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. 2010-0190-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 Cotton Gin Facilities and Cotton Burr Tub Grinders. Notice of the proposed standard permit was published in the November 6, 2009, issue of the *Texas Register* (34 TexReg 7845). (Michael Wilhoit, Christine Angeletti)

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 Cotton Gin Facilities and Cotton Burr Tub Grinders

Docket No. 2010-0190-AIR

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Background

Staff is recommending issuance of a new air quality standard permit for cotton gin facilities and cotton burr tub grinders, 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; dry bulk fertilizer handling operations; 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 cotton gin facilities and cotton burr tub grinders 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 cotton gin facilities (including all material handling, pre-cleaning and cleaning equipment, cotton dryers, burners, and engines) and cotton burr tub grinders.
- 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), the Biodiesel Coalition of Texas (BCOT), 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.**

- BCOT commented that the proposed standard permit should allow for the use of biodiesel fuel. **The commission has revised the permit to allow for the use of biodiesel and biodiesel-diesel blends as authorized fuels under this standard permit. Such fuels must meet applicable standards and requirements.**

- The TCGA submitted general comments supporting this standard permit.

Potentially Controversial Matters

None.

COTTON GIN FACILITIES AND COTTON BURR TUB 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 cotton gin facilities and cotton burr tub grinders. The new standard permit can be used to authorize cotton gin facilities and cotton burr tub 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 cotton gin facility or cotton burr tub 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 §106.291, Cotton Gin Stands and 30 TAC §106.261, Facilities (Emission Limitations) or under 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification. PBRs §106.291 and §106.261 will remain authorization mechanisms to continue to allow authorization flexibility for those facilities authorized under case-by-case air quality permits.

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 cotton gin facilities and cotton burr tub grinders is protective of the public health and welfare.

The modeling results demonstrated that a cotton gin with all fan exhausts equipped with a rotary drum filter, fabric filter, and/or cyclone collection system that exhaust vertically and with site-wide emissions of PM_{10} less than or equal to 52.94 pounds per hour (lb/hr) does not require a setback distance from the property line to meet the NAAQS. For cotton gins with emission controls as previously described and with site-wide emissions greater than 52.94 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. A cotton gin with emission controls other than those previously described and with site-wide emissions of PM_{10} less than or equal to 9.94 lb/hr also does not require a setback distance from the property line to meet the NAAQS. For these cotton gins with site-wide emissions greater than 9.94 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. All cotton gins must be equipped with the appropriate controls to meet baseline BACT requirements (described in the General Operating Requirements portion of this technical summary) and applicable state and federal rules and regulations.

For sites in which cotton burr tub grinders are the only facilities present (with the exception of planned maintenance, start-up, and shutdown (MSS) facilities and activities) and with a site-wide PM_{10} 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 cotton burr tub 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 PM_{10} emissions do not exceed the NAAQS.

III. OVERVIEW OF AIR QUALITY STANDARD PERMIT

The commission issues this air quality standard permit authorizing cotton gin facilities and cotton burr tub 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 cotton gin facilities (including all material handling, pre-cleaning, and cleaning equipment, in addition to associated cotton dryers, burners, and engines) and cotton burr tub 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 cotton gin facilities and cotton burr tub grinders to comply with certain administrative requirements, such as 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 the cotton ginning and cotton burr grinding processes. 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 cotton gin facilities (including all material handling, pre-cleaning and cleaning equipment, cotton dryers, burners, and engines) and cotton burr tub grinders that meet the applicable conditions of the standard permit.

To help prevent burr fires and maximize control over any possible product fire, facility owners or operators should review the guidelines in the document entitled "Proper Storage of Cotton Gin Trash."

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 cotton gin facilities (including all material handling, pre-cleaning and cleaning equipment, cotton dryers, burners, and engines) and cotton burr tub grinders in addition to any fugitive emissions associated with these facilities. This condition is intended to specify the scope of the standard permit authorization.

Subsection (B) prohibits the use of this standard permit to authorize any cotton gin facility that has 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 40 million Btu/hr). This restriction is based on concerns associated with 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 and nitrogen oxide (NO_X) limitations in 30 TAC Chapter 117, Control of Air Pollution from Nitrogen Compounds, 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 40 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 cotton gin facilities.

Subsection (C) 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 cotton gin facility or cotton burr tub 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 cotton gin facilities and cotton burr tub grinders to use this standard permit provided all other applicable requirements of the standard permit can be met.

Subsection (D) 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 (E) 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 (F) 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 cotton gin operation and/or cotton burr tub 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 cotton gin or cotton burr tub grinder operations. However, all site-wide emission limitations in this standard permit must be met. The restrictions in subsections (E) and (F) are included to limit the cumulative effects of specific contaminants and to ensure the protection of health and human welfare. Subsection (F) 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 (7) 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 (G) 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), and (7) of this standard permit. This includes PM_{10} emissions from all facilities at the site, even facilities that are not associated with the cotton gin or cotton burr tub grinder operations. This condition limits cumulative emissions and reinforces the site-wide emission rate requirements in sections (5), (6), and (7) to maintain the protectiveness of this standard permit.

Definitions

Section (2) contains the definitions of cotton gin, off-site receptor, site, and temporary 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 cotton gin facilities and cotton burr tub grinders 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 cotton gin facilities and cotton burr tub grinders 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 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 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 cotton gin facilities and cotton burr tub 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. In addition, subsection (A) requires compliance with 30 TAC §111.171, Emissions Limits Based on Process Weight Method. While all applicable state regulation requirements must be met, the allowable hourly emission rate based on process weight (Process Weight Method) is critical for these types of operations, since it also determines what level of emission control is necessary. Baseline BACT for cotton gin facilities is specified in a memo passed by the Texas Air Control Board in May 1993. This memo is still in effect and is used in all cotton gin facility permit reviews. Baseline BACT is defined as small-mesh screens on all condenser exhausts, and properly sized high efficiency cyclones on all other fan exhausts or equivalent methods of control. 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) specifies the operating requirements and design parameters for all rotary drum filter, fabric filter, and cyclone collection systems used. Fabric filter and drum filter collection systems must be operated properly with no tears or leaks; 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. Cyclone collection systems must be operated properly with no leaks and be properly sized high efficiency cyclones with a cone length at least twice the diameter of the cyclone. Cyclone opacity limitations are not specified since cyclones at cotton gins are usually configured in a bank and are in very close proximity to each other. This configuration has the potential to make opacity readings more difficult and potentially inaccurate.

Subsection (C) specifies that fugitive emissions from burr hoppers authorized by this standard permit must be minimized through the use of appropriate operational practices and/or other control methods to prevent visible emissions from traveling off property during trash dumping operations.

Subsection (D) specifies that fuel used for any dryer or burner 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 (E) 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 (F) 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)(C) of this standard permit and the limitation on operating hours as specified in paragraph (4)(F)(iii) of this standard permit will provide sufficient NO_X reductions to meet BACT requirements. The operating hours in paragraph (4)(F)(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 cotton burr tub 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 cotton burr tub 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 (G) 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 (H) 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 and rotary drum collection systems.

The requirements in subsections (B) through (H) 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 (H) were obtained from existing case-by-case NSR permits for cotton gin facilities and represent BACT for this industry.

Subsection (I) 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 (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 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)(F)(iii) of this standard permit. Paragraph (J)(ii) requires the owner or operator to maintain all records sufficient to demonstrate that the cotton gin facilities and cotton burr tub grinder(s) are meeting all applicable emission rate and property line minimum setback distance limitations determined by using Figures 1 through 3 (whichever is

applicable) 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 determine the maximum allowable short-term emission rates. Additional information regarding the modeling used to develop Figures 1 through 3 can be found in the Protectiveness Review portion of this technical summary. Paragraph (J)(iii) specifies that records for temporary cotton burr tub grinders shall remain with the primary grinder equipment. Paragraph (J)(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 (H) of this standard permit. The periodic monitoring reference was included to link recordkeeping requirements and the 30-day monitoring frequency added to subsection (H) of this standard permit. Paragraph (J)(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 (7)(C)(i) through (7)(C)(iv) of this standard permit.

Requirements Specific to Cotton Gin Facilities (New, Modified, or Existing)

Section (5) of this standard permit addresses new, modified, or existing cotton gin facilities. The addition of a cotton burr tub grinder at the cotton gin site would be a modification requiring emissions from any cotton burr tub grinder to be included in the overall site emissions. All facilities associated with the cotton gin must be authorized under this standard permit. 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.

Paragraph (A)(ii) specifies the minimum setback distance necessary for all fan exhausts (including cyclones, drum filters, and fabric filters), burr hoppers, burr stackers, and a cotton burr tub grinder and associated engine for authorization under this standard permit. The minimum setback distance for these emission points 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, all fan exhausts, burr hoppers, burr stackers, and cotton burr tub grinders are the sources associated with cotton gins that have greater potential for nuisance from particulate emissions; therefore, these emission points 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 (7) of this standard permit, up to and including 52.94 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) for cotton gins with all fan exhausts equipped with a rotary drum filter, fabric filter, and/or cyclone collection system that exhaust vertically. Based on this information, nuisance conditions are not expected at the property line. For sites with emissions greater than 52.94 lb/hr of PM_{10} for a gin with emission controls as previously described, all facility emission points, including facilities and activities as specified in section (7) 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. A protectiveness review was also conducted for gins with emission controls and exhaust direction other than those previously described. This protectiveness review showed that site emissions, including emissions from facilities and activities as specified in section (7) of this standard permit, up to and including 9.94 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. For sites with emissions greater than 9.94 lb/hr of PM_{10} for a gin with emission controls and exhaust direction other than those previously described, all facility emission points, including facilities and activities as specified in section (7) 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 fan exhausts, burr hoppers, burr stackers, and cotton burr tub 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 or 2 (whichever is applicable) of this standard permit, nuisance dust conditions are not expected.

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

Paragraph (A)(iii) requires the minimization of emissions of lint and cotton trash through the proper maintenance of all buildings and gin equipment. Any accumulations of lint, cotton trash, and cotton burrs (other than those from burr stackers) on the cotton gin site must be cleaned up and removed from the cotton gin site on a daily basis.

Paragraph (A)(iv) addresses requirements for any burr stackers used on site. For those cotton gins where a burr stacker is used in lieu of or in conjunction with a burr hopper to handle and store lint and cotton trash, all cotton trash must be properly stacked by the burr stacker in the burr storage area until this material can be removed from the cotton gin site. Any other accumulations of lint, cotton trash, and cotton burrs on the cotton gin site must be cleaned up and removed from the cotton gin site on a daily basis. In addition, a water spray system for the burr stacker must be used as necessary to minimize visible emissions from traveling off property during stacking operations.

Paragraph (A)(v) 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 paragraphs (A)(iv) and (A)(v) do not exempt cotton gin operations from the requirements in 30 TAC §101.4, Nuisance.

The best management practices in paragraphs (A)(iii) through (A)(v) were obtained from existing case-by-case NSR permits for cotton gin facilities, represent BACT for this industry, and will reduce particulate emissions to minimize nuisance potential and protect human health and welfare.

Paragraph (A)(vi) specifies that the cotton gin shall be in compliance with the PM_{10} emission rates, minimum setback distance requirements, and emission controls as determined by using Figure 1 or 2 (whichever is applicable) of this standard permit. PM_{10} emission rates are site-wide and all facility emission points, including facilities and activities as specified in section (7) of this standard permit, emitting PM_{10} at the site must meet the specified minimum setback distance to the property line, which is required to demonstrate compliance with the 24-hour NAAQS as determined by using Figure 1 or 2 (whichever is applicable) of this standard permit. The emission rates and setback distance requirements in Figures 1 and 2 were determined through current modeling techniques and will be discussed further in the Protectiveness Review portion of this technical summary. Paragraph (A)(vi) 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 or 2 (whichever is applicable) of this standard permit.

Subsection (B) specifies that all cotton burr tub grinders authorized by this standard permit and on the cotton gin site must meet the requirements in section (6) of this standard permit. Subsection (B) is included to ensure protectiveness and minimize nuisance potential associated with these facilities.

Subsection (C) 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 cotton gin facilities 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 Permanent or Temporary Cotton Burr Tub Grinders (New, Modified, or Existing)

Section (6) of this standard permit addresses the use of permanent or temporary cotton burr tub grinders. Paragraphs (A)(i) through (A)(vii) require that cotton burr tub grinders be used only to grind cotton burrs; no more than one cotton burr tub grinder and associated engine can operate co-located with an on-site cotton gin; no more than two cotton burr tub grinders and two associated engines can operate simultaneously at a site when the cotton burr tub grinders and associated engines are the only facilities present at the site; all associated conveyors must be enclosed; each cotton burr tub 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 cotton burr tub grinders and associated engines must be located at least 250 feet from the nearest off-site receptor.

For cotton burr tub grinders and associated engines that are the only facilities (with the exception of facilities and activities specified in section (7) of this standard permit) at the site (i.e., burr storage sites), 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 cotton burr tub 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 cotton burr tub grinders and associated engines are the only facilities (with the exception of facilities and activities as specified in section (7) of this standard permit) at the site, and showed that site emissions, including emissions from facilities and activities as specified in section (7) of this standard permit, up to and including 4.10 lb/hr of PM_{10} 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 PM_{10}, cotton burr tub grinders and all facilities and activities (as specified in section (7) of this standard permit) 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 3 of this standard permit, nuisance dust conditions are not expected.

When cotton burr tub grinders are the only facilities (with the exception of facilities and activities as specified in section (7) of this standard permit) at the site, the grinders meet the conditions of paragraph (A)(viii) if the total PM_{10} emissions from the site, including emissions from any facility or activity as specified in section (7) of this standard permit, do not exceed 4.10 lb/hr. The total PM_{10} emissions from the site may exceed 4.10 lb/hr if all burr grinders and associated engines and any facility and activity, as specified in section (7) of this standard permit, emitting PM_{10} at the site meet the specified minimum setback distance to the property line required to demonstrate compliance with the 24-hour PM_{10} NAAQS determined by using

Figure 3 of this standard permit. 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 PM_{10} 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 3 of this standard permit.

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

The requirements in section (6) 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 cotton burr tub 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 cotton burr tub grinders is adequate for routine operations.

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 cotton burr tub 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.

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

Section (7) 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 cotton gin facilities, including cotton burr tub 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 cotton gin facilities (including cotton burr tub 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 (7)(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 (7)(B) and (7)(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 cotton gin 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. Predicted concentrations for carbon monoxide (CO), sulfur dioxide (SO_2), and nitrogen dioxide (NO_2) (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 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 cotton gin facilities and cotton burr tub grinders. The commission used the following assumptions, selections, and techniques:

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

(2) scenarios for cotton gin operations, products of combustion, and cotton burr tub grinders were evaluated. The cotton gin operations included PM_{10} emissions from dryers, pre-cleaning equipment, condenser exhausts, other handling equipment, and cotton burr tub grinder operations. Two scenarios were evaluated for cotton gin operations: 1) a cotton gin with all fan exhausts equipped with a rotary drum filter, fabric filter, and/or cyclone collection system that exhaust vertically; and 2) a cotton gin with emission controls and exhaust direction other than those previously described. The products of combustion scenario included emissions of SO_2, NO_2, and CO from the cotton burr tub grinder engines and the higher emissions of SO_2, NO_2, and CO from the dryers associated with two different fuels (natural gas and propane). The cotton burr tub grinder scenario only included PM_{10} emissions from two cotton burr tub grinders and the PM_{10} emissions associated with the products of combustion from the two cotton burr tub grinder engines since these facilities may operate alone at a site;

(3) 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;

(4) daytime and nighttime hours were modeled;

(5) all facilities and equipment at the site were assumed to be within a 100-foot circular area for a conservative estimate of predicted concentrations. The cotton gin facilities 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. The area 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 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 NO_2. 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 NO_2;

(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 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, which are the dominant contributor to the overall maximum predicted concentrations;

(10) there were no downwash structures present for the modeling analysis. This is conservative because the final results are given in distance required to fall below the 24-hour average PM_{10} NAAQS, and the distance to the maximum predicted concentration without downwash is farther than the distance with downwash. Also, the low-level fugitive emissions that were modeled as area sources are the dominant contributor to the overall maximum predicted concentrations. Downwash does not apply to area source modeling;

(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 cotton gin equipment and operations, including cotton burr tub 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 cotton gin operations and cotton burr tub grinders. Based on modeling PM_{10}, the emissions from a cotton gin operation (including cotton burr tub 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 a cotton gin with all fan exhausts equipped with a rotary drum filter, fabric filter, and/or cyclone collection system that exhaust vertically and with site-wide emissions of PM_{10} less than or equal to 52.94 pounds per hour (lb/hr) does not require a setback distance from the property line to meet the NAAQS. For cotton gins with emission controls as previously described and with site-wide emissions greater than 52.94 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.

Modeling results demonstrated that a cotton gin with emission controls and exhaust direction other than those previously described and with site-wide emissions of PM_{10} less than or equal to 9.94 lb/hr also does not require a setback distance from the property line to meet the NAAQS. For these cotton gins with site-wide emissions greater than 9.94 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.

For two or less cotton burr tub grinders operating alone at a site with site-wide emissions of PM_{10} 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 cotton burr tub grinders operating alone at a site with site-wide emissions of PM_{10} 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 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), Biodiesel Coalition of Texas (BCOT), 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 Cotton Gin Facilities and Cotton Burr Tub Grinders 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.

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.

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, Figure 1 of this 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 52.94 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 70.1 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.

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 COTTON GIN FACILITIES AND COTTON BURR TUB GRINDERS

Effective Date: April 7, 2010

This air quality standard permit authorizes the air emissions associated with cotton gin facilities and cotton burr tub grinders that meet all of the applicable conditions in sections (1) through (7) 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 cotton gin facilities (including all material handling, pre-cleaning and cleaning equipment, cotton dryers, burners, and engines) and cotton burr tub grinders on or after the effective date of this standard permit. This standard permit also authorizes any fugitive emissions associated with cotton gin facilities and cotton burr tub grinders authorized by this standard permit.

(B) Cotton gin facilities do not qualify for authorization under this standard permit if any on-site associated fuel-fired equipment (including, but not limited to, 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 40 million Btu/hr. This requirement does not apply to engines.

(C) 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.

(D) 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.

(E) 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.

(F) 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 (7) 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 cotton gin facilities or cotton burr tub grinder(s)) at the site provided the cotton gin facilities and cotton burr tub grinder(s) remain in compliance with all requirements of this standard permit.

(G) This standard permit cannot be used if the total site-wide emissions do not meet the emission rate requirements specified in sections (5), (6), and (7) of this standard permit.

(2) Definitions

(A) Cotton gin - a facility, or group of facilities, that receives seed cotton; removes moisture from and separates plant matter and seed from the cotton; and conducts subsequent processes, which include grinding of plant matter and baling and/or packaging of lint or lint waste.

(B) 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.

(C) Site - a site as defined in 30 TAC §122.10, General Definitions.

(D) Temporary - operating at a site no more than 180 calendar days during any 12-month period.

(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) 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 IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines;

(iii) 40 CFR Part 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines; and

(iv) 30 TAC §111.171, Emissions Limits Based on Process Weight Method.

(B) All rotary drum filter, fabric filter, and cyclone collection systems used to control particulate emissions from the cotton gin facilities authorized by this standard permit shall meet the following requirements, as applicable:

(i) fabric filter and drum filter systems shall be operated properly with no tears or leaks;

(ii) fabric filter and drum 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);

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

(iv) cyclone collection systems shall be operated properly with no leaks; and

(v) cyclone collectors shall be properly sized high efficiency cyclones with a cone length at least twice the diameter of the cyclone.

(C) Fugitive emissions from burr hoppers authorized by this standard permit shall be minimized through the use of appropriate operational practices and/or other control methods to prevent visible emissions from traveling off property during trash dumping operations.

(D) Fuel for any dryer or burner authorized by this standard permit shall be pipeline quality sweet natural gas or propane.

(E) 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.

(F) 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.

(G) Any engine authorized by this standard permit shall be equipped with an exhaust stack with a minimum height of ten feet above ground level.

(H) 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.

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

(J) For all cotton gin facilities, cotton burr tub 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)(F)(iii) of this standard permit, records of hours of operation for each engine;

(ii) all records to demonstrate that the cotton gin facilities and cotton burr tub grinder(s) meet the applicable emission rate and minimum setback distance limitations determined by using Figures 1 through 3 (whichever is applicable) of this standard permit;

(iii) records for temporary cotton burr tub grinders shall remain with the primary grinder equipment;

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

(v) records containing sufficient information to demonstrate compliance with paragraphs (7)(C)(i) through (7)(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 Cotton Gin Facilities (New, Modified, or Existing)

(A) In addition to section (4) of this standard permit, cotton gin facilities 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 fan exhausts (including cyclones, drum filters, and fabric filters), burr hoppers, burr stackers, and cotton burr tub 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)(A)(vi) of this standard permit;

(iii) emissions of lint and cotton trash shall be minimized by proper maintenance of all buildings and gin equipment. Any accumulations of lint, cotton trash, and cotton burrs (other than those from burr stackers) on the cotton gin site shall be cleaned up and removed from the cotton gin site on a daily basis;

(iv) if burr stackers are used to handle and store lint and cotton trash from the cotton gin facilities, the following requirements shall apply:

(a) all cotton trash shall be properly stacked by the burr stacker in the burr storage area until this material can be removed from the cotton gin site. Any other accumulations of lint, cotton trash, and cotton burrs on the cotton gin site shall be cleaned up and removed from the cotton gin site on a daily basis; and

(b) a water spray system for the burr stacker shall be used as necessary to minimize visible emissions from traveling off property during stacking operations;

(v) One or more of the following methods shall be used to control emissions from cotton gin plant roads, parking areas, and other traffic areas to maintain compliance with all TCEQ rules and regulations:

(a) sprinkling with water as necessary;

(b) treating with effective dust suppressant(s) as necessary; or

(c) paving (with a cohesive hard surface) and cleaning as necessary; and

(vi) The cotton gin shall be in compliance with the PM_{10} emission rates, minimum setback distance requirements, and emission controls as determined by using Figure 1 or 2 (whichever is applicable) 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 or 2 (whichever is applicable) of this standard permit.

(B) Any cotton burr tub grinder authorized by this standard permit at the cotton gin site shall meet the requirements of section (6) of this standard permit with the exception of paragraphs (6)(A)(vii) and (6)(A)(viii).

(C) Notification and registration are not required for cotton gin facilities authorized by this standard permit.

(6) <u>Requirements Specific to Permanent or Temporary Cotton Burr Tub Grinders (New, Modified, or Existing)</u>

(A) In addition to section (4) of this standard permit, permanent or temporary cotton burr tub grinders shall also meet the following requirements:

(i) cotton burr tub grinders shall be used only to grind cotton burrs;

(ii) no more than one cotton burr tub grinder and one associated engine shall operate co-located with an on-site cotton gin;

(iii) no more than two cotton burr tub grinders and two associated engines shall operate simultaneously at a site when the cotton burr tub grinders and associated engines are the only facilities present (with the exception of

facilities and activities as specified in section (7) of this standard permit) at the site;

(iv) all associated conveyors shall be enclosed;

(v) each cotton burr tub 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) cotton burr tub grinders and associated engines shall be the only facilities present (with the exception of facilities and activities as specified in section (7) 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 (6)(A)(viii) of this standard permit;

(viii) cotton burr tub grinders and associated engines shall be the only facilities present (with the exception of facilities and activities as specified in section (7) of this standard permit) at the site and meet one of the following scenarios:

(a) total PM_{10} emissions from the site (including emissions from any facility or activity as specified in section (7) of this standard permit) shall be less than or equal to 4.10 lb/hr; or

(b) total PM_{10} emissions from the site may be greater than 4.10 lb/hr if all cotton burr tub grinders and associated engines and any facility and activity, as specified in section (7) of this standard permit, emitting PM_{10} 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

(ix) no visible emissions from the loading, operation, and unloading of any cotton burr tub grinder authorized by this standard permit shall leave the property.

(B) Notification and registration are not required for cotton burr tub grinders authorized by this standard permit.

(7) 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 cotton gins and cotton burr tub grinders 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 (7)(B) and (7)(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.

Cotton Gin Facilities Controlled with Rotary Drum Filter, Fabric Filter, and/or Cyclone Collection System Exhausted Vertically

Required Minimum Setback Distance

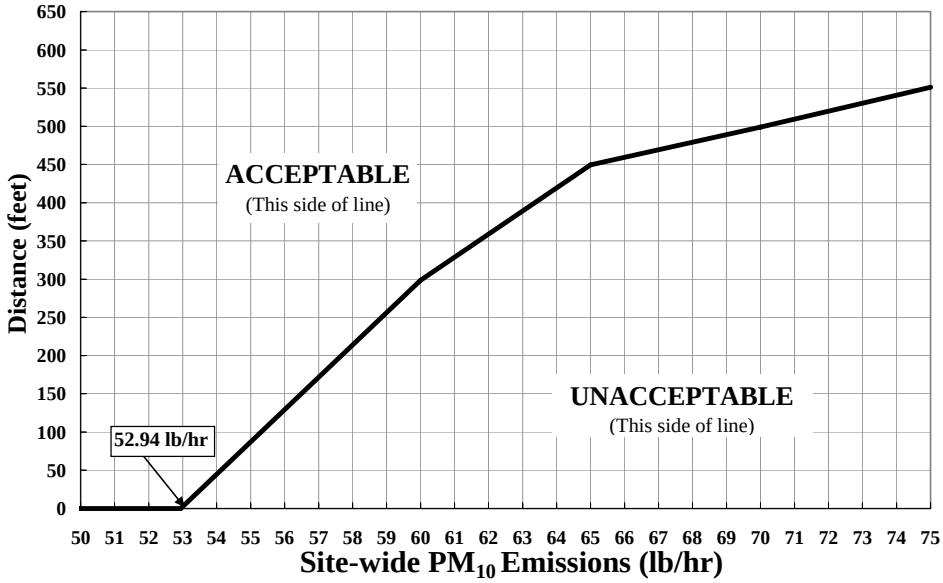

Figure 1

All Other Cotton Gin Facilities

Required Minimum Setback Distance

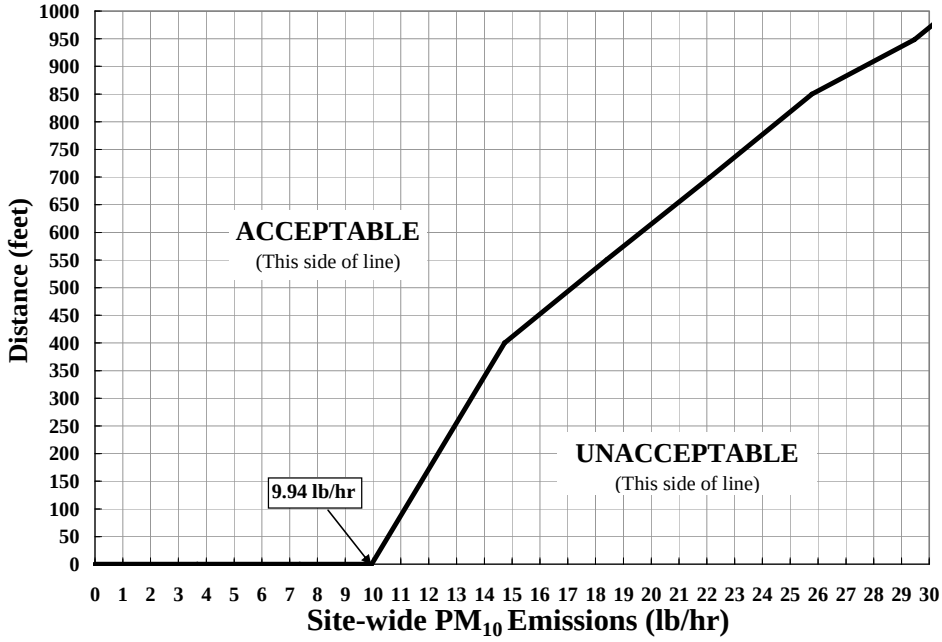

Figure 2

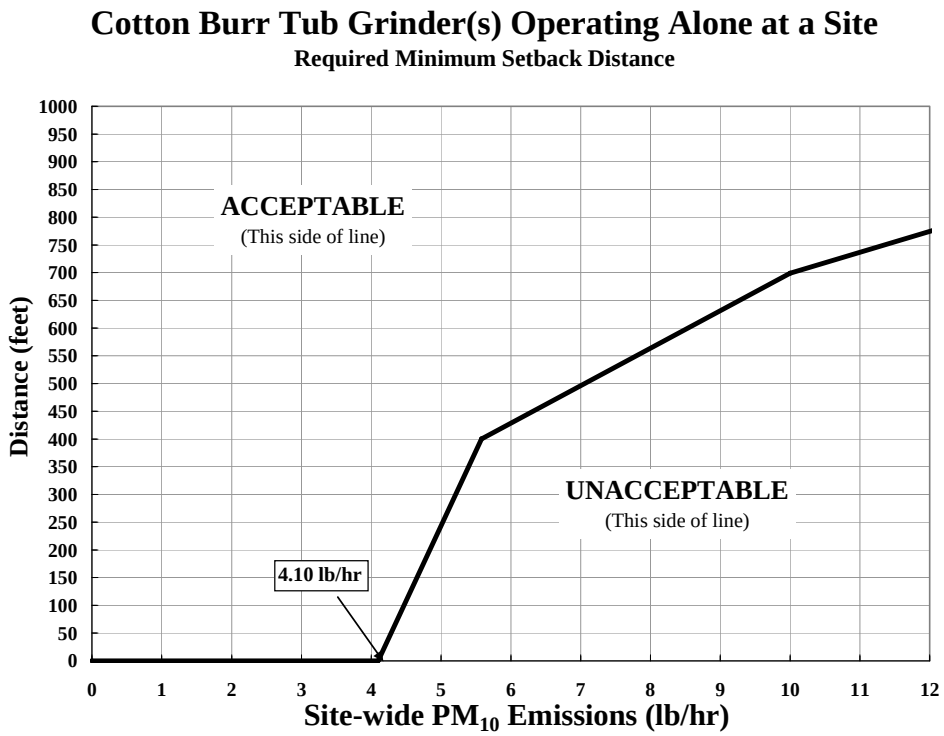
Cotton Burr Tub Grinder(s) Operating Alone at a Site
Required Minimum Setback Distance
ACCEPTABLE
(This side of line)
UNACCEPTABLE
(This side of line)
4.10 lb/hr
Distance (feet)
Site-wide PM10 Emissions (lb/hr)
0
50
100
150
200
250
300
350
400
450
500
550
600
650
700
750
800
850
900
950
1000
0
1
2
3
4
5
6
7
8
9
10
11
12

Figure 3