

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

Effective Date: April 7, 2010

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

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

(1) Applicability

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

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

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

(2) Definitions

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

(3) General Administrative Requirements

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

(4) General Operating Requirements

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

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

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

- (i) 2.0 grams per horsepower-hour (g/hp-hr) for gas fuel;
  - (ii) 11.0 g/hp-hr for liquid diesel or biodiesel-based fuel; or
  - (iii) 1,200 hours during any 12-month period.
- (P) Any engine authorized by this standard permit shall be equipped with an exhaust stack with a minimum height of ten feet above ground level.
- (Q) All air pollution abatement equipment shall be checked every 30 days (unless more frequent checks/inspections are otherwise specified in this standard permit) and shall be properly maintained and operated during the operation of the facilities authorized by this standard permit. Scheduled cleaning and maintenance of the abatement equipment shall be performed as recommended by the manufacturer and as necessary so that the equipment efficiency is adequately maintained.
- (R) All facilities and associated equipment authorized by this standard permit, including any transfer equipment, must be maintained in good working order and operated properly.
- (S) Maximum hourly facility production capacities shall not exceed the values used to determine compliance with the 24-hour National Ambient Air Quality Standards (NAAQS) for particulate matter less than or equal to ten microns in diameter (PM<sub>10</sub>) as shown by the plotted line in Figures 1 through 4 (whichever is applicable) of this standard permit.
- (T) For all feedmill operations, portable augers, hay grinders, and planned maintenance, start-up, and shutdown (MSS) facilities and activities authorized by this standard permit, the following records shall be maintained at the site for a rolling 24-month period and be made available at the request of personnel from the TCEQ or any other air pollution control agency or program having jurisdiction:
- (i) if limiting hours of operation, as specified in paragraph (4)(O)(iii) of this standard permit, records of hours of operation for each engine;
  - (ii) all records to demonstrate that the feedmill operation, portable auger(s), and hay grinder(s) meet the applicable emission rate and minimum setback distance limitations determined by using Figures 1 through 4 (whichever is applicable) of this standard permit;
  - (iii) records for portable augers and temporary hay grinders shall remain with the primary auger or grinder equipment;

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

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

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

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

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

- (a) total PM<sub>10</sub> emissions from the site (including emissions from facilities and activities as specified in section (9) of this standard permit) shall be less than or equal to 9.77 lb/hr; or
- (b) total PM<sub>10</sub> emissions from the site may be greater than 9.77 lb/hr if all facilities (including facilities and activities as specified in section (9) of this standard permit) emitting PM<sub>10</sub> at the site meet the minimum setback distance to the property line determined by using Figure 2 of this standard permit. The minimum setback distance shall be measured from each facility emission point or maintenance activity emission point to the nearest property line using the shortest distance to that property line. All facility emission points and maintenance activity emission points must meet the minimum setback distance requirements determined by using Figure 2 of this standard permit.

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

(7) Requirements Specific to Portable Augers

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

- (a) total PM<sub>10</sub> emissions from the site (including emissions from any facility and activity as specified in section (9) of this standard permit) shall be less than or equal to 0.95 lb/hr; or
- (b) total PM<sub>10</sub> emissions from the site may be greater than 0.95 lb/hr if all portable augers and any facility and activity, as specified in section (9) of this standard permit, emitting PM<sub>10</sub> at the site meet the minimum setback distance to the property line determined by using Figure 3 of this standard permit. The minimum setback distance shall be measured from each facility emission point or maintenance activity emission point to the nearest property line using the shortest distance to that property line. All facility emission points and maintenance activity emission points must meet the minimum setback distance requirements determined by using Figure 3 of this standard permit; and
- (iv) no visible emissions from the operation of any portable auger authorized by this standard permit shall leave the property.
- (B) For portable augers, authorized by this standard permit, that are located at a feedmill that is not producing feed as specified in subsection (5)(A) of this standard permit, notification and registration are not required.
- (C) For portable augers, authorized by this standard permit, that are located at a site where the portable augers are the only facilities present (with the exception of facilities and activities as specified in section (9) of this standard permit), notification and registration are not required.
- (8) Requirements Specific to Permanent or Temporary Hay Grinders (New, Modified, or Existing)
  - (A) In addition to section (4) of this standard permit, permanent or temporary hay grinders shall also meet the following requirements:
    - (i) hay grinders shall be used only to grind hay;
    - (ii) no more than one hay grinder and one associated engine shall operate co-located with an on-site feedmill;
    - (iii) no more than two hay grinders and two associated engines shall operate simultaneously at a site when the hay grinders and associated engines are the only facilities present (with the exception of facilities and activities as specified in section (9) of this standard permit) at the site;
    - (iv) all associated conveyors shall be enclosed;

- (v) each hay grinder shall be filled to at least one-half capacity by volume before grinding operations begin and the capacity shall be maintained at that level during grinding operations;
  - (vi) emission rates shall be determined using calculation methods accepted by the TCEQ Air Permits Division at the time of the standard permit claim;
  - (vii) hay grinders and associated engines shall be the only facilities present (with the exception of facilities and activities as specified in section (9) of this standard permit) at the site, shall be located at least 250 feet from the nearest off-site receptor, and shall meet any property line minimum setback distance as required in paragraph (8)(A)(viii) of this standard permit;
  - (viii) hay grinders and associated engines shall be the only facilities present (with the exception of facilities and activities as specified in section (9) of this standard permit) at the site and meet one of the following scenarios:
    - (a) total PM<sub>10</sub> emissions from the site (including emissions from any facility and activity as specified in section (9) of this standard permit) shall be less than or equal to 4.10 lb/hr; or
    - (b) total PM<sub>10</sub> emissions from the site may be greater than 4.10 lb/hr if all hay grinders and associated engines and any facility and activity, as specified in section (9) of this standard permit, emitting PM<sub>10</sub> at the site meet the minimum setback distance to the property line determined by using Figure 4 of this standard permit. The minimum setback distance shall be measured from each facility emission point or maintenance activity emission point to the nearest property line using the shortest distance to that property line. All facility emission points and maintenance activity emission points must meet the minimum setback distance requirements determined by using Figure 4 of this standard permit; and
  - (ix) no visible emissions from the loading, operation, and unloading of any hay grinder authorized by this standard permit shall leave the property.
- (B) For hay grinders, authorized by this standard permit, that are located at a feedmill that is not producing feed as specified in subsection (5)(A) of this standard permit, notification and registration are not required.

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

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

- (A) This standard permit authorizes all emissions from planned start-up and shutdown activities associated with facilities or groups of facilities that are authorized by this standard permit.
- (B) This standard permit authorizes emissions from the following planned maintenance activities and facilities associated with feedmills, portable augers, and hay grinders that are authorized by this standard permit:
  - (i) abrasive blasting (wet blast and dry abrasive cleaning);
  - (ii) surface preparation;
  - (iii) surface coating;
  - (iv) facilities used for testing and repair of engines;
  - (v) compressors, pumps, or engines, and associated pipes, valves, flanges, and connections;
  - (vi) hand-held or manually operated equipment used for buffing, polishing, carving, cutting, drilling, machining, routing, sanding, sawing, surface grinding, or turning of ceramic precision parts, leather, metals, plastics, fiber board, masonry, carbon, glass, graphite, or wood;
  - (vii) vacuum cleaning systems;
  - (viii) hydraulic oil filtering;
  - (ix) lubrication; and
  - (x) brazing, soldering, welding, or metal cutting equipment.
- (C) Planned maintenance activities and facilities shall meet the following requirements.
  - (i) The following materials are authorized and shall not be used at the site at more than the rates prescribed below:

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

# Feedmill Operations

Required Minimum Setback Distance

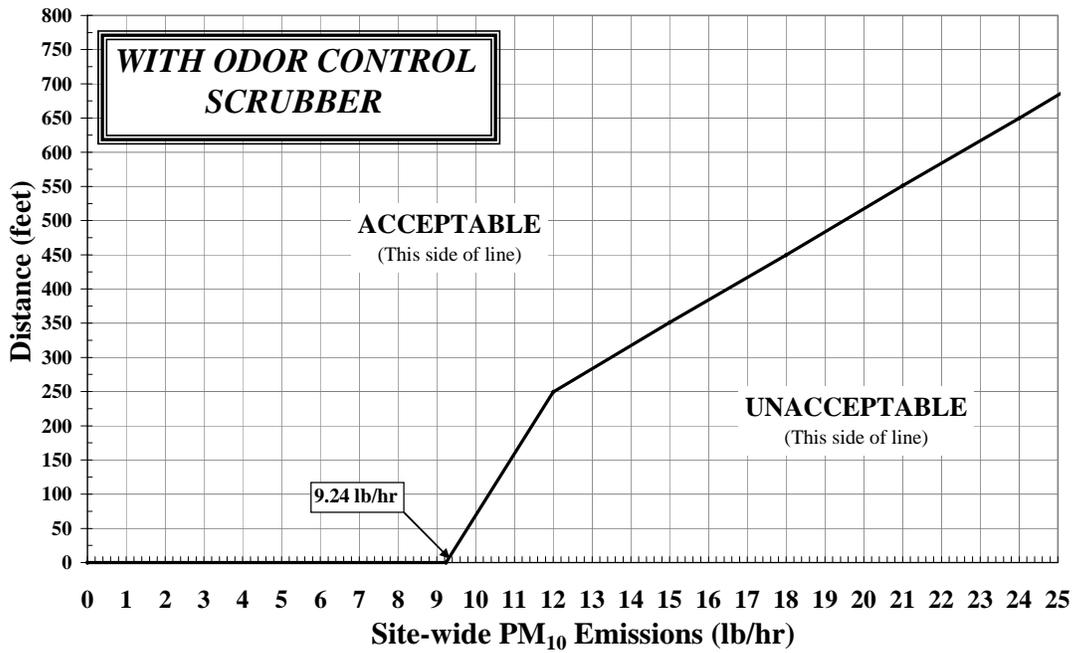


Figure 1

# Feedmill Operations

Required Minimum Setback Distance

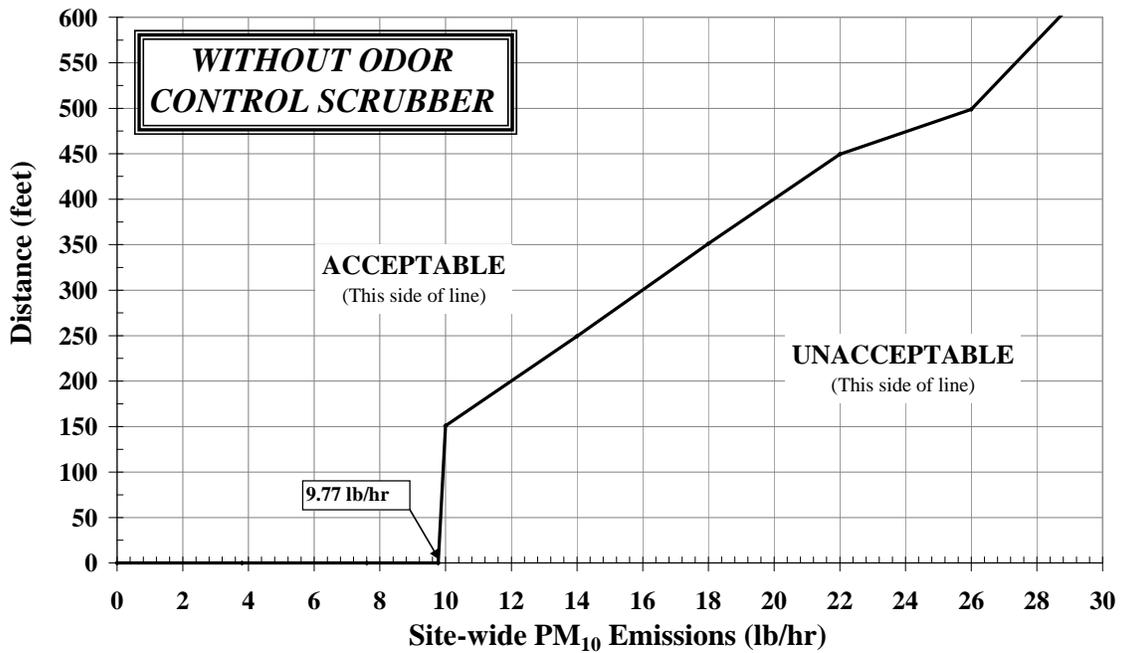


Figure 2

## Portable Auger(s) Operating Alone at a Site

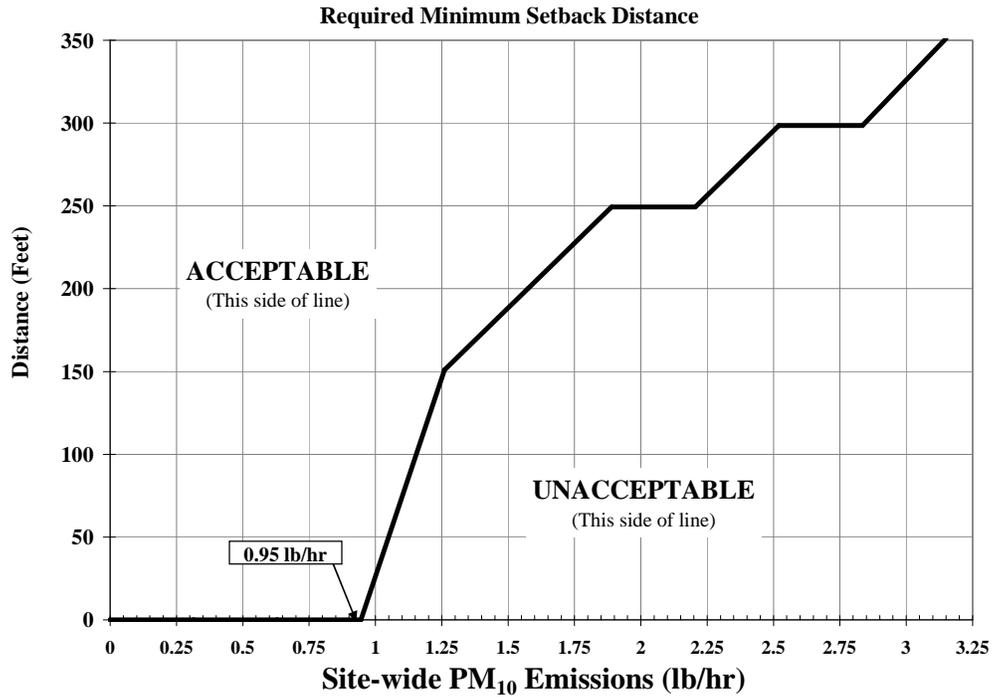


Figure 3

## Hay Grinder(s) Operating Alone at a Site

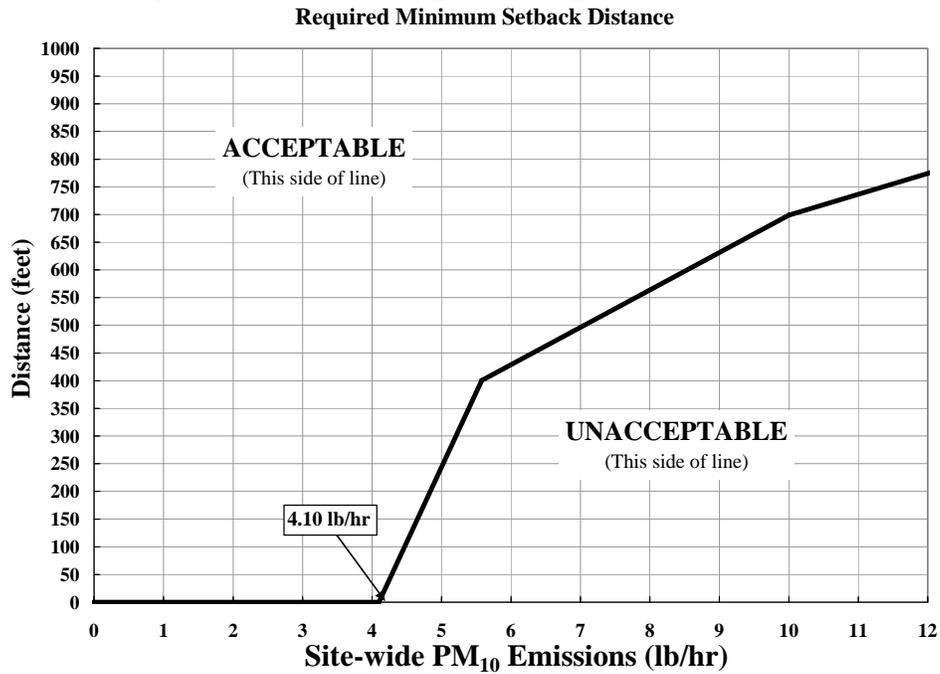


Figure 4