TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

AGENDA ITEM REQUEST

AGENDA REQUESTED: March 30, 2010

DATE OF REQUEST: March 11, 2010

NAME & NUMBER OF PERSON TO CONTACT REGARDING CHANGES TO THIS REQUEST, IF NEEDED: Michael Wilhoit, 239-1222

CAPTION: Docket No. 2010-0186-AIR. Consideration of the issuance of a new air quality standard permit under 30 TAC Chapter 116, Subchapter F, Standard Permits. The new standard permit would authorize Dry Bulk Fertilizer Handling Operations. Notice of the proposed standard permit was published in the November 6, 2009, issue of the *Texas Register* (34 TexReg 7845). (Michael Wilhoit, Douglas Brown)

Deputy Director

Division Director

Agenda Coordinator

Copy to CCC Secretary? NO___ YES_X_

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Commissioners **Date:** March 11, 2010

Thru: LaDonna Castañuela, Chief Clerk
Mark R. Vickery, P.G., Executive Director

From: Richard A. Hyde, P.E., Deputy Director
Office of Permitting and Registration

Subject: Air Quality Standard Permit for Dry Bulk Fertilizer Handling Operations
Docket No. 2010-0186-AIR

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Background

Staff is recommending issuance of a new air quality standard permit for dry bulk fertilizer handling operations, one of several new standard permits which would cover a variety of agricultural processes. The other agricultural standard permits in this group could be used to authorize the following types of agricultural facilities: peanut handling operations; cotton gins and cotton burr grinders; feedmills, portable augers, and hay grinders; grain elevators, portable grain augers, and grain handling operations; polyphosphate blending operations; and anhydrous ammonia storage and distribution operations. These standard permits for agricultural facilities have been developed to provide a streamlined method of authorizing these types of operations while ensuring that human health and the environment are protected. The proposed standard permits could be used to authorize new or existing non-major sources meeting all applicable conditions of the relevant standard permit. The proposed standard permit for Dry bulk fertilizer handling operations includes permit terms and conditions concerning operating requirements, control requirements, and distance limitations, which, in combination, would be protective of human health and welfare. Please refer to the technical summary document for detailed information concerning the standard permit requirements. The actual permit text is located at the end of the technical summary document.

Key Provisions of the Standard Permit

- Authorizes facilities that receive, handle, mix, store, or load dry bulk fertilizer. Dry bulk fertilizer includes urea, potash, monoammonium phosphate, diammonium phosphate, triple superphosphate, nitric phosphate, trisodium phosphate, ammonium nitrate, ammonium sulphate, and zinc.
- Prohibits sources which would be major under federal New Source Review (NSR).
- Improves operational flexibility by allowing higher emission rates at sites which have more distance around the facility.
- Contains technical requirements representing Best Available Control Technology to control PM_{10} emissions and prevent nuisance conditions.
- Does not require registration, notification, or fees.

- Includes maintenance, startup, and shutdown emissions.
- Requires recordkeeping to ensure compliance with emission/distance limits and with periodic equipment inspection requirements.

Response to Comments and Significant Changes

Stakeholder meetings on the draft standard permit were held in Austin, Texas on November 12, 2007, and in Lubbock, Texas on November 14, 2007. The standard permit was formally proposed on November 6, 2009. A public meeting on the proposed standard permit was held in Austin on December 10, 2009. During the public comment period which closed on December 15, 2009, the Air Permits Division received comments from the Texas Cotton Ginners' Association (TCGA), Justin Seed Company, and the U.S. Environmental Protection Agency (EPA).

The most significant comments are summarized in this section.

- EPA commented that the permit should include even stronger language compelling the facility to ensure that the site does not exceed federal major NSR levels. **The staff did not revise the permit in this regard because the proposed language already is very explicit in disallowing the use of the standard permit for a project that is major, or at a site that is major.**

- EPA recommended increased monitoring, recordkeeping, and reporting requirements to enhance enforceability of opacity and emission limits. (E.g. periodic opacity determinations, monitoring of particulate emissions, five year record retention.) **The staff added a requirement for periodic checks of control equipment to ensure proper operation, and corresponding recordkeeping. The staff maintained the proposed two year record retention timeframe.**

- EPA suggested 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, or revocation, or for denial of a renewal application. EPA stated that the permit must contain reporting requirements for noncompliance. **The staff added a condition to state that noncompliance with permit emission limits is a violation, but did not add mandatory self-reporting of noncompliance to the permit.**

- Justin Seed commented that the standard permit did not have sufficient input from the industries that would be affected. **Prior to proposal, the commission held two stakeholder meetings to solicit input from interested parties. A variety of trade associations, organizations, and companies participated. When the standard permit was formally proposed, notices were published in the Texas Register and in six major newspapers in Texas. An announcement was also posted on the commission's web site, and a press release was issued. A public meeting was also held on the proposed standard permit. In combination, these meetings and notices provided**

more than sufficient opportunity for input.

- The TCGA submitted general comments supporting this standard permit.

Potentially Controversial Matters

None.

DRY BULK FERTILIZER HANDLING OPERATIONS
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 dry bulk fertilizer handling operations. The new standard permit can be used to authorize dry bulk fertilizer handling operations 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 dry bulk fertilizer handling operation 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 dry bulk fertilizer handling operations and associated facilities through permit by rule (PBR) under 30 TAC §106.261, Facilities (Emission Limitations) or under 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification. PBR §106.261 will remain an authorization mechanism for dry bulk fertilizer handling operations.

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 (PM_{10}) 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 dry bulk fertilizer handling operations is protective of the public health and welfare.

The modeling results demonstrated that a dry bulk fertilizer handling operation with site-wide emissions of PM_{10} less than or equal to 13.63 pounds per hour (lb/hr) does not require a setback distance from the property line to meet the NAAQS. For site-wide emissions greater than 13.63 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 PM_{10} emissions do not exceed the NAAQS.

III. OVERVIEW OF AIR QUALITY STANDARD PERMIT

The commission issues this air quality standard permit authorizing dry bulk fertilizer handling operations 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 dry bulk fertilizer handling operations. 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 dry bulk fertilizer handling operations to comply with certain administrative requirements, including recordkeeping, as well as general requirements, including housekeeping procedures, best management practices, planned maintenance, start-up, and shutdown (MSS) limitations, and specific operating procedures to minimize off-property impacts from dry bulk fertilizer handling. Facilities are also required to meet distance requirements to be within acceptable off-property concentrations of PM_{10}. Registration or renewal of registration every ten years is not required.

This standard permit authorizes the air emissions (including fugitive emissions) associated with dry bulk fertilizer handling operations 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 dry bulk fertilizer handling operations including any fugitive emissions associated with the operation. This condition is intended to specify the scope of the standard permit authorization.

Subsection (B) 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 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 (C) 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 (D) 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 dry bulk fertilizer handling operation 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 dry bulk fertilizer handling operation. However, all site-wide emission limitations in this standard permit must be met. The restrictions in subsections (C) and (D) are included to limit the cumulative effects of specific contaminants and to ensure the protection of health and human welfare. Subsection (D) 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 (6) 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 (E) 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) and (6) of this standard permit. This includes PM_{10} emissions from all facilities at the site, even facilities that are not associated with the dry bulk fertilizer handling operation. This condition limits cumulative emissions and reinforces the site-wide emission rate requirements in sections (5) and (6) to maintain the protectiveness of this standard permit.

Definitions

Section (2) contains definitions of dry bulk fertilizer, dry bulk fertilizer handling operation, off-site receptor, and site in subsections (A) through (D). These definitions are intended to specify and, where necessary, limit the scope of the standard permit's authorization. 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. 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 dry bulk fertilizer handling operations is primarily PM_{10}, 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 section (3), the TCEQ exempts dry bulk fertilizer handling operations authorized under this standard permit from the requirements of 30 TAC §116.610(a)(1).

Section (3) also exempts facilities meeting the applicable requirements of this standard permit from registration, fee, and start-up notification requirements in 30 TAC §§116.611(a) and (b), Registration to Use a Standard Permit; 116.614, Standard Permit Fees; and 116.615(5), Start-up Notification (General Conditions). The exemption from 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 notifications or 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 dry bulk fertilizer handling operations seeking authorization under this standard permit. Subsection (A) 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 fabric filter system. The fabric filter systems must be operated as specified in subsection (4)(B) of this standard permit.

Subsection (B) specifies the operating requirements and design parameters for all fabric filter 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 (combined front half and back half); and not exceed an opacity of five percent averaged over a six-minute period.

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

Subsection (D) 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 (E) and (F). Subsection (E) 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 fertilizer products and dust to be blown off site onto

neighboring properties and cause nuisance dust conditions. Exposure to rain can cause off-property runoff issues and nuisance odors, which can travel off property. Subsection (F) 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 (E) and (F) do not exempt dry bulk fertilizer handling operations from the requirements in 30 TAC §101.4, Nuisance.

Subsection (G) 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 systems.

The requirements in subsections (A) through (G) 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 (A) through (G) were obtained from existing case-by-case NSR permits for dry bulk fertilizer handling operations and represent BACT for this industry.

Subsection (H) 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 (I) specifies that the maximum hourly facility production capacities shall not exceed the values used to determine compliance with the 24-hour NAAQS for PM_{10} as shown by the plotted line in Figure 1 of this standard permit. The figure shows 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 Figure 1 can be found in the Protectiveness Review portion of this technical summary.

Subsection (J) 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 (J)(i) requires the owner or operator to maintain all records sufficient to demonstrate that the dry bulk fertilizer handling operation is meeting all applicable emission rate and property line minimum setback distance limitations determined by using Figure 1 of this standard permit. This paragraph is used in conjunction with subsection (4)(I) 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 Figure 1 of this standard permit. Paragraph (J)(ii) 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 (G) of this standard permit. The periodic monitoring reference was included to link recordkeeping requirements and the 30-day monitoring frequency added to subsection (G) of this standard permit. Paragraph (J)(iii) requires recordkeeping regarding planned MSS facilities and activities to demonstrate compliance with the operational requirements (material usage rates and emission rate limitations) in paragraphs (6)(C)(i) through (6)(C)(iv) of this standard permit.

Requirements Specific to Dry Bulk Fertilizer Handling Operations (New, Modified, or Existing)
Section (5) of this standard permit addresses new, modified, or existing dry bulk fertilizer handling operations. Paragraph (A)(i) requires the use of calculation methods accepted by the TCEQ at the time of the standard permit claim to determine emission rates.

Dry bulk fertilizer handling operations meet the conditions of subparagraph (A)(ii)(a) if the total PM_{10} emissions from the site, including emissions from facilities and activities as specified in section (6) of this standard permit, do not exceed 6.82 lb/hr. Dry bulk fertilizer handling operations meet the requirements of subparagraph (A)(ii)(b) if the total PM_{10} emissions from the site, including emissions from facilities and activities as specified in section (6) of this standard permit, are less than or equal to 13.63 lb/hr **and** each facility emission point associated with the handling of dry bulk fertilizer is located at least 100 feet from the nearest off-site receptor. This setback distance is included to further minimize the potential for nuisance conditions from particulate emissions. The total PM_{10} emissions may exceed 13.63 lb/hr only if each facility emission point associated with the handling of dry bulk fertilizer is located at least 100 feet from the nearest off-site receptor, **and** all facility emission points, including facilities and activities as specified in section (6) of this standard permit, emitting PM_{10} at the site also meet any specified minimum setback distance to the property line required to demonstrate compliance with the 24-hour PM_{10} 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 PM_{10} emission rates referenced in subsection (A) are site-wide; therefore, PM_{10} 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)(ii)(c) 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.

The determination to require no minimum setback distance for smaller operations and a minimum setback distance of 100 feet to the nearest off-site receptor for slightly larger operations was based on facility observations, engineering judgment, and the following:

a) These facilities have a low nuisance potential for particulate due to the small amounts of emissions typically generated; calculations for many operations show emissions of less than one lb/hr for the entire site. For additional conservatism and since this standard permit is intended for small, country operations, the PM_{10} emission limitations and nuisance setback distance in the standard permit are more conservative than what was required as a result of the protectiveness review.

b) 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 for larger operations, nuisance dust conditions are not expected.

c) A protectiveness review was conducted and showed that site emissions, including emissions from facilities and activities as specified in section (6) of this standard permit, up to and including 13.63 lb/hr of PM_{10} 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. To limit the scope of this standard permit to small, country operations, the standard permit would require no minimum setback distance for site emissions up to and including 6.82 lb/hr of PM_{10}. For sites with emissions greater than 6.82 lb/hr and less than or equal to 13.63 lb/hr of PM_{10}, each facility emission point associated with the handling of dry bulk fertilizer must meet a minimum setback distance of 100 feet from the nearest off-site receptor. A property line minimum setback distance for each facility associated with the handling of dry bulk fertilizer would also be required to ensure protectiveness for those sites emitting more than 13.63 lb/hr, as well as the minimum setback distance of 100 feet from the nearest off-site receptor. The property line 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 minimum nuisance 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.

Subsection (B) specifies that neither notification nor registration is required. To streamline the permitting process and allocate resources to more complex and controversial permitting projects, these facilities were evaluated to determine whether dry bulk fertilizer handling operations 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.

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

Section (6) 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. Start-up and shutdown emissions for dry bulk fertilizer handling operations 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 dry bulk fertilizer handling operations 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, 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 (6)(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 (6)(B) and (6)(C). 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 dry bulk fertilizer handling operation site. For facilities authorized under this standard permit, predicted 24-hour and annual average concentrations of PM_{10} were evaluated for comparison to the PM_{10} NAAQS as part of the protectiveness review. In accordance with the U.S. EPA's $PM_{2.5}$ surrogate policy, the TCEQ uses the PM_{10} 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. PM_{10} controls and emissions were modeled, and predicted PM_{10} concentrations were compared to the PM_{10} NAAQS. Under the surrogate policy, compliance with the PM_{10} 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 PM_{10} emissions from this industry consist of $PM_{2.5}$. For this industry, 17 percent of PM_{10} emissions are assumed to be $PM_{2.5}$. The ratio of the 24-hour standards for $PM_{2.5}$ and PM_{10} (35 micrograms per cubic meter ($\mu g/m^3$) to 150 $\mu g/m^3$) is 23 percent. The ratio of the annual standards for $PM_{2.5}$ and PM_{10} (15 $\mu g/m^3$ to 50 $\mu g/m^3$) is 30 percent. Both of these ratios are greater than the fraction of $PM_{2.5}$ emissions. Therefore, demonstrating compliance with the PM_{10} 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 PM_{10} is 150 $\mu g/m^3$ while the primary and secondary NAAQS for the long-term average PM_{10} standard is 50 $\mu g/m^3$.

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

(1) air dispersion modeling was performed using ISCST3 (version 02035);

(2) the emission rates modeled were based on maximum hourly emissions. The emission rates of PM_{10} were adjusted in the model to represent 24-hour average emissions;

(3) the modeling included emissions from front-end loading and handling operations, receiving operations, loadout operations, and warehouse handling and mixing operations;

(4) daytime and nighttime hours were modeled;

(5) all facilities and equipment at the site were assumed to be within a 125-foot circular area for a conservative estimate of predicted concentrations. The sources were modeled as circular area sources in order to eliminate any bias associated with source configuration and/or wind direction;

(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 in the modeling analysis to account for plume meander at low wind speeds and high atmospheric stability;

(8) 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 PM_{10} 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;

(9) there were no downwash structures present for the modeling analysis, since downwash is not applicable for area sources;

(10) 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

(11) a polar receptor grid extending from the edge of the property to 1,750 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 dry bulk fertilizer handling equipment and operations. 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 dry bulk fertilizer handling operations. Based on modeling PM_{10}, the emissions from a dry bulk fertilizer handling operation 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 dry bulk fertilizer handling operation with site-wide emissions of PM_{10} less than or equal to 13.63 lb/hr do not require a setback distance to meet standards. For facilities with site-wide emissions greater than 13.63 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. 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), Justin Seed Company, 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 Dry Bulk Fertilizer Handling Operations 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 expends 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.

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 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 PM_{10} 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 protectivenesss 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 PM_{10} 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 the dry bulk fertilizer handling 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 13.63 lb/hr of PM_{10}. 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 17.1 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.

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 DRY BULK FERTILIZER HANDLING OPERATIONS

Effective Date: April 7, 2010

This air quality standard permit authorizes the air emissions associated with dry bulk fertilizer handling operations that meet all of the applicable conditions listed in sections (1) through (6) of this standard permit.

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 dry bulk fertilizer handling operations on or after the effective date of this standard permit. This standard permit also authorizes any fugitive emissions associated with a dry bulk fertilizer handling operation authorized by this standard permit.

(B) A dry bulk fertilizer handling operation 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.

(C) 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.

(D) 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 (6) 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 dry bulk fertilizer handling operation) at the site provided the dry bulk fertilizer handling operation remains in compliance with all requirements of this standard permit.

(E) This standard permit cannot be used if the total site-wide emissions do not meet the emission rate requirements specified in sections (5) and (6) of this standard permit.

(2) Definitions

(A) Dry bulk fertilizer - granular fertilizer products including, but not limited to, urea, potash, monoammonium phosphate, diammonium phosphate, triple superphosphate, nitric phosphate, trisodium phosphate, ammonium nitrate, ammonium sulphate, and/or zinc.

(B) Dry bulk fertilizer handling operation - a facility, or group of facilities, that receives, handles, mixes, stores, or loads out dry bulk fertilizer.

(C) Off-site receptor - any recreational area or residence or other structure that is in use 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) Site - a site as defined in 30 TAC §122.10, General Definitions.

(3) General Administrative Requirements

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; §116.611(a) and (b), Registration to Use a Standard Permit; §116.614, Standard Permit Fees; and §116.615(5), Start-up Notification (General Conditions).

(4) General Operating Requirements

(A) 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 fabric filter system, which must operate as specified in subsection (4)(B) of this standard permit.

(B) All fabric filter collection systems used to control particulate emissions from the dry bulk fertilizer handling operation 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 (combined front half and back half); and

(iii) in accordance with U.S. Environmental Protection Agency Test Method 9, opacity of emissions from any fabric filter shall not exceed five percent averaged over a six-minute period.

(C) Operation of conveyors associated with receiving authorized by this standard permit shall not commence until the receiving areas are full.

(D) 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.

(E) 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.

(F) 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.

(G) 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.

(H) All facilities and associated equipment authorized by this standard permit, including any transfer equipment, must be maintained in good working order and operated properly.

(I) 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 (PM_{10}) as shown by the plotted line in Figure 1 of this standard permit.

(J) For all dry bulk fertilizer handling operations 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) all records to demonstrate that the dry bulk fertilizer handling operation meets the applicable emission rate and minimum setback distance limitations determined by using Figure 1 of this standard permit;

(ii) records of periodic monitoring and scheduled cleaning and maintenance of the abatement equipment to demonstrate compliance with subsection (4)(G) of this standard permit; and

(iii) records containing sufficient information to demonstrate compliance with paragraphs (6)(C)(i) through (6)(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 Dry Bulk Fertilizer Handling Operations (New, Modified, or Existing)

(A) In addition to section (4) of this standard permit, dry bulk fertilizer handling operations 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; and

(ii) a dry bulk fertilizer handling operation 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 (6) of this standard permit) shall be less than or equal to 6.82 pounds per hour (lb/hr);

(b) total PM_{10} emissions from the site (including emissions from facilities and activities as specified in section (6) of this standard permit) may be greater than 6.82 lb/hr and less than or equal to 13.63 lb/hr if each emission point associated with the handling of dry bulk fertilizer is located at least 100 feet from the nearest off-site receptor; or

(c) total PM_{10} emissions from the site may be greater than 13.63 lb/hr if each emission point associated with the handing of dry bulk fertilizer

is located at least 100 feet from the nearest off-site receptor. All facilities (including facilities and activities as specified in section (6) of this standard permit) emitting PM_{10} at the site shall also 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.

(B) Notification and registration are not required for dry bulk fertilizer handling operations authorized by this standard permit.

(6) 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 dry bulk fertilizer handling operations that are authorized by this standard permit:

(i) abrasive blasting (wet blast and dry abrasive cleaning);

(ii) surface preparation;

(iii) surface coating;

(iv) compressors, pumps, or engines, and associated pipes, valves, flanges, and connections;

(v) 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;

(vi) vacuum cleaning systems;

(vii) hydraulic oil filtering;

(viii) lubrication; and

(ix) 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 (6)(B) and (6)(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.

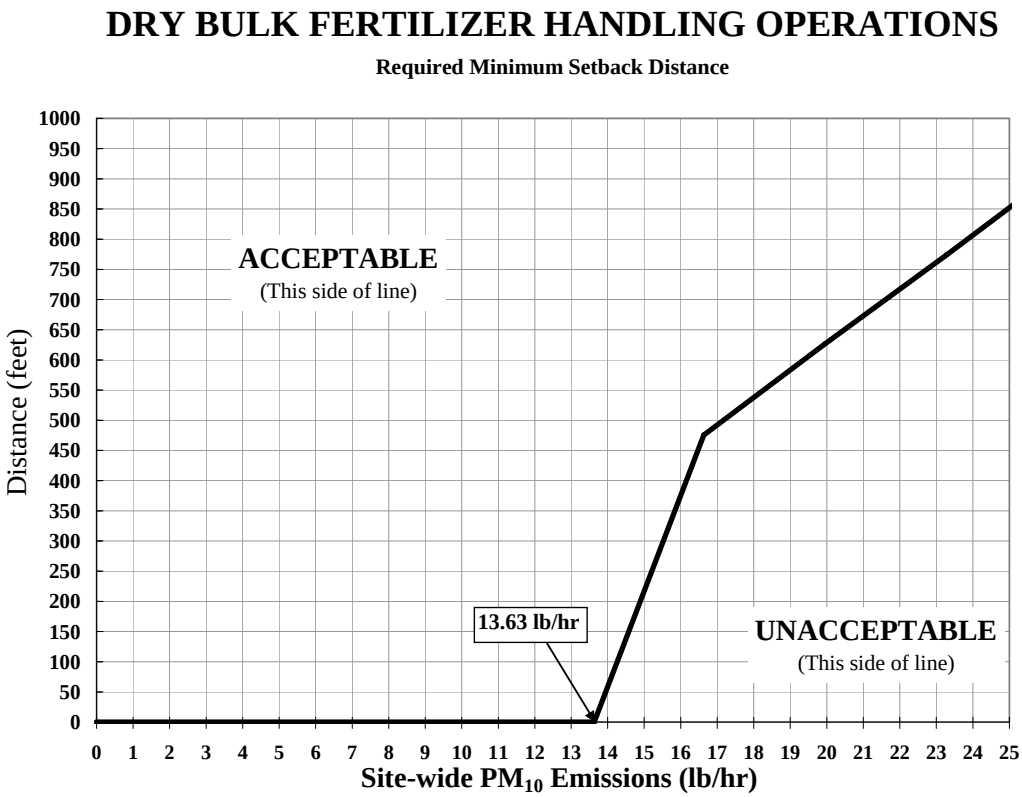
DRY BULK FERTILIZER HANDLING OPERATIONS
Required Minimum Setback Distance
Distance (feet)
1000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
200
150
100
50
0
ACCEPTABLE
(This side of line)
13.63 lb/hr
UNACCEPTABLE
(This side of line)
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25
Site-wide PM10 Emissions (lb/hr)

Figure 1