AIR QUALITY STANDARD PERMIT FOR DRY BULK FERTILIZER HANDLING OPERATIONS

Effective Date: April 7, 2010

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

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

(1) Applicability

- (A) This standard permit may be used to authorize air emissions from dry bulk fertilizer handling operations on or after the effective date of this standard permit. This standard permit also authorizes any fugitive emissions associated with a dry bulk fertilizer handling operation authorized by this standard permit.
- (B) A dry bulk fertilizer handling operation does not qualify for authorization under this standard permit if it constitutes a new major stationary source or major modification as defined by Title 30 Texas Administrative Code (30 TAC) §116.12, Nonattainment and Prevention of Significant Deterioration Review Definitions, or is located at a major stationary source.
- (C) This standard permit cannot authorize any emission increase of an air contaminant that is specifically prohibited by a condition in any permit issued under 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification, at the site.
- (D) This standard permit cannot be used in conjunction with any permit or standard permit issued under 30 TAC Chapter 116 or in conjunction with any permit by rule (PBR) under 30 TAC Chapter 106, Permits by Rule, except that PBRs and standard permits may be used, as specified in section (6) of this standard permit, to authorize planned maintenance activities and facilities. This requirement does not preclude the use of permits, standard permits, and PBRs to authorize other facilities (that are not associated with the dry bulk fertilizer handling operation) at the site provided the dry bulk fertilizer handling operation remains in compliance with all requirements of this standard permit.
- (E) This standard permit cannot be used if the total site-wide emissions do not meet the emission rate requirements specified in sections (5) and (6) of this standard permit.

(2) <u>Definitions</u>

- (A) Dry bulk fertilizer granular fertilizer products including, but not limited to, urea, potash, monoammonium phosphate, diammonium phosphate, triple superphosphate, nitric phosphate, trisodium phosphate, ammonium nitrate, ammonium sulphate, and/or zinc.
- (B) Dry bulk fertilizer handling operation a facility, or group of facilities, that receives, handles, mixes, stores, or loads out dry bulk fertilizer.
- (C) Off-site receptor any recreational area or residence or other structure that is in use at the time of the standard permit claim and that is not occupied or used solely by the owner or operator of the facilities or the owner of the property upon which the facilities are located.
- (D) Site a site as defined in 30 TAC §122.10, General Definitions.

(3) <u>General Administrative Requirements</u>

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) <u>General Operating Requirements</u>

- (A) All conveyors and elevator legs authorized by this standard permit shall be enclosed. Exhaust air to the atmosphere from pneumatic conveying systems or from the pulling of suction on mechanical systems shall be vented through a fabric filter system, which must operate as specified in subsection (4)(B) of this standard permit.
- (B) All fabric filter collection systems used to control particulate emissions from the dry bulk fertilizer handling operation authorized by this standard permit shall meet the following requirements, as applicable:
 - (i) fabric filter systems shall be operated properly with no tears or leaks;
 - (ii) fabric filter systems shall be designed to meet an outlet grain loading not to exceed 0.01 grains per dry standard cubic foot (combined front half and back half); and
 - (iii) in accordance with U.S. Environmental Protection Agency Test Method 9, opacity of emissions from any fabric filter shall not exceed five percent averaged over a six-minute period.

- (C) Operation of conveyors associated with receiving authorized by this standard permit shall not commence until the receiving areas are full.
- (D) All loadout devices (augers, drop spouts, etc.) authorized by this standard permit shall be equipped with drop socks at the drop points to minimize fugitive emissions from loadout areas.
- (E) Spillage of any raw products, finished products, and waste products shall be cleaned up on a daily basis. Waste products shall be removed on a daily basis from the site or shall be stored in a contained manner that prevents exposure to the elements. Raw products and finished products shall be stored in a contained manner that prevents exposure to the elements.
- (F) One or more of the following methods shall be used to control emissions from all in-plant roads, truck loading and unloading areas, parking areas, and other traffic areas to maintain compliance with all TCEQ rules and regulations:
 - (i) sprinkling with water as necessary;
 - (ii) treating with effective dust suppressant(s) as necessary; or
 - (iii) paving (with a cohesive hard surface) and cleaning as necessary.
- (G) All air pollution abatement equipment shall be checked every 30 days (unless more frequent checks/inspections are otherwise specified in this standard permit) and shall be properly maintained and operated during the operation of the facilities authorized by this standard permit. Scheduled cleaning and maintenance of the abatement equipment shall be performed as recommended by the manufacturer and as necessary so that the equipment efficiency is adequately maintained.
- (H) All facilities and associated equipment authorized by this standard permit, including any transfer equipment, must be maintained in good working order and operated properly.
- (I) Maximum hourly facility production capacities shall not exceed the values used to determine compliance with the 24-hour National Ambient Air Quality Standards (NAAQS) for particulate matter less than or equal to ten microns in diameter (PM_{10}) as shown by the plotted line in Figure 1 of this standard permit.
- (J) For all dry bulk fertilizer handling operations and planned maintenance, start-up, and shutdown (MSS) facilities and activities authorized by this standard permit, the following records shall be maintained at the site for a rolling 24-month period and be made available at the request of personnel from the TCEQ or any other air pollution control agency or program having jurisdiction:

- (i) all records to demonstrate that the dry bulk fertilizer handling operation meets the applicable emission rate and minimum setback distance limitations determined by using Figure 1 of this standard permit;
- (ii) records of periodic monitoring and scheduled cleaning and maintenance of the abatement equipment to demonstrate compliance with subsection (4)(G) of this standard permit; and
- (iii) records containing sufficient information to demonstrate compliance with paragraphs (6)(C)(i) through (6)(C)(iv) of this standard permit that include:
 - (a) the type and reason for the activity or facility;
 - (b) the processes and equipment involved;
 - (c) the date, time, and duration of the activity or facility operation; and
 - (d) the amount of material usage and emission rates.
- (5) Requirements Specific to Dry Bulk Fertilizer Handling Operations (New, Modified, or Existing)
 - (A) In addition to section (4) of this standard permit, dry bulk fertilizer handling operations shall also meet the following requirements:
 - emission rates shall be determined using calculation methods accepted by the TCEQ Air Permits Division at the time of the standard permit claim; and
 - (ii) a dry bulk fertilizer handling operation shall meet one of the following scenarios:
 - (a) total PM₁₀ emissions from the site (including emissions from facilities and activities as specified in section (6) of this standard permit) shall be less than or equal to 6.82 pounds per hour (lb/hr);
 - (b) total PM₁₀ emissions from the site (including emissions from facilities and activities as specified in section (6) of this standard permit) may be greater than 6.82 lb/hr and less than or equal to 13.63 lb/hr if each emission point associated with the handling of dry bulk fertilizer is located at least 100 feet from the nearest off-site receptor; or
 - (c) total PM_{10} emissions from the site may be greater than 13.63 lb/hr if each emission point associated with the handing of dry bulk fertilizer

is located at least 100 feet from the nearest off-site receptor. All facilities (including facilities and activities as specified in section (6) of this standard permit) emitting PM₁₀ at the site shall also meet the minimum setback distance to the property line determined by using Figure 1 of this standard permit. The minimum setback distance shall be measured from each facility emission point or maintenance activity emission point to the nearest property line using the shortest distance to that property line. All facility emission points and maintenance activity emission points must meet the minimum setback distance requirements determined by using Figure 1 of this standard permit.

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

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

- (A) This standard permit authorizes all emissions from planned start-up and shutdown activities associated with facilities or groups of facilities that are authorized by this standard permit.
- (B) This standard permit authorizes emissions from the following planned maintenance activities and facilities associated with dry bulk fertilizer handling operations that are authorized by this standard permit:
 - (i) abrasive blasting (wet blast and dry abrasive cleaning);
 - (ii) surface preparation;
 - (iii) surface coating;
 - (iv) compressors, pumps, or engines, and associated pipes, valves, flanges, and connections;
 - (v) hand-held or manually operated equipment used for buffing, polishing, carving, cutting, drilling, machining, routing, sanding, sawing, surface grinding, or turning of ceramic precision parts, leather, metals, plastics, fiber board, masonry, carbon, glass, graphite, or wood;
 - (vi) vacuum cleaning systems;
 - (vii) hydraulic oil filtering;
 - (viii) lubrication; and
 - (ix) brazing, soldering, welding, or metal cutting equipment.

- (C) Planned maintenance activities and facilities shall meet the following requirements.
 - (i) The following materials are authorized and shall not be used at the site at more than the rates prescribed below:
 - (a) abrasives 150 tons per year, 15 tons per month, and one ton per day;
 - (b) cleaning and stripping solvents and lubricants 50 gallons per year;
 - (c) coatings (excluding plating materials) 100 gallons per year;
 - (d) dyes 1,000 pounds per year;
 - (e) bleaches 1,000 gallons per year;
 - (f) fragrances (excluding odorants) 250 gallons per year; and
 - (g) water-based surfactants and detergents 2,500 gallons per year.
 - (ii) Planned maintenance activities associated with facilities or groups of facilities authorized by this standard permit shall not occur simultaneously (no two or more processes can occur at the same time), and these planned maintenance activities shall not occur simultaneously with production operations;
 - (iii) Planned maintenance activities and facilities at the site shall not emit more than 25 tons per year of any one air contaminant; and
 - (iv) Lead emissions from planned maintenance activities or facilities at the site shall be less than 0.6 tons per year.
- (D) Planned maintenance that cannot meet the requirements of subsections (6)(B) and (6)(C) of this standard permit may be authorized by one or by a combination of the following mechanisms, provided the planned maintenance activities do not occur simultaneously (no two or more processes can occur at the same time), and the planned maintenance activities do not occur simultaneously with production operations:
 - (i) any applicable PBR under 30 TAC Chapter 106; or
 - (ii) any other applicable standard permit.

DRY BULK FERTILIZER HANDLING OPERATIONS

Required Minimum Setback Distance



Figure 1