

**AIR QUALITY STANDARD PERMIT FOR ANHYDROUS AMMONIA
STORAGE AND DISTRIBUTION OPERATIONS**

Effective Date: April 7, 2010

This air quality standard permit authorizes the air emissions associated with anhydrous ammonia storage and distribution 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 anhydrous ammonia storage and distribution operations (including portable nurse tanks stored on site) on or after the effective date of this standard permit. This standard permit also authorizes any fugitive emissions associated with an anhydrous ammonia storage and distribution operation authorized by this standard permit.
- (B) An anhydrous ammonia storage and distribution operation does not qualify for authorization under this standard permit if any of the facilities to be authorized under this standard permit are used to manufacture ammonia or any other ammonia products on site or are located at a site where the anhydrous ammonia is used for purposes other than agricultural handling and distribution. This requirement does not preclude the use of on-site polyphosphate blenders as defined in section (2) of this standard permit.
- (C) An anhydrous ammonia storage and distribution 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.
- (D) 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.
- (E) 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 anhydrous ammonia storage and distribution operation) at the site provided the anhydrous ammonia storage and distribution operation remains in compliance with all requirements of this standard permit. On-site polyphosphate blenders, authorized through another applicable mechanism, may be used in association with an anhydrous ammonia storage and distribution operation.

- (F) 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.
- (G) This standard permit does not authorize emissions from on-site polyphosphate blenders.

(2) Definitions

- (A) Anhydrous ammonia - ammonia without water, which is a colorless gas or liquid depending upon its method of storage.
- (B) Anhydrous ammonia storage and distribution operation - a facility, or group of facilities, that receives, stores, and handles anhydrous ammonia.
- (C) Polyphosphate blender - a facility, or group of facilities, that receives, mixes, reacts, and blends ammonia, superphosphoric acid, and water to manufacture liquid fertilizer.
- (D) Site - a site as defined in 30 TAC §122.10, General Definitions.

(3) General Administrative Requirements

- (A) Specific notification requirements for this standard permit are located in section (5) of this standard permit.
- (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; §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 shall be operated in accordance with a mitigation plan that describes the methods and procedures utilized by the facility to reduce the risk of a catastrophic release of anhydrous ammonia from traveling off site. This plan shall include precautionary controls including (but not limited to) sprinkler systems, lock-out systems, and barricades around the permanent storage tanks. Additional precautionary controls such as fire extinguishers, dikes, and alarms may also be included in the mitigation plan. This mitigation plan shall be kept on site and be accessible at all times.
- (B) Facilities authorized by this standard permit shall be operated in accordance with a contingency plan that describes the actions used at this facility to notify persons in the immediate area of a sudden release of anhydrous ammonia. This plan shall include procedures to contact police and fire departments, as well as a discussion of emergency protocol by employees and the installation of special equipment to prevent anhydrous ammonia vapors from becoming airborne. This contingency plan shall be kept on site and be accessible at all times.
- (C) All valves, connectors, flanges, and hoses associated with anhydrous ammonia handling authorized by this standard permit shall be properly maintained in leak-proof condition at all times.
- (D) When transferring anhydrous ammonia, all vapors shall be vented back to the host tank and never to the atmosphere.
- (E) When relieving pressure from connectors and hoses associated with permanent storage tanks and any nurse tanks authorized by this standard permit, all anhydrous ammonia vapors shall be bled into an adequate volume of water and never released to the atmosphere. A container of water shall be reserved for this purpose, and the water shall never be saturated with ammonia.
- (F) Each permanent anhydrous ammonia storage tank and any nurse tanks authorized by this standard permit and stored on site shall be equipped in such a manner that will prevent unauthorized access.
- (G) A barrier that will prevent accidental ruptures from vehicular traffic shall be erected and maintained around the permanent anhydrous ammonia storage tanks authorized by this standard permit.
- (H) A water spray system shall be installed to minimize and suppress ammonia emissions in the event of a release from, or rupture of, any permanent storage tanks authorized by this standard permit.

- (I) Audio, olfactory, and visual checks for facilities authorized by this standard permit shall be performed according to the following requirements:
 - (i) Audio, olfactory, and visual checks for anhydrous ammonia leaks within the operating areas and within the nurse tank storage areas shall be made once per day during normal business hours.
 - (ii) Immediately, but no later than five hours upon detection of a leak, plant personnel shall take the following actions:
 - (a) isolate the leak;
 - (b) commence repair or replacement of the leaking component; and
 - (c) if immediate repair is not possible, a leak collection or containment system shall be used to prevent the leak until repair or replacement can be made. Permanent repair or replacement shall be made within 15 days of detection of the leak.
- (J) While stored on-site, each nurse tank shall not contain anhydrous ammonia in a quantity greater than one percent of the total nurse tank capacity.
- (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 emission control equipment shall be properly maintained and operated during the operation of the facilities authorized by this standard permit. Scheduled maintenance of the control equipment shall be performed as recommended by the manufacturer and as necessary so that the equipment and control efficiencies are 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) For all anhydrous ammonia storage and distribution 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) records of all repairs and replacements made to equipment associated with the storage and handling of anhydrous ammonia;
 - (ii) records of all audio, olfactory, and visual checks for anhydrous ammonia. These records shall include dates and times checks are performed and the results of these checks to demonstrate compliance with paragraph (4)(I)(i) of this standard permit;
 - (iii) records of leak repairs and replacements to demonstrate compliance with paragraph (4)(I)(ii) of this standard permit;
 - (iv) documentation accurately reflecting the different types, service (light liquid, heavy liquid, or vapor), and quantity of valves, seals, flanges, and open-ended lines for all permanent anhydrous ammonia storage tanks;
 - (v) all records to demonstrate that the anhydrous ammonia storage and distribution operation meets the applicable emission rate and minimum setback distance limitations determined by using Figure 1 of this standard permit;
 - (vi) records of scheduled maintenance of the control equipment to demonstrate compliance with subsection (4)(L) of this standard permit; and
 - (vii) 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 an Anhydrous Ammonia Storage and Distribution Operation (New, Modified, or Existing)
- (A) In addition to section (4) of this standard permit, anhydrous ammonia storage and distribution operations shall also meet the following requirements:
- (i) emission rates shall be determined using calculation methods accepted by the TCEQ Air Permits Division at the time of the standard permit claim; and
 - (ii) an anhydrous ammonia storage and distribution operation shall meet one of the following scenarios:
 - (a) total ammonia 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 0.65 pounds per hour (lb/hr); or
 - (b) total ammonia emissions from the site may be greater than 0.65 lb/hr if all facilities (including facilities and activities as specified in section (6) of this standard permit) emitting ammonia 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) If a polyphosphate blender is located on site, total ammonia emissions from the anhydrous ammonia storage and distribution operation shall be less than or equal to 0.65 lb/hr.
- (C) Written notification submitted to the appropriate TCEQ regional office is required for the authorization of anhydrous ammonia storage and distribution operations under this standard permit.
- (D) Registration is not required for anhydrous ammonia storage and distribution 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 anhydrous ammonia storage and distribution 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 ammonia transfer 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 ammonia transfer operations:
- (i) any applicable PBR under 30 TAC Chapter 106; or
 - (ii) any other applicable standard permit.

ANHYDROUS AMMONIA STORAGE AND DISTRIBUTION OPERATIONS

Required Minimum Setback Distance

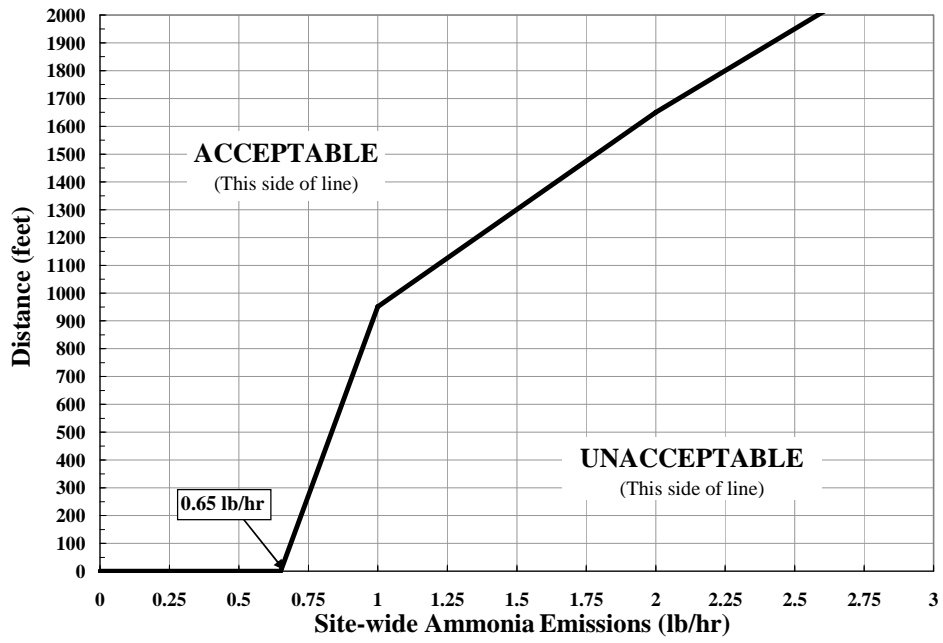


Figure 1