The Texas Commission on Environmental Quality (commission or TCEQ) adopts an amendment to §328.4 *with changes* to the proposed text as published in the April 4, 2008 issue of the *Texas Register* (33 TexReg 2800) and will be republished.

BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE ADOPTED RULE

House Bill (HB) 2541, 80th Legislature, Regular Session, 2007 requires the commission to establish rules regarding the size, characteristics, and fire safety features for non-permitted and non-registered municipal solid waste (MSW) recycling facilities that store combustible materials to produce compost or mulch and are located in certain counties that have areas designated as recharge or transition zones of a sole source aquifer and that have a population of more than 1.3 million. This bill also requires more stringent standards for facilities located over sole source aquifers. At present, Bexar County is the only county that satisfies the population and aquifer qualifiers contained within HB 2541. The effective date of the legislation was September 1, 2007. The bill further stipulates that rules implementing the requirements for these MSW recycling facilities must not become effective until the first anniversary of the adoption date of the new rules. The commission is implementing the specific rule requirements of HB 2541, which address the rather unique environmental setting of Bexar County. These requirements are not applicable to other counties.

SECTION DISCUSSION

The commission adopts administrative changes throughout the rule to insert and update cross-references.

The commission adopts changes to cross-references in §328.4(a), (c), (d), and (f) to update chapter citations due to reorganization that occurred during a previous rulemaking.

The commission adopts an amendment to §328.4(a) to include cross-references to 30 TAC Chapter 330, Municipal Solid Waste, and Chapter 332, Composting, to mirror the references contained in those chapters. These changes are administrative, intended to improve the use and readability of this section.

The commission adopts §328.4(g) to implement the requirements of Texas Health and Safety Code (THSC), §361.1191, Regulation of Certain Recycling Facilities in Certain Counties, as established by HB 2541 for Bexar County. This statutory change took effect September 1, 2007 and applies only to MSW recycling facilities that are not required to have permits or registrations; that store combustible materials to produce mulch or compost; and that are located in certain counties. These counties must have a population of more than 1.3 million and include areas designated as recharge or transition zones of an aquifer as defined under the commission's Edwards Aquifer Protection Program that is the sole or principle source of drinking water for an area under Section 1424(e), Safe Drinking Water Act of 1974 (42 United States Code, Section 300h-3(e)) and is designated by the United States Environmental Protection Agency (EPA) as the Edwards Underground Reservoir under 40 Federal Register (FR) 58344. The referenced EPA designation, published December 16, 1975, was only for areas found within Medina, Bexar, and Comal Counties. Of the three counties designated in 1975, only Bexar County has a present population greater than 1.3 million persons and is the only county presently affected by the new legislation. Travis County is not potentially affected by this legislation because the Austin-Area Edwards Aquifer was designated as a sole source of drinking water by the EPA on June 7, 1988 (53 FR 20897). As a result, Travis County is not within the 1975 designation. There are no applicable existing federal regulations. Municipalities, Bexar County, state and federal agencies, and persons affiliated with an MSW disposal permit who operate mulch and compost facilities located within Bexar County which were

previously exempt from storage and processing limitations, recordkeeping, and reporting, will now be subject to these requirements.

The commission adopts §328.4(g)(1) to establish a storage time limit applicable to combustible material at the facility as required by HB 2541. Since proposal, the commission has revised the basis for at least 90% of the material to be removed from the facility to be by weight or by volume in response to comments. If a volume-based demonstration is used, the owner or operator will specify in the notice of intent (NOI) to operate the facility an appropriate conversion factor to convert volumes of incoming material to equivalent volumes of outgoing material. The commission changed from proposal, material must leave the facility during each subsequent 12-month period. This was also in response to comments. The material removal requirement is intended to prevent sham recycling operations where profits are made primarily from money received on the incoming material in conjunction with an overall gross accumulation of material. The 90% removal requirement is intended to provide flexibility in facility operations to allow for slight seasonal or annual variations in the demand of recycled material. The 90% removal requirement can be documented by the owner or operator through such means as sales receipts of material purchased from the facility or shipping invoices for material leaving the facility. Since proposal, the commission has made a change in response to comments to allow owners or operators of composting processes that take longer than 12 months to request an alternative compliance period of more than 12 months from the initial accumulation of material. These requests for additional time to accumulate and process material will be made as part of the NOI to operate the facility and will include a technical justification as well as any supporting information for the additional time.

The commission adopts §328.4(g)(2) to establish a maximum volume of combustible material to be stored

at the facility as required by HB 2541. The maximum storage volume limitation will be established by the most current NOI to operate the facility. The storage limitation will apply to both processed and unprocessed combustible material.

The commission adopts §328.4(g)(3) to require combustible material stored by the facility to produce mulch or compost be ground so that 100% has a particle size of six inches or less in at least one dimension and 90% has a particle size of six inches or less in all dimensions no later than 90 days after receipt. The commission revised this paragraph from proposal to allow for some material to be less than six inches in at least one dimension in response to comments about typical grinding operations. While processed material is also combustible, unprocessed brush at mulch and compost sites represents the most immediate fire risk. Ground material is more likely to smolder in a confined manner and can more easily be doused with water or cut away from a pile to prevent further spread of the fire. The commission adopts an allowance for an owner or operator to request executive director approval for additional time to grind combustible materials up to 180 days after receipt of the material, if conditions warrant. There may be limited circumstances, such as the initial startup of a facility or an equipment malfunction, where it is not practical to grind materials within 90 days of receipt. This would allow the executive director to grant an extension to the processing time limit.

The commission adopts §328.4(g)(4) to establish individual pile size limits for combustible materials as required by HB 2541. The commission adopts the requirements that each pile shall not exceed 25 feet in height; that unprocessed combustible material shall not cover an area greater than 50,000 square feet at the facility, with no single pile exceeding 8,000 square feet; and that a pile of processed combustible material shall not cover an area greater than 25,000 square feet. The adopted height requirement for all

piles is consistent with commission guidance on cotton gin trash and Chapter 19, Section 1908 of the International Fire Code (IFC). The adopted maximum individual pile size area for unprocessed combustible material would limit the amount of material that could be engulfed in flames and is consistent with the requirements of §328.61, Design Requirements for Scrap Tire Storage Site. The 25,000 square feet limitation for processed material is consistent with the IFC, except that the footprint of the pile was adjusted downward since internal pile temperature monitoring, automatic sprinkler systems, and portable fire extinguisher requirements of the IFC are not included in this rule requirement. The maximum individual pile size area for processed material would limit the impact of a smoldering fire to a manageable pile size and is consistent with commission guidance on cotton gin trash.

The commission adopts §328.4(g)(5) to establish a limit on the number of piles of combustible materials at a facility, as required by HB 2541. The commission adopts the requirement that the number of piles shall not exceed the maximum number specified by the operator in the NOI to operate the facility.

The commission adopts §328.4(g)(6) to require fire lanes between piles of combustible material as required by HB 2541. The commission adopts a minimum separation of 40 feet from piles of unprocessed combustible materials. Since proposal, the commission revised the minimum separation between piles of processed material to be equal to the pile height between piles of processed materials in response to comments. The adopted rule allows narrower fire lanes adjacent to piles of processed materials since ground material is considered to represent a lesser fire risk than unprocessed brush. The commission adopts the requirement for an all-weather road which encircles the area used for processing and storage of combustible material. This all-weather road must have minimum 25-foot turning radii, be capable of accommodating firefighting vehicles during wet weather, and meet applicable local requirements and

specifications. The commission further adopts the requirement that there be space between buildings and piles that are kept open at all times and maintained free of combustible material, rubbish, equipment, or other materials. The commission adopts an allowance that this distance may be increased as necessary to protect human health and safety upon coordination with the local fire marshal.

The commission adopts §328.4(g)(7) to require at least a 50-foot buffer zone between the facility boundary and areas receiving, processing, or storing material. This provision is intended to implement HB 2541 by prohibiting the receipt, storage, and processing of brush, mulch, and compost within 50 feet of a residence, school, or church. This adoption is consistent with the set back distances required by §332.8, Air Quality Requirements, applicable to mulch and compost facilities.

The commission adopts §328.4(g)(8) to require a water pollution abatement plan for facilities located on the recharge or transition zones of the Edwards Aquifer. HB 2541 requires more stringent standards for facilities located over the recharge or transition zone of the Edwards Aquifer. The commission adopts the requirement for this plan to be consistent with the requirements for plans under 30 TAC §213.5(b) concerning the Edwards Aquifer.

The commission adopts §328.4(g)(9) to require the owner or operator to file, by the effective date of this subsection for existing facilities or at least 90 days prior to commencing new operations, an NOI in accordance with §328.5(b) that includes provisions to demonstrate compliance with this subsection. Based on comments received, the commission revised this paragraph from proposal to require a revised NOI to be filed with the executive director before an owner or operator revises a volume conversion factor used when demonstrating compliance with the 90% removal requirement of material accumulated

at a facility at the beginning of a 12-month period. A revised NOI to operate a facility must also be filed before a facility exceeds the maximum amount of material specified to be stored in an existing NOI. These provisions make it clear what actions are required and by when, thereby allowing for improvements to the inspection and enforcement processes.

The commission adopts §328.4(g)(10) to require an owner or operator of a facility subject to the requirements of this subsection to maintain all records necessary to demonstrate compliance with this subsection. This provision makes it clear that records are required that will improve the inspection and enforcement process.

The commission adopts §328.4(g)(11) to enhance enforceability by stating that failure to operate and maintain a facility as proposed in the current NOI for the facility is a violation of this chapter. This provision makes it clear that storage of processed or unprocessed material in excess of the maximum volume of material or the maximum number of piles specified in the current NOI is a violation and therefore will improve the inspection and enforcement process.

The commission adopts §328.4(g)(12) to establish that the rule does not become effective until the first anniversary of the date on which the rule was adopted, as required by HB 2541.

FINAL REGULATORY IMPACT ANALYSIS

The commission reviewed the rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and determined that the rulemaking is not subject to §2001.0225 because it is not a "major environmental rule" and it does not meet any of the four criteria listed in the statute. A

"major environmental rule" means a rule, the specific intent of which is 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.

This adoption meets the first part of the definition to be considered a "major environmental rule" because it is intended to protect the environment and reduce risk to human health from environmental exposure. The adoption is intended to implement HB 2541, 80th Legislature, 2007, for certain counties. The provisions that are adopted to establish annual storage time limits, the maximum volume that can be stored at a facility, size limits for individual piles of combustible material, a requirement for fire lanes between piles of combustible materials, set back distances from a facility's boundary, and recordkeeping requirements; and also require a water pollution abatement plan for facilities located on the recharge or transition zones of the Edwards Aquifer. These provisions will apply to some facilities that are currently exempt from this subchapter under THSC, §361.119 and 30 TAC §328.4(a) and §328.5(a). Adverse fiscal implications are anticipated for small or micro-businesses in Bexar County as a result of the adopted rule. There may be as many as three businesses that may have to reduce pile size, expand fire lanes, or increase recordkeeping practices as a result of the adopted rule. Because these adverse fiscal implications will only apply to a limited number of facilities in certain counties, the adoption is not expected to 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 adopted rule does not meet the definition of a "major environmental" rule because it is not expected to 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.

Furthermore, a regulatory impact analysis is not required, because the adopted rulemaking does not meet any of the four applicable requirements listed in Texas Government Code, §2001.0225(a). Texas Government Code, §2001.0225(a) only applies to a major environmental rule adopted by an agency, 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.

In this case, the adopted rule does not meet any of these applicability requirements. First, there are no standards set for these facilities by federal law and the adoption is specifically required by HB 2541, 80th Legislature, 2007. Second, the adopted rule does not exceed an express requirement of state law. THSC, §361.119 and §361.1191 authorize the commission to regulate recycling facilities, but there are no specific statutory requirements for recycling facilities that are exceeded by the adopted rule. Third, the rule does not exceed an express 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. Fourth, the commission does not adopt the rule solely under the general powers of the agency, but rather under the authority of THSC, §361.011, which establishes the commission's jurisdiction over all aspects of the management of MSW; §361.024, which provides the commission with rulemaking authority; §361.061, which authorizes the commission to require and issue permits governing the construction, operation, and maintenance of solid waste facilities used to store, process, or dispose of solid waste; §361.119, which authorizes the commission to adopt rules to regulate recycling facilities as solid waste facilities; and

§361.1191, which authorizes the commission to adopt rules addressing specific criteria for recycling facilities in certain counties. Therefore, the commission does not adopt the rule solely under the commission's general powers.

The commission invited public comment regarding the draft regulatory impact analysis determination. The commission received no comments regarding the draft regulatory impact analysis determination.

TAKINGS IMPACT ASSESSMENT

The commission completed a takings impact assessment for the rulemaking action under Texas Government Code, Chapter 2007. The specific intent of this rulemaking is to ensure that recyclable material does not create a nuisance or threaten or impair the environment or public health and safety. The adoption implements a portion of HB 2541, 80th Legislature, 2007, which requires the commission to establish rules regarding the size, fire safety features, and other design and operational standards for certain types of MSW recycling facilities in certain counties. The adopted rule implements the provisions of the legislation for Bexar County.

The adopted provisions for Bexar County establish: annual storage time limits, the maximum volume that can be stored at a facility, limits for individual piles of combustible material, requirements for fire lanes between piles of combustible materials, buffer zones, recordkeeping requirements, and requirements for a water pollution abatement plan for facilities located on the recharge or transition zones of the Edwards Aquifer. The adopted rule is intended to reduce the likelihood of large unmanageable fires at mulching and compost facilities and protect water resources in Bexar County.

The adopted rule substantially advances these purposes by amending specific provisions in Chapter 328. The adopted rule provides a benefit to society by protecting the environment, public health, and safety. The provisions relate to reporting and operational requirements for recycling facilities and do not impose a burden on a recognized real property interest and, therefore, do not constitute a taking.

The promulgation of the adopted rule is neither a statutory nor a constitutional taking of private real property by the commission. Specifically, the adopted rule does not affect a landowner's rights in a recognized private real property interest because this rulemaking neither: burdens (constitutionally) or restricts or limits the owner's right to the property that would otherwise exist in the absence of this rulemaking, nor would it reduce its value by 25% or more beyond that value which would exist in the absence of the adopted rule. Therefore, the adopted rule will not constitute a taking under Texas Government Code, Chapter 2007.

CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission reviewed the rulemaking and found that the rule is neither identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11, nor will it affect any action/authorization identified in Coastal Coordination Act Implementation Rules, 31 TAC §505.11. Therefore, the adopted rule is not subject to the Texas Coastal Management Program.

The commission invited public comment regarding the consistency with the Coastal Management Program. The commission received no comments regarding the consistency of the rule with the Coastal Management Program.

PUBLIC COMMENT

The TCEQ held a public hearing April 28, 2008, and the comment period closed May 5, 2008. The commission received oral comments from: The City of San Antonio, Geosource Inc. (Geosource), the Living Earth Technology Group, L.L.C. (LETCO), and Quality Organic dba Texas Hill Country Landscaping, Inc. (Quality Organic).

The commission received written comments from: Austin Wood Recycling/Austin Land Service (AWR/ALS), CIC Environmental (CIC), the City of Brownwood, the City of San Antonio, Eggemeyer Land Clearing, L.L.C., the Lone Star Chapter of the Solid Waste Association of North America (TxSWANA), Nature's Way Resources (Nature's Way), Risa Fisher & Associates, Inc. (Fisher), Silver Creek Materials Recycling and Compost (Silver Creek), LETCO, Texas Landfill Management, L.L.C. (TLM), and The Woodlands Grass Roots Environmental Education Network (TWG), and one individual.

Commenters either opposed portions of the rulemaking, supported the rulemaking with suggested changes, or supported portions of the rulemaking. Comments received during the formal comment period are addressed as follows.

RESPONSE TO COMMENTS

General Comments

Comment

AWR/ALS supported regulating sham recyclers without hurting legitimate businesses but stated that the rule has detrimental ramifications for legitimate businesses. LETCO stated that this rule should be written in a way that does not create financial hardships or operational standards that cannot be obtained by

legitimate operators. AWR/ALS, TLM, and TWG stated that the rule significantly increases the costs to legitimate compost operations.

Nature's Way and TWG commented that the rule will harm the composting industry in Texas for many reasons and will not accomplish the intended goals. Nature's Way and TWG stated that the rule as proposed is only attacking symptoms and not the real problems, that profitability will be harder and therefore would encourage more illegal operations with lower quality products, and that legal operations will be forced to close as they shift from marginal profitability to not being profitable due to increased operating costs.

TLM stated that brush pile fires can be avoided by enforcing the existing rules that limit the storage of recyclable materials and prohibit conditions which endanger human health or the environment. TLM further stated that this new rule will not generate any benefit without proper enforcement and that the perceived problem would not exist if current rules were enforced. TLM urged the commission to diligently pursue sham recycling facilities before another avoidable problem situation erupts which would lead to additional commission actions that further hurt legitimate recyclers.

Geosource commented that the commission should focus less on penalizing operators and more on compliance assistance.

Response

The commission appreciates these comments. The commission intends for the adopted limitations on combustible materials at mulch and compost facilities within Bexar County to primarily satisfy

the commission's legislative mandate to address fire prevention over sensitive aquifers within Bexar County. Additionally, the commission intends that these requirements may further help inspectors and enforcement officials distinguish between sham and legitimate operations. The adopted requirements for owner or operator notification, processing to a specified standard within a reasonable time frame, and material removal from a mulch or compost facility should further contrast sham operations where profits are made primarily from money received on the incoming material in conjunction with an overall gross accumulation of material as compared to legitimate operators whose economic viability depends on the sale of finished material. The commission recognizes that legitimate operators will tend to manage incoming brush as soon as practicable and that these operators will consider in-process and processed material to be valuable commodities requiring protection from losses due to mismanagement or fire. The commission further expects that legitimate operators will use prudent measures to adequately train staff; maintain necessary safety and fire control equipment; and employ best management operating practices such as temperature monitoring and moisture content control to safeguard incoming, in-process, and processed material even though these actions are not within the adopted requirements.

The commission encourages concerned persons to lodge complaints of suspected environmental violations through a toll-free hotline, (888) 777-3186, or by directly contacting the local TCEQ Region Office. All complaints will be investigated by commission staff. The commission made no changes in response to these comments.

Comment

CIC commented that raw material such as brush can be considered combustible if an ignition source is

available, but processed and finished material that has been combined with soil and manure and kept in a moist state is not combustible. CIC suggested the commission provide a definition of combustible material. If defined in the rule, CIC stated that financial assurance should be based on combustible material storage and not processed or finished product. CIC also stated that processed or finished product can be sold at a discounted rate to be removed from the site and the owner should not have to include processed or finished products in the cost estimate for financial assurance.

Nature's Way commented that fires are caused by improper moisture management of the piles and not by pile size. Nature's Way suggested enforcing regulations for watering equipment on grinding operations for woody materials.

Silver Creek cited literature references which indicate that moisture is a crucial requirement for composting, that the critical moisture content range supporting spontaneous combustion is roughly 20% to 45%, that there is enough moisture available for evaporation to hold down temperatures at moisture contents above 45%, and that composting operations typically have moisture contents ranging from 50% to 60%. Silver Creek further stated that there are composting facilities that maintain high moisture contents well above 50% and that calling processed compost combustible material is simply not accurate. Silver Creek suggested that this rule should better define processed combustible material as containing less than 50% moisture. Silver Creek stated that any material having a moisture content of 50% and above should not be regulated from a fire standpoint.

Response

The commission concurs with the comments regarding moisture content but is not prepared at this

time to mandate moisture content for mulch and compost activities that do not require a permit or registration. Mandating a moisture content would significantly increase a mulch or compost operator's expense to demonstrate compliance. The commission prefers that legitimate operators implement best management practices when processing material for mulch and compost and treat all inventories in a commodity-like manner. The commission expects that legitimate mulch and compost operators maintain appropriate moisture contents for all materials stored, in process, and for final product; ensure that ample water supplies exist both for moisture control and for fire fighting capability; train staff in proper fire fighting techniques; and provide and maintain all necessary equipment to quickly and effectively respond to a fire. The commission made no change in response to this comment.

The purpose of financial assurance is to cover third-party mobilization, operation, and disposition costs when material is abandoned. Mulch and compost is combustible if moisture content is not maintained. Since a desired or optimal moisture content cannot be assured at abandonment, the commission made no change relating to defining combustible material in terms of moisture content or relating to excluding material with moisture contents of 50% or greater from the financial assurance requirements for combustible material when stored outdoors.

Comment

CIC requested that the commission provide a mulch or compost checklist with yes, no, or N/A answers such as the permit by rule air checklists, that this will help industry understand the conditions that must be met in order to comply with the rule.

Response

The commission has developed TCEQ Publication RG-410, Requirements for Nonhazardous Recycling and Composting Facilities, and a guidance document entitled "Guidelines for Complying with Financial Assurance Requirements for Recycling, Composting, and Mulching Facilities." These documents, and additional resources, are available on the TCEQ web page "Composting and Mulching: Am I Regulated," online at http://www.tceq.state.tx.us/permitting/waste_permits/msw_permits/MSW_amIregulatedcomposting.html. The commission made no change in response to this comment.

Comment

CIC requested the commission provide a sample fire prevention and suppression plan for industry to use as a guide to help standardize the plan and provide guidance for industry and inspectors.

Response

Both the enabling legislation and the adopted rule contain components that contribute to overall fire safety; however, the commission suggests that fire prevention and suppression plans are more appropriately developed through coordination with state and local fire control officials. The commission made no change in response to this comment.

Comment

Geosource asked at what point the commission would take over firefighting responsibilities from local fire fighters.

Response

The commission does not intend to take over firefighting responsibilities where an owner or operator or a local firefighting authority are providing an adequate response. The commission would consider taking the lead responding to a fire based on the ability of local firefighters to respond and the financial resources available to the commission at the time. The commission made no change in response to this comment.

Comment

Eggemeyer Land Clearing, L.L.C. stated that they have multiple grinders in and around the San Antonio area; that the fair market price for grinding in San Antonio ranges from $1.25 to $2.00 per cubic yard depending on the size of any debris and how clean the debris is as far as rock, dirt, and concrete; and that the cost for disposal of the grindings is approximately $2.50 per cubic yard, of which $2.00 per cubic yard is for trucking and $0.50 per cubic yard is for loading.

Response

The commission appreciates this information.

Section 328.4(g).

Comment

The City of San Antonio, while noting that HB 2541 was targeted only at Bexar County, stated that the rule should apply to all Texas counties. The city states that a mulch fire can occur anywhere, does not understand why the rule should be applicable only to Bexar County, and stated that the rule would have more benefit to rural areas that may not have adequate fire fighting resources in a county with a

population less than 1.3 million people.

Geosource stated that several counties such as Comal County and Kendall County have sole source aquifers. Geosource did not understand why Travis County should be exempted and suggested that there be a level playing field. Geosource stated that Bexar County mulch and compost facilities will bear a burden that facilities located in other counties and municipalities will not have to bear.

AWR/ALS has an imminent concern that these regulations may be adopted statewide and stated that there is no need to adopt this legislation statewide.

The City of Brownwood stated that regulators in the West Central Texas area have discussed publicly their desire to implement whatever rule comes out of the rulemaking process of HB 2541. The City of Brownwood agreed that while the rule does need to be updated, the rule should be based on the size and location of the facility rather than a one size fits all approach.

LETCO, Nature's Way, Silver Creek, and TWG expressed concern that, although the rule is intended to be limited to Bexar County, other cities and counties may adopt this rule at some point. LETCO stated that its facility's capacity will be cut in half if the rule as proposed goes statewide. LETCO stated that this would result in LETCO being noncompliant and having to cancel large contracts. LETCO stated that facilities similar to theirs that are within cities are typically land locked and that the price of adjacent land, if available, would be hundreds of thousands of dollars per acre. LETCO stated that locations within cities are crucial to recycling success due to increased transportation and fuel costs associated with an outlying facility.

TLM stated that this rule is not necessary to address problem facilities and therefore urges the commission to forever limit this rule to Bexar County.

Response

HB 2541 and this adopted rulemaking are applicable only to the unique situation in Bexar County. Actions taken by other Texas cities and counties are beyond the scope of this rule and are not controlled by the commission. The commission made no changes in response to these comments.

Comment

The City of San Antonio and Geosource sought clarification as to whether local governments remained exempt from the entire chapter or whether local governments are exempt from certain parts of the chapter such as financial assurance, registration, and reporting.

Response

Presently, local governments are exempt from §328.4, Limitations on Storage of Recyclable Materials, and §328.5, Reporting and Recordkeeping Requirements, but are subject to the remaining requirements of Chapter 328. HB 2541 did not exempt local governments within Bexar County from the adopted requirements located in §328.4(g) relating to storage, recordkeeping, and reporting. Therefore, local governments within Bexar County are only subject to the storage limitations of §328.4(g) and the registration and recordkeeping requirements of §328.4(g) and §328.5(b). The commission made no change in response to this comment.

Comment

Geosource requested clarification as to the applicability of the proposed rule to material production yards and retailers. Geosource stated that production yards transfer processed material to sales yards. Sales yards sell retail and wholesale and may also perform some processing as well. Geosource also suggested a fixed financial assurance requirement, $1,000,000 for example, for all mulch and compost facilities.

Response

Recycling facilities that store and process combustible materials to produce mulch and compost in Bexar County are subject to these adopted regulations. After material processing has been completed and transferred to another facility, a facility that performs no processing of recyclable materials but is only involved in the sale of the materials is not a recycling facility and therefore is not subject to these adopted regulations. Recycling facilities outside of Bexar County are not subject to the adopted regulations. A $1,000,000 fixed financial assurance amount would certainly be easier to implement but may not be protective or appropriate for all facilities. Variations in facility size and location do not support imposing a one size fits all flat rate financial assurance amount for third-party closure of the facility. The commission made no changes in response to these comments.

Comment

AWR/ALS stated that fire protection in Harris and Travis County is based on the IFC. AWR/ALS suggested that the proposed rule take into account exceptions based on sales of mulch, fire fighting capabilities, and local fire officials.

Response

Mulch sales by a recycling facility are a way of demonstrating compliance with existing §328.4 that materials are recyclable with an economically feasible means of being recycled. Additionally, facilities that are not presently exempt from the requirements of §328.5 are required to have a fire prevention and suppression plan available for review and coordination with local fire control officials. The commission made no change in response to this comment.

Comment

Geosource commented that counties are exempted from many of the requirements that private business must follow relating to mulch and compost. Geosource further stated that the Alamo Area Council of Governments gives money to these counties to buy grinders in competition with private business, creating a double standard.

Response

The commission appreciates these comments and has forwarded them to the TCEQ Regional Solid Waste Grants Program so they can bring these comments to the attention of the Solid Waste Advisory Committee of the Alamo Area Council of Governments. Projects approved and funded by a regional Council of Governments must promote cooperation between public and private entities, provide services not readily available, and must not create a competitive advantage over a private industry that provides recycling or solid waste services. The exemptions for local governments contained in existing §328.4 and §328.5 implement existing statutory exemptions which the commission does not have authority to change. The commission made no change in response to this comment.

Section 328.4(g)(1). Storage time limits of all material.

Comment

Geosource stated that since some of these facilities receive gravel and soil in addition to mulch that the annual storage limits refer only to mulch and compost and not to all materials. Geosource recommends using the submitted NOI as a ceiling on the amount of material that may be stored at a facility.

Response

Soil and gravel are not usually considered recyclable materials and so would not be subject to the terms and conditions of §328.4, pertaining to storage limitations of recyclable materials. The commission revised this paragraph to refer to the removal of combustible material from the facility, consistent with the additional requirements of this adopted subsection.

Comment

Nature's Way and TMG stated that some composting techniques require over three years in order to adequately treat residual herbicides found within feed stocks, or to fully decompose certain conifer and juniper feed stocks that naturally contain turpentines, terpines, rosins, phenolics, and waxes; while composted mulch operations may only require nine to 12 months depending on the sales season. Nature's Way suggested placing time limits only on woody mulch products, not compost.

Response

Acknowledging that many mulch products may undergo some amount of biological degradation prior to sale, the definitions of compost and mulch in Chapter 332 are not sufficiently distinct for

the exempt and notification tiers established within Chapter 332 to allow for different time limitations based on material type. The commission acknowledges that some composting processes can take longer than the time allowed by this rule amendment, but these storage limits are necessary to prevent sham recyclers from creating a fire hazard. Therefore, the commission revised this paragraph to allow owners or operators of composting processes that take longer than 12 months to request a compliance period for more than 12 months from the initial accumulation of material, to have these requests for additional time to accumulate and process material be made part of the NOI to operate a facility, and to have owners or operators include a technical justification as well as any supporting information for the additional time as part of the submitted NOI to operate a facility.

Comment

CIC, Geosource, LETCO, and Silver Creek stated that a 90% removal by weight basis would require the purchase and installation of scales and that most materials are received, recorded, and sold by the cubic yard and not by weight.

Geosource stated that requiring removal by a weight basis brings in moisture content as a factor and that feed stock weights vary. LETCO stated that materials are much heavier when finished due to added moisture and so a weight basis is not a reasonable way to measure turn-over. Silver Creek noted that the varying degrees of moisture content from the woody feedstock to the final compost can greatly affect weight and may lead to compliance difficulties with this subsection. Fisher and TxSWANA commented that while most operations typically sell their product within a year, documenting 90% removal will be difficult at best and subject to misinterpretation.

Fisher, Silver Creek, and TxSWANA stated that composting is a seasonal operation in most climates with the amount of feedstock accepted and the amount of product produced varying tremendously during the course of a year, that the composting process often entails repeatedly combining piles or windrows during processing to optimize site usage, and that the final product of a properly run compost operation is reduced dramatically in both weight and volume through the course of processing. Silver Creek stated that the resulting compost product does not resemble the starting feedstock either physically or chemically. Fisher stated that tracking a given quantity of material for one year from the time it enters the site until it leaves is impossible and that trying to correlate feedstock-in to product-out one year later is meaningless due to seasonality. TxSWANA stated that tracking the material in a clearly reportable fashion may be quite complicated to the precision required of a 90% turnaround rule.

CIC recommended that the 90% material removal requirement be on a weight or volume basis. CIC suggested that the owner or operator be required to provide records documenting compliance with the subsection to ensure the facility is meeting the 90% limit and can handle an increase in raw material.

Fisher, LETCO, and TxSWANA suggested that the storage time limit for all material be revised to require at least 50% by weight or volume of all materials present on-site as of a specified annual anniversary date be removed from the site during the one-year period following that date. Fisher and TxSWANA suggested that if a volume-based calculation is used, that an appropriate conversion factor be applied to convert volumes of unprocessed material to equivalent volumes of processed material with the approval of the executive director.

Geosource stated that grinding of loose brush results in a 40% reduction in volume and that composting results in an additional 20% volume reduction of the incoming material. Silver Creek stated that grinding reduces volume at a ratio of about 3:1, with composting providing a further reduction of both volume and mass of 50%. Silver Creek stated that with all these changes, it did not know how the proposed 90% by weight removal could be quantified.

The City of Brownwood did not oppose an annual storage time limit, but stated that the 90% removal of all materials annually poses an undue burden on small municipal operators due to the low population density of West Texas. The City of Brownwood stated that municipal operators tend to give mulch away to residents and no records are kept since the material is free for the taking. The City of Brownwood suggested that 50% removal is sufficient to eliminate most fire hazards.

Response

The commission does not intend to require exempt and notification tier mulch and compost facilities to purchase and install weighing scales. The commission agrees that tracking material removal from a facility solely by a weight basis may prove difficult due to variations in material and moisture content. Additionally, tracking material removal from a facility using a volume basis alone will prove difficult due to the great volume reduction of material through grinding and composting. Comments have indicated that grinding brush to mulch may result in a 40% - 67% volume reduction, and that subsequent composting may result in an additional 20% - 50% volume reduction. In order to implement the requirement for removal of material from a facility, the commission revised §328.4(g)(1) to allow for annual material removal of 90% from the facility by weight or volume as documented through appropriate recordkeeping and an executive director

approved conversion factor. The rule was also changed to specify that the amount required to be removed relates to the amount accumulated at the beginning of the period.

Comment

Fisher, Nature's Way, TWG, and TxSWANA further stated that the provision does not allow for sudden influxes of recyclable debris as a result of a disaster, such as after a tornado or a tropical storm, that require more than one year to process properly. Geosource requested clarification as to how quickly the commission would respond to requests from processing yards to increase capacity after disasters such as a hurricane or wind storm.

Response

The commission recognizes that the 90% turnover rate does not allow for sudden influxes of recyclable debris resulting from a disaster. When a disaster occurs, the Office of the Governor may issue a disaster declaration in response to the emergency. That declaration gives the commission enforcement discretion for any regulated activity which assists with the swift and effective response to the disaster. Each disaster presents unique circumstances for the commission as well as other local, state, and federal authorities to consider at the time of the event. Based on the actual disaster declaration, and the needs identified as a result of the disaster event, any special authorizations can then be granted more quickly than the time required for preparation, review, and approval of a written request for alternative compliance. The commission made no change in response to this comment.

Section 328.4(g)(2). Maximum volume of combustible material.

Comment

Fisher recommended no change to the proposed requirements relating to maximum volume of combustible material.

Response

The commission appreciates this comment.

Section 328.4(g)(3). Time limits for processing.

Comment

Nature's Way stated that a mid-sized grinder with a three-inch by five-inch internal sizing screen could grind over 90% of the wood chips to a six inch particle size or smaller but that some pieces might be 1/2 inch in diameter by 12 inches long, for example. Nature's Way stated that using a smaller internal sizing screen to ensure 100% of all wood chips are less than six inches in all dimensions would cut current grinding production in half, effectively doubling grinding costs. Nature's Way stated that the larger material is used as a bulking agent to ensure good airflow into compost piles. Nature's Way suggests the rule be revised to require 80% of the wood chips be ground to six-inch particle size or smaller so that the larger material could continue to be used as a bulking agent for proper pile construction and airflow.

Geosource commented that the incident that prompted this rulemaking was a brush fire, not a mulch fire. Geosource stated that a double-ground wet mulch will not burn, but will smolder, will probably go out, or could be taken out with equipment and put out quickly; that single-ground mulch will smolder and maybe burn, could be taken out with a loader or excavator, and be put out with a small amount of water; and that brush will readily burn and will take a lot of water to put out. Geosource supported more regulation on

brush piles than on mulch piles.

Response

The commission concurs that a typical medium sized grinder will not achieve 100% particle sizing in all dimensions less than six inches. It is the commission's opinion that a properly maintained grinder will achieve 80% - 95% particle sizing to six inches after a first grind of the material. The commission acknowledges that owners or operators will usually employ subsequent grinding that will achieve even further size reduction. The commission intends to have owners and operators reduce the potential combustibility of incoming brush as well as change the character and nature of the potential fire hazard by grinding the material to a specified standard.

As noted by several commenters, grinding incoming brush and adding moisture to the resulting mulch fundamentally changes the potential fire hazard presented by the combustible material. Further grinding, processing, and maintenance of the mulch or using this material as a feedstock for composting further reduces the potential fire hazard of the material by changing the character and nature of the material's combustibility. The commission concurs that particle size reduction reduces the potential fire hazard and requires less subsequent effort to extinguish a fire outbreak. The commission concurs that further size reduction also changes how a fire can be extinguished and the type of equipment appropriate to manage such an outbreak. The commission agrees with the comments and revised the rule to require that 90% of the material be ground to six inches or less in all dimensions and 100% of the material be ground to six inches or less in at least one dimension. The main purpose of the adopted requirement is to have facility owners or operators grind brush to a reasonable particle size in order to fundamentally change the nature of a fire and

reduce the potential fire hazard. This adopted standard will also further distinguish sham operations from legitimate mulch and compost facilities.

Comment

The City of Brownwood stated that it is not feasible for them to own a grinder due to the size of the city-owned grind site, so the city contracts with others to provide grinding services. The city stated that most, if not all, contract grinders are located east of the IH-35 corridor, must travel to provide services for West Texas, and typically request the city to have on hand 10,000 cubic yards or more of material prior to arrival. The city stated that they can accumulate 10,000 cubic yards of brush in five to six months and that asking the contractors to grind less than 10,000 cubic yards would drive the price up significantly or force the city to consider purchasing a grinder costing $375,000 or more. The city stated that there can be no guarantee that the executive director will grant approval for an additional 180 days for grinding. The City of Brownwood proposed that this subsection be changed to allow for the accumulation of brush up to six months for small municipal sites.

Similarly, Fisher, LETCO, and TxSWANA stated that the 90-day limit is too short for small operations, start-up operations, and operations that depend on outside grinding contractors, especially during the non-growing season. LETCO stated that these operations can require more time than 90 days to collect enough material to economically grind or process.

The City of San Antonio commented that grinders are frequently out of service for repairs, that the type of equipment cannot be rented, and that the ability of a contractor to service a site immediately during down time is limited. The City of San Antonio requested the commission to consider variances based on

reported equipment malfunctions, to be able to contact the local TCEQ Region Office to report an equipment malfunction and receive a temporary variance to the storage size and timeline requirements.

The City of San Antonio, Fisher, LETCO, and TxSWANA requested that the time limit to grind be increased from 90 days to no later than 180 days after receipt. Fisher and TxSWANA suggested that an owner or operator be allowed to request executive director approval for additional time under certain circumstances.

Nature's Way stated that incoming brush, limbs, and leaves should be ground at least weekly if not daily, that large stockpiles of unground material are difficult to manage, and that stockpiling of unground feed stock material should not be allowed. Nature's Way stated that feed stocks are easier to grind while green and moist and reduces the amount of dust produced. Nature's Way further stated that materials that dry out are harder to grind with resultant increased operating costs, become hydrophobic, and do not reabsorb moisture well. Nature's Way stated that existing regulations that allow six-month storage time for unground feedstock should be lessened to reduce the risk of fires.

Response

As noted in the previous response, the commission intends to have owners and operators reduce the potential combustibility of incoming brush as well as change the character and nature of the potential fire hazard by grinding the material to a specified standard. Several commenters stated that grinding incoming brush to a specified size and adding moisture to the resulting mulch fundamentally changes the potential fire hazard presented by combustible material. Several commenters noted that accumulated brush presents by far the greatest potential fire hazard, both

in the magnitude of a potential fire and the amount and type of resources necessary to control such a fire. The commission determined that 90 days is a reasonable time for an owner or operator to process incoming brush to a specified particle size in order to reduce the potential fire hazard from accumulated brush. The adopted rule does allow an owner or operator the ability to request that the processing time be increased to 180 days when the additional time is supported by clear justification. The commission establishes by this adopted rule that grinding incoming brush to a specified size within a reasonable time frame addresses one of the most fundamental factors affecting the potential fire hazard posed by combustible material. This adopted standard will also further distinguish sham operations from legitimate mulch and compost facilities. The commission made no change in response to these comments.

Section 328.4(g)(4). Pile size limits.

Comment

An individual suggested that operators be allowed or encouraged to have a real time measurement and recording system that is connected to an alarm for compost pile temperature, and perhaps other indicators like moisture content, as an alternative approach to prescribed compost pile sizes. The individual mentioned that numerous studies indicate that the compost process is biologically active and constructive to about 70 to 80 degrees Centigrade (158 to 176 degrees Fahrenheit) and is dangerous when pile temperatures rise to 150 degrees Centigrade (302 degrees Fahrenheit). The individual noted that this is a dramatic temperature difference that is quite noticeable and could be used to activate automatic alarms. The individual commented that real-time measurements could be a means for a composter to build larger piles than those contemplated by the proposed rule that simply limits the height of the stack. The individual further commented that periodic reporting of the compost pile temperature measurements at a

facility would provide the public with the assurance that the compost piles are safe.

The City of San Antonio suggested that alternative compliance be approved for facilities that have operational plans that describe additional fire protection measures that would support increasing storage time and pile size.

Response

HB 2541 requires the commission to limit the pile size of combustible material, including mulch and compost. By adopting this rule, the commission establishes that pile size is one of the most fundamental factors regarding the potential fire hazard posed by combustible material. This adopted standard will also further distinguish sham operations from legitimate mulch and compost facilities. Variances to the adopted requirements have potential merit but would require case-by-case consideration to establish reasonable but specific performance requirements that are beyond the scope of this rulemaking to operate under an NOI. The commission made no change in response to these comments.

Comment

The City of Brownwood commented that the pile size as proposed by the agency would contain approximately 7,400 cubic yards of material and that the proposed pile height of 25 feet would present a danger to employees building the piles and potentially to customers. The city recommended that materials be measured by cubic yards rather than square feet, that the pile height be limited to 15 feet, and that the base of the piles be extended to 125 feet by 150 feet. The city noted that this would provide a volume of 10,400 cubic yards, about 3,000 cubic yards more than the agency's proposal. The City of Brownwood

also requested for continuity that all piles be the same size for processed and unprocessed materials.

The City of San Antonio commented that the proposed limitation of processed material pile size of 25,000 square feet would impose a hardship and suggested maximum processed material pile sizes of 55,000 to 75,000 square feet. Alternatively, the City of San Antonio suggested that if a pile is allowed to be 25 feet tall and have 25,000 square feet, to allow a 50,000 square foot pile at a maximum height of 14 feet as an example.

AWR/ALS commented that if mulch piles are limited to 25,000 square feet, operational efficiencies would decrease, the need for land would drastically increase, and this limitation would cost approximately $3.00 per cubic yard.

Fisher and TxSWANA stated that the total amount of unprocessed combustible material should not be limited in terms of total area if this material is otherwise managed according to best management practices in terms of fire prevention and control, and that the proposed provision does not recognize the possibility that some sites may be large enough to maintain several smaller, appropriately spaced piles of brush, representing a very large combined footprint of all brush piles since economies of scale are significant in this industry. TxSWANA requested to delete the proposed wording regarding limitations on overall facility size, and encourage or allow larger, well-managed, and economically advantageous operations. Fisher and TxSWANA suggested the provision be revised to require that no single pile of processed or unprocessed combustible material shall cover an area exceeding 25,000 square feet, that at least one single dimension of any pile of processed or unprocessed combustible material must be no more than 100 feet in length to allow for access of equipment for operational as well as emergency

management of the pile, and that the pile size limitations may be exceeded if authorized in writing by the executive director as supported by the recommendation of the local fire marshal.

LETCO commented that the 25,000 square foot pile size came from a document titled "Proper Storage of Cotton Gin Trash" and is irrelevant to this proposed rule. LETCO states that no one in Texas is composting cotton gin trash in large static piles. LETCO stated that brush is much less likely to catch fire than cotton trash. LETCO stated that pile sizes should be larger to allow for future contracts to recycle large amounts of brush per year. LETCO recommended the pile size for unprocessed material to be 20,000 square feet and 37,500 square feet for processed material, both with 25-foot pile height limits.

Response

HB 2541 requires the commission to limit the pile size of combustible material, including mulch and compost. The legislation further requires the commission to impose different standards appropriate to the size and number of piles of combustible materials to be stored at the facility. The commission has chosen to limit pile heights and pile areas for incoming and processed material to establish performance standards that are easily observable to verify compliance with the limits. The commission establishes by this adopted rule that pile size is one of the most fundamental factors regarding potential fire hazard posed by combustible material. This adopted standard will also further distinguish sham operations from legitimate mulch and compost facilities. As previously stated in the Section Discussion, the adopted maximum individual pile size area for unprocessed combustible material limits the amount of material that could be engulfed in flames and is consistent with the requirements of §328.61, Design Requirements for Scrap Tire Storage Site. The 25,000 square feet limitation for processed material is consistent with the IFC, except that the

footprint of the pile was adjusted downward since internal pile temperature monitoring, automatic sprinkler systems, and portable fire extinguisher requirements of the IFC are not included in this adoption. The maximum individual pile size area for processed material would limit the impact of a smoldering fire to a manageable pile size and is consistent with commission guidance on cotton gin trash. The commission made no changes in response to these comments.

Section 328.4(g)(5). Number of piles.

Comment

CIC stated that there should be some flexibility added to this subsection to allow a facility to expand. CIC suggested the subsection be revised to allow the owner or operator to notify the commission in writing within ten days of increasing the number of piles.

Response

The commission does not agree with the concept that a change to an NOI be offered after a facility has exceeded its maximum capacity. The commission envisions that a facility's submitted NOI would include some additional potential capacity to allow for operational flexibility. After-the-fact submittals of NOIs are problematic from an administrative and compliance perspective. The commission made no change in response to these comments.

Comment

Fisher recommended no change to the proposed requirements relating to maximum number of piles at a facility.

LETCO states a facility should be able to have as many piles on-site as needed as long as set-back, height, and spacing requirements are met.

Response

The enabling legislation requires the commission to limit the amount of combustible material that may be stored and to impose standards relating to the number of piles of combustible material. The commission made no change in response to these comments.

Section 328.4(g)(6). Fire lanes between piles.

Comment

The City of Brownwood stated that a 20-foot fire lane is not adequate for most fire vehicles to safely pass through or to prevent fires from spreading from one pile to another during windy conditions. The city stated that the proposed all weather road will be destroyed with every grinding event, will have to be rebuilt afterward at significant cost, and that access would probably not be needed if the facility was muddy or if it was raining. The city proposed to simplify the subsection to require firm and passable lanes in most weather conditions, and that all fire lanes are 40 feet wide.

LETCO recommended 20-foot pile separation distances and suggested that the windrow type of composting be addressed.

Nature's Way stated that access to piles of material for turning and watering requires at least 12 to 15 feet of separation for large front end loaders to have access and room to work, which provides enough room for fire trucks to reach piles.

Fisher and TxSWANA commented that the proposed requirements for fire lanes appear to be based on the need to access all parts of the site with fire fighting equipment, with additional width around unprocessed material. Fisher and TxSWANA stated that pumping water on a burning or smoldering pile is very often not the most effective means of fighting compost and mulch fires. Fisher and TxSWANA commented that the net effect of these unnecessarily wide proposed buffers and wider aisle-ways is the reduction of a site's cost-effectiveness and thus makes an otherwise well-managed operation infeasible. Fisher and TxSWANA stated that it is important to allow enough space between compost and mulch piles to allow heavy equipment such as loaders and dozers to isolate burning material to spread or relocate the material before it is then either smothered or doused with water. Fisher stated that a more appropriate approach is requiring a fire prevention plan that addresses clean aisle-ways wide enough to accommodate heavy equipment and maintaining clean, open areas adequate to spread burning material, among other requirements. Fisher and TxSWANA suggested the proposed provision be revised to require a minimum separation of 20 feet between piles of either processed or unprocessed materials; that there be a minimum separation of ten feet between actively managed compost windrows; that the open space between buildings and piles be open at all times, maintained free of combustible material, rubbish, equipment, or other materials; and that the distance may be increased, as necessary, to protect human health and safety upon coordination with the local fire marshal.

Silver Creek commented that their composting facility has static piles of compost averaging eight feet in height that can actually be driven upon. Silver Creek stated that to build an all-weather road and incorporate the 20-foot spacing between piles, with a maximum 25,000 square foot area pile limitation will cost a minimum of $200,000 at their facility, and probably two to three times higher for other

facilities.

Response

The commission determined from the comments that accessibility and fire control methods are relative to pile height for processed material and whether the material is managed in windrows or static piles. The commission notes that long thin windrows of processed material allow for burning material to be removed and isolated from the pile and quickly smothered or doused. The commission further notes that compost windrows typically may be eight to 12 feet high, whereas static piles may be up to 25 feet high. Noting that the pile configuration as well as the pile height affects fire fighting equipment and methods used in response to a fire, the commission revised the rule to require fire lanes between processed combustible material to be equal to or greater than the height of the piles. Unprocessed material must still have a minimum separation of 40 feet between piles.

Section 328.4(g)(7). Buffer zone.

Comment

Fisher suggested that the minimum 50-foot buffer zone distance be measured from the property boundary to piles of processed or unprocessed combustible materials, rather than to areas receiving, processing, or storing material.

Response

The buffer zone distance is consistent with the set back distance specified within §332.8, Air Quality Requirements. In order to not create a different or potentially conflicting buffer zone distance, the

commission made no change in response to the comment.

Section 328.4(g)(8). Recharge Zone or Transition Zone.

Comment

Fisher recommended no change to the proposed requirements relating to the recharge or transition zone of the Edwards Aquifer.

Response

The commission appreciates the comment.

Section 328.4(g)(9). Notice of intent.

Comment

CIC stated there should be some flexibility to allow a facility to expand since the owners or operators of the facilities have no way to tell when their business is going to increase and it would be difficult for them to send the NOI prior to the increase. CIC suggested the subparagraph be revised to allow the facility to submit the NOI within ten days after the capacity increase.

Fisher recommended no change to the proposed requirements relating to submittal of an NOI.

Geosource sought clarification as to whether a submitted NOI requires a response from the commission and the time frame for any commission response.

Response

The commission does not agree with the concept that a change to an NOI be offered after a facility has exceeded its maximum capacity. If financial assurance is required, owners or operators of existing facilities must provide proof of financial assurance within 60 days of executive director approval of the revised closure cost estimate, as specified in §37.141, Increase in Current Cost Estimate. The commission envisions that a facility's submitted NOI would include some additional potential capacity to allow for operational flexibility. After-the-fact submittals of NOIs are problematic from an administrative and compliance perspective. Executive director's staff can typically review NOIs to determine whether the owner or operator has proposed to conduct facility operations according to required standards within 30 days of receipt. If determined to be acceptable, staff responds with a letter acknowledging the submitted notification and informing the owner or operator of an assigned identification number for the facility. The commission made no changes in response to these comments.

Section 328.4(g)(11). Compliance.

Comment

Fisher recommended no change to the proposed requirements relating to operating and maintaining the facility in accordance with the submitted NOI.

Response

The commission appreciates the comment.

Section 328.4(g)(12). Effective date.

Comment

The City of San Antonio supported the delayed effective date until at least one year after the commission adoption date to allow the city to properly budget for this mandate. The city stated that the new rule will have a large fiscal impact associated with increased capital costs of approximately $300,000 as well as increased recurring operational costs of approximately $190,000. The city also requested an October 1st effective date to coincide with many persons' fiscal years.

Fisher recommended no change to the proposed requirements relating to the effective date of this subsection.

Response

HB 2541 establishes the effective date of the adopted rule and does not allow an extension of the effective date. However, the commission changed from proposal the removal rate requirement specified in §328.4(g)(1) from an annual basis to a 12-month period basis to allow operators greater flexibility in demonstrating compliance with the material removal requirements from the facility.

SUBCHAPTER A: PURPOSE AND GENERAL INFORMATION

§328.4

STATUTORY AUTHORITY

The amendment is adopted under THSC, §361.011, which establishes the commission's jurisdiction over all aspects of the management of MSW; THSC, §361.024, which provides the commission with rulemaking authority; THSC, §361.061, which authorizes the commission to require and issue permits governing the construction, operation, and maintenance of solid waste facilities used to store, process, or dispose of solid waste; THSC, §361.119, which authorizes the commission to adopt rules to regulate recycling facilities as solid waste facilities; and THSC, §361.1191, which authorizes the commission to adopt rules addressing specific criteria for recycling facilities in certain counties.

The amendment implements THSC, §361.119, Regulation of Certain Facilities as Solid Waste Facilities, and THSC, §361.1191, Regulation of Certain Recycling Facilities in Certain Counties.

§328.4. Limitations on Storage of Recyclable Materials.

(a) The provisions of subsections (e) and (f) of this section are available to all recycling facilities. In accordance with §§330.11(e)(2), 332.3(d), and 332.23(5) of this title (relating to Notification Required; Applicability; and Operational Requirements), in order to be exempt from the registration and permit requirements under Chapter 330 of this title (relating to Municipal Solid Waste) or under Chapter 332 of this title (relating to Composting), a facility must comply with the requirements of this section unless:

(1) the owner or operator of the facility is a local government or an agency of the state or the federal government;

(2) the facility receives more than 50% of its recyclable material directly from any combination of generators not affiliated with the facility, from the public, or from haulers not affiliated with the facility; the facility receives no financial compensation to accept any of the recyclable material it receives; and the facility accumulating the recyclable material can show that the material is potentially recyclable and has an economically feasible means of being recycled; or

(3) the facility smelts recyclable metals or the facility is a secondary metals recycling facility affiliated with a smelter of recyclable metals, including the operations conducted and materials handled at the facility, provided that the owner or operator of the facility demonstrates that:

(A) the primary function of the facility is to process materials that have a resale value greater than the cost of processing the materials for subsequent beneficial use; and

(B) all the solid waste generated from processing the materials is disposed of in a solid waste facility authorized under Texas Health and Safety Code, Chapter 361 (concerning the Solid Waste Disposal Act), with the exception of small amounts of solid waste that may be inadvertently and unintentionally disposed of in another manner;

(4) the facility is owned or operated by, or affiliated with, a person who holds a permit to dispose of municipal solid waste.

(b) Recyclable material may be accumulated or stored at a recycling facility only under the following conditions:

(1) the facility accumulating it can show that the material is potentially recyclable and has an economically feasible means of being recycled;

(2) within 270 days after the effective date of this rule, or 270 days from the commencement of a new facility's operations, the amount of material recycled, or transferred to a different site for recycling, equals at least 25% by weight or volume of the material accumulated 90 days from the effective date of this rule or 90 days from the commencement of a new facility's operation; and

(3) during each subsequent six-month period, the amount of material that is recycled, or transferred to a different site for recycling, equals at least 50% by weight or volume of the material accumulated at the beginning of the period.

(A) In calculating the percentage of turnover, the percentage requirements are to be applied to each material of the same type.

(B) For the purposes of this section, the following materials shall not be considered to be accumulated, but shall be considered to be recycled, as long as they have been contained, covered, or otherwise managed to protect them from degradation, contamination, or loss of value as recyclable material:

(i) materials for mulching and composting facilities that have been ground for use as mulch, or compost, or prepared and placed in a windrow, static pile, or vessel for composting; or

(ii) materials for other recycling facilities that have been processed for recycling.

(c) A recycling facility that fails to comply with the requirements of this section shall be required, if the executive director so requests in writing, to obtain a permit or registration as a municipal solid waste facility under the provisions of Chapter 330 or Chapter 332 of this title. A facility that receives large quantities of materials as a result of a disaster or other circumstance beyond its control, and a mulching or composting facility that must accumulate a certain volume of materials in order to obtain grinding services from a contractor may not be subject to one or more of the requirements of subsection (b) of this section as determined by the executive director on a case-specific basis for a specified period of time as provided for in subsection (e) of this section.

(d) A facility that processes recyclable material that contains more than incidental amounts of non-recyclable waste must obtain a permit or registration as applicable under Chapter 330 or Chapter 332 of this title unless the executive director approves its request for alternative compliance.

(e) The executive director will use the following procedures in evaluating applications for alternative compliance with the standards in the definition of "Incidental amount(s) of non-recyclable

waste" in §328.2 of this title (relating to Definitions) or with the requirements of subsection (b) of this section.

(1) The applicant must apply in writing to the executive director for the alternative compliance. The application must address the relevant criteria contained in subsection (f) of this section.

(2) The executive director will evaluate the application and issue a letter granting or denying the application. Any person affected by the decision of the executive director may file with the chief clerk a motion to overturn according to the procedures set out in §50.139(b) - (g) of this title (relating to Motion to Overturn Executive Director's Decision). The executive director may revoke an alternative compliance for good cause.

(f) The executive director may grant requests for alternative compliance if the applicant submits sufficient documentation demonstrating that the applicant cannot meet the requirements in the definition of "Incidental amount(s) of non-recyclable waste" in §328.2 of this title without affecting the ability to support related recycling activities. Failure to qualify for alternative compliance will subject the applicant to the permitting or registration requirements of Chapter 330 or Chapter 332 of this title. The executive director's decision will be based on the following factors:

(1) whether the application is for a single facility or for facilities of a similar type recycling the same kind of material;

(2) the locations of all facilities to be covered by the alternative compliance;

(3) the type(s) of material(s) accepted for recycling;

(4) any storage of materials prior to recycling;

(5) how the material(s) are recycled;

(6) the amount of and reasons for unavoidable damage to incoming material during collection, unloading, and sorting that renders the material unmarketable;

(7) reasons that data on tramp or damaged materials cannot be separated from data on other non-recyclable waste;

(8) reasonable efforts used at the facility or facilities to maintain and enforce source-separation, or reasons why source-separation cannot be practicably maintained and enforced at the facility or facilities;

(9) the amount and type of non-recyclable waste disposed of by the facility or facilities, the method of disposal, and the amount of time between receiving the waste and disposal;

(10) the prevalence of the practice on an industry-wide basis, or on the basis of other similar facilities recycling the same kind of material;

(11) reasons why alternative compliance would be protective of the environment and human health and safety; and

(12) other relevant factors.

(g) A municipal solid waste recycling facility that produces mulch or compost that is not required to have a permit or registration that stores combustible materials and is located in Bexar County shall comply with the following requirements of this subsection. This subsection applies to facilities that are exempt from other requirements of this section as provided in subsection (a) of this section.

(1) Storage time limits for combustible material. An amount equal to at least 90% by weight or volume of combustible materials accumulated at the beginning of a 12-month period must be removed from the facility during each subsequent 12-month period. The 12-month period begins on the day this subsection becomes effective for existing facilities, on the first day that materials are received for a new facility, or as otherwise approved by the executive director. If a volume-based demonstration is used, the owner or operator will apply an appropriate conversion factor, as specified in the notice of intent to operate the facility and as approved by the executive director, based on facility operations to convert volumes of incoming material to equivalent volumes of outgoing material. For composting processes that need longer than 12 months, the owner or operator may request a compliance period longer than 12 months from the accumulation of material to demonstrate 90% removal of material accumulated during an earlier 12-month period. Requests for a longer compliance period must be accompanied by a technical justification as well as any supporting information for the additional time. The conversion factor and

alternate compliance period may be periodically reviewed by the executive director to ensure that material is being removed from the facility.

(2) Maximum volume of combustible material. A facility shall not store processed or unprocessed combustible material in excess of the maximum volume of material indicated in the current notice of intent to operate the facility submitted to the executive director.

(3) Time limits for processing. All combustible material stored by a facility to produce mulch or compost must be ground so that 100% has a particle size of six inches or less in at least one dimension and 90% has a particle size of six inches or less in all dimensions no later than 90 days after receipt. Material will not be considered processed until it is ground to the specified dimensions. Under certain circumstances, an owner or operator may request executive director approval for additional time to grind combustible materials up to 180 days after receipt of the material.

(4) Pile size limits. Each pile of combustible material shall have dimensions not to exceed 25 feet in height. Unprocessed combustible material shall not cover an area greater than 50,000 square feet at the facility, with no single pile exceeding 8,000 square feet. A pile of processed combustible material shall not cover an area greater than 25,000 square feet.

(5) Number of piles. The number of piles of combustible materials at the facility shall not exceed the maximum number specified in the notice of intent to operate the facility submitted to the executive director.

(6) Fire lanes between piles. There shall be a minimum separation of 40 feet from piles of unprocessed combustible materials and a minimum separation equal to the pile height between piles of processed combustible materials. An all-weather road shall encircle the area used for processing and storage of combustible material. At a minimum, this all-weather roadway shall have minimum 25-foot turning radii; shall be capable of accommodating firefighting vehicles during wet weather; and shall meet applicable local requirements and specifications. The open space between buildings and piles shall be kept open at all times; and be maintained free of combustible material, rubbish, equipment, or other materials. Upon coordination with the local fire marshal, the distance required may be increased, as necessary, to protect human health and safety.

(7) Buffer zone. The set back distance from all property boundaries to the edge of the areas receiving, processing, or storing material must be at least 50 feet.

(8) Recharge Zone or Transition Zone. Notwithstanding the applicability requirements of Chapter 213 of this title (relating to Required Edwards Aquifer Protection Plans, Notifications, and Exemptions), facilities located on a recharge or transition zone shall have a water pollution abatement plan consistent with the requirements of §213.5(b) of this title (relating to Required Edwards Aquifer Protection Plans, Notifications, and Exemptions).

(9) Notice of intent. By the effective date of this subsection for existing facilities or at least 90 days prior to commencing new operations, the owner or operator must file a notice of intent in accordance with §328.5(b) of this title (relating to Reporting and Recordkeeping Requirements) that also includes provisions to demonstrate compliance with this subsection. A revised notice of intent must be

filed with the executive director before revising a volume conversion factor or before a facility exceeds the maximum amount of material to be stored as specified in the current notice of intent.

(10) Recordkeeping. The owner or operator of a facility subject to the requirements of this subsection must maintain all records necessary to demonstrate compliance with this subsection.

(11) Compliance. Failure to operate and maintain a facility as proposed in the current notice of intent for the facility is a violation of this chapter.

(12) Effective date. The requirements of this subsection do not become effective until one year after commission adoption of this subsection.