

FEEDMILLS, PORTABLE AUGERS, AND HAY GRINDERS AIR QUALITY STANDARD PERMIT SUMMARY DOCUMENT

I. EXECUTIVE SUMMARY

The Texas Commission on Environmental Quality (TCEQ or commission) issues a new air quality standard permit for feedmills, portable augers, and hay grinders. The new standard permit can be used to authorize feedmills, portable augers, and hay grinders on or after the effective date of the standard permit.

II. EXPLANATION AND BACKGROUND OF AIR QUALITY STANDARD PERMIT

The New Source Review (NSR) Program under Title 30 Texas Administrative Code (30 TAC) Chapter 116, Control of Air Pollution by Permits for New Construction or Modification, requires any person who plans to construct any new facility or to engage in the modification of any existing facility which may emit air contaminants into the air of the state to obtain a permit pursuant to 30 TAC §116.111, General Application, or satisfy the conditions of a standard permit, a flexible permit, a permit by rule, or the criteria for a de minimis facility or source before any actual work begins on the facility. A standard permit authorizes the construction or modification of new or existing facilities which are similar in terms of operations, processes, and emissions. A standard permit provides an efficient mechanism for qualifying facilities to obtain authorization as an alternative to a case-specific air quality permit.

The standard permit provides a streamlined preconstruction authorization process that can be used for any feedmill, portable auger, or hay grinder complying with the standard permit requirements and that is not prohibited by some other state or federal permitting statute or regulation. Additionally, the executive director authorizes these facilities through permits by rule (PBRs) under 30 TAC §§106.281, Feed Milling; 106.282, Feed Grinding Facilities; and 106.283, Grain Handling, Storage, and Drying or under 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification. PBRs §106.281 and §106.282 will remain authorization mechanisms for these types of operations, and the noncommercial and grain storage portions of PBR §106.283 will remain authorization mechanisms for the grain handling operations located at feedmills.

The commission has included requirements to minimize emissions and establish property line distance limitations. These requirements are based on air dispersion modeling and an impacts analysis performed to verify the protectiveness of the standard permit. Additionally, the standard permit contains requirements that implement best available control technology (BACT), which is required under Texas Health and Safety Code (THSC), §382.0518(b), Preconstruction Permit and §382.05195(a), Standard Permit. The standard permit also contains provisions to ensure that any facility authorized by the standard permit does not cause an exceedance of the National Ambient Air Quality Standards (NAAQS). The site-wide emission rate of particulate matter less than or equal to ten microns in diameter (PM₁₀) will determine the setback distance that is necessary to ensure compliance with the NAAQS. The standard permit also includes control

provisions and, where applicable, a minimum setback distance for specified facilities to prevent nuisance conditions. The commission has concluded an evaluation that shows that the standard permit for feedmills, portable augers, and hay grinders is protective of the public health and welfare.

The modeling results demonstrated that a typical feedmill, not producing feed with the potential to produce nuisance odors and for which an odor control scrubber is not required, with site-wide emissions of PM₁₀ less than or equal to 9.77 pounds per hour (lb/hr) does not require a setback distance from the property line to meet the NAAQS. For these typical feedmills with site-wide emissions greater than 9.77 lb/hr, a graph has been developed depicting the required minimum facility setback distance from the nearest property line required to ensure that the total site-wide allowable PM₁₀ emissions do not exceed the NAAQS.

The modeling results demonstrated that a feedmill, producing feed with the potential to produce nuisance odors and for which an odor control scrubber is required, with site-wide emissions of PM₁₀ less than or equal to 9.24 lb/hr does not require a setback distance from the property line to meet the NAAQS. For these feedmills with site-wide emissions greater than 9.24 lb/hr, a graph has been developed depicting the required minimum facility setback distance from the nearest property line required to ensure that the total site-wide allowable PM₁₀ emissions do not exceed the NAAQS.

For sites in which portable augers are the only facilities present (with the exception of planned maintenance, start-up, and shutdown (MSS) facilities and activities) and with a site-wide PM₁₀ emission rate less than or equal to 0.95 lb/hr, no minimum facility setback distance from the nearest property line is required to meet the NAAQS. For portable auger operations with site-wide emissions greater than 0.95 lb/hr, a graph has been developed depicting the required minimum facility setback distance from the nearest property line required to ensure that the total site-wide allowable PM₁₀ emissions do not exceed the NAAQS.

For sites in which hay grinders are the only facilities present (with the exception of planned MSS facilities and activities) and with a site-wide PM₁₀ emission rate less than or equal to 4.10 lb/hr, no minimum facility setback distance from the nearest property line is required to meet the NAAQS. For hay grinder operations with site-wide emissions greater than 4.10 lb/hr, a graph has been developed depicting the required minimum facility setback distance from the nearest property line required to ensure that the total site-wide allowable PM₁₀ emissions do not exceed the NAAQS.

III. OVERVIEW OF AIR QUALITY STANDARD PERMIT

The commission issues this air quality standard permit authorizing feedmills, portable augers, and hay grinders under the authority of the Texas Clean Air Act (TCAA) in THSC, §382.05195, Standard Permit and 30 TAC Chapter 116, Subchapter F, Standard Permits.

The standard permit authorizes typical feedmills (including, but not limited to, associated raw ingredient and finished feed storage facilities, grain and seed cleaners, hammermills, grinders, roller mills, flakers, pellet coolers, boilers, dryers, and engines), portable augers, and hay grinders. However, the standard permit is not intended to cover all possible facility configurations or operating scenarios. Owners or operators of facilities that cannot meet the standard permit conditions may apply for a case-by-case air quality permit under 30 TAC §116.111, General Application, or other applicable authorization mechanism.

IV. PERMIT CONDITION ANALYSIS AND JUSTIFICATION

This standard permit requires owners or operators of feedmills, portable augers, and hay grinders to comply with certain administrative requirements, including registration and recordkeeping, as well as general requirements, including housekeeping procedures, best management practices, planned MSS limitations, and specific operating procedures to minimize off-property impacts from material handling. Registration and odor abatement measures are also required for those feedmills producing feed with the potential to produce nuisance odors. Such feed includes, but is not limited to, dog food, cat food, turkey feed, emu feed, and fish feed. Facilities are also required to meet distance requirements to be within acceptable off-property concentrations of PM₁₀. Facilities that do not produce feed with the potential to produce nuisance odors as specified in subsection (5)(A) of this standard permit, do not require registration or renewal of registration every ten years.

This standard permit authorizes the air emissions (including fugitive emissions) associated with feedmills (including, but not limited to, raw ingredient and finished feed storage facilities, grain and seed cleaners, hammermills, grinders, roller mills, flakers, pellet coolers, boilers, dryers, and engines), portable augers, and hay grinders that meet the applicable conditions of the standard permit.

Applicability

Section (1) outlines the applicability of the standard permit (what can and cannot be authorized under the standard permit). Subsection (A) specifies that this standard permit authorizes air emissions from feedmills (including, but not limited to, raw ingredient and finished feed storage facilities, grain and seed cleaners, hammermills, grinders, roller mills, flakers, pellet coolers, boilers, dryers, and engines), portable augers, and hay grinders in addition to any fugitive emissions associated with these facilities. This condition is intended to specify the scope of the standard permit authorization.

Subsections (B) and (C) prohibit the use of this standard permit to authorize any feedmill that has a permanent raw grain storage capacity of more than 2.5 million bushels and on-site fuel-fired equipment with an individual heating rate of ten million British thermal units per hour (Btu/hr) or greater (or a combined heating rate of greater than 20 million Btu/hr). The restrictions in these subsections are based on concerns associated with large facility capacities, which trigger New Source Performance Standard (NSPS), Title 40 Code of Federal Regulations (40 CFR) Part 60, Subpart DD, Standards of Performance for Grain Elevators; large facility throughputs and emission rates; and the potential for

these factors to result in a facility's non-compliance with the NAAQS. To address compliance with BACT, nitrogen oxide (NO_x) limitations in 30 TAC Chapter 117, Control of Air Pollution from Nitrogen Compounds, and NO_x limitations in 40 CFR Part 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, the cutoff for eligibility under this standard permit was determined to be a heating rate of less than ten million Btu/hr. This limit is used because BACT is no controls for most units with a heating rate less than ten million Btu/hr, and most state and federal NO_x requirements do not apply at this heating rate. The NO_x requirements in 30 TAC Chapter 117, Subchapter D, Combustion Control at Minor Sources in Ozone Nonattainment Areas, for small combustion sources will still apply to those facilities in the specified counties, and this standard permit does not exempt those facilities from having to meet any applicable requirements of 30 TAC Chapter 117, as specified in subsection (4)(A) of this standard permit. The combined heating rate limitation of 20 million Btu/hr is specified since it was the maximum parameter provided for modeling off-property impacts from products of combustion. The limitation is a reasonable worst-case scenario based on information in existing permit files for feedmills.

Subsection (D) states that any individual engine (or combination of engines) used must not be rated greater than 525 horsepower (hp). This power limitation applies collectively to all engines used at the feedmill or hay grinder site. This limitation is included to ensure that NO_x emissions will not exceed the NAAQS and to ensure that all BACT requirements applicable to NO_x emissions from engines will be met. Based on discussions with industry representatives and the review of existing permit and PBR files, the typical size for these engines is 525 hp or smaller; therefore, this limitation should still allow most feedmills and hay grinders to use this standard permit provided all other applicable requirements of the standard permit can be met.

Subsection (E) prohibits the use of this standard permit for any facility that constitutes a new major stationary source or major modification as defined by 30 TAC Chapter 116. This standard permit also cannot be used for authorization of facilities located at a major stationary source. These restrictions regarding use of the standard permit are based on concerns associated with large facility capacities, throughputs, and emission rates, and the potential to result in a facility's non-compliance with the NAAQS. Additionally, 30 TAC Chapter 116 does not allow facilities defined as major with regard to federal NSR to be authorized by a standard permit.

Subsection (F) prohibits the use of this standard permit to authorize any increase of an air contaminant specifically prohibited by a 30 TAC Chapter 116 air quality permit that exists at the site.

Subsection (G) specifies that this standard permit cannot be used in conjunction with any other Chapter 116 air quality permit, standard permit, or PBR, with the exception of standard permits and PBRs used to authorize planned maintenance activities and facilities. The entire feedmill, portable auger(s), and/or hay grinder(s) must be authorized under this standard permit. If other authorizations for the operation exist, these

authorizations must be voided if authorization under this standard permit is to occur. This requirement does not preclude the use of permits, standard permits, and PBRs to authorize other facilities, located at the site, that are not associated with the feedmill, portable auger, or hay grinder operations. However, all site-wide emission limitations in this standard permit must be met. The restrictions in subsections (F) and (G) are included to limit the cumulative effects of specific contaminants and to ensure the protection of health and human welfare. Subsection (G) does allow standard permits and PBRs to be used in conjunction with this standard permit if the standard permits and PBRs are used to authorize emissions from planned maintenance activities and facilities as specified in section (9) of this standard permit. Additional information regarding the authorization of planned maintenance, start-up, and shutdown emissions can be found in the Planned Maintenance, Start-up, and Shutdown (MSS) Activities portion of this technical summary.

Subsection (H) specifies that this standard permit cannot be used if the total site-wide emissions do not meet the emission rate requirements specified in sections (5), (6), (7), (8), and (9) of this standard permit. This includes PM₁₀ emissions from all facilities at the site, even facilities that are not associated with the feedmill, portable auger, or hay grinder operations. This condition limits cumulative emissions and reinforces the site-wide emission rate requirements in sections (5), (6), (7), (8), and (9) to maintain the protectiveness of this standard permit.

Definitions

Section (2) contains definitions of feedmill, grain, off-site receptor, permanent storage capacity, site, and temporary in subsections (A) through (F). These definitions are intended to specify and, where necessary, limit the scope of the standard permit's authorization since some aspects of these definitions are associated with the applicability of 40 CFR Part 60, Subpart DD for grain elevators and grain handling facilities. Permitting is based on the concepts of facility, facilities, related facilities, and related increases, which may involve equipment throughout a given site. Many aspects of permitting are evaluated on a site basis to account for all sources of pollutants that may impact surrounding areas.

General Administrative Requirements

Section (3) addresses the administrative requirements associated with this standard permit. Subsection (3)(A) refers owners and operators to section (5) of this standard permit, which contains specific registration requirements for feedmills. This subsection was included in one of the first sections of the standard permit as a notice to owners and operators that action is necessary on their part to comply with the administrative requirements.

All standard permits must meet the requirements in 30 TAC Chapter 116, Subchapter F (including §§116.604 through 116.615). However, the TCEQ can waive or modify some of these requirements, and has elected to do so for this standard permit. Section 116.610(a)(1), Applicability, requires that a standard permit project resulting in a net emission increase must meet the emission limitations of 30 TAC §106.261, Facilities

(Emission Limitations), unless otherwise specified in the standard permit. The contaminant of concern from feedmills (including portable augers and hay grinders) is primarily PM₁₀, and these operations do not emit significant amounts of the air contaminants that 30 TAC §106.261 addresses. In addition, the commission has determined that the industry specific emission rate limitations and distance requirements in this standard permit justify this exemption from 30 TAC §106.261. Therefore, in subsection (3)(B), the TCEQ exempts feedmills, portable augers, and hay grinders authorized under this standard permit from the requirements of 30 TAC §116.610(a)(1).

Subsection (3)(B) also exempts facilities meeting the applicable requirements of this standard permit from start-up notification requirements in 30 TAC §116.615(5), Start-up Notification (General Conditions). Through the protectiveness review, the commission has determined that facilities meeting all of the applicable requirements of this standard permit will be protective of health and human welfare, and individual notification of start-up as specified in 30 TAC §116.615(5) is not necessary.

Subsection (3)(C) exempts facilities meeting the applicable requirements of this standard permit from registration and fee requirements in 30 TAC §116.611(a) and (b), Registration to Use a Standard Permit and 30 TAC §116.614, Standard Permit Fees. The exemption from the registration requirements in 30 TAC §116.611 only addresses §116.611(a) and (b) and does not exempt a source owner or operator from the requirement to submit a certified registration under §116.611(c), which is required to avoid the applicability of 30 TAC Chapter 122, Federal Operating Permits Program. Through the protectiveness review, the commission has determined that facilities meeting all of the applicable requirements of this standard permit will be protective of health and human welfare, and individual review of registrations by TCEQ staff is not necessary.

General Operating Requirements

Section (4) contains the general operating requirements that must be met by all feedmills, portable augers, and hay grinders seeking authorization under this standard permit. Subsection (A) outlines those state and federal regulations that are most likely to apply to facilities authorized by this standard permit. This list is not meant to be all inclusive, and other state and federal regulations may still apply. Subsection (A) specifies that facilities located in counties subject to emissions banking and trading requirements and to nitrogen compound limitations and requirements must comply with all applicable requirements of 30 TAC Chapter 101, Subchapter H, Division 3, Mass Emissions Cap and Trade Program and 30 TAC Chapter 117. Subsection (A) also requires compliance with federal New Source Performance Standards under 40 CFR Part 60 for engines that may also be applicable to facilities authorized by this standard permit. Authorization under this standard permit does not exempt facilities from any of the regulations outlined in subsection (A) or any other applicable regulations.

Subsection (B) requires that all conveyors and elevator legs authorized by this standard permit be enclosed. This subsection also specifies that exhaust air to the atmosphere from any pneumatic conveying system or from the pulling of suction on mechanical systems be vented through a cyclone collection system or through a fabric filter system.

The cyclone and/or fabric filter systems must be operated as specified in subsection (4)(C) of this standard permit.

Subsection (C) specifies the operating requirements and design parameters for all fabric filter and cyclone collection systems used. Fabric filter collection systems must be operated properly with no tears or leaks; be designed to meet an outlet grain loading not to exceed 0.01 grains per dry standard cubic foot (gr/dscf) (combined front half and back half); and not exceed an opacity of five percent averaged over a six-minute period. Cyclone collection systems must be operated properly with no leaks; be properly sized high efficiency cyclones with a cone length at least twice the diameter of the cyclone; and not exceed an opacity of ten percent averaged over a six-minute period.

Subsection (D) requires that the operation of conveyors associated with receiving authorized by this standard permit shall not commence until the receiving pits are full. This requirement is included to minimize the free-fall of grain, which subsequently minimizes fugitive emissions from the emission points and the potential for nuisance conditions.

Subsection (E) prohibits visible emissions from the operation of any grain dryer authorized by this standard permit from leaving the property.

Requirements for pneumatic exhausts are addressed in subsection (F), which specifies that all fan discharges from cleaners, aspirators, and any other grain cleaning equipment authorized by this standard permit and with pneumatic handling of material shall be equipped with either a cyclone or fabric filter as specified in subsection (4)(C) of this standard permit.

Requirements for all fan discharges from grinders and hammermills authorized by this standard permit and with pneumatic handling of material are addressed in subsection (G), and these discharges shall be equipped with a fabric filter system as specified in subsection (4)(C) of this standard permit or be equipped with a method of control designed to meet an outlet grain loading not to exceed 0.01 gr/dscf (combined front half and back half).

Emissions from flakers and pellet mill/pellet cooler systems authorized by this standard permit are addressed in subsection (H). Exhaust air from these systems shall be vented to a cyclone system as specified in subsection (4)(C) of this standard permit before being released to the atmosphere. The requirements in subsection (4)(C) do not apply to cyclones being used as product separators.

Subsection (I) specifies the location of an oil suppression system. While an oil suppression system is not a requirement for authorization under this standard permit, if one is used to minimize emissions from the handling of raw grain, the oil shall be applied during or after the grain is received and prior to loadout.

Subsection (J) requires that all loadout devices authorized by this standard permit be equipped with drop socks at the drop points to minimize fugitive emissions from loadout areas.

Housekeeping requirements are specified in subsections (K) and (L). Subsection (K) requires that the spillage of any raw products, finished products, or waste products be cleaned up on a daily basis. Waste products must be removed from the site on a daily basis or may be stored on site in a manner that prevents exposure to the elements. Raw products and finished products must also be stored in a contained manner that prevents exposure to the elements. The prevention of exposure to the elements should help minimize the potential for nuisance conditions since exposure to the wind causes the potential for grain products and other commodities to be blown off site onto neighboring properties and cause nuisance dust conditions. Exposure to rain can cause grain and other commodities to sour and produce nuisance odors, which can travel off property. Subsection (L) requires the maintenance of on-site roads and other traffic areas to be conducted as necessary through the sprinkling of water, treatment with effective dust suppressants, and/or paving with a cohesive hard surface that is cleaned. The best management practices in this subsection help minimize the potential for off-property nuisance dust conditions resulting from roads and other traffic areas. The requirements in subsections (K) and (L) do not exempt feedmills, portable augers, and hay grinders from the requirements in 30 TAC §101.4, Nuisance.

Subsection (M) specifies that fuel used for any dryer, burner, boiler, or pellet cooler authorized by this standard permit shall be pipeline quality sweet natural gas or propane. Emissions from the use of both fuel types were evaluated through modeling and were determined to be protective of public health and welfare.

Subsection (N) specifies the fuel requirements for any engine authorized by this standard permit. Fuel shall be limited to gas fuel, liquid diesel fuel, or biodiesel and biodiesel fuel blends meeting the requirements of this subsection. Gas fuel shall be limited to pipeline quality sweet natural gas, liquid petroleum gas, or fuel gas containing no more than ten grains total sulfur per 100 dry standard cubic feet. Liquid diesel fuel shall be petroleum distillate oil that is not a blend, does not contain waste oils or solvents, and contains 0.05 percent or less sulfur by weight. Biodiesel fuel and biodiesel used in biodiesel fuel blends must meet the specifications of American Society for Testing and Materials (ASTM) D6751 and must comply with the applicable requirements of 30 TAC Chapter 114, Control of Air Pollution from Motor Vehicles, Subchapter H, Division 2, Low Emission Diesel. Based on comments received from the Biodiesel Coalition of Texas, the use of biodiesel fuel and biodiesel fuel blends was added to the standard permit. Emission rates associated with the biodiesel and biodiesel fuel blends were also evaluated through modeling, and it was determined that the site-wide emissions from products of combustion will not result in an exceedance of applicable NAAQS.

Subsection (O) addresses NO_x emission limitations for any engine authorized by this standard permit. It specifies that NO_x emissions for any engine authorized by this standard permit shall not exceed 2.0 grams per horsepower-hour (g/hp-hr) for gas fuel or

11.0 g/hp-hr for liquid diesel or biodiesel-based fuel. The age and efficiency of some engines may not be documented, making it difficult for operators to estimate NO_x emissions. Therefore, to allow additional flexibility to facility operators, this subsection also includes an option to limit the number of hours per year that an engine can operate at a site. The limitation on the engine size as specified in subsection (1)(D) of this standard permit and the limitation on operating hours as specified in paragraph (4)(O)(iii) of this standard permit will provide sufficient NO_x reductions to meet BACT requirements. The operating hours in paragraph (4)(O)(iii) are based on engines operating ten hours per day for a four-month period at each site and shall be applied over a 12-month period. For engines associated with hay grinders that leave a site and then return, all of the hours the unit has operated at the site in any 12-month period must be counted. To remain in compliance with the standard permit, the cumulative hours for the 12-month period cannot exceed 1,200. Based on information received from industry representatives, this operating schedule is considered conservative since the majority of engines authorized under this standard permit will be used to operate hay grinders.

To ensure that off-property concentrations of products of combustion emitted from any engine authorized by this standard permit are in compliance with the NAAQS, subsection (P) requires that engine stacks be a minimum height of ten feet above ground level. Additional information regarding the modeling used to determine this stack parameter can be found in the Protectiveness Review portion of this technical summary.

Subsection (Q) requires that all air pollution abatement equipment be checked every 30 days (unless more frequent checks/inspections are otherwise specified in this standard permit) and be properly maintained and operated, which includes scheduled cleaning and maintenance as recommended by the manufacturer and as necessary to adequately maintain equipment efficiency. This subsection was revised in response to a comment received from the U.S. Environmental Protection Agency (EPA) stating that the standard permit must specify a representative monitoring frequency to ensure compliance with the opacity limits. The opacity limits apply to the fabric filter collection, cyclone collection, and scrubber systems.

The requirements in subsections (B) through (Q) represent BACT and will reduce particulate emissions to minimize nuisance potential and protect human health and welfare. The TCAA and 30 TAC Chapter 116 require that standard permits apply BACT. Subsections (B) through (Q) were obtained from existing case-by-case NSR permits for feedmill operations and represent BACT for this industry.

Subsection (R) requires that all facilities and associated equipment authorized by this standard permit, including any transfer equipment, be maintained in good working order and operated properly. This requirement is included to ensure that all processing equipment is properly operated and maintained to minimize nuisance potential.

Subsection (S) specifies that the maximum hourly facility production capacities shall not exceed the values used to determine compliance with the 24-hour NAAQS for PM₁₀ as shown by the plotted line in Figures 1 through 4 (whichever is applicable to the facility

seeking authorization) of this standard permit. The figures show maximum short-term emission rates allowed for a specific setback distance of facility emission points to the nearest point on the nearest property line. A specific setback and emission rate correlate to a point on the graph that will either fall in the “acceptable” area of the graph or on the dividing line. To ensure compliance with this standard permit, owners and operators must demonstrate that emission rates and setbacks are inside the “acceptable” area of the graph or on the dividing line. Should the point for an emission rate and setback fall in the “unacceptable” area of the graph, the setback must be increased or the emission rate reduced. The production capacities, in conjunction with previously determined emission factors, are used to calculate the maximum allowable short-term emission rates. Additional information regarding the modeling used to develop Figures 1 through 4 can be found in the Protectiveness Review portion of this technical summary.

Subsection (T) addresses all recordkeeping requirements for facilities authorized by this standard permit. All records must be kept for a rolling 24-month period and be made available at the request of personnel from the TCEQ or any other air pollution control agency or program having jurisdiction. Paragraph (T)(i) requires recordkeeping of hours of operation for each engine if the owner or operator is limiting hours of operation (used to limit NO_x emissions) to maintain compliance with paragraph (4)(O)(iii) of this standard permit. Paragraph (T)(ii) requires the owner or operator to maintain all records sufficient to demonstrate that the feedmill operation, portable auger(s), and hay grinder(s) are meeting all applicable emission rate and property line minimum setback distance limitations determined by using Figures 1 through 4 (whichever is applicable) of this standard permit. This paragraph is used in conjunction with subsection (4)(S) and further clarifies that all records must be maintained to demonstrate the operation’s continued compliance with the emission rates and corresponding setback distances in Figures 1 through 4 of this standard permit. Paragraph (T)(iii) specifies that records for portable augers and temporary hay grinders shall remain with the primary auger or grinder equipment. Paragraph (T)(iv) requires that records of periodic monitoring and scheduled cleaning and maintenance of abatement equipment be kept. These records must be maintained to demonstrate compliance with subsection (Q) of this standard permit. The periodic monitoring reference was included to link recordkeeping requirements and the 30-day monitoring frequency added to subsection (Q) of this standard permit. Paragraph (T)(v) requires recordkeeping regarding planned MSS facilities and activities to demonstrate compliance with the operational requirements (material usage rates and emission rate limitations) in paragraphs (9)(C)(i) through (9)(C)(iv) of this standard permit.

Requirements Specific to Feedmills Producing Certain Feeds (New, Modified, or Existing)

Section (5) of this standard permit addresses new, modified, or existing feedmills producing feed with the potential to produce nuisance odors. Additional abatement equipment is required for these types of operations to minimize the nuisance odor potential from the handling, heating, and additional processing of rendering by-products. Subsection (A) requires the use of a scrubber system to control odors from the pellet cooler system for those feedmills producing feed with the potential to produce nuisance

odors (including, but not limited to, dog food, cat food, turkey feed, emu feed, and fish feed). This scrubber system must be used when the pellet cooler system is in use and must be properly installed and in good working order.

Subsection (B) requires the automatic injection of sodium hypochlorite or a combination of chlorine gas and sodium hydroxide into the scrubber system for odor control. The sodium hypochlorite must be added continuously to the scrubber solution along with fresh make-up water as specified by the manufacturer, and a minimum residual chlorine concentration of ten parts per million (ppm) and a minimum pH of 11 must be maintained in the scrubber recycle tank.

Subsection (C) requires a minimum retention time of 0.5 seconds through the scrubber packing material and one second through the scrubber(s).

Subsection (D) requires the installation and evaluation of an odor detection (sniff) tube. A sniff tube must be installed in each scrubber exhaust stack and vented to near ground level to evaluate samples of the scrubber exhaust by olfactory means. An observer should detect a slight aroma of chlorine from this tube at all times. If rendering odors are detected, the concentration of chemicals in the scrubber must be increased until the rendering odors are no longer detectable by olfactory means.

The requirements in subsections (A) through (D) represent BACT for this industry and will aid in the oxidation of odors to minimize odor nuisance potential.

Subsection (E) addresses recordkeeping requirements. The minimum residual chlorine concentration, the pH level of the scrubber recycle tanks, and sniff tube observations must be recorded daily, maintained in a file at the plant site, and made available at the request of personnel from the TCEQ or any other air pollution control agency or program having jurisdiction. These records will be used to determine compliance with subsections (5)(B) and (5)(D) of this standard permit. Records must be retained for a rolling 24-month period.

Subsection (F) specifically addresses emission rates and required setback distances for feedmills producing feed with the potential to produce nuisance odors. The addition of portable augers or a hay grinder at the feedmill site would be a modification requiring emissions from any hay grinder and portable auger to be included in the overall site emissions. All facilities associated with the feedmill must be authorized under this standard permit. To be eligible to register under this standard permit, these feedmills must also meet all specified conditions in paragraphs (F)(i) through (F)(v). Paragraph (F)(i) requires the use of calculation methods accepted by the TCEQ at the time of the standard permit registration to determine emission rates.

Paragraph (F)(ii) specifies the minimum setback distance necessary for all receiving and loadout points for authorization under this standard permit. The minimum setback distance for receiving and loadout points (including portable augers) is 100 feet to the nearest off-site receptor. This setback distance is included to further minimize the

potential for nuisance conditions from particulate emissions. Based on facility observations and engineering judgment, the receiving and loadout points at feedmills are the sources with greater potential for nuisance from particulate emissions; therefore, these emission points were selected for a minimum setback distance of 100 feet to the nearest off-site receptor. The 100-foot minimum setback distance was determined based on the following:

a) The standard permit requires BACT, best management practices, and specific operating requirements that will minimize the potential for nuisance conditions from particulate emissions. When the facilities are operated in accordance with the requirements of the standard permit and coupled with the 100-foot minimum setback distance to receptor, nuisance dust conditions are not expected.

b) A protectiveness review was conducted and showed that site emissions, including emissions from facilities and activities as specified in section (9) of this standard permit, up to and including 9.24 lb/hr of PM₁₀ are protective at the property line (i.e., no setback distance from any facility emission point to the property line is required to ensure protectiveness). Based on this information, nuisance conditions are not expected at the property line. For sites with emissions greater than 9.24 lb/hr of PM₁₀, all facility emission points, including facilities and activities as specified in section (9) of this standard permit, at the site must meet a minimum setback distance from the property line. The property line setback distance is directly correlated to the site emissions and was determined through the modeling. If the receiving and loadout points are located in accordance with the 100-foot minimum setback distance to receptor and meet any applicable corresponding property line setback distances determined through the use of Figure 1 of this standard permit, nuisance dust conditions are not expected.

c) The standard permit does not allow visible emissions from any portable auger to leave the property.

Paragraph (F)(iii) specifies the minimum setback distance necessary for a hay grinder and associated engine located at the feedmill site to meet in order for a feedmill to be eligible for authorization under this standard permit. The minimum setback distance for a hay grinder and its associated engine is 100 feet to the nearest property line. This setback distance is included to further minimize the potential for nuisance conditions from particulate emissions. Based on facility observations and engineering judgment, hay grinders also have the potential for nuisance from particulate emissions (similar to receiving and loadout points); therefore, hay grinders were selected for a minimum setback distance of 100 feet to the nearest property line. The 100-foot minimum setback distance was determined based on the following:

a) The standard permit requires BACT, best management practices, and specific operating requirements that will minimize the potential for nuisance conditions from particulate emissions. When the facilities are operated in accordance with the requirements of the standard permit and coupled with the 100-foot minimum setback distance to the property line, nuisance dust conditions are not expected.

b) A protectiveness review was conducted and showed that site emissions, including emissions from facilities and activities as specified in section (9) of this standard permit, up to and including 9.24 lb/hr of PM₁₀ are protective at the property line (i.e., no setback distance from any facility emission point to the property line is required to ensure protectiveness). Based on this information, nuisance conditions are not expected at the property line. For sites with emissions greater than 9.24 lb/hr of PM₁₀, all facility emission points, including facilities and activities as specified in section (9) of this standard permit, at the site must meet a minimum setback distance from the property line. The property line setback distance is directly correlated to the site emissions and was determined through the modeling. If the hay grinder and associated engine are located in accordance with the 100-foot minimum setback distance to the property line and meet any applicable corresponding property line setback distances determined through the use of Figure 1 of this standard permit, nuisance dust conditions are not expected.

c) The standard permit does not allow any more than one hay grinder and associated engine at a feedmill site and does not allow visible emissions from any hay grinder to leave the property.

Paragraph (F)(iv) specifies the minimum setback distance necessary for all scrubber exhausts to meet in order for a feedmill to be eligible for authorization under this standard permit. The feedmills specified in subsection (5)(A) of this standard permit also have the potential for nuisance from odors. Therefore, the odor scrubber exhausts associated with these operations must meet a minimum setback distance of 100 feet to the nearest property line. This 100-foot property line minimum setback distance was based on the following:

a) For feedmills producing feed with the potential to produce nuisance odors (including, but not limited to, dog food, cat food, turkey feed, emu feed, and fish feed), the standard permit requires BACT through the use of a scrubber and specifies operating parameters for the scrubber. The operating parameters specified have been proven to be effective in controlling odors from these types of operations.

b) When the scrubber is operated in accordance with the requirements in the standard permit and meets the 100-foot minimum setback distance to the property line as well as any additional property line setback distances determined through the use of Figure 1 of this standard permit, nuisance odor conditions are not expected.

Feedmill operations meet the conditions of paragraph (F)(v) if the total PM₁₀ emissions from the site, including emissions from facilities and activities as specified in section (9) of this standard permit, do not exceed 9.24 lb/hr. The total PM₁₀ emissions may exceed 9.24 lb/hr if all facility emission points, including facilities and activities as specified in section (9) of this standard permit, emitting PM₁₀ at the site meet the specified minimum setback distance to the property line required to demonstrate compliance with the 24-hour PM₁₀ NAAQS determined by using Figure 1 of this standard permit. The emission rates and distance requirements in Figure 1 were determined through current modeling

techniques and will be discussed further in the Protectiveness Review portion of this technical summary. All PM₁₀ emission rates referenced in subsection (F) are site-wide; therefore, PM₁₀ emissions from any other facilities or sources at the site must be included when determining the required minimum setback distance and qualification for this standard permit. Subparagraph (F)(v)(b) also includes a clarification that the minimum setback distance to the property line shall be measured from each facility emission point or maintenance activity emission point to the nearest property line using the shortest distance to that property line (i.e., the nearest corresponding property line). All facility emission points and maintenance activity emission points must meet the minimum setback distance requirements determined by using Figure 1 of this standard permit.

Subsection (G) specifies that all portable augers authorized by this standard permit and on the feedmill site must meet the requirements in subsection (7)(A) of this standard permit. Subsection (G) is included to ensure protectiveness and minimize nuisance potential associated with these portable facilities.

Subsection (H) specifies that all hay grinders authorized by this standard permit and on the feedmill site must meet the requirements in subsection (8)(A) of this standard permit. Subsection (H) is included to ensure protectiveness and minimize nuisance potential associated with these facilities.

Subsection (I) requires registration with and approval from the TCEQ Air Permits Division prior to the construction or modification of any feedmill producing feed with the potential to produce nuisance odors (including, but not limited to, dog food, cat food, turkey feed, emu feed, and fish feed). Due to the odor nuisance potential associated with these types of operations, it is necessary for TCEQ staff to determine that the scrubber meets all design parameters and that the owner or operator has represented compliance with the required control equipment and required operational practices.

Requirements Specific to All Other Feedmills (New, Modified, or Existing)

Section (6) of this standard permit addresses new, modified, or existing feedmills not producing feed as specified in subsection (5)(A) of this standard permit. The addition of portable augers or a hay grinder at the feedmill site would be a modification requiring emissions from any hay grinder and portable auger to be included in the overall site emissions. All facilities associated with the feedmill must be authorized under this standard permit. Paragraph (A)(i) requires the use of calculation methods accepted by TCEQ at the time of the standard permit claim to determine emission rates.

Paragraph (A)(ii) specifies the minimum setback distance necessary for all receiving and loadout points for authorization under this standard permit. The minimum setback distance for receiving and loadout points (including portable augers) is 100 feet to the nearest off-site receptor. This setback distance is included to further minimize the potential for nuisance conditions from particulate emissions. Based on facility observations and engineering judgment, the receiving and loadout points at feedmill operations are the sources with greater potential for nuisance from particulate emissions; therefore, these emission points were selected for a minimum setback distance of 100 feet

to the nearest off-site receptor. The 100-foot minimum setback distance was determined based on the following:

a) The standard permit requires BACT, best management practices, and specific operating requirements that will minimize the potential for nuisance conditions from particulate emissions. When the facilities are operated in accordance with the requirements of the standard permit and coupled with the 100-foot minimum setback distance to receptor, nuisance dust conditions are not expected.

b) A protectiveness review was conducted and showed that site emissions, including emissions from facilities and activities as specified in section (9) of this standard permit, up to and including 9.77 lb/hr of PM₁₀ are protective at the property line (i.e., no setback distance from any facility emission point to the property line is required to ensure protectiveness). Based on this information, nuisance conditions are not expected at the property line. For sites with emissions greater than 9.77 lb/hr of PM₁₀, all facility emission points, including facilities and activities as specified in section (9) of this standard permit, at the site must meet a minimum setback distance from the property line. The property line setback distance is directly correlated to the site emissions and was determined through the modeling. If the receiving and loadout points are located in accordance with the 100-foot minimum setback distance to receptor and meet any applicable corresponding property line setback distances determined through the use of Figure 2 of this standard permit, nuisance dust conditions are not expected.

c) The standard permit does not allow visible emissions from any portable auger to leave the property.

Paragraph (A)(iii) specifies the minimum setback distance necessary for a hay grinder and associated engine located at the feedmill site to meet in order for a feedmill to be eligible for authorization under this standard permit. The minimum setback distance for a hay grinder and its associated engine is 100 feet to the nearest property line. This setback distance is included to further minimize the potential for nuisance conditions from particulate emissions. Based on facility observations and engineering judgment, hay grinders also have the potential for nuisance from particulate emissions (similar to receiving and loadout points); therefore, hay grinders were selected for a minimum setback distance of 100 feet to the nearest property line. The 100-foot minimum setback distance was determined based on the following:

a) The standard permit requires BACT, best management practices, and specific operating requirements that will minimize the potential for nuisance conditions from particulate emissions. When the facilities are operated in accordance with the requirements of the standard permit and coupled with the 100-foot minimum setback distance to the property line, nuisance dust conditions are not expected.

b) A protectiveness review was conducted and showed that site emissions, including emissions from facilities and activities as specified in section (9) of this standard permit, up to and including 9.77 lb/hr of PM₁₀ are protective at the property line (i.e., no setback

distance from any facility emission point to the property line is required to ensure protectiveness). Based on this information, nuisance conditions are not expected at the property line. For sites with emissions greater than 9.77 lb/hr of PM₁₀, all facility emission points, including facilities and activities as specified in section (9) of this standard permit, at the site must meet a minimum setback distance from the property line. The property line setback distance is directly correlated to the site emissions and was determined through the modeling. If the hay grinder and associated engine are located in accordance with the 100-foot minimum setback distance to the property line and meet any applicable corresponding property line setback distances determined through the use of Figure 2 of this standard permit, nuisance dust conditions are not expected.

c) The standard permit does not allow any more than one hay grinder and associated engine at a feedmill site and does not allow visible emissions from any hay grinder to leave the property.

Feedmill operations meet the conditions of paragraph (A)(iv) if the total PM₁₀ emissions from the site, including emissions from facilities and activities as specified in section (9) of this standard permit, do not exceed 9.77 lb/hr. The total PM₁₀ emissions may exceed 9.77 lb/hr if all facility emission points, including facilities and activities as specified in section (9) of this standard permit, emitting PM₁₀ at the site meet the specified minimum setback distance to the property line required to demonstrate compliance with the 24-hour PM₁₀ NAAQS determined by using Figure 2 of this standard permit. The emission rates and distance requirements in Figure 2 were determined through current modeling techniques and will be discussed further in the Protectiveness Review portion of this technical summary. All PM₁₀ emission rates referenced in subsection (A) are site-wide; therefore, PM₁₀ emissions from any other facilities or sources at the site must be included when determining the required minimum setback distance and qualification for this standard permit. Subparagraph (A)(iv)(b) also includes a clarification that the minimum setback distance to the property line shall be measured from each facility emission point or maintenance activity emission point to the nearest property line using the shortest distance to that property line (i.e., the nearest corresponding property line). All facility emission points and maintenance activity emission points must meet the minimum setback distance requirements determined by using Figure 2 of this standard permit.

Subsection (B) specifies that all portable augers authorized by this standard permit and on the feedmill site must meet the requirements in section (7) of this standard permit. Subsection (B) is included to ensure protectiveness and minimize nuisance potential associated with these portable facilities.

Subsection (C) specifies that all hay grinders authorized by this standard permit and on the feedmill site must meet the requirements in section (8) of this standard permit. Subsection (C) is included to ensure protectiveness and minimize nuisance potential associated with these facilities.

Subsection (D) specifies that neither notification nor registration is required for feedmills not producing feed as specified in subsection (5)(A) of this standard permit. To

streamline the permitting process and allocate resources to more complex and controversial permitting projects, these facilities were evaluated to determine whether feedmills meeting all of the applicable requirements of this standard permit could be exempt from the notification and registration processes. Based on the review of existing permits, discussions within affected areas of the TCEQ, and the emission rate limitations and distance requirements determined to be protective through the modeling, the commission determined that notification and registration are not required.

Requirements Specific to Portable Augers

This section addresses the use of portable augers. Paragraph (A)(i) specifies that all portable augers authorized by this standard permit, whether operating as the only facilities present at a site or in conjunction with an on-site feedmill, must handle only those agricultural products as specified in THSC, §382.020(a). These agricultural products are grain, seeds, legumes, and vegetable fibers. This condition is included to allow an additional authorization mechanism for those operations handling any one of these products whether they are larger commercial operations or smaller, non-commercial, or on-farm entities. This flexibility was added to this standard permit because feedmills typically receive a variety of materials and commodities to process a final feed product whereas grain elevators and grain handling operations are very specific in receiving only materials defined as grain. Allowing the handling of these specific agricultural products does not change emission factors, short-term emission rates, or minimum distance requirements determined in the feedmill protectiveness review.

Paragraph (A)(ii) requires the use of calculation methods accepted by the TCEQ at the time of the standard permit claim to determine emission rates. When portable augers are the only facilities (with the exception of facilities and activities as specified in section (9) of this standard permit) at the site, the augers will also be required to meet the conditions of paragraph (A)(iii). The standard permit requires that the total PM₁₀ emissions from the site, including emissions from any facility and activity as specified in section (9) of this standard permit, do not exceed 0.95 lb/hr, or the total PM₁₀ emissions from the site exceed 0.95 lb/hr and all portable augers and all facilities and activities (as specified in section (9) of this standard permit) emitting PM₁₀ at the site meet the specified minimum setback distance to the property line required to demonstrate compliance with the 24-hour PM₁₀ NAAQS determined by using Figure 3. The emission rates and distance requirements in Figure 3 were determined through current modeling techniques and will be discussed further in the Protectiveness Review portion of this technical summary. All PM₁₀ emission rates referenced in subsection (A) are site-wide. Subparagraph (A)(iii)(b) also includes a clarification that the minimum setback distance to the property line shall be measured from each facility emission point or maintenance activity emission point to the nearest property line using the shortest distance to that property line (i.e., the nearest corresponding property line). All facility emission points and maintenance activity emission points must meet the minimum setback distance requirements determined by using Figure 3 of this standard permit.

For portable augers that are the only facilities (with the exception of facilities and activities as specified in section (9) of this standard permit) at the site, no minimum

setback distance is required to further minimize the potential for nuisance from particulate emissions. This determination was based on the following:

a) These portable facilities are on site for minimal periods of time. For the time they are at the site, the standard permit does not allow visible emissions from these facilities to leave the property.

b) A protectiveness review was conducted for sites in which portable augers are the only facilities (with the exception of facilities and activities as specified in section (9) of this standard permit) at the site, and showed that site emissions, including emissions from facilities and activities as specified in section (9) of this standard permit, up to and including 0.95 lb/hr of PM₁₀ are protective at the property line (i.e., no setback distance to the property line is required to ensure protectiveness). Based on this information, nuisance conditions are not expected at the property line. For sites with emissions greater than 0.95 lb/hr of PM₁₀, portable augers and all facilities and activities (as specified in section (9) of this standard permit) at the site must meet a minimum setback distance from the property line. The setback distance is directly correlated to the site emissions and was determined through the modeling. If the facilities are located in accordance with any applicable corresponding property line setback distances determined through the use of Figure 3 of this standard permit, nuisance dust conditions are not expected.

Paragraph (A)(iv) prohibits any visible emissions from any portable auger authorized by this standard permit from leaving the property. The requirements in subsection (7)(A) of this standard permit ensure protectiveness of human health and welfare and minimize nuisance potential associated with these portable facilities.

Subsection (B) specifies that neither notification nor registration is required for portable augers that are located at a feedmill that is not producing feed as specified in subsection (5)(A) of this standard permit. To streamline the permitting process and allocate resources to more complex and controversial permitting projects, these facilities were evaluated to determine whether portable augers meeting all of the applicable requirements of this standard permit could be exempt from the notification and registration processes. Based on the review of existing permits, discussions within affected areas of the TCEQ, and the emission rate limitations and distance requirements determined to be protective through the modeling, the commission determined that notification and registration are not required.

Subsection (C) specifies that neither notification nor registration is required for portable augers when they are the only facilities (with the exception of facilities and activities as specified in section (9) of this standard permit) at a site.

Requirements Specific to Permanent or Temporary Hay Grinders (New, Modified, or Existing)

Section (8) of this standard permit addresses the use of permanent or temporary hay grinders. Paragraphs (A)(i) through (A)(vii) require that hay grinders be used only to grind hay; no more than one hay grinder and associated engine can operate co-located

with an on-site feedmill; no more than two hay grinders and two associated engines can operate simultaneously at a site when the hay grinders and associated engines are the only facilities present at the site; all associated conveyors must be enclosed; each hay grinder must be filled to at least one-half capacity by volume of the tub before grinding operations begin and the capacity must be maintained at that level during grinding operations; the emission rates must be determined using calculation methods accepted by the TCEQ at the time of the standard permit claim; and all hay grinders and associated engines must be located at least 250 feet from the nearest off-site receptor.

For hay grinders and associated engines that are the only facilities (with the exception of facilities and activities as specified in section (9) of this standard permit) at the site, a 250-foot minimum setback distance to the nearest off-site receptor is required to further minimize the potential for nuisance conditions from particulate emissions. The 250-foot minimum setback distance was based on the following:

a) These portable facilities are on site for minimal periods of time. For the time they are at the site, the standard permit does not allow the operation of any more than two hay grinders at a site and does not allow visible emissions from these facilities to leave the property.

b) A protectiveness review was conducted for sites in which hay grinders and associated engines are the only facilities (with the exception of facilities and activities as specified in section (9) of this standard permit) at the site, and showed that site emissions, including emissions from facilities and activities as specified in section (9) of this standard permit, up to and including 4.10 lb/hr of PM₁₀ are protective at the property line (i.e., no setback distance to the property line is required to ensure protectiveness). Based on this information, nuisance conditions are not expected at the property line. For sites with emissions greater than 4.10 lb/hr of PM₁₀, hay grinders and all facilities and activities (as specified in section (9) of this standard permit) at the site must meet a minimum setback distance from the property line. The setback distance is directly correlated to the site emissions and was determined through the modeling. If the facilities are located in accordance with the 250-foot minimum setback distance to receptor and meet any applicable corresponding property line setback distances determined through the use of Figure 4 of this standard permit, nuisance dust conditions are not expected.

When hay grinders are the only facilities (with the exception of facilities and activities as specified in section (9) of this standard permit) at the site, the grinders meet the conditions of paragraph (A)(viii) if the total PM₁₀ emissions from the site, including emissions from any facility or activity as specified in section (9) of this standard permit, do not exceed 4.10 lb/hr. The total PM₁₀ emissions from the site may exceed 4.10 lb/hr if all hay grinders and associated engines and any facility and activity, as specified in section (9) of this standard permit, emitting PM₁₀ at the site meet the specified minimum setback distance to the property line required to demonstrate compliance with the 24-hour PM₁₀ NAAQS determined by using Figure 4 of this standard permit. The emission rates and distance requirements in Figure 4 were determined through current modeling techniques and will be discussed further in the Protectiveness Review portion of this

technical summary. All PM₁₀ emission rates referenced in subsection (A) are site-wide. Subparagraph (A)(viii)(b) also includes a clarification that the minimum setback distance to the property line shall be measured from each facility emission point or maintenance activity emission point to the nearest property line using the shortest distance to that property line (i.e., the nearest corresponding property line). All facility emission points and maintenance activity emission points must meet the minimum setback distance requirements determined by using Figure 4 of this standard permit.

Paragraph (A)(ix) prohibits any visible emissions from the loading, operation, and unloading of any hay grinder authorized by this standard permit from leaving the property.

The requirements in section (8) of this standard permit ensure protectiveness of human health and welfare and minimize nuisance potential associated with these facilities. The limitation on the number of hay grinders operating at a site is based on emission calculations, modeling results, and information from the industry. The industry has stated that the limitation on the number of hay grinders is adequate for routine operations.

Subsection (B) specifies that neither notification nor registration is required for hay grinders that are located at a feedmill that is not producing feed as specified in subsection (5)(A) of this standard permit. To streamline the permitting process and allocate resources to more complex and controversial permitting projects, these facilities were evaluated to determine whether hay grinders meeting all of the applicable requirements of this standard permit could be exempt from the notification and registration processes. Based on the review of existing permits, discussions within affected areas of the TCEQ, and the emission rate limitations and distance requirements determined to be protective through the modeling, the commission determined that notification and registration are not required.

Subsection (C) specifies that neither notification nor registration is required for hay grinders when they are the only facilities (with the exception of facilities and activities as specified in section (9) of this standard permit) at a site.

Planned Maintenance, Start-up, and Shutdown (MSS) Activities

Section (9) of this standard permit addresses emissions from planned MSS activities from those facilities authorized by this standard permit. Subsection (A) specifies that emissions from planned start-up and shutdown activities are authorized by this standard permit. Start-up and shutdown emissions are virtually indistinguishable from production emissions. Although there may be minor emissions associated with start-up and shutdown, particulate emission factors used to quantify production emissions are considered to have enough conservatism to include any incidental increases that may be attributed to start-up and shutdown. In addition, emissions from planned start-up and shutdown of combustion units should not result in any quantifiable hourly emissions change of products of combustion. Although there may be transitional and incidental spikes before units stabilize during start-ups (5 to 15 minutes), overall products of combustion are expected to be within hourly range limits for normal loads during

production operations. Start-up and shutdown emissions for feedmill operations, including portable augers and hay grinders, were evaluated through air dispersion modeling, and when combined with emissions from production, all emissions were determined to be protective provided that the operation is in compliance with all requirements of the standard permit.

Emissions from specific planned maintenance activities are authorized by this standard permit, and these activities are listed in subsection (B). The planned maintenance activities and facilities listed in this subsection apply to those feedmill operations (including portable augers and hay grinders) authorized by this standard permit. After discussions with industry representatives, a list of common maintenance activities and facilities was developed, and the frequency and timing of the maintenance activities was also determined. Common maintenance activities and facilities authorized by this standard permit include abrasive blasting, surface preparation, surface coating, facilities used for testing and repair of engines, compressors/pumps/engines, hand-held or manually operated equipment, vacuum cleaning systems, hydraulic oil filtering, lubrication, and brazing/soldering/welding/metal cutting equipment. Emissions from the activities listed in subsection (B) are expected to be protective due to the operational requirements and site-wide emission rate limitations specified in subsection (9)(C) of this standard permit.

The operational requirements in subsection (C) consist of site-wide material usage rate limitations for abrasives, solvents, lubricants, coatings, dyes, bleaches, fragrances, and water-based surfactants and detergents; restrictions on planned maintenance activities occurring simultaneously with each other and with production operations; and site-wide emission rate limitations for lead and all other contaminants associated with planned maintenance activities. The material usage limitations have been previously evaluated and are considered de minimis, and the emission limitations for lead (0.6 tons per year) and all other contaminants (25 tons per year or less for any one contaminant) are considered insignificant and consistent with emission rate limitations in current PBRs. The material usage and emission rate limitations are also site-wide limitations to minimize cumulative emissions from planned maintenance activities that may be associated with other facilities (not authorized by this standard permit) located at the site. Planned maintenance activities, associated with the facilities or groups of facilities authorized by this standard permit, are not expected to result in adverse cumulative effects due to the restriction of simultaneous maintenance activities and the restriction of those maintenance activities occurring with production operations.

Subsection (D) allows some flexibility to the facility operator regarding planned maintenance activities. Subsection (D) guides the applicant toward alternate methods of authorization for planned maintenance that cannot meet the requirements of subsections (9)(B) and (9)(C) of this standard permit. Forms of authorization are listed as any applicable PBR, any other applicable standard permit, or a combination of these mechanisms. Even with these options, protectiveness is maintained since planned maintenance activities still cannot occur simultaneously with each other, and cannot occur simultaneously with production operations. Any maintenance, start-up, and

shutdown emissions that are not authorized are subject to the applicable requirements of 30 TAC Chapter 101, Subchapter F, Emissions Events and Scheduled Maintenance, Startup, and Shutdown Activities.

V. PROTECTIVENESS REVIEW

Particulate matter is the principal criteria pollutant emitted at a feedmill site. For facilities authorized under this standard permit, predicted 24-hour and annual average concentrations of PM₁₀ were evaluated for comparison to the PM₁₀ NAAQS as part of the protectiveness review. Predicted concentrations for carbon monoxide (CO), sulfur dioxide (SO₂), and nitrogen dioxide (NO₂) (associated with products of combustion) were also evaluated for comparison to the NAAQS as part of the protectiveness review. In accordance with the U.S. EPA's PM_{2.5} surrogate policy, the TCEQ uses the PM₁₀ program as a surrogate for the PM_{2.5} program until the U.S. EPA fully implements and integrates PM_{2.5} into the new source review program. PM₁₀ controls and emissions were modeled, and predicted PM₁₀ concentrations were compared to the PM₁₀ NAAQS. Under the surrogate policy, compliance with the PM₁₀ NAAQS was used as the surrogate for compliance with the PM_{2.5} NAAQS. This is a reasonable approach given that a relatively small fraction of the PM₁₀ emissions from this industry consist of PM_{2.5}. For this industry, 17 percent of PM₁₀ emissions are assumed to be PM_{2.5}. The ratio of the 24-hour standards for PM_{2.5} and PM₁₀ (35 micrograms per cubic meter (µg/m³) to 150 µg/m³) is 23 percent. The ratio of the annual standards for PM_{2.5} and PM₁₀ (15 µg/m³ to 50 µg/m³) is 30 percent. Both of these ratios are greater than the fraction of PM_{2.5} emissions. Therefore, demonstrating compliance with the PM₁₀ NAAQS is sufficient to demonstrate compliance with the PM_{2.5} NAAQS.

The primary NAAQS define a level of air quality that the U.S. EPA administrator determined is necessary, with an adequate margin of safety, to protect the public health. The secondary NAAQS define a level of air quality that the administrator determined necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant. Such standards are subject to revision, and additional primary and secondary standards may be promulgated as the administrator deems necessary to protect the public health and welfare. The primary and secondary NAAQS for a 24-hour average for PM₁₀ is 150 µg/m³ while the primary and secondary NAAQS for the long-term average PM₁₀ standard is 50 µg/m³.

The protectiveness review examined worst-case predicted concentrations from feedmill operations. The commission used the following modeling assumptions, selections, and techniques:

- (1) air dispersion modeling was performed using ISC-PRIME (version 04269) and ISCST3 (version 02035);
- (2) scenarios for feedmill operations with an odor control scrubber, feedmill operations without an odor control scrubber, products of combustion, portable augers, and hay grinders were evaluated. The feedmill operations with and without an odor control scrubber scenarios included PM₁₀ emissions from boilers, pellet coolers, grain cleaning, drying, receiving, handling, loadout devices, portable augers, and hay grinding

operations. The products of combustion scenario included emissions of SO₂, NO₂, and CO from the hay grinder engines and the higher emissions of SO₂, NO₂, and CO from the dryers, boilers, and pellet coolers associated with two different fuels (natural gas and propane). The portable auger scenario only included PM₁₀ emissions from the portable auger since these facilities may operate alone at a site. The hay grinder scenario only included PM₁₀ emissions from two hay grinders and the PM₁₀ emissions associated with the products of combustion from the two hay grinder engines since these facilities may operate alone at a site;

(3) the emission rates modeled were based on maximum hourly emissions. The emissions rates of PM₁₀ were adjusted in the model to represent 24-hour average emissions;

(4) daytime and nighttime hours were modeled;

(5) all facilities and equipment at the site were assumed to be within a 200-foot by 200-foot area for a conservative estimate of predicted concentrations. Feedmills have emissions from stacks and emissions that are fugitive in nature. The stacks were modeled as point sources and the fugitive emissions were modeled as area sources;

(6) all sources were co-located at the center of the property. By doing so, there is no bias based on source configuration and/or wind direction. This technique will also provide conservative results, since the cumulative impact of all sources is maximized;

(7) a fugitive adjustment factor of 0.6 was applied to the source emission rates of applicable sources in the modeling analysis to account for plume meander at low wind speeds and high atmospheric stability;

(8) a 0.75 factor was multiplied with the emission rate of NO₂. This is the U.S. EPA national default value, as referenced in Appendix W to 40 CFR Part 51, Requirements for Preparation, Adoption, and Submittal of Implementation Plans to account for limited conversion of NO_x to NO₂;

(9) rural dispersion coefficients and flat terrain were used in the modeling analysis. The selection of rural dispersion coefficients is conservative because the final results are given in distance required to fall below the PM₁₀ 24-hour average NAAQS, and the distance to the maximum concentration for rural dispersion is farther than the distance with urban dispersion. Flat terrain is appropriate for modeling low-level fugitive emissions, which are the dominant contributor to the overall maximum predicted concentrations;

(10) BPIP-PRIME (version 04274) was used to develop the downwash parameters. A cylindrical structure was used as the only downwash structure. The radius of the structure was estimated by converting the principal structure at an average-size feedmill site into a circle with equivalent area. The height of the cylindrical structure was based

on an average height for the principal structure at an average-size feedmill site. The stacks were located at the center of the structure so there was no wind direction bias;

(11) the modeling analysis used surface data from Austin and upper air data from Victoria for the years 1983, 1984, 1986, 1987, and 1988. Since the analysis is primarily for short-term concentrations, this five-year data set includes worst-case short-term meteorological conditions that could occur anywhere in the state. The wind directions were used at ten-degree intervals to be coincident with the receptor radials. This would provide predictions along the plume centerline, which is a conservative result; and

(12) a polar receptor grid extending from the edge of the property to 1,800 feet with 50-foot spacing along each ten-degree radial was used in the modeling analysis. This was done to determine the plume centerline concentration.

To ensure that there are no adverse health effects, the commission performed air quality modeling to determine an appropriate setback distance from the site property line for feedmill equipment and operations, including portable augers and hay grinders. The air quality modeling used in these analyses is typically conservative. Combined with conservative emission rate estimates, the modeling tends to over-predict maximum ground-level concentrations compared to actual monitored concentrations. The commission found that the 24-hour PM_{10} NAAQS is the limiting threshold for feedmill operations, portable augers, and hay grinders. Based on modeling PM_{10} , the emissions from a feedmill operation (including portable augers and hay grinders) were used to establish certain limitations with respect to distances between facilities and the property line as a function of the site-wide emission rate. The modeling results demonstrated that the facilities at a feedmill operation, producing feed with the potential to produce nuisance odors and for which an odor control scrubber is required, with site-wide emissions of PM_{10} less than or equal to 9.24 lb/hr do not require a setback distance from the property line to meet standards. For these feedmill operations with site-wide emissions of PM_{10} greater than 9.24 lb/hr, a graph has been developed depicting the required minimum facility setback distance from the nearest property line versus the total site-wide allowable PM_{10} emissions to meet the NAAQS.

Modeling results demonstrated that the facilities at a feedmill operation, not producing feed with the potential to produce nuisance odors and for which an odor control scrubber is not required, with site-wide emissions of PM_{10} less than or equal to 9.77 lb/hr do not require a setback distance from the property line to meet standards. For these feedmill operations with site-wide emissions of PM_{10} greater than 9.77 lb/hr, a graph has been developed depicting the required minimum facility setback distance from the nearest property line versus the total site-wide allowable PM_{10} emissions to meet the NAAQS.

For portable augers operating alone with site-wide emissions of PM_{10} less than or equal to 0.95 lb/hr, no minimum facility setback distance from the nearest property line is required to meet standards. For portable augers operating alone at a site with site-wide emissions of PM_{10} greater than 0.95 lb/hr, a graph has been developed depicting the

required minimum facility setback distance from the nearest property line versus the total site-wide allowable PM₁₀ emissions to meet the NAAQS.

For two or less hay grinders operating alone at a site with site-wide emissions of PM₁₀ less than or equal to 4.10 lb/hr, no minimum facility setback distance from the nearest property line is required to meet standards. For two or less hay grinders operating alone at a site with site-wide emissions of PM₁₀ greater than 4.10 lb/hr, a graph has been developed depicting the required minimum facility setback distance from the nearest property line versus the total site-wide allowable PM₁₀ emissions to meet the NAAQS. The modeling report is available upon request.

VI. PUBLIC NOTICE AND COMMENT PERIOD

In accordance with 30 TAC §116.603, Public Participation in Issuance of Standard Permits, the TCEQ published notice of the proposed standard permit in the *Texas Register* and newspapers of the largest general circulation in the following metropolitan areas: Austin, Corpus Christi, Dallas, Houston, Lubbock, and Midland. The date for these publications was November 6, 2009. The public comment period ran from the date of publication until December 15, 2009. Comments on the proposed standard permit were received from the Texas Cotton Ginners' Association (TCGA), Biodiesel Coalition of Texas (BCOT), Texas Grain and Feed Association (TGFA), Justin Seed Company (Justin Seed), and the U.S. Environmental Protection Agency (EPA).

VII. PUBLIC MEETINGS

The TCEQ held a public meeting on the proposed Air Quality Standard Permit for Feedmills, Portable Augers, and Hay Grinders in Austin on December 10, 2009, at 9:30 a.m., at the TCEQ, Building B, Room 201A, 12100 Park 35 Circle, Austin, Texas. There were no formal comments submitted at the public meeting.

VIII. ANALYSIS OF COMMENTS

TCGA indicated support for the proposed standard permit.

The commission appreciates the support.

TCGA commented that the facilities covered by the proposed standard permit have a minor impact, and supported the concept of using a sliding scale for distance limitations based on emission rate.

The standard permit was designed with conditions and requirements that are intended to ensure that the facilities and operations covered by the standard permit will not have a detrimental effect on human health or the environment. The variable distance requirements in the standard permit will allow operational flexibility for owners and operators of authorized facilities while still establishing enforceable emission rates and ensuring that the standard permit is protective.

TCGA commented that the operations covered by the standard permit have many common features, and use standard control methods. TCGA commented that the

proposed standard permit has requirements that are similar to case-by-case permits issued for these facilities, and therefore would be protective.

TCGA is correct that many of the facilities and operations covered by the standard permit have similar features and use common control methods. The terms and conditions of the standard permit are intentionally similar to the terms and conditions in case-by-case permits, as standard permits are required by statute to implement BACT and must be protective of human health and the environment.

TCGA commented that the proposed standard permit would substantially reduce the amount of time that TCEQ staff spends reviewing individual permit applications, and streamline the process for the applicants.

The commission agrees that the standard permit will reduce the time and resources that are currently expended to perform case-by-case permit reviews for these types of facilities. The standard permit will provide a streamlined authorization method for the regulated community and will allow the commission to focus resources on reviews of projects that are more environmentally significant.

BCOT commented that the proposed standard permit should allow for the use of biodiesel fuel. BCOT stated that agricultural and biodiesel development go hand-in-hand. BCOT noted that the 2005 amendments to the Electric Generating Unit Standard Permit provided for the use of renewable fuels such as biodiesel.

The commission has added language to allow for the use of biodiesel and biodiesel-diesel blends as an authorized fuel under this standard permit. However, all biodiesel used as a fuel (or in a fuel blend) must meet ASTM D6751 specifications. In addition, many areas of Texas are subject to the Low Emission Diesel requirements of 30 TAC Chapter 114, Subchapter H, Division 2, and owners or operators seeking to use biodiesel in affected areas must ensure that the fuel complies with those requirements.

TGFA generally supports the development of the proposed standard permit.

The commission appreciates the support.

TGFA expressed concern that most feedmills use some type of “rendered byproduct” in their operation, which would trigger increased odor control requirements and recordkeeping requirements under the standard permit. TGFA commented that many substances that could be considered rendering byproducts do not create any risk of nuisance odors, and other rendering byproducts do not create a risk of nuisance odors when used in certain types of processes (such as the pelleting of cattle cubes). TGFA recommended that the terms “process” and “rendering byproducts” be defined more explicitly to include only those processes and rendering byproducts that actually create a risk of nuisance odors.

The commission agrees with the concern expressed by TGFA and has determined that the headings for the two sections covering the specific requirements for feedmills should be changed from “Requirements Specific to Feedmills Processing Rendering By-Products (New, Modified, or Existing)” and “Requirements Specific to Feedmills Not Processing Rendering By-Products (New, Modified, or Existing)” be changed to “Requirements Specific to Feedmills Producing Certain Feeds (New, Modified, or Existing)” and “Requirements Specific to All Other Feedmills (New, Modified, or Existing),” respectively. Subsection (5)(A) will continue to list the types of feed that are of concern and provide clarification as to which feedmills the requirements of this section are applicable.

TGFA commented that TCEQ should expand the allowed fuel types to include renewable fuels such as biogas, biofuel, and biomass-derived fuels, such as manure and wood chips. TGFA also recommended that biodiesel, renewable diesel, and ethanol be allowed as fuels. TGFA stated that many of their members already produce these fuels, and that their use should be encouraged due to benefits such as being domestically available, reducing waste, and generating carbon dioxide offset credits.

The commission has added language to allow for the use of biodiesel and biodiesel-diesel blends as an authorized fuel under this standard permit. However, all biodiesel used as a fuel (or in a fuel blend) must meet ASTM D6751 specifications. In addition, many areas of Texas are subject to the Low Emission Diesel requirements of 30 TAC Chapter 114, Subchapter H, Division 2, and owners or operators seeking to use biodiesel in affected areas must ensure that the fuel complies with those requirements. With respect to the other fuels suggested by TGFA, the commission has determined that these alternative fuel formulations would require greater case-by-case study and compliance verification than would be practical to accommodate under this standard permit.

Justin Seed expressed concern that the proposed standard permits covering dry bulk fertilizer handling operations; grain elevators/grain handling operations and portable grain augers; and feedmills, portable augers, and hay grinders are being forwarded with little input from the industries that they affect, and with little knowledge of the impact. Justin Seed suggested that the impact on agriculture could be much larger than stated in the technical summary documents.

The commission has not changed the standard permit in response to this comment. Before these agricultural standard permits were proposed, the commission formed an advisory group comprised of stakeholders from the agricultural industry, and held two stakeholder meetings on draft versions of the standard permits to solicit input from interested parties. A variety of trade associations, organizations, and companies had representatives attending these stakeholder meetings, including but not limited to the Texas Cotton Ginners’ Association, United States Department of Agriculture, Texas Ag Industries Association, Texas Cattle Feeders’ Association, and companies involved in the production or sale of grain, peanuts, and fertilizer. Following these stakeholder meetings, TCEQ revised the draft permits partially

based on input from these groups, and formally proposed the agricultural standard permits on November 6, 2009. Notices of the proposals were published in the Texas Register and in six major newspapers in Texas. An announcement of the proposals was also posted on the commission's web site, and a press release on the proposed standard permits was issued for distribution to the media. Notice of the proposed standard permits was also sent to a representative of the Texas Department of Agriculture. In addition, notice of the proposed standard permits was provided electronically to persons subscribed to a mailing list for air permitting issues. The commission believes that in combination, these stakeholder meetings and notices provided sufficient opportunity for the relevant industries to offer input on the proposed standard permits.

As to the impact of the standard permits on these industries, in many cases the impact will be minimal, with some exceptions noted further below. Generally, any facility that produces air contaminants is required to obtain some type of authorization for those emissions. That authorization is typically a permit by rule under 30 TAC Chapter 106, a standard permit, or a case-by-case permit under 30 TAC Chapter 116. The proposed standard permits would offer a new, streamlined method of authorization for those facilities that do not wish to use a permit by rule or case-by-case permit. Existing facilities that are already authorized could continue to operate under those authorizations and would not be affected by the proposed standard permits. Facilities that are most likely to be directly affected by the proposed standard permits are portable pipe reactors (polyphosphate blenders), and commercial grain handling facilities. The commission is considering the repeal of permit by rule 30 TAC §106.302 for portable pipe reactors, and considering revisions to permit by rule 30 TAC §106.283 for grain handling, storage, and drying facilities. If the portable pipe reactor permit by rule is repealed, portable pipe reactors will be required to comply with the standard permit for polyphosphate blending operations, or meet another authorization mechanism such as another applicable PBR or a case-by-case permit. Similarly, if the planned changes to the permit by rule for grain handling, storage and drying are adopted, new or modified commercial grain handling operations will be required to comply with the standard permit for grain handling operations, or meet another authorization mechanism such as another applicable PBR or a case-by-case permit.

Justin Seed stated that they contacted two state trade associations and one federal trade association, and none of those associations understood the purpose or impact of the proposed standard permit.

The commission has not changed the proposed standard permit in response to this comment. The commission cannot speak for other associations or entities, and has no information as to why those associations may not have understood the purpose or impact of the proposed standard permit. The purpose of the proposed standard permit is to provide a new method of authorization for common agricultural operations, that is relatively simple to obtain, and that is protective of human health and the environment if the conditions of the standard permit are met. The standard

permit tends to allow more operational flexibility and larger facility sizes than the corresponding permit by rule, while minimizing registration and notification requirements. The standard permit is also a more streamlined and less resource-intensive method of authorization than a case-by-case permit. In combination, these features of the standard permit will allow the commission to more efficiently allocate resources towards the protection of air quality.

Justin Seed expressed concern that they (a) don't fully understand the purpose for the new standards, (b) are not able to identify what is being changed relative to current requirements, and (c) are unable to support or disagree to references made on the impact to industry stakeholders.

The commission has not changed the standard permit in response to this comment. The purpose of the agricultural standard permits is to provide a new, streamlined method of authorization for these types of facilities and operations, as an alternative to the use of a permit by rule or case-by-case permit. Except as noted below, owners or operators of agricultural facilities would still be able to use an applicable permit by rule, case-by-case permit, or other applicable authorization mechanism if they elect to do so, but the commission expects that in many cases the new standard permits will be a more attractive option for a variety of reasons. The issuance of the new standard permits does not directly affect or change existing requirements. Facilities that are already authorized would continue to hold that authorization and are not required to comply with a standard permit. However, as noted above, the commission is considering the repeal of the permit by rule for portable pipe reactors (polyphosphate blenders) and considering revisions to the permit by rule for grain handling, storage, and drying facilities. If those changes are adopted, then new or relocated portable pipe reactor (polyphosphate blending) facilities will need to comply with the applicable standard permit, a case-by-case permit, or other applicable authorization mechanism. Similarly, new or modified commercial grain handling facilities would be required to comply with the applicable standard permit, a case-by-case permit, or other applicable authorization mechanism. The repeal of 30 TAC §106.302 and the revisions to 30 TAC §106.283 are being proposed in a separate action.

Justin Seed mentioned that a statement in the feedmill standard permit technical summary refers to less than five permits in the vicinities of Abilene and Fort Worth and stated that more permits need to be issued because Justin Seed Company holds four permits in these vicinities. Justin Seed stated that they serve more than five businesses that use augers to supply Texas agricultural operations with seed, and these operations are located close to other structures but are used for less than 45 days a year.

The commission would like to clarify that the statement in the feedmill standard permit technical summary did not state there were only five permits in the vicinities of Abilene and Fort Worth. The technical summary stated that most (feedmill) operations will be located in North Texas, in the general vicinities of Abilene and Fort Worth. The technical summary also included a statement that the state

permits database showed less than five feedmill operations located in the nonattainment area counties of Ellis and Tarrant. Denton County, which is where the four facilities owned by Justin Seed Company are located, is also nonattainment but was not considered when conducting this database review. The purpose of these statements in the technical summary was to emphasize that minimal numbers of these types of operations are/will be located in nonattainment counties thereby, addressing any concerns the U.S. EPA may have regarding the authorization of additional sources in nonattainment areas. Portable grain augers that meet the requirements of the feedmill or grain elevator standard permits are authorized.

Justin Seed said they were uncertain of the impact of the standard permits on existing permitted facilities, when modifications or upgrades are performed. Justin Seed asked if older facilities would become subject to higher standards that would become burdensome.

The commission has not changed the standard permit in response to this comment. Modifications or changes at existing facilities that are already authorized by a case-by-case permit would typically be handled by an amendment or alteration to that permit, or, the use of an applicable permit-by-rule to authorize the change. Similarly, existing agricultural facilities that are already authorized by a permit by rule that requires registration would need to update their PBR registration to reflect the modification. In most situations, the availability of the new standard permits would not affect that process.

However, as noted above, the commission is considering an amendment to permit by rule 30 TAC §106.283 that would prohibit its use to authorize commercial grain handling facilities. If that amendment is adopted, then an existing commercial grain handling facility that is currently authorized by permit by rule 30 TAC §106.283 would not be able to use 30 TAC §106.283 to authorize any future modifications. The modified grain handling facility would have to comply with the applicable standard permit, meet another applicable PBR, obtain a case-by-case permit, or use another applicable authorization mechanism.

EPA stated that the standard permit must contain additional language compelling the facility to ensure that the entire site's emissions do not exceed major source threshold levels.

The commission has not changed the standard permit in response to this comment. The standard permit contains a provision that specifies that the standard permit cannot be used to authorize any facility or project that would constitute a new major stationary source or a major modification. The provision further states that the standard permit cannot be used at a major source. This provision is similar to the language in 30 TAC §116.610(b), which EPA approved as a State Implementation Plan (SIP) revision on November 14, 2003 (68 FR 64543). The second part of this provision, which prohibits the standard permit from being used at a major source, is more conservative than is typical of TCEQ practice for

standard permits. This provision was added to ensure protectiveness and further minimize concerns about federal applicability, but it is not an express requirement of the SIP or federal regulations concerning federal new source review. Finally, under 30 TAC §116.615(8), owners or operators are required to maintain records sufficient to demonstrate compliance with the applicable standard permit, which includes records to demonstrate that the site is not a major source. The commission believes the restrictions as written in the standard permit combined with the general conditions of 30 TAC §116.615 will be sufficient to allow TCEQ to enforce the condition relating to major source threshold levels.

EPA stated that the draft permit must provide a rationale to support the use of PM₁₀ as a surrogate for PM_{2.5}. EPA cited the recent Louisville Gas and Electric Petition Response, No. IV-2002-3, from the EPA Administrator Jackson, dated August 12, 2009.

The modeling and protectiveness review for this standard permit determined that the combined PM_{2.5} impacts from all sources would not exceed the short term PM_{2.5} NAAQS standards of 35 micrograms per cubic meter averaged over a 24-hour period, or the annual PM_{2.5} standards of 15 micrograms per cubic meter. A relatively small fraction of the PM₁₀ emissions from this industry consist of PM_{2.5}.

EPA stated that the proposed standard permit must contain either an enforceable annual particulate matter (PM) emission limitation or a maximum hourly limitation to keep the emissions below major source NSR or Title V applicability thresholds. Although the permit does state that facilities are not eligible if they constitute a new major stationary source or major modification, EPA stated that this condition is not enforceable. EPA recommended the permit include annual limits to ensure that the facility cannot become a major source and require that the facility document annual PM emissions, along with production and/or operational limits. EPA stated that the permit must specify a representative monitoring frequency which will ensure that compliance is demonstrated with a PM limit.

The commission has not changed the standard permit in response to this comment. Although the standard permit PM emission limits are presented in a manner that is different from most other TCEQ permits, the standard permit does contain enforceable hourly emission limits for PM. The standard permit contains a graph that represents the relationship between the allowable short-term PM emission rate and the available setback distance to the nearest property line. For example, for this standard permit, Figure 1 of the standard permit indicates that a site that has no effective setback distance to the property line is limited to a site-wide maximum emission rate of 9.24 lb/hr of PM₁₀. Also from Figure 1, a site with a setback distance of 500 feet is limited to a site-wide maximum short-term emission rate of 19.5 lb/hr. Regardless of the allowable short-term emission rate indicated by the applicable figure, other conditions of the standard permit concerning the non-applicability of the standard permit to major sources also remain in effect independently. The owner or operator of the standard permit facility is required by the standard permit to maintain records to show compliance with the applicable

emission rate determined by the applicable graph. Under 30 TAC §116.615(8), the owner or operator is also required to maintain records sufficient to demonstrate compliance with the standard permit, which includes records to demonstrate that the site is not a major source. TCEQ will enforce these conditions by inspection of these records.

As a point of clarification, although EPA's comment references Title V applicability thresholds in addition to Federal New Source Review (FNSR) thresholds, TCEQ is not aware of any restriction or prohibition on the use of standard permits issued under Subchapter F of 30 TAC Chapter 116 at a facility or site that is subject to Title V permitting. Although TCEQ does not allow a standard permit to be used to authorize a project that would constitute a major source or major modification under FNSR, TCEQ does not globally prohibit the use of a standard permit to authorize a project at a site that is potentially subject to Title V.

The commission has not included a monitoring frequency to demonstrate compliance with a PM limit. Because of the low level of emissions expected at these sites, the commission determined that monitoring frequencies associated with PM emission rate limitations are not necessary. The recordkeeping requirements in the standard permit are sufficient to demonstrate compliance with the specified emission rate limitations.

EPA stated that the permit must specify a representative monitoring frequency to ensure compliance with the opacity limit, and a recordkeeping requirement to ensure enforceability of the opacity limit.

The commission agrees with the EPA's comment and a monitoring frequency has been added to the standard permit to aid in the demonstration of compliance with specified opacity limitations. However, as it is not feasible for these operations to keep a certified opacity reader on site, the TCEQ has addressed this through a regular control device inspection program instead of direct measurements of opacity. The standard permit now includes a requirement that all air pollution abatement equipment must be checked for proper operation every 30 days (unless more frequent checks/inspections are otherwise specified in the standard permit). The recordkeeping requirements of the standard permit have also been changed to clarify that records are required to demonstrate compliance with this monitoring frequency. In addition to the monitoring now included in the standard permit, the commission will also continue to rely on periodic inspections to enforce opacity limits and control nuisances. The TCEQ investigators will use EPA Test Method 9 to determine compliance with the opacity limitation(s).

EPA stated that the permit must specify that all equipment within the stationary source should be considered in the emissions determination.

The commission has not changed the standard permit in response to this comment. The Applicability section of the standard permit includes a condition that states that

the standard permit cannot be used if the total site-wide emissions do not meet the applicable emission rate requirements. Although this condition does not explicitly refer to “all equipment,” it would not be possible to determine total site-wide emissions unless all sources of air pollution were included. Section IV of the permit technical summary, Permit Condition Analysis and Justification, notes that the determination of site-wide emissions includes emissions from all facilities at the site, including facilities that are not associated with the operation being authorized under the standard permit. The terminology used may be slightly different than suggested in EPA’s comment, but the language used in the standard permit and technical summary will accomplish the same goal. Note that the term “site” is potentially even broader than the term “stationary source” as a site can include multiple stationary sources.

EPA stated that to ensure enforceability, the permit must contain recordkeeping requirements for the PM and opacity emission limitations.

The standard permit as proposed requires that the owner or operator maintain records to demonstrate that the operation meets the applicable emission rate and setback distance requirements. With respect to opacity, it is not feasible for these small operations to keep a certified opacity reader on site, therefore the commission will enforce the opacity requirements through periodic monitoring of equipment performance and periodic TCEQ inspections. The owner or operator is required to maintain records of the periodic equipment/control device monitoring.

EPA requested that TCEQ consider a five-year records retention period (instead of the proposed two year period) to facilitate enforcement of other SIP requirements.

The commission has not changed the standard permit in response to this comment. TCEQ typically uses a two-year (24-month rolling) recordkeeping timeframe in association for non-major forms of authorization such as PBRs and standard permits, unless some other factor justifies a longer retention period. A five-year recordkeeping requirement would be more typical for records associated with federal regulations or a Title V permit. TCEQ is uncertain what other SIP requirements EPA is referring to in this comment. In the absence of more specific rationale to justify a five-year record retention period, TCEQ is electing to maintain the proposed 24-month retention period. However, standard permit holders should be aware that a five-year record retention period would apply if the standard permit operation is located at a site that is subject to Title V.

EPA requested that TCEQ include a provision stating any noncompliance with the permit constitutes a violation of the SIP and state law and is grounds for an enforcement action, for permit suspension, revocation, or revision, or for denial of a permit renewal application. In addition, EPA stated that the permit must contain reporting requirements for noncompliance with permit terms.

Although the commission's authority to enforce, revoke, revise, or deny a permit is already expressed in other commission rules and Texas statutes, the commission concurs that the permit should contain a provision to clearly state that emissions that exceed the limitations of the permit are a violation of the permit, and has added such a statement to the standard permit. With respect to reporting requirements for noncompliance with permit terms, TCEQ does not typically include such a condition in standard permits except in particular cases (for example, boilers equipped with a continuous emission monitoring system). Operations authorized under this standard permit are subject to all the rules of the commission including the recordkeeping and reporting requirements of 30 TAC Chapter 101, Subchapter F, Emissions Events and Scheduled Maintenance, Startup, and Shutdown Activities. Additional reporting requirements may apply if the standard permit facility is covered by a Title V permit.

EPA stated that they did not have access to the modeling used to make the determination for the lack of emission limits or operational limitations in the permit. EPA asked if TCEQ made the modeling data readily available, and if so, how was it made available.

The modeling data was made readily available; as stated in each standard permit proposal technical summary document, the modeling data for each standard permit was and is available upon request.

IX. STATUTORY AUTHORITY

This standard permit is issued under THSC, §382.011, General Powers and Duties, which authorizes the commission to control the quality of the state's air; THSC, §382.023, Orders, which authorizes the commission to issue orders necessary to carry out the policy and purposes of the TCAA; THSC, §382.051, Permitting Authority of Commission; Rules, which authorizes the commission to issue permits, including standard permits for similar facilities; THSC, §382.0513, Permit Conditions, which authorizes the commission to establish and enforce permit conditions consistent with Subchapter C of the TCAA; and THSC, §382.05195, Standard Permit, which authorizes the commission to issue standard permits according to the procedures set out in that section.

**AIR QUALITY STANDARD PERMIT FOR FEEDMILLS, PORTABLE
AUGERS, AND HAY GRINDERS**

Effective Date: April 7, 2010

This air quality standard permit authorizes the air emissions associated with feedmills, portable augers, and hay grinders that meet all of the applicable conditions listed in sections (1), (2), (3), (4), and (9) of this standard permit and, if applicable, the conditions listed in section (5) for construction and modification of feedmills producing certain feeds, section (6) for construction and modification of all other feedmills, section (7) for portable augers, and section (8) for hay grinders.

This standard permit does not relieve the owner or operator from complying with any other applicable provision of the Texas Health and Safety Code, Texas Water Code, rules of the Texas Commission on Environmental Quality (TCEQ), or any additional state or federal regulations. Emissions that exceed the limits in this standard permit are not authorized and are violations of the standard permit.

(1) Applicability

- (A) This standard permit may be used to authorize air emissions from feedmills (including, but not limited to, raw ingredient and finished feed storage facilities, grain and seed cleaners, hammermills, grinders, roller mills, flakers, pellet coolers, boilers, dryers, and engines), portable augers, and hay grinders on or after the effective date of this standard permit. This standard permit also authorizes any fugitive emissions associated with feedmills, portable augers, and hay grinders authorized by this standard permit.
- (B) A feedmill does not qualify for authorization under this standard permit if it has an on-site permanent raw grain storage capacity of more than 2.5 million bushels.
- (C) A feedmill does not qualify for authorization under this standard permit if any on-site associated fuel-fired equipment (including, but not limited to, boilers, dryers, and burners) has an individual heating rate of ten million British thermal units per hour (Btu/hr) or greater, or a combined heating rate of greater than 20 million Btu/hr. This requirement does not apply to engines.
- (D) Facilities do not qualify for authorization under this standard permit if any individual engine (or combination of engines) rated greater than 525 horsepower is used.
- (E) A facility does not qualify for authorization under this standard permit if it constitutes a new major stationary source or major modification as defined by Title 30 Texas Administrative Code (30 TAC) §116.12, Nonattainment

and Prevention of Significant Deterioration Review Definitions, or is located at a major stationary source.

- (F) This standard permit cannot authorize any emission increase of an air contaminant that is specifically prohibited by a condition in any permit issued under 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification, at the site.
- (G) This standard permit cannot be used in conjunction with any permit or standard permit issued under 30 TAC Chapter 116 or in conjunction with any permit by rule (PBR) under 30 TAC Chapter 106, Permits by Rule, except that PBRs and standard permits may be used, as specified in section (9) of this standard permit, to authorize planned maintenance activities and facilities. This requirement does not preclude the use of permits, standard permits, and PBRs to authorize other facilities (that are not associated with the feedmill, portable auger(s), or hay grinder(s)) at the site provided the feedmill, portable auger(s), and hay grinder(s) remain in compliance with all requirements of this standard permit.
- (H) This standard permit cannot be used if the total site-wide emissions do not meet the emission rate requirements specified in sections (5), (6), (7), (8), and (9) of this standard permit.

(2) Definitions

- (A) Feedmill - a facility, or group of facilities, that uses grain as one of the primary raw materials to produce either final products for human or animal consumption or intermediate products that are subjected to further processing.
- (B) Grain - corn, wheat, sorghum, rice, rye, oats, barley, and soybeans.
- (C) Off-site receptor - any recreational area or residence or other structure that is in use at the time the standard permit registration is filed with the commission or at the time of the standard permit claim and that is not occupied or used solely by the owner or operator of the facilities or the owner of the property upon which the facilities are located.
- (D) Permanent storage capacity - grain storage capacity that is inside a building, bin, or silo.
- (E) Site - a site as defined in 30 TAC §122.10, General Definitions.
- (F) Temporary - operating at a site no more than 180 calendar days during any 12-month period.

(3) General Administrative Requirements

- (A) Specific registration requirements for this standard permit are located in section (5) of this standard permit for feedmills producing certain feeds.
- (B) Any claim under this standard permit must comply with applicable conditions of 30 TAC Chapter 116, Subchapter F, Standard Permits, except 30 TAC §116.610(a)(1), Applicability and §116.615(5), Start-up Notification (General Conditions).
- (C) Claims that are not subject to the registration requirements in section (5) of this standard permit are exempt from 30 TAC §116.611(a) and (b), Registration to Use a Standard Permit and 30 TAC §116.614, Standard Permit Fees.

(4) General Operating Requirements

- (A) Facilities authorized by this standard permit must comply with all applicable state and federal regulations, including, but not limited to, the following:
 - (i) facilities located in counties subject to 30 TAC Chapter 101, Subchapter H, Division 3, Mass Emissions Cap and Trade Program, and 30 TAC Chapter 117, Control of Air Pollution from Nitrogen Compounds, shall comply with all applicable requirements in 30 TAC Chapter 101, Subchapter H, Division 3, and 30 TAC Chapter 117;
 - (ii) Title 40 Code of Federal Regulations (40 CFR) Part 60, Subpart III, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines; and
 - (iii) 40 CFR Part 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.
- (B) All conveyors and elevator legs authorized by this standard permit shall be enclosed. Exhaust air to the atmosphere from pneumatic conveying systems or from the pulling of suction on mechanical systems shall be vented through a cyclone collection system or through a fabric filter system, each of which must operate as specified in subsection (4)(C) of this standard permit.
- (C) All fabric filter and cyclone collection systems used to control particulate emissions from the feedmill (including raw grain handling operations), portable auger, or hay grinder authorized by this standard permit shall meet the following requirements, as applicable:

- (i) fabric filter systems shall be operated properly with no tears or leaks;
 - (ii) fabric filter systems shall be designed to meet an outlet grain loading not to exceed 0.01 grains per dry standard cubic foot (gr/dscf) (combined front half and back half);
 - (iii) in accordance with U.S. Environmental Protection Agency (EPA) Test Method 9, opacity of emissions from any fabric filter shall not exceed five percent averaged over a six-minute period;
 - (iv) cyclone collection systems shall be operated properly with no leaks;
 - (v) cyclone collectors shall be properly sized high efficiency cyclones with a cone length at least twice the diameter of the cyclone; and
 - (vi) in accordance with U.S. EPA Test Method 9, opacity of emissions from any cyclone shall not exceed ten percent averaged over a six-minute period.
- (D) Operation of conveyors associated with receiving authorized by this standard permit shall not commence until the receiving pits are full.
- (E) No visible emissions from the operation of any grain dryer authorized by this standard permit shall leave the property.
- (F) All fan discharges from cleaners, aspirators, and any other grain cleaning equipment authorized by this standard permit and handling material pneumatically shall be equipped with either a cyclone or fabric filter system as specified in subsection (4)(C) of this standard permit.
- (G) All fan discharges from grinders and hammermills authorized by this standard permit and handling material pneumatically shall be equipped with a fabric filter system as specified in subsection (4)(C) of this standard permit or shall be equipped with a method of control designed to meet an outlet grain loading not to exceed 0.01 gr/dscf (combined front half and back half).
- (H) All pellet mill/pellet cooler systems and all flaker systems authorized by this standard permit shall vent the exhaust air to a cyclone system as specified in subsection (4)(C) of this standard permit before releasing the exhaust air to the atmosphere. If the cyclone is used as a product separator, the requirements in subsection (4)(C) do not apply.

- (I) For those operators that choose to use an oil suppression system to minimize emissions generated during the handling of raw grain, the oil shall be applied during or after the grain is received and prior to loadout.
- (J) All loadout devices (augers, drop spouts, etc.) authorized by this standard permit shall be equipped with drop socks at the drop points to minimize fugitive emissions from loadout areas.
- (K) Spillage of any raw products, finished products, and waste products shall be cleaned up on a daily basis. Waste products shall be removed on a daily basis from the site or shall be stored in a contained manner that prevents exposure to the elements. Raw products and finished products shall be stored in a contained manner that prevents exposure to the elements.
- (L) One or more of the following methods shall be used to control emissions from all in-plant roads, truck loading and unloading areas, parking areas, and other traffic areas to maintain compliance with all TCEQ rules and regulations:
 - (i) sprinkling with water as necessary;
 - (ii) treating with effective dust suppressant(s) as necessary; or
 - (iii) paving (with a cohesive hard surface) and cleaning as necessary.
- (M) Fuel for any dryer, burner, boiler, or pellet cooler authorized by this standard permit shall be pipeline quality sweet natural gas or propane.
- (N) Fuel for any engine authorized by this standard permit shall be gas fuel, liquid diesel fuel, or biodiesel and biodiesel fuel blends meeting the requirements of this subsection. Gas fuel shall be limited to pipeline quality sweet natural gas, liquid petroleum gas, or fuel gas containing no more than ten grains total sulfur per 100 dry standard cubic feet. Liquid diesel fuel shall be petroleum distillate oil that is not a blend, does not contain waste oils or solvents, and contains 0.05 percent or less sulfur by weight. Biodiesel fuel and biodiesel used in biodiesel fuel blends shall meet the specifications of American Society for Testing and Materials (ASTM) D6751 and shall comply with the applicable requirements of 30 TAC Chapter 114, Control of Air Pollution from Motor Vehicles, Subchapter H, Division 2, Low Emission Diesel.
- (O) For any engine authorized by this standard permit, emissions of nitrogen oxides (NO_x) or operating hours shall not exceed the following limits at each site:

- (i) 2.0 grams per horsepower-hour (g/hp-hr) for gas fuel;
 - (ii) 11.0 g/hp-hr for liquid diesel or biodiesel-based fuel; or
 - (iii) 1,200 hours during any 12-month period.
- (P) Any engine authorized by this standard permit shall be equipped with an exhaust stack with a minimum height of ten feet above ground level.
- (Q) All air pollution abatement equipment shall be checked every 30 days (unless more frequent checks/inspections are otherwise specified in this standard permit) and shall be properly maintained and operated during the operation of the facilities authorized by this standard permit. Scheduled cleaning and maintenance of the abatement equipment shall be performed as recommended by the manufacturer and as necessary so that the equipment efficiency is adequately maintained.
- (R) All facilities and associated equipment authorized by this standard permit, including any transfer equipment, must be maintained in good working order and operated properly.
- (S) Maximum hourly facility production capacities shall not exceed the values used to determine compliance with the 24-hour National Ambient Air Quality Standards (NAAQS) for particulate matter less than or equal to ten microns in diameter (PM₁₀) as shown by the plotted line in Figures 1 through 4 (whichever is applicable) of this standard permit.
- (T) For all feedmill operations, portable augers, hay grinders, and planned maintenance, start-up, and shutdown (MSS) facilities and activities authorized by this standard permit, the following records shall be maintained at the site for a rolling 24-month period and be made available at the request of personnel from the TCEQ or any other air pollution control agency or program having jurisdiction:
- (i) if limiting hours of operation, as specified in paragraph (4)(O)(iii) of this standard permit, records of hours of operation for each engine;
 - (ii) all records to demonstrate that the feedmill operation, portable auger(s), and hay grinder(s) meet the applicable emission rate and minimum setback distance limitations determined by using Figures 1 through 4 (whichever is applicable) of this standard permit;
 - (iii) records for portable augers and temporary hay grinders shall remain with the primary auger or grinder equipment;

- (iv) records of periodic monitoring and scheduled cleaning and maintenance of the abatement equipment to demonstrate compliance with subsection (4)(Q) of this standard permit; and
 - (v) records containing sufficient information to demonstrate compliance with paragraphs (9)(C)(i) through (9)(C)(iv) of this standard permit that include:
 - (a) the type and reason for the activity or facility;
 - (b) the processes and equipment involved;
 - (c) the date, time, and duration of the activity or facility operation; and
 - (d) the amount of material usage and emission rates.
- (5) Requirements Specific to Feedmills Producing Certain Feeds (New, Modified, or Existing)
- (A) For those feedmills producing feed with the potential to produce nuisance odors (including, but not limited to, dog food, cat food, turkey feed, emu feed, and fish feed), a scrubber system, properly installed and in good working order, shall be used to control odors from the pellet cooler system when the pellet cooler system is in operation.
 - (B) Either sodium hypochlorite or a combination of chlorine gas and sodium hydroxide shall be automatically injected into the scrubber system for odor control and the following conditions shall apply:
 - (i) sodium hypochlorite shall be added continuously to the scrubber solution along with fresh make-up water as specified by the manufacturer; and
 - (ii) a minimum residual chlorine concentration of ten parts per million and a minimum pH of 11 shall be maintained in the scrubber recycle tank.
 - (C) The scrubber(s) shall have a minimum retention time of 0.5 seconds through the packing material and one second through the scrubber(s).
 - (D) An odor detection (sniff) tube shall be installed in each scrubber exhaust stack and vented to near ground level so that samples of the scrubber exhaust may be evaluated by olfactory means. An observer should be able to detect a slight aroma of chlorine from this tube at all times. If rendering odors are detected, the concentration of chemicals in the scrubber shall be

increased until the rendering odors are no longer detectable by olfactory means.

- (E) The minimum residual chlorine concentration, the pH level of the scrubber recycle tanks, and sniff tube observations shall be recorded daily, maintained in a file at the site, and made available at the request of personnel from the TCEQ or any other air pollution control agency or program having jurisdiction to show compliance with subsections (5)(B) and (5)(D) of this standard permit. These records shall be retained for a rolling 24-month period.
- (F) In addition to section (4) of this standard permit, feedmills producing feed as specified in subsection (5)(A) of this standard permit shall also meet the following requirements:
 - (i) emission rates shall be determined using calculation methods accepted by the TCEQ Air Permits Division at the time of the standard permit registration;
 - (ii) all receiving and loadout points (including portable augers) shall be located at least 100 feet from the nearest off-site receptor and shall meet any property line minimum setback distance as required in paragraph (5)(F)(v) of this standard permit;
 - (iii) all hay grinders and associated engines shall be located at least 100 feet from the nearest property line using the shortest distance to the nearest property line and shall meet any property line minimum setback distance as required in paragraph (5)(F)(v) of this standard permit;
 - (iv) each scrubber exhaust shall be located at least 100 feet from the nearest property line using the shortest distance to the nearest property line and shall meet any property line minimum setback distance as required in paragraph (5)(F)(v) of this standard permit; and
 - (v) a feedmill shall meet one of the following scenarios:
 - (a) total PM_{10} emissions from the site (including emissions from facilities and activities as specified in section (9) of this standard permit) shall be less than or equal to 9.24 pounds per hour (lb/hr); or
 - (b) total PM_{10} emissions from the site may be greater than 9.24 lb/hr if all facilities (including facilities and activities as specified in section (9) of this standard permit) emitting PM_{10} at the site meet

the minimum setback distance to the property line determined by using Figure 1 of this standard permit. The minimum setback distance shall be measured from each facility emission point or maintenance activity emission point to the nearest property line using the shortest distance to that property line. All facility emission points and maintenance activity emission points must meet the minimum setback distance requirements determined by using Figure 1 of this standard permit.

- (G) Any portable auger must be included in the registration application submitted for the feedmill site and shall meet the requirements of subsection (7)(A) of this standard permit with the exception of paragraph (7)(A)(iii).
 - (H) Any hay grinder must be included in the registration application submitted for the feedmill site and shall meet the requirements of subsection (8)(A) of this standard permit with the exception of paragraphs (8)(A)(vii) and (8)(A)(viii).
 - (I) For feedmills producing feed as specified in subsection (5)(A) of this standard permit, before construction or modification begins, registration must be submitted to and approval received from the TCEQ Air Permits Division in Austin.
- (6) Requirements Specific to All Other Feedmills (New, Modified, or Existing)
- (A) In addition to section (4) of this standard permit, those feedmills not producing feed as specified in subsection (5)(A) of this standard permit shall also meet the following requirements:
 - (i) emission rates shall be determined using calculation methods accepted by the TCEQ Air Permits Division at the time of the standard permit claim;
 - (ii) all receiving and loadout points (including portable augers) shall be located at least 100 feet from the nearest off-site receptor and shall meet any property line minimum setback distance as required in paragraph (6)(A)(iv) of this standard permit;
 - (iii) all hay grinders and associated engines shall be located at least 100 feet from the nearest property line using the shortest distance to the nearest property line and shall meet any property line minimum setback distance as required in paragraph (6)(A)(iv) of this standard permit; and
 - (iv) a feedmill shall meet one of the following scenarios:

- (a) total PM₁₀ emissions from the site (including emissions from facilities and activities as specified in section (9) of this standard permit) shall be less than or equal to 9.77 lb/hr; or
- (b) total PM₁₀ emissions from the site may be greater than 9.77 lb/hr if all facilities (including facilities and activities as specified in section (9) of this standard permit) emitting PM₁₀ at the site meet the minimum setback distance to the property line determined by using Figure 2 of this standard permit. The minimum setback distance shall be measured from each facility emission point or maintenance activity emission point to the nearest property line using the shortest distance to that property line. All facility emission points and maintenance activity emission points must meet the minimum setback distance requirements determined by using Figure 2 of this standard permit.

- (B) Any portable auger authorized by this standard permit at the feedmill site shall meet the requirements of section (7) of this standard permit with the exception of paragraph (7)(A)(iii).
- (C) Any hay grinder authorized by this standard permit at the feedmill site shall meet the requirements of section (8) of this standard permit with the exception of paragraphs (8)(A)(vii) and (8)(A)(viii).
- (D) For feedmills, authorized by this standard permit, that are not producing feed as specified in subsection (5)(A) of this standard permit, notification and registration are not required.

(7) Requirements Specific to Portable Augers

- (A) In addition to section (4) of this standard permit, portable augers shall also meet the following requirements:
 - (i) portable augers shall handle only those agricultural products as specified in Texas Health and Safety Code §382.020(a);
 - (ii) emission rates shall be determined using calculation methods accepted by the TCEQ Air Permits Division at the time of the standard permit claim;
 - (iii) portable augers shall be the only facilities present (with the exception of facilities and activities as specified in section (9) of this standard permit) at the site, and meet one of the following scenarios:

- (a) total PM₁₀ emissions from the site (including emissions from any facility and activity as specified in section (9) of this standard permit) shall be less than or equal to 0.95 lb/hr; or
 - (b) total PM₁₀ emissions from the site may be greater than 0.95 lb/hr if all portable augers and any facility and activity, as specified in section (9) of this standard permit, emitting PM₁₀ at the site meet the minimum setback distance to the property line determined by using Figure 3 of this standard permit. The minimum setback distance shall be measured from each facility emission point or maintenance activity emission point to the nearest property line using the shortest distance to that property line. All facility emission points and maintenance activity emission points must meet the minimum setback distance requirements determined by using Figure 3 of this standard permit; and
 - (iv) no visible emissions from the operation of any portable auger authorized by this standard permit shall leave the property.
- (B) For portable augers, authorized by this standard permit, that are located at a feedmill that is not producing feed as specified in subsection (5)(A) of this standard permit, notification and registration are not required.
 - (C) For portable augers, authorized by this standard permit, that are located at a site where the portable augers are the only facilities present (with the exception of facilities and activities as specified in section (9) of this standard permit), notification and registration are not required.
- (8) Requirements Specific to Permanent or Temporary Hay Grinders (New, Modified, or Existing)
- (A) In addition to section (4) of this standard permit, permanent or temporary hay grinders shall also meet the following requirements:
 - (i) hay grinders shall be used only to grind hay;
 - (ii) no more than one hay grinder and one associated engine shall operate co-located with an on-site feedmill;
 - (iii) no more than two hay grinders and two associated engines shall operate simultaneously at a site when the hay grinders and associated engines are the only facilities present (with the exception of facilities and activities as specified in section (9) of this standard permit) at the site;
 - (iv) all associated conveyors shall be enclosed;

- (v) each hay grinder shall be filled to at least one-half capacity by volume before grinding operations begin and the capacity shall be maintained at that level during grinding operations;
 - (vi) emission rates shall be determined using calculation methods accepted by the TCEQ Air Permits Division at the time of the standard permit claim;
 - (vii) hay grinders and associated engines shall be the only facilities present (with the exception of facilities and activities as specified in section (9) of this standard permit) at the site, shall be located at least 250 feet from the nearest off-site receptor, and shall meet any property line minimum setback distance as required in paragraph (8)(A)(viii) of this standard permit;
 - (viii) hay grinders and associated engines shall be the only facilities present (with the exception of facilities and activities as specified in section (9) of this standard permit) at the site and meet one of the following scenarios:
 - (a) total PM₁₀ emissions from the site (including emissions from any facility and activity as specified in section (9) of this standard permit) shall be less than or equal to 4.10 lb/hr; or
 - (b) total PM₁₀ emissions from the site may be greater than 4.10 lb/hr if all hay grinders and associated engines and any facility and activity, as specified in section (9) of this standard permit, emitting PM₁₀ at the site meet the minimum setback distance to the property line determined by using Figure 4 of this standard permit. The minimum setback distance shall be measured from each facility emission point or maintenance activity emission point to the nearest property line using the shortest distance to that property line. All facility emission points and maintenance activity emission points must meet the minimum setback distance requirements determined by using Figure 4 of this standard permit; and
 - (ix) no visible emissions from the loading, operation, and unloading of any hay grinder authorized by this standard permit shall leave the property.
- (B) For hay grinders, authorized by this standard permit, that are located at a feedmill that is not producing feed as specified in subsection (5)(A) of this standard permit, notification and registration are not required.

- (C) For hay grinders, authorized by this standard permit, that are located at a site where the hay grinders are the only facilities present (with the exception of facilities and activities as specified in section (9) of this standard permit), notification and registration are not required.

(9) Planned Maintenance, Start-up, and Shutdown (MSS) Activities

- (A) This standard permit authorizes all emissions from planned start-up and shutdown activities associated with facilities or groups of facilities that are authorized by this standard permit.

- (B) This standard permit authorizes emissions from the following planned maintenance activities and facilities associated with feedmills, portable augers, and hay grinders that are authorized by this standard permit:

- (i) abrasive blasting (wet blast and dry abrasive cleaning);
- (ii) surface preparation;
- (iii) surface coating;
- (iv) facilities used for testing and repair of engines;
- (v) compressors, pumps, or engines, and associated pipes, valves, flanges, and connections;
- (vi) hand-held or manually operated equipment used for buffing, polishing, carving, cutting, drilling, machining, routing, sanding, sawing, surface grinding, or turning of ceramic precision parts, leather, metals, plastics, fiber board, masonry, carbon, glass, graphite, or wood;
- (vii) vacuum cleaning systems;
- (viii) hydraulic oil filtering;
- (ix) lubrication; and
- (x) brazing, soldering, welding, or metal cutting equipment.

- (C) Planned maintenance activities and facilities shall meet the following requirements.

- (i) The following materials are authorized and shall not be used at the site at more than the rates prescribed below:

- (a) abrasives - 150 tons per year, 15 tons per month, and one ton per day;
 - (b) cleaning and stripping solvents and lubricants - 50 gallons per year;
 - (c) coatings (excluding plating materials) - 100 gallons per year;
 - (d) dyes - 1,000 pounds per year;
 - (e) bleaches - 1,000 gallons per year;
 - (f) fragrances (excluding odorants) - 250 gallons per year; and
 - (g) water-based surfactants and detergents - 2,500 gallons per year.
- (ii) Planned maintenance activities associated with facilities or groups of facilities authorized by this standard permit shall not occur simultaneously (no two or more processes can occur at the same time), and these planned maintenance activities shall not occur simultaneously with production operations;
 - (iii) Planned maintenance activities and facilities at the site shall not emit more than 25 tons per year of any one air contaminant; and
 - (iv) Lead emissions from planned maintenance activities or facilities at the site shall be less than 0.6 tons per year.
- (D) Planned maintenance that cannot meet the requirements of subsections (9)(B) and (9)(C) of this standard permit may be authorized by one or by a combination of the following mechanisms, provided the planned maintenance activities do not occur simultaneously (no two or more processes can occur at the same time), and the planned maintenance activities do not occur simultaneously with production operations:
- (i) any applicable PBR under 30 TAC Chapter 106; or
 - (ii) any other applicable standard permit.

Feedmill Operations

Required Minimum Setback Distance

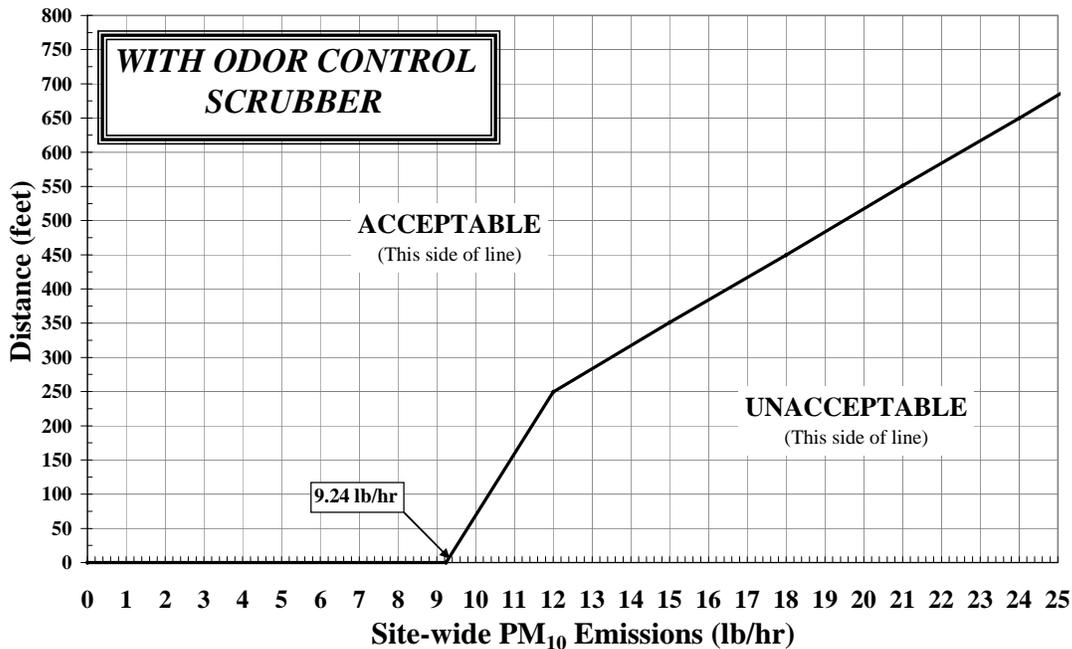


Figure 1

Feedmill Operations

Required Minimum Setback Distance

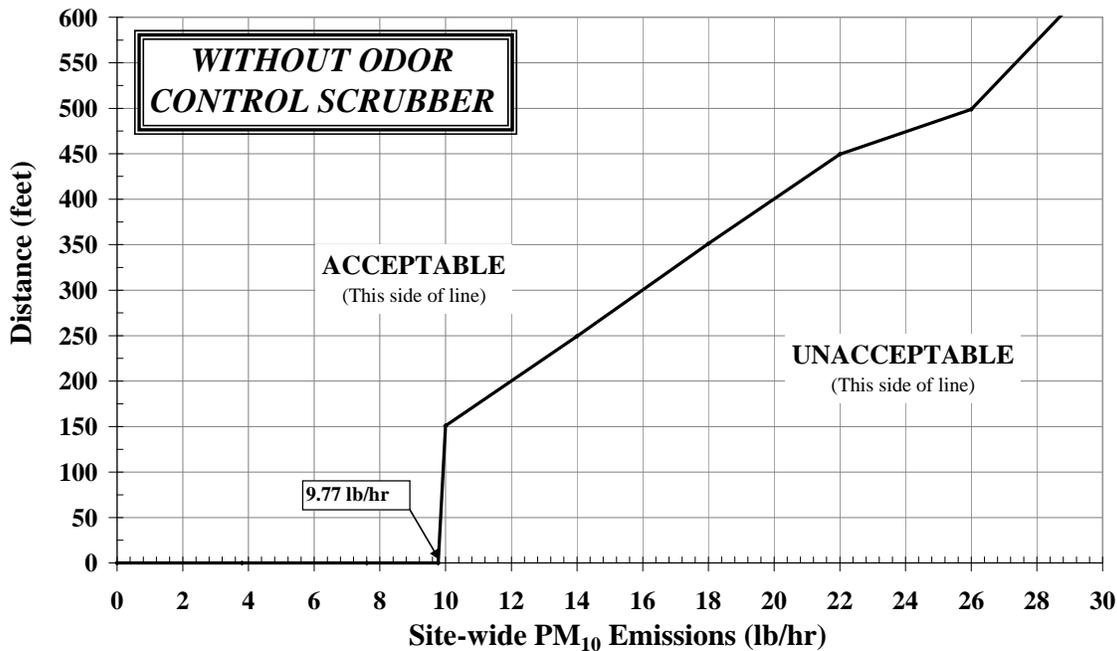


Figure 2

Portable Auger(s) Operating Alone at a Site

Required Minimum Setback Distance

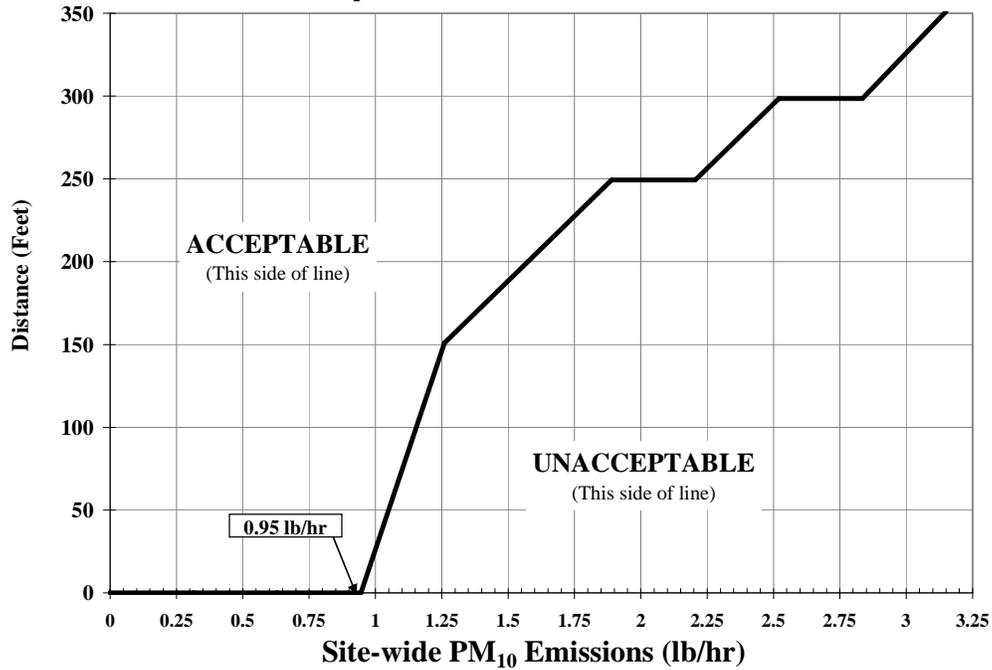


Figure 3

Hay Grinder(s) Operating Alone at a Site

Required Minimum Setback Distance

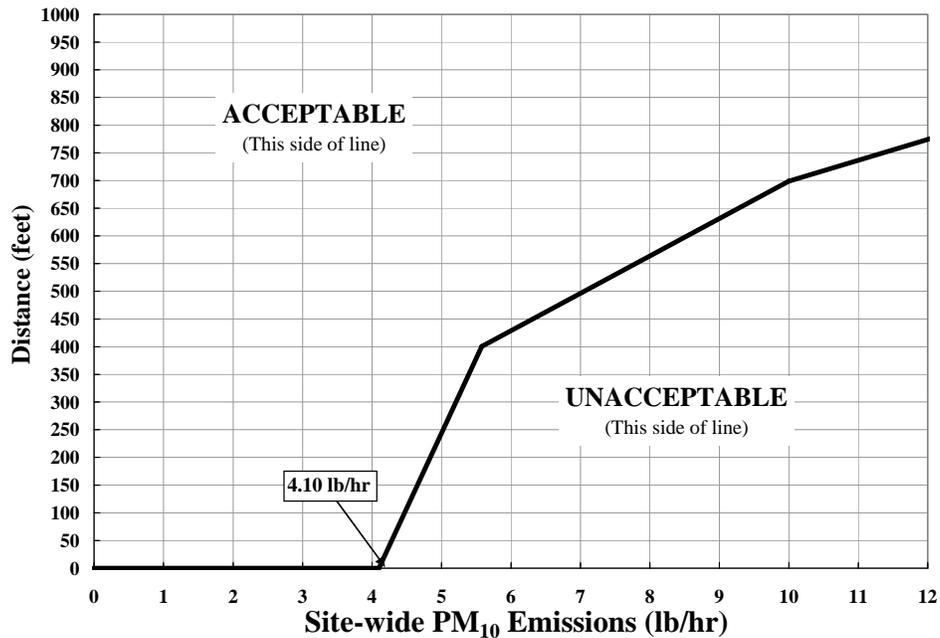


Figure 4