intended to lead to the construction or alteration of an enclosed structure for the use and/or occupation of people for an industrial, commercial, or public purpose or to the construction of residences for three or more families, including subdivisions that will include single-family homes and duplexes.

- (7) Development permit--A written permit issued by the executive director that, by its conditions, may authorize a person or persons to develop an enclosed structure over a closed municipal solid waste landfill unit. The development permit does not supersede local building and development permits, but is an additional permit.
- (8) Dumping area--An non-permitted area of land or an excavation with unknown boundaries or which have had the boundaries determined through subsequent investigation that has received only municipal solid waste or municipal solid waste combined with other solid wastes, including but not limited to, construction/demolition waste, commercial solid waste, nonhazardous sludge, very small quantity generator [conditionally exempt small-quantity generator] hazardous waste, and industrial solid waste, and that is not a land treatment unit, surface impoundment, injection well, or waste pile as those terms are defined in 40 Code of Federal Regulations §257.2. [§330.3 of this title (relating to Definitions).]
- (9) Enclosed structure or structure--Any permanent structure that is intended to be or has the potential of being used or occupied by people for an industrial, commercial, public, or residential purpose.
- (10) Essential improvements--All improvements and appurtenances including, but not limited to, the excavations for the structure, installation of utilities, on-site wastewater disposal facilities, grading and drainage improvements, access drives and parking lots, foundation, security, fencing, landscape plantings, and irrigation systems necessary for the utilization of an enclosed structure.

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- (11) Existing structure--Any enclosed structure that began development prior to September 1, 1993.
- (12) Permitted development--An enclosed structure or group of enclosed structures that have been issued a development permit.
- (13) Post-closure care--The period of time beginning with the professional engineer certification of completing final closure activities as accepted by the executive director in accordance with §§330.453(f), 330.455(c), or 330.457(f)(5) of this title (relating to Closure and Post-Closure) and ending with the professional engineer certification of completion of post-closure care maintenance as accepted by the executive director in accordance with §330.463 of this title (relating to Post-Closure Care Requirements). Monitoring and maintenance activities are required during the post-closure care period in accordance with §330.463 of this title.
- (14) Post-closure care landfills--A municipal solid waste landfill facility that has received a municipal solid waste permit under §330.7 of this title (relating to Permit Required) and is currently in the post-closure care period as defined in this section.
- (15) Registration--A document issued by the executive director regarding submitted information for an existing enclosed structure built over a closed municipal solid waste landfill unit that does not require a development permit.
- (16) Site operating plan--A prepared document that provides guidance for operations and procedures necessary to maintain human safety and environmental protection

at the development, permitted development, or existing structure in a manner consistent with the development permit and the commission's regulations.

(17) Structures gas monitoring plan--A document prepared by a licensed professional engineer that provides procedures to ensure the detection of landfill gases and the prevention of migration of landfill gases into enclosed structures.

§330.953. Soil Test Required before Development.

- (a) A person may not undertake the development of a tract of land that is greater than one acre in area unless the person conducts a soil test prior to or during development and construction. The soil test is intended to determine if a landfill exists on the property planned for development.
 - (b) A soil test under this section shall be conducted by a licensed professional engineer.
 - (c) The licensed professional engineer must choose one of the following tests.
- (1) Test I. The licensed engineer shall observe all subsurface disturbances, undertaken for whatever reason, during development through the completion of the foundation. A subsurface investigation prior to construction is not required by Test I.
- (2) Test II. A subsurface investigation undertaken for the purpose of finding a closed municipal solid waste landfill unit. The investigation must incorporate a sufficient number of borings or excavations, the number of which shall be determined on a site-specific

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basis by the licensed professional engineer. Each boring or excavation shall be to a minimum depth of ten feet.

- (3) Test III. A subsurface investigation conducted at the development site for geotechnical or environmental purposes, or a housing and urban development test for a homeowner's warranty.
- (d) In accordance with Texas Health and Safety Code, §361.538(c), any engineer who conducts a soil test and determines that part of the tract overlies a closed municipal solid waste landfill shall notify the following persons of that determination within 30 days of the completion of the test:
 - (1) each owner and each lessee of the tract;
 - (2) the executive director;
- (3) local government officials with the authority to disapprove the application for development; and
 - (4) the regional council of governments.
- (e) The responsible engineer shall affix his seal, signature, and date of execution to the soil test results as required by the Texas Engineering Practice Act, §15c, and in accordance with 22 TAC §137.33 (relating to Sealing Procedures) [22 TAC §131.166 (relating to Engineer's Seal)].

(f) All soil test excavations where waste is removed shall be backfilled and compacted with clean high-plasticity or low-plasticity clay. The excavation shall be backfilled to exceed the existing grade and provide positive drainage.

§330.954. Development Permit, Development Authorization, and Registration Requirements, Procedures, and Processing.

- (a) Permit required for development over a closed municipal solid waste (MSW) landfill unit.
- (1) No person may commence or continue physical construction of an enclosed structure over a closed MSW landfill as defined in §330.951 of this title (relating to Definitions) without first submitting a development permit application in accordance with §330.956 of this title (relating to Application for Proposed or Existing Constructions Over a Closed Municipal Solid Waste Landfill Unit, General Requirements) and receiving a development permit issued by the executive director, except as noted in paragraph (7) of this subsection. The permit issued by the executive director under this subchapter is a development permit and not a permit for the management of solid waste. A permit application for a development permit shall comply with those requirements in this subchapter. A permit application to manage MSW shall comply with the applicable sections of Chapter 281 and Chapter 305 of this title (relating to Applications Processing and Consolidated Permits), and Subchapters A M of this chapter.
- (2) A development permit is required for construction of an enclosed structure over a closed MSW landfill that had received a permit under §330.7 of this title (relating to Permit Required) and had its permit revoked at the end of the post-closure care period in

accordance with §305.67 of this title (relating to Revocation and Suspension upon Request or Consent) or for construction of an enclosed structure over a non-permitted closed MSW landfill. The exact waste boundary may be determined through soil boring tests in accordance with §330.953 of this title (relating to Soil Test Required before Development), or through alternative investigation methods approved by the executive director.

- (3) A development permit for construction of an enclosed structure is required for an entire property that includes a closed MSW landfill with unknown boundaries as defined in §330.951 of this title.
- (4) The permit application under this subchapter must be received at least 45 days prior to the proposed commencement of construction over the closed MSW landfill unit.
- (5) If a person directs an engineer to conduct Soil Test I, and the soil test reveals the existence of a closed MSW landfill unit after the commencement of construction, construction of the enclosed structure being built over the waste area shall cease immediately, and a permit application shall be submitted and a development permit issued before construction of the enclosed structure over the waste area unit can resume. The person may proceed with construction and development of other facilities, including those items listed in the definition of essential improvements.
- (6) If a person directs an engineer to conduct either Soil Test II or Soil Test III and the engineer discovers a closed MSW landfill unit as a result of the test, the person shall submit a permit application. Development of an enclosed structure over the closed landfill unit cannot begin until a development permit is issued.

- (7) If a person directs an engineer to conduct either Soil Test II or Soil Test III and the engineer does not detect a closed MSW landfill unit as a result of the test, but subsequently discovers a closed MSW landfill unit during the development, the person is not required to submit a permit application but must meet the provisions of §330.959 of this title (relating to Contents of Registration Application for an Existing Structure Built Over a Closed Municipal Solid Waste Landfill Unit).
- (8) As part of the application, the owner shall provide the name and physical and mailing addresses of a public building with normal operating hours such as library, city hall, or county courthouse where the application can be viewed by the general public. The facilities where the permit can be viewed shall be in compliance with all applicable requirements of the Americans with Disabilities Act. The application shall also include an adjacent landowner list.
 - (b) Review and approval of permit application.
- (1) Notice of the opportunity to request a public meeting for an application shall be provided not later than 45 days of the executive director's receipt of the application in accordance with the procedures contained in §39.501(c) of this title (relating to Application for Municipal Solid Waste Permit). The owner or operator and the commission shall hold a public meeting in the local area, prior to facility authorization, if a public meeting is required based on the criteria contained in §55.154(c) of this title (relating to Public Meetings). This section does not require the commission to respond to comments, and it does not create an opportunity for a contested case hearing. The purpose of the public meeting is for the public to provide input

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for consideration by the commission, and for the applicant and commission staff to provide information to the public.

- $\mbox{(2) The commission shall notify the owner by mail of the date and time of the} \\ \mbox{meeting} \; .$
- (3) The commission shall require the applicant to publish notice of the meeting in a newspaper that is generally circulated in each county in which the property proposed for development is located. The published notice must appear at least once a week for the two weeks before the date of the meeting. The commission shall also notify all individuals on the list of adjacent landowners at least 15 days prior to the meeting. The notice shall list the location, date, and time of the public meeting, and the location of the public building where the development permit application can be viewed.
- (4) The executive director's staff will conduct the public meeting at the designated location. The owner will make a presentation of the application, the executive director's staff will describe the development permit, and public comment will be received. The public meeting is not an evidentiary proceeding.

(5) On or before the fifth day following the public meeting:

(A) the executive director will either approve or deny the development permit application. The executive director shall base the decision on whether the application meets each of the requirements of §330.956 of this title and §330.957 of this title (relating to Contents of the Development Permit and Workplan Application). A decision denying the permit

shall state the deficiencies that were cause for the denial and any modifications necessary to correct those deficiencies; and

- (B) a person may submit in writing to the chief clerk a request to be notified of the executive director's decision on the application.
- (6) The date on which the executive director issues the order shall be construed as the date on which notice of the decision is mailed to the owner and to each person that requested notification of the executive director's decision in accordance with paragraph (5)(B) of this subsection.
 - (7) Petition for review of executive director's decision.
- (A) The owner or a person may file a petition for review not later than the tenth day after the date the executive director issues the order. The owner or person that files a petition shall file the petition with the chief clerk, and shall mail a copy of the petition to the owner and to each person that requested notification of the executive director's decision in accordance with paragraph (5)(B) of this subsection.
- (B) If a petition for review is filed, the commission shall act on the petition for review within 35 days after issuance of the executive director's order or at the next scheduled commission meeting, whichever is later. The commission may affirm or reverse the order issued by the executive director.

- (C) A commission order ruling on a petition for review is final and effective on the date issued.
- (8) If no petition for review is filed ten days after the executive director issues a decision, the decision is final and effective on the 11th day after the date the decision was issued.
- (9) If the actual cost of reviewing the permit is not equal to the application fee, the owner will be presented with either a refund or an invoice in accordance with subsection (a)(7) of this section. If an invoice is submitted, a development permit will not be issued until the invoice is paid.
- (10) An owner who is denied a development permit may submit a new application to the executive director.
 - (c) Requirements for development over a closed MSW landfill in post-closure care.
- (1) For an MSW landfill that is covered by an existing permit for the management of solid waste received under §330.7 of this title and is currently in post-closure care, no person may commence physical construction of an enclosed structure without submitting a permit modification application for the closure plan and post-closure plan of the existing permit in accordance with §305.70(k)(12) [§305.70(j)(6)] of this title (relating to Municipal Solid Waste Permit and Registration Modifications), or a permit amendment application in accordance with §305.62 of this title (relating to Amendment), and a workplan including those items listed in §330.957 of this title, and receiving the approval from the executive director.

- (2) For an MSW landfill that is covered by an existing permit for the management of solid waste received under §330.7 of this title and is currently in post-closure care, no person may commence with any type of non-enclosed structures, which will result in the disturbance, in any way, of the final cover without submitting a permit modification application for the closure plan and post-closure plan of the existing permit in accordance with \$305.70(k)(12) {\$305.70(k)(12) {\$30
- (3) The executive director shall issue a decision to approve or deny the permit modification/amendment application. The executive director shall base the decision on whether the application meets each of the requirements of \$\frac{\frac{8305.70(k)(12)}{(12)}}{(12)}\$ [\$\frac{1}{3}\frac{3}{3}\frac{3}{3}\frac{5}{3}\frac{
 - (d) Registration for existing structures.
- (1) The owner or lessee of an existing structure that existed or began development prior to September 1, 1993, and is built over a closed MSW landfill unit, shall submit a registration application to the executive director. The registration application shall be submitted to the executive director and shall include those items listed in §330.959 of this title.

This paragraph is not intended to require that owners and lessees of enclosed structures initiate investigations for closed MSW landfills.

- (2) A registration issued by the executive director under this subchapter is not a registration for the management of solid waste. A registration application for an existing structure shall comply with those requirements in this subchapter. A registration application to manage MSW shall comply with the applicable sections of Chapter 281 and Chapter 305 of this title and Subchapters A M of this chapter.
- (3) The owner shall submit the registration within 180 days from the determination that the structure overlies a closed MSW landfill.
- (4) Upon receipt of written approval of the structures gas monitoring plan or approval with modifications to the plan from the executive director, the owner or lessee of the existing structure shall implement the plan in accordance with its approved schedule.
 - (e) Authorization to disturb final cover for non-enclosed structures.
- (1) The integrity of the final cover of a closed MSW landfill shall not knowingly be violated, disturbed, altered, removed, or interrupted in any way without the prior authorization of the executive director, except where soil tests are being performed in accordance with §330.953 of this title.
- (2) Penetrations of the final cover or liner systems will not be allowed without the prior authorization of the executive director. These include, but are not limited to, borings,

piers, spread footings, foundations for light standards, fence posts, anchors, deadman anchors, manholes, on-site disposal systems, recreational facilities, and any other kind of non-enclosed structures.

- (3) An authorization to disturb final cover issued by the executive director under this subchapter is not an authorization for the management of solid waste. An application for authorization shall comply with those requirements in this subchapter.
- (4) The authorization request must be received at least 45 days prior to the proposed commencement of construction over the closed MSW landfill unit.

§330.959. Contents of Registration Application for an Existing Structure Built Over a Closed Municipal Solid Waste Landfill Unit.

- (a) The application shall follow the general requirements as set forth in §330.956 of this title (relating to Application for Proposed or Existing Constructions Over a Closed Municipal Solid Waste Landfill Unit, General Requirements).
 - (b) The registration application shall consist of the following:
- (1) a legal description as set forth in §330.957(h) [§330.957(e)] of this title (relating to Contents of the Development Permit and Workplan Application);
- (2) certified copies of all notices having been made by the owner and the lessor/lessee in accordance with §330.962 of this title (relating to Notice to Real Property

Records), §330.963 of this title (relating to Notice to Buyers, Lessees, and Occupants), and §330.964 of this title (relating to Lease Restrictions);

- (3) plans and drawings as set forth in §330.957(i), (j), and (n)(3) of this title;
- (4) a site operating plan as set forth in §330.957(s) of this title;
- (5) a structures gas monitoring plan:
 - (A) General.

(i) The owner or lessee of an existing structure built over a closed municipal solid waste landfill unit shall ensure that the concentration of methane gas generated by the landfill does not exceed 20% of the lower explosive limit for methane (1.0% by volume methane in air) in facility structures (excluding gas control or recovery system components). Any enclosed structures shall contain automatic methane gas sensors approved by the executive director and designed to trigger an audible alarm if the volumetric concentration of methane in the air is greater than 1.0%.

(ii) Landfill gas monitoring requirements for a registration under this section may be suspended by the executive director as provided for in $\S 330.957(t)(1)(B)$ of this title.

(B) Requirements for structures gas monitoring plan. The owner or lessee shall submit a structures gas monitoring plan, designed by a licensed professional engineer, to

the executive director for review and approval. The plan shall ensure detection of the presence of landfill gas entering on-site structures. All design drawings should bear the licensed engineer's seal and signature. The plan shall include, but not be limited to, the following:

(i) an analysis of specific facility characteristics and potential migration pathways or barriers as set forth in §330.957(t)(2)(A) of this title;

(ii) a facility drawing, drawn to scale, which indicates the location of all waste disposal areas, existing structures, creeks, and ponds;

(iii) a narrative describing modifications to the existing structures including, but not limited to, the following:

- (I) structural;
- (II) electrical;
- (III) mechanical; and

(IV) landfill gas monitoring equipment including manufacturer's specification sheets and any gas ventilation or active gas extraction systems if the development utilizes such systems;

(iv) a detailed implementation schedule for the installation of landfill gas monitoring equipment;

(v) a sampling and analysis plan as set forth in §330.957(t)(2)(F) of

this title; and

(vi) a landfill gas analysis as set forth in §330.957(t)(2)(G) of this

title; and

(6) a safety and evacuation plan describing evacuation procedures and safety measures in the event the methane gas sensors sound the audible alarms.

SUBCHAPTER U: STANDARD AIR PERMITS FOR MUNICIPAL SOLID WASTE LANDFILL FACILITIES AND TRANSFER STATIONS

§§330.987, 330.991, 330.993, 330.995

Statutory Authority

The amendments are adopted under the authority of Texas Water Code (TWC), §5.013, which establishes the general jurisdiction of the commission; TWC, §5.102, which provides the commission with the authority to carry out its duties and general powers under its jurisdictional authority as provided by TWC; TWC, §5.103, which requires the commission to adopt any rule necessary to carry out its powers and duties under TWC and other laws of the state; TWC, §5.105, which authorizes the commission to establish and approve all general policy of the commission by rule; Texas Health and Safety Code (THSC), §361.011, which grants the commission authority over municipal solid waste; THSC, §361.017, which grants the commission jurisdiction over industrial solid waste and hazardous municipal waste; and THSC. §361.024, which authorizes the commission to adopt rules consistent with the general purposes of the Solid Waste Disposal Act. The standard air permit is also adopted under THSC, §382.002, which establishes the policy of the state and the purpose of the chapter to safeguard the state's air resources from pollution; §382.011, which gives the commission the powers necessary or convenient to carry out its responsibilities under the TCAA; THSC, §382.017, which authorizes the commission to adopt rules; THSC, §382.051, which authorizes the commission to issue a permit to construct or modify a facility that may emit air contaminants, including a standard permit for similar sources; and THSC, §382.05195, which authorizes the commission to issue standard permits and to adopt rules as necessary to implement standard permits.

The adopted amendments implement House Bill 3060, 88th Texas Legislature, 2023.

§330.987. Certification Requirements.

- (a) Type IV landfills are exempt from the requirements of this subsection.
- (b) Certification under this subchapter constitutes an acknowledgment and agreement that the permit holder will comply with all rules, regulations, and orders of the commission issued in conformity with Texas Clean Air Act, Texas Health and Safety Code, Chapter 382, and the conditions precedent to the claiming of this standard permit. If more than one state or federal rule or regulation or permit condition are applicable, the most stringent limit or condition will govern. Acceptance includes consent to the entrance of commission employees and designated representatives of any local air pollution control agency having jurisdiction over the site into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the standard permit.
- (c) A certification under this subchapter is valid for a term not to exceed ten years from the date of receipt by the Texas Commission on Environmental Quality. An owner and/or operator is required to renew a certification by no later than the expiration date of the certification. The commission will provide written notice to operators of the renewal deadline at least 180 days prior to the expiration of the certification.
- (d) Two copies of the certification must be submitted to the Waste Permits Division. One copy must be submitted to the appropriate regional office, and one copy must be sent to any appropriate local air pollution control program having jurisdiction over the site. The certification must be based on the capacity of the landfill minimum of a ten-year period. The

certification must include supporting documentation to demonstrate compliance with the conditions of this subchapter and any other applicable federal and state requirements, and at a minimum should include the following:

- (1) the basis and quantification of emission estimates;
- (2) sufficient information to demonstrate that the project will comply with all applicable conditions of this subchapter; and
 - (3) a description of any equipment and related processes.
 - (e) Certifications must be submitted as follows.
- [(1) Owners or operators of existing municipal solid waste landfill sites that have been modified and do not continue to meet the existing standard permit under §116.621 of this title (relating to Municipal Solid Waste Landfills) must certify.]
- (1) [(2)] Owners or operators must submit a certification for the initial construction of a municipal solid waste landfill under this subchapter at least 120 days prior to building or installation of any equipment or structure that may emit air contaminants.
- (2) [(3)] Modifications to an existing municipal solid waste landfill site that results in a change in categories as listed in §330.983 of this title (relating to Definitions) must submit a certification at least 60 days after changes occurring at the site.

- (f) New facilities or changes to existing facilities that do not cause a site to become ineligible for this standard permit can be authorized by meeting one of the following:
- (1) independently claiming the permit by rule under Chapter 106 of this title (relating to Permits by Rule) or a standard permit under Chapter 116, Subchapter F of this title (relating to Standard Permits), including all registrations, fees, and documentation. These independent registrations must be administratively incorporated at the next standard permit certification renewal or modification; or
- (2) including the claimed permit by rule or standard permit as a part of an initial or modified certification. A claimed permit by rule or standard permit included under a municipal solid waste landfill standard permit certification is exempt from the registration and fee requirements normally required of permits by rule or standard permits. The certification must include sufficient information necessary to demonstrate qualification for those authorizations. Certifications must meet the following:
- (A) update the site certification within one year of constructing new facilities or modifications if the cumulative amount of emissions resulting from the new facilities or modifications is:
- (i) less than five tons per year of any criteria air contaminant for sites located in a designated nonattainment area; or
- (ii) less than 25 tons per year of any criteria air contaminant for sites located in an attainment area;

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(B) update the site certification within 30 days of constructing new facilities or modifications if the site is not considered an existing major source in accordance with prevention of significant deterioration review or nonattainment new source review, and the cumulative amount of emissions for these changes is:

(i) greater than or equal to five tons per year of any criteria air contaminant for sites located in a designated nonattainment area; or

(ii) greater than or equal to 25 tons per year of any criteria air contaminant for sites located in attainment areas; or

(C) update the site certification at least 30 days prior to the change, including any applicable major source netting demonstration as specified in §116.150 of this title (relating to New Major Source or Major Modification in Ozone Nonattainment Areas), if the site is considered an existing major site in accordance with prevention of significant deterioration review or nonattainment new source review, and the cumulative amount of emissions for changes is:

(i) greater than or equal to five tons per year of any criteria air contaminant for sites located in a designated nonattainment area; or

(ii) greater than or equal to 25 tons per year of any criteria air contaminant for sites located in an attainment area.

§330.991. Technical and Operational Requirements for all Municipal Solid Waste Landfill

Sites.

- (a) Air emissions from the following stationary sources are authorized by this standard permit:
- (1) recycling (e.g., crushing glass, shredding or crushing aluminum, light bulb crushing, wood chipping, or mulching);
 - (2) transfer stations:
 - (A) located at a municipal solid waste (MSW) landfill site; or
- (B) not located at a landfill and store over 1,000 tons of MSW overnight, defined as sunset to sunrise, must have the waste holding area covered by a ventilated building that has a minimum 16-foot vertical exhaust of 45,000 cubic feet per minute or greater;
- (3) waste solidification/stabilization operations, which must be conducted with the following conditions:
- (A) when dry fine powdery materials, including, but not limited to, fly ash, cement kiln dust, hydrated lime, and fine sawdust are used for mixing in the waste solidification/stabilization process loading/unloading, transporting, and mixing, they must be controlled so as to minimize particular matter emissions. Controls to minimize particular matter emissions may include loading and storing in enclosed containers, or mixing and unloading under conditions where the materials cannot become airborne; and

- (B) no site-generated visible emissions may cross the property line for a period not to exceed 30 seconds in any six-minute period, as determined by United States Environmental Protection Agency (EPA) Test Method 22;
- (4) landfill cell construction, operation, and closures, including landfill gas emissions and associated capture and control equipment;
- (5) landfill mist spray systems to control odor. These landfill mist spray systems will operate such that no visible emissions may cross the property line for a period not to exceed 30 seconds in any six-minute period, as determined by EPA Test Method 22;
- (6) any other facility or group of facilities that meets a permit by rule under Chapter 106 of this title (relating to Permits by Rule) or a standard permit under Chapter 116, Subchapter F of this title (relating to Standard Permits) with the exception of activities listed in §330.985(d)(2) of this title (relating to Applicability and Exceptions);
- (7) leachate and landfill gas condensate activities, which must be conducted as follows:
- (A) leachate and/or landfill gas condensate may be recirculated on-site at a rate not to exceed 100,000 gallons per day, and in accordance with the conditions and limitations specified in §330.177 of this title (relating to Leachate and Gas Condensate Recirculation); and

- (B) air emissions are authorized from leachate and/or landfill gas condensate stored in tanks or disposed in evaporation ponds that are lined in accordance with §330.331(b) of this title (relating to Design Criteria), and meet the requirements in §330.17 of this title (relating to Technical Guidelines);
 - (8) fuel storage tanks, which must meet the following requirements:
- (A) storage and transfer of gasoline, diesel fuel, or kerosene are authorized by this standard permit;
- (B) permanent gasoline tanks must be located at least 500 feet from any off-property receptor;
- (C) total annual throughput of gasoline for all tanks may not exceed 20,000 gallons per year unless a vapor balance system as defined in §115.10 of this title (relating to Definitions), is used; and
 - (D) records of annual throughput must be maintained;
- (9) tire shredding, which may be conducted at a rate not to exceed 11 tons per hour. Records of the amount of tires shredded per hour must be maintained;
- (10) bioremediation pads, which must be operated such that the pad must be located at least 165 feet from any off-property receptor;

- (11) the GCCS, which must be designed to route total collected landfill gas to one of the following control devices:
- (A) flares that satisfy requirements and are operated in accordance with 40 CFR Part 60, Subpart WWW, as applicable;
- (B) a landfill gas-fired stationary, reciprocating internal combustion engine or a landfill gas-fired turbine not used to generate electricity, that satisfies all of the requirements of §106.4(a)(1) of this title (relating to Requirements for Permitting by Rule) and §106.512 of this title (relating to Stationary Engines and Turbines);
- (C) a landfill gas-fired stationary electric generating unit that satisfies all of the requirements of Chapter 116, Subchapter F of this title;
- (D) a landfill gas-fired boiler, heater, or other combustion unit, not including stationary, reciprocating internal combustion engines or turbines, that satisfies the maximum heat input and nitrous oxide requirements of §106.4(a)(1) of this title and §106.183 of this title (relating to Boilers, Heaters, and Other Combustion Devices) and applicable sections of Chapter 117 of this title (relating to Control of Air Pollution from Nitrogen Compounds);
- (E) a pollution control project that satisfies all the requirements of §116.617 of this title (relating to State Pollution Control Project Standard Permit) [(relating to Standard Permits for Pollution Control Projects)]. Any facility or process added under this subsection is not considered a new production facility for the purposes of §116.617 of this title; or

(F) a gas treatment system that processes the collected gas to produce a product or by-product for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system must be subject to the requirements of 40 CFR §60.752(b)(2)(iii)(A) or (B); and

(12) a temporary rock crusher that is used exclusively for cell construction that satisfies all the requirements of the Air Quality Standard Permit for Temporary Rock Crushers.

- (b) If sampling of stacks and/or process vents are required, the owner or operator must contact the appropriate regional office and any other air pollution control program having jurisdiction over the site prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The owner or operator is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant.
- (c) The facilities covered by this standard permit may not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. Notification for emissions events and unscheduled maintenance must be made in accordance with §101.201 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements) and §101.211 of this title (relating to Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements).

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(d) Owners and/or operators must monitor and control particulate matter as follows.

(1) All operations must be conducted in a manner so as to minimize any

particulate matter emissions at the landfill boundary. No site-generated visible emissions, as

determined by EPA Test Method 22, may not cross the property line for a period exceeding 30

seconds in any six-minute period.

(2) Roads and other areas subject to vehicle traffic must be kept clean of debris

and either be watered, treated with dust-suppressant chemicals, or paved with a cohesive hard

surface that is maintained intact and cleaned as necessary.

(3) All excavated areas must be watered or treated with dust-suppressant

chemicals as necessary to control particulate matter emissions.

(e) Tire shredding, outdoor dry abrasive blasting, the operation of a temporary rock

crusher used exclusively for cell construction, or waste solidification/stabilization when fine

materials are used in the process, must not occur simultaneously (no two or more processes

can occur at the same time).

(f) An MSW landfill cell that contains Class 1 industrial nonhazardous waste greater than

20% by weight or volume must have a GCCS associated with the location of the Class 1 waste,

and that GCCS is subject to the provisions of §330.995 of this title (relating to Recordkeeping

and Reporting Requirements for all Municipal Solid Waste Landfill Sites).

§330.993. Additional Requirements for Owners or Operators of Category 3 Municipal Solid

Waste Landfills.

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removed provided that the following are met:

- (a) The owner and/or operator must comply with the applicable provisions as specified in 40 Code of Federal Regulations §§60.752 60.759 and 40 Code of Federal Regulations Part 63, Subparts A and AAAA. The landfill gas collection and control system may be capped or
- (1) the municipal solid waste landfill is permanently closed in accordance with Subchapter K of this chapter (relating to Closure and Post-Closure); and
- (2) the conditions of 40 Code of Federal Regulations §60.752(b)(2)(v) [§60.752(2)(b)(v)] are met, and a closure report has been submitted to the Texas Commission on Environmental Quality's Air Permits Division in accordance with 40 Code of Federal Regulations §60.757(d).
- (b) Methane concentration at the surface of the municipal solid waste landfill must be monitored quarterly, as specified in 40 Code of Federal Regulations §60.755(c).
- (c) The gas collection and control system must be monitored in accordance with the provisions specified in 40 Code of Federal Regulations §60.756.

§330.995. Recordkeeping and Reporting Requirements for all Municipal Solid Waste Landfill Sites.

- (a) A copy of this subchapter along with any claimed permit by rule, the applicable general conditions of Chapter 106, Subchapter A of this title (relating to General Requirements), and any claimed standard permits must be kept at the site.
- (b) The operator will keep records for any permit by rule or standard permit claimed containing sufficient information to demonstrate compliance with Chapter 106, Subchapter A of this title and all applicable permit by rule or standard permit conditions. This information must include, but is not limited to, production records and operating hours.
- (c) The owner or operator will maintain additional records specified in 40 Code of Federal Regulations (CFR) Part 60, Subpart WWW or 40 CFR 63, Subpart AAAA, if applicable, including:
- (1) an initial design capacity report required by 40 CFR §60.757(a)(2), or an amended design capacity report required by 40 CFR §60.757(a)(3);
- (2) records of the non-methane organic compound emission rates, determined annually using the procedures specified in 40 CFR §60.754(a)(1), or every five years using the procedures of 40 CFR §60.757(b)(1)(ii), as applicable, and submit the non-methane organic compound emissions rate report within 90 days of exceeding 2.5 million megagrams and 2.5 million cubic meters and annually thereafter, or every five years in accordance with 40 CFR §60.757(b); and
- (3) all records in accordance with the provisions of 40 CFR §60.758, Recordkeeping Requirements.

- (d) A semiannual compliance report must be submitted to the Texas Commission on Environmental Quality's Office of Compliance and Enforcement, in accordance with the provisions of 40 CFR §63.1981 [§63.1980].
- (e) Records must be maintained at the site and made available at the request of representatives of the executive director, the United States Environmental Protection Agency, or any local air pollution control program having jurisdiction over the site.
 - (f) Records must be retained for at least 60 months.