

**AIR QUALITY STANDARD PERMIT FOR  
GRAIN ELEVATORS/GRAIN HANDLING OPERATIONS  
AND PORTABLE GRAIN AUGERS**

Effective Date: April 7, 2010

This air quality standard permit authorizes the air emissions associated with grain elevators/grain handling operations and portable grain augers that meet all of the applicable conditions listed in sections (1), (2), (3), (4), (5), and (7) of this standard permit, and, if applicable, the conditions listed in section (6) for portable grain augers.

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 grain elevators/grain handling operations (including, but not limited to, grain storage facilities, grain dryers, and grain and seed cleaners) and portable grain augers on or after the effective date of this standard permit. This standard permit also authorizes any fugitive emissions associated with grain elevators/grain handling operations and portable grain augers authorized by this standard permit.
- (B) A grain elevator/grain handling operation does not qualify for authorization under this standard permit if it is a grain terminal elevator that has a permanent grain storage capacity of more than 2.5 million bushels.
- (C) A grain elevator/grain handling operation does 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 ten million Btu/hr.
- (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 grain elevator/grain handling operation or portable grain auger(s)) at the site provided the grain elevator/grain handling operation and portable grain auger(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) Grain - corn, wheat, sorghum, rice, rye, oats, barley, and soybeans.
- (B) Grain elevator/grain handling operation - a facility, or group of facilities, that receives, handles, cleans, dries, stores, or loads out grain.
- (C) Off-site receptor - any recreational area or residence or other structure that is in use at the time of the standard permit claim and that is not occupied or used solely by the owner or operator of the facilities or the owner of the property upon which the facilities are located.
- (D) 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.

(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 and 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.
- (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 grain elevator/grain handling operation or portable grain auger authorized by this standard permit shall meet the following requirements, as applicable.
- (i) fabric filter systems shall be operated properly with no tears or leaks;
  - (ii) fabric filter systems shall be designed to meet an outlet grain loading not to exceed 0.01 grains per dry standard cubic foot (combined front half and back half);
  - (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) Fuel for any dryer or burner authorized by this standard permit shall be pipeline quality sweet natural gas or propane.
- (G) 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.
- (H) For those operators that choose to use an oil suppression system to minimize emissions generated during the handling of grain, the oil shall be applied during or after the grain is received and prior to loadout.
- (I) 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.
- (J) 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.

- (K) 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.
- (L) 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.
- (M) All facilities and associated equipment authorized by this standard permit, including any transfer equipment, must be maintained in good working order and operated properly.
- (N) 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 or 2 (whichever is applicable) of this standard permit.
- (O) For all grain elevator/grain handling operations, portable grain augers, and planned maintenance, start-up, and shutdown (MSS) facilities and activities authorized by this standard permit, the following records shall be maintained at the site for a rolling 24-month period and be made available at the request of personnel from the TCEQ or any other air pollution control agency or program having jurisdiction:
  - (i) all records to demonstrate that the grain elevator/grain handling operation and portable grain auger(s) meet the applicable emission rate and minimum setback distance limitations determined by using Figures 1 or 2 (whichever is applicable) of this standard permit;
  - (ii) records for portable grain augers shall remain with the primary auger equipment;

- (iii) records of periodic monitoring and scheduled cleaning and maintenance of the abatement equipment to demonstrate compliance with subsection (4)(L) of this standard permit; and
  - (iv) 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 Grain Elevators/Grain Handling Operations (New, Modified, or Existing)
- (A) In addition to section (4) of this standard permit, grain elevators/grain handling operations shall also meet the following requirements:
    - (i) emission rates shall be determined using calculation methods accepted by the TCEQ Air Permits Division at the time of the standard permit claim;
    - (ii) all receiving and loadout points (including portable grain 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)(A)(iii) of this standard permit; and
    - (iii) a grain elevator/grain handling operation 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 (7) of this standard permit) shall be less than or equal to 16.30 pounds per hour (lb/hr); or
      - (b) total PM<sub>10</sub> emissions from the site may be greater than 16.30 lb/hr if all facilities (including facilities and activities as specified in section (7) 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 1 of this standard permit. The minimum setback distance shall be measured from each facility emission point or maintenance activity emission point to the nearest property line using the shortest distance to that property line. All facility emission points and maintenance activity emission points must meet the minimum setback distance requirements determined by using Figure 1 of this standard permit.

- (B) Any portable grain auger authorized by this standard permit at the grain elevator/grain handling operation site shall meet the requirements of section (6) of this standard permit with the exception of paragraph (6)(A)(ii).
- (C) Notification and registration are not required for grain elevators/grain handling operations authorized by this standard permit.

(6) Requirements Specific to Portable Grain Augers

- (A) In addition to section (4) of this standard permit, portable grain augers 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) portable grain augers 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<sub>10</sub> emissions from the site (including emissions from any facility and activity as specified in section (7) 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 grain augers and any facility and activity, as specified in section (7) 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; and
  - (iii) no visible emissions from the operation of any portable grain auger authorized by this standard permit shall leave the property.
- (B) Notification and registration are not required for portable grain augers 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 grain elevators/grain handling operations and portable grain augers that are authorized by this standard permit:

- (i) abrasive blasting (wet blast and dry abrasive cleaning);
  - (ii) surface preparation;
  - (iii) surface coating;
  - (iv) compressors, pumps, or engines, and associated pipes, valves, flanges, and connections;
  - (v) hand-held or manually operated equipment used for buffing, polishing, carving, cutting, drilling, machining, routing, sanding, sawing, surface grinding, or turning of ceramic precision parts, leather, metals, plastics, fiber board, masonry, carbon, glass, graphite, or wood;
  - (vi) vacuum cleaning systems;
  - (vii) hydraulic oil filtering;
  - (viii) lubrication; and
  - (ix) brazing, soldering, welding, or metal cutting equipment.
- (C) Planned maintenance activities and facilities shall meet the following requirements.
- (i) The following materials are authorized and shall not be used at the site at more than the rates prescribed below:
    - (a) abrasives - 150 tons per year, 15 tons per month, and one ton per day;
    - (b) cleaning and stripping solvents and lubricants - 50 gallons per year;
    - (c) coatings (excluding plating materials) - 100 gallons per year;
    - (d) dyes - 1,000 pounds per year;
    - (e) bleaches - 1,000 gallons per year;
    - (f) fragrances (excluding odorants) - 250 gallons per year; and
    - (g) water-based surfactants and detergents - 2,500 gallons per year.
  - (ii) Planned maintenance activities associated with facilities or groups of facilities authorized by this standard permit shall not occur simultaneously (no two or more processes can occur at the same time), and these planned maintenance activities shall not occur simultaneously with production operations;

- (iii) Planned maintenance activities and facilities at the site shall not emit more than 25 tons per year of any one air contaminant; and
  - (iv) Lead emissions from planned maintenance activities or facilities at the site shall be less than 0.6 tons per year.
- (D) Planned maintenance that cannot meet the requirements of subsections (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.

# Grain Elevators/Grain Handling Operations

Required Minimum Setback Distance

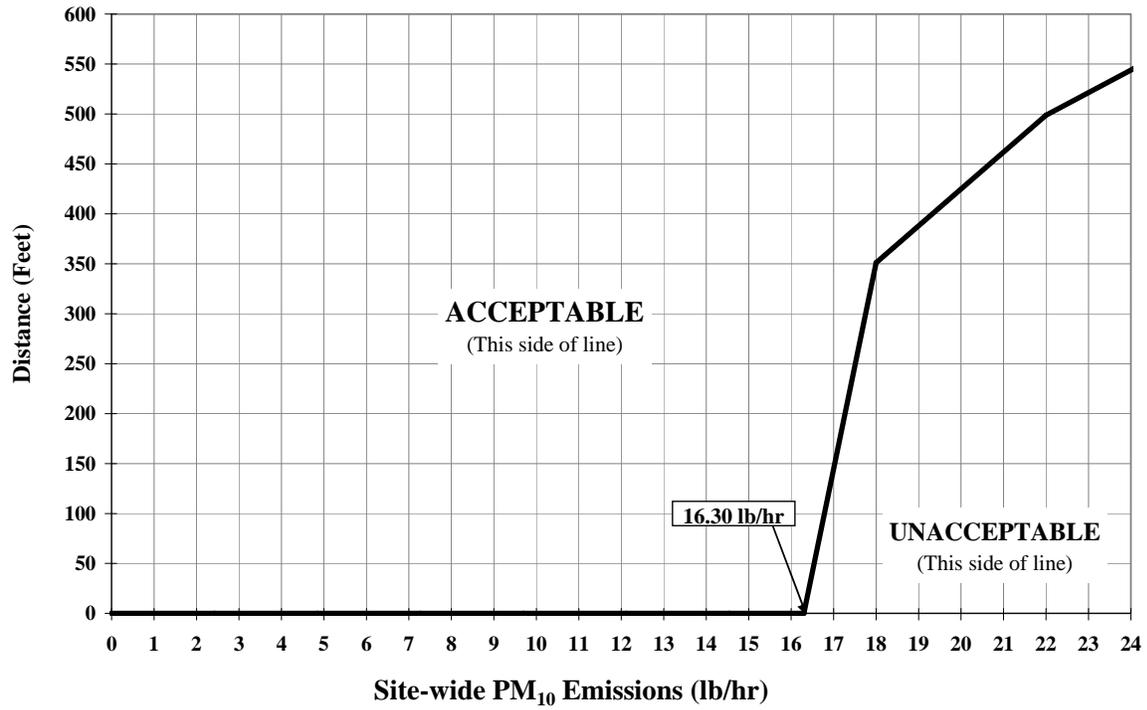


Figure 1

# Portable Grain Auger Operating Alone at a Site

Required Minimum Setback Distance

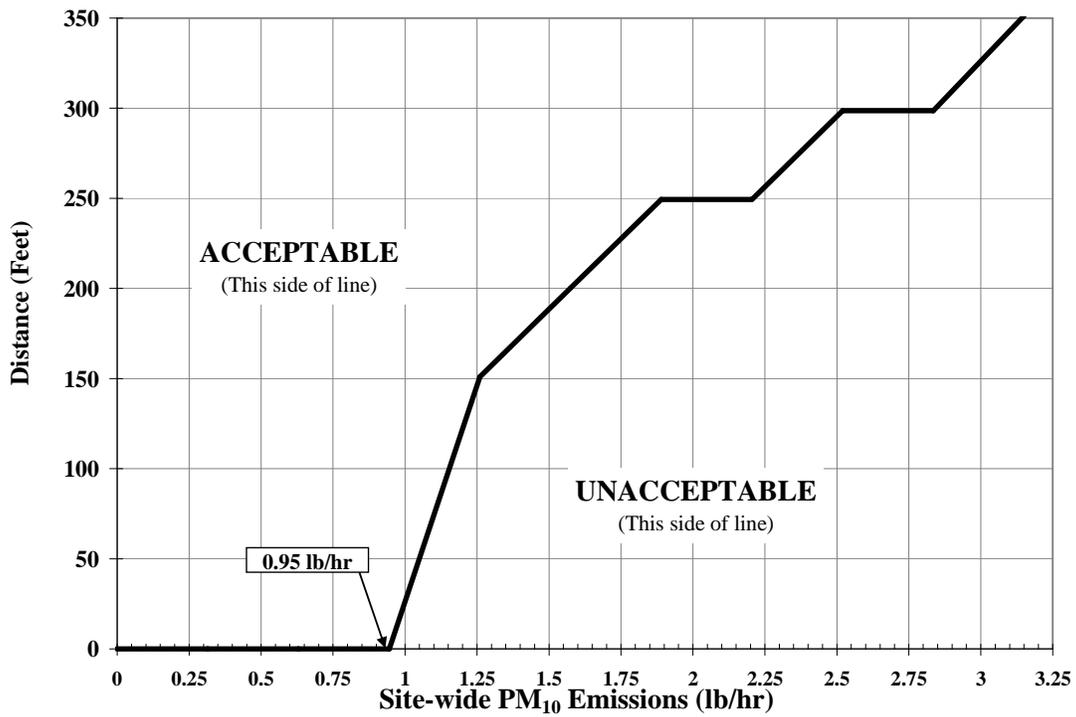


Figure 2