

The Texas Commission on Environmental Quality (commission) adopts the amendment to §106.534 *with change* to the proposed text as published in the September 9, 2005, issue of the *Texas Register* (30 TexReg 5539).

BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE ADOPTED RULE

The commission adopts the amendment to §106.534, Municipal Solid Waste Landfills and Transfer Stations, to state the specific activities that are permitted under the section. Those activities are cell construction, waste disposal, and waste transfer. The previous rule language stated that municipal solid waste landfills (MSWLFs) and waste transfer stations operating in compliance with the Texas Solid Waste Disposal Act are permitted by rule. This language may have been misleading to landfill owners and operators and the general public because it implied that any and all activities at a landfill are permitted by this rule. The only facility authorized under the permit by rule, however, is the landfill itself. The commission adopted eligibility criteria for authorization under §106.534 in order to clarify the scope of activities and landfill size that will maintain emissions to an insignificant level for purposes of meeting statutory requirements of Texas Health and Safety Code (THSC), Texas Clean Air Act (TCAA), §382.05196. Some landfill sites may also conduct various activities that would require separate authorizations.

Air dispersion models were used to estimate the downwind concentration of pollutants emitted from landfills and transfer stations. The models' predictions are conservative, based on the general assumptions used to develop the model as well as the engineering assumptions used to determine emission rates. In addition, it is generally assumed that all sources emit pollutants simultaneously at

maximum rates, and during worst-case meteorological conditions. These assumptions are not expected to occur in actual operation of the sources modeled. The modeling for this permit by rule was conducted to evaluate the worst-case operating scenarios for a landfill that is larger in size than a landfill that could be authorized under the revised permit by rule. Pollutants evaluated included particulate matter (PM) and volatile organic compounds (VOCs), and the commission determined that the PM and VOC emissions from a landfill authorized under §106.534 would be less than or equal to the emissions used in the modeling demonstration. Therefore, the emissions from landfills being permitted by this rule would be protective of human health and the environment. Emissions from roads were not evaluated because they are not considered a facility as defined in TCAA, §382.003(6). Maintenance, startup, or shutdown emissions from the landfill or transfer station activities are included under this permit by rule but these emissions are minimal and not significantly different than emissions from normal operations.

In a separate action, the commission also adopted a new air standard permit in 30 TAC Chapter 330, Subchapter U, Standard Air Permits for Municipal Solid Waste Landfill Facilities and Transfer Stations for MSWLFs receiving nonhazardous waste. The subchapter includes various facilities commonly found at landfill and waste transfer sites and is intended for use by larger MSWLFs with more extensive support activities.

SECTION DISCUSSION

§106.534. Municipal Solid Waste Landfills and Transfer Stations.

The amendment specifies that landfill cell construction and waste disposal activities at transfer stations

of the types specified may be authorized under this section. Landfill cell construction activities may include unloading, spreading, or compacting of waste and applying as daily, immediate, or final cover. The commission is adding a reference to 40 Code of Federal Regulations (CFR) §60.751 to specify the meaning of the definition of landfill cell construction or modification to prevent confusion with the term “construction or modification” as it is used in other definitions applicable to air contaminants. This permit by rule does not limit the type of landfill authorized if it complies with the Texas Solid Waste Disposal Act. Reference to the Texas Solid Waste Disposal Act was removed from this section because it included the authorization of industrial landfills, in addition to other waste operations such as bioreactors. This proposed amendment limits the type of landfill to which the permit by rule is applicable in order to exclude industrial landfills and bioreactors.

Use of permits by rule are limited by TCAA, §382.05196, to those facilities that would make an insignificant contribution of air contaminants to the atmosphere. The new §106.534(1) specifies when sites having facilities other than landfill cell construction and waste disposal would not qualify for the permit by rule, and therefore, must meet the conditions of the concurrently adopted Chapter 330, Subchapter U, or apply for a permit under Chapter 116. This would include new or modified landfills and transfer stations that do not meet the requirements of this permit by rule authorization. Some examples of types of facilities common at landfills that are not included in this rule are engines and storage tanks. In response to public comment, the commission removed the proposed 25-ton restriction on daily waste acceptance. Landfills with other facilities located on site must still get authorization for those facilities either through other permits by rule or through use of the air standard permit in Chapter 330, Subchapter U.

Adopted §106.534(2) requires that the site owner or operator obtain a valid permit or registration under §330.7, Permit Required, when claiming this authorization to ensure compliance with the commission's solid waste regulations.

Adopted §106.534(3) requires that the site have a design capacity of less than 2.5 million megagrams (Mg) by mass or 2.5 million cubic meters by volume. This restriction will apply to landfills that are new or modified after the effective date of this rule.

Adopted §106.534(4) requires that the site have a non-methane organic compound (NMOC) emission rate of less than 50 Mg per year (Mg/yr). This emission rate was selected based on the requirements in 40 CFR Part 60, Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills. A landfill that is subject to 40 CFR Part 60, Subpart WWW and has an NMOC emission rate equal to or greater than 50 Mg/yr, must have a gas collection and control system preapproved and installed. The permit by rule authorization is intended to be used by those landfills that are small enough not to generate the amount of landfill gas that requires a gas collection and control system. In order to evaluate a worst-case scenario for landfill and transfer station fugitive gas emissions, an air quality dispersion modeling analysis was performed to evaluate the effect based on the 50 Mg/yr NMOC emission rate. The air quality dispersion modeling assumed the nature and characteristic for the transfer stations and landfills fugitive emissions were identical, which is an overly conservative approach. Upon the evaluation of the modeling results, the commission concluded that the MSWLF and transfer station emissions are protective of human health and the environment, and that these uncontrolled emissions did not jeopardize public health and welfare.

Adopted §106.534(5) requires that the emissions from the entire site do not exceed 25 tons per year of VOCs and PM. Air dispersion modeling was performed to verify that these limits are protective of human health and the environment.

Adopted §106.534(6) states that visible emissions from the site must not leave the property for a period exceeding 30 seconds in any six-minute period as determined by United States Environmental Protection Agency (EPA) Test Method 22. This opacity limit constitutes a reasonable measure of best available control technology standards of the air permits program and should minimize the potential for dust nuisances.

Adopted §106.534(7) authorizes stand-alone transfer stations located at sites other than an MSWLF and requires compliance with the Texas Solid Waste Disposal Act. In response to public comment and after analysis of additional material concerning transfer stations, the commission concluded that the proposed 165-foot setback distance was not justified. Instead of the setback distance, the commission will require transfer stations holding waste overnight be covered by a building with a vertical exhaust at least 16 feet above ground level and with 45,000 cubic feet per minute ventilation capacity.

FINAL REGULATORY IMPACT ANALYSIS DETERMINATION

The commission reviewed the rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and determined that the amendment does not meet the definition of a “major environmental rule” as defined in that statute. According to Texas Government Code, §2001.0225(g)(3), a “major environmental rule” is a rule that is specifically intended 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. The intent of this rulemaking is to resolve the misinterpretation that the current permit by rule language authorizes all activities at an MSWLF or transfer station when in fact various activities beyond cell construction require separate authorizations. The amendment to §106.534 does not meet the definition of “major environmental rule” because it does 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. The purpose of the amendment is to detail precisely what activities are authorized under this section. The previous rule language caused confusion among landfill operators and the general public as to what activities are authorized. The rulemaking is prospective and would neither affect facilities currently claiming the existing permit by rule, nor prevent landfills or transfer facilities from obtaining the necessary authorizations to construct.

In addition, 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 rulemaking is not subject to the regulatory analysis provisions of Texas Government Code, §2001.0225(b), because the proposed amendment does not meet any of the four applicability

requirements. Specifically, the amendment implements the requirements of THSC, TCAA, §382.05196, regarding Permits by Rule.

TAKINGS IMPACT ASSESSMENT

The commission evaluated this rulemaking and performed an assessment of whether this action would constitute a takings under Texas Government Code, Chapter 2007. Promulgation and enforcement of this rule would be neither a statutory nor a constitutional taking of private real property. This rulemaking amends §106.534 so that only cell construction and waste disposal activities are authorized under this section. The purpose of the amendment is to detail precisely what activities are authorized under this section. The previous rule language caused confusion among landfill operators and the general public as to what activities are, or are not, authorized. Landfill owners and the general public will benefit from clearer rule language that specifies the requirements for landfill and transfer station operations that use this section to authorize air emissions. These requirements are established in order to protect public health and welfare from air emissions from these types of facilities. Landfill facilities that have activities other than cell construction and waste disposal, and transfer stations that cannot meet the setback requirements of the amended section, would not be precluded from obtaining an air quality permit through other authorizations. The amendment does not affect private property in a manner that restricts or limits an owner's right to the property that would otherwise exist in the absence of a governmental action. The amendment does not add a requirement for an air authorization for landfills and transfer stations that did not exist previously. Therefore, the amendment to Chapter 106 would not constitute a takings under Texas Government Code, Chapter 2007.

CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission determined that this rulemaking action relates to an action or actions subject to the Texas Coastal Management Program (CMP) in accordance with the Coastal Coordination Act of 1991, as amended (Texas Natural Resources Code, §§33.201 *et seq.*), and the commission rules in 30 TAC Chapter 281, Subchapter B, concerning Consistency with the Texas Coastal Management Program. As required by §281.45(a)(3) and 31 TAC §505.11(b)(2), relating to Actions and Rules Subject to the Coastal Management Program, commission rules governing air pollutant emissions must be consistent with the applicable goals and policies of the CMP. The commission reviewed this action for consistency with the CMP goals and policies in accordance with the rules of the Coastal Coordination Council, and determined that the action is consistent with the applicable CMP goals and policies. The CMP goal applicable to this rulemaking action is the goal to protect, preserve, and enhance the diversity, quality, quantity, functions, and values of coastal natural resource areas (31 TAC §501.12(l)). No new sources of air contaminants are authorized and the revisions will maintain the same level of emissions control as the existing rules. The CMP policy applicable to this rulemaking action is the policy that commission rules comply with federal regulations in 40 CFR, to protect and enhance air quality in the coastal areas (31 TAC §501.14(q)). This rulemaking action complies with 40 CFR Part 51, Requirements for Preparation, Adoption, and Submittal of Implementation Plans. Therefore, in accordance with 31 TAC §505.22(e), the commission affirms that this rulemaking action is consistent with CMP goals and policies.

EFFECT ON SITES SUBJECT TO THE FEDERAL OPERATING PERMITS PROGRAM

Because §106.534 is an applicable requirement under 30 TAC Chapter 122, Federal Operating Permits

Program, owners or operators subject to the Federal Operating Permit Program must, consistent with the revision process in Chapter 122, revise their operating permit to include the revised §106.534 requirement for each landfill or transfer station affected by the revisions at their site.

PUBLIC COMMENT

The commission held a public hearing on this proposal in Austin on September 29, 2005. During the public comment period that closed on October 31, 2005, the commission received comments from Houston Regional Group of the Sierra Club (HSC), Waste Management Texas (WMTX), Allied Waste Management (Allied), Russell, Moorman, and Rodriguez, LLP (RMR), and the Lone Star Chapter of the Solid Waste Association of North America (TxWANA). All of the commenters opposed the proposed amendment to §106.534.

RESPONSE TO COMMENTS

HSC commented that there is no mention of odorous compounds originating at small landfills or transfer stations in the list of compounds analyzed for their effect on public health. The commenter stated that "Odorous compounds should be examined specifically by this PBR analysis to ensure that their emission does not cause a nuisance condition," because HSC further states that ". . . odorous compounds can cause a person to become sick or jeopardize his/her public health and welfare." The commenter also stated that the 165-foot setback applicable to transfer stations could not be enough when considering the effect of these compounds.

The commission received additional information from stakeholders on transfer stations not located

at MSWLFs after the public comment period closed for the proposed rules. That information was sufficient for the commission to conduct its evaluation. The commission analyzed compounds for nuisance conditions, as well as for protection of public health and welfare. Specifically, the commission reviewed three odorous compounds from Table 2.4.1, *Default Concentration for Landfill Gas Constituents*, in the EPA guidance document AP-42 Fifth Edition, *Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources*. These compounds evaluated were dimethyl sulfate, ethyl mercaptan, and methyl mercaptan, which are common odor producing compounds, and the commission determined that the standard permit is protective of public health and welfare. Air dispersion modeling indicated that these three compounds presented no problems, with regard to odor, at the property line for transfer stations that retain 1,000 tons or less of municipal solid waste overnight. Transfer stations retaining over 1,000 tons overnight will be required to have the waste holding area covered by a ventilated building.

HSC prefers that visible emissions limitations from transfer stations be limited to a cumulative 30 seconds over a two-hour period instead of the proposed 30-second accumulation in six minutes.

The commission is not changing the rule in response to this comment. The 30 seconds in six-minute standard is an accepted standard used in other authorizations for sources of PM.

Allied and WMTX commented that the commission should remove the setback requirement for stand-alone transfer stations. They stated that modeling based on fugitive emissions similar to landfills is overly conservative, assuming the volume of waste at a small landfill and a transfer station is

comparable. The magnitude of waste at a small landfill is magnitudes greater. Allied provided additional data for modeling input. TxWANA agreed that the modeling was overly conservative. TxWANA sought clarification as to whether a “receptor” is an off-property receptor.

The commission examined additional material concerning the volume of material being moved through transfer stations as compared to landfill material volumes and concluded that the setback distance was not required for protection of public health. Waste holding areas that store waste overnight will be required to be covered by a ventilated building. A receptor refers to individuals, structures, and public areas not owned by the landfill operator.

Allied and RMR commented that the applicability of §106.534 should be expanded to cover landfills accepting more than 25 tons of waste per day. This restriction and the lack of authorization of ancillary activities limits the usefulness of the permit by rule. Allied stated that it is not aware of any landfills accepting such a low volume of waste.

The commission agrees with Allied’s assessment of the limited usefulness of the permit by rule as proposed and removed the 25 tons of waste per day restriction. The use of the permit by rule will still be restricted based on the landfill design capacity of 2.5 million megagrams or 2.5 million cubic meters.

Allied recommended that proposed §106.534 should be expanded to authorize closed landfills.

The commission recognizes that closed landfills may still have a valid permit under §330.7, Permit Required, and landfill closure does not prevent claiming this permit by rule.

SUBCHAPTER X: WASTE PROCESSES AND REMEDIATION

§106.534

STATUTORY AUTHORITY

The amendment is adopted under THSC, §382.011, which authorizes the commission to administer the requirements of the TCAA; THSC, §382.017, which authorizes the commission to adopt rules consistent with the policy and purposes of the TCAA; THSC, §382.057, which authorizes the commission to exempt from permitting, changes within any facility that would not make a significant contribution of air contaminants to the atmosphere; THSC, §382.051, which authorizes the commission to issue permits for construction of facilities that emit air contaminants; and THSC, §382.05196, which authorizes the commission to adopt permits by rule for types of facilities that will not make a significant contribution of air contaminants to the atmosphere.

The adopted amendment implements THSC, §§382.011, 382.017, 382.057, 382.051, and 382.05196.

§106.534. Municipal Solid Waste Landfills and Transfer Stations.

Municipal solid waste landfill (MSWLF) cell construction or modification, as defined in 40 Code of Federal Regulations (CFR) §60.751, of MSWLF Type I, Type I-AE, Type II, Type III, Type IV, Type IV-AE, and Type V transfer stations as defined in §330.5 of this title (relating to Classification of Municipal Solid Waste Facilities) that meet the conditions listed in this section are permitted by rule.

(1) The following are not authorized by this section:

(A) MSWLF sites that have facilities other than cell construction and waste disposal; or

(B) maintenance, startup, shutdown, or emission excursions under Chapter 101, Subchapter F of this title (relating to Emissions Events and Scheduled Maintenance, Startup, and Shutdown Activities).

(2) The owner or operator must have obtained a valid permit or registration under §330.7 of this title (relating to Permit Required), for the site.

(3) The MSWLF or transfer station must have a design capacity of less than 2.5 million megagrams (Mg) by mass or 2.5 million cubic meters by volume.

(4) The MSWLF or transfer station must have a non-methane organic compound emission rate of less than 50 Mg per year as determined by United States Environmental Protection Agency (EPA) publication AP-42, Compilation of Air Pollutant Emission Factors.

(5) Emissions from the site are limited to 25 tons per year of volatile organic compounds or particulate matter. There are no short-term limitations for particulate matter and volatile organic compounds.

(6) Visible emissions from the site must not leave the property for a period exceeding 30 seconds in any six-minute period as determined by EPA Test Method 22, as found in 40 CFR Part 60, Appendix A.

(7) Transfer stations not located at an MSWLF site shall:

(A) operate in compliance with the Texas Solid Waste Disposal Act, and;

(B) be required to have the waste holding area covered by a ventilated building that has a minimum vertical exhaust vent located at least 16 feet above ground level with a capacity of 45,000 cubic feet per minute, if the facility retains over 1,000 tons of waste overnight.

(8) Facilities shall comply with applicable requirements of all federal regulations and state rules.