



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
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**GENERAL PERMIT TO INSTALL FOR
ANHYDROUS AMMONIA STORAGE AND HANDLING**

February 23, 1998
Revised September 29, 2000

SUMMARY

On February 23, 1998, the Air Quality Division (AQD) of the Michigan Department of Environmental Quality (Department) issued the attached general permit to install for anhydrous ammonia storage and handling. Anhydrous ammonia has a variety of industrial uses ranging from metallurgical processes to wastewater treatment to flue gas conditioning at electric power plants. In addition, numerous bulk storage tanks currently exist for agricultural purposes for fertilizer sales and applications. This general permit was issued pursuant to R 336.1201a of the Administrative Rules for Air Pollution Control (Rule 201a), and provides a streamlined permitting alternative for the affected facilities. Prior to finalizing the attached general permit, the Department held a 30-day public comment period on a proposed general permit. On October 28, 1999 the general permit was updated and revised to make minor corrections and to identify additional state requirements that are addressed in the General Conditions. The general permit was revised on March 20, 2000 to address the issue of applicability for a source, process or process equipment that may be identified in a consent order or consent judgement. The general permit is being revised once again to include a new version of the General Information form EQP5727 and to revise the language in General Condition 18.

BACKGROUND

Rule 201a allows the Department to issue a general permit to install covering numerous similar stationary sources, processes or process equipment after public notice and opportunity for public participation. The use of general permits provides a streamlined permitting alternative for processes that meet the following criteria:

- a) The processes must produce the same or reasonably similar products.
- b) The processes must emit the same or similar air contaminants.
- c) The method for capturing and controlling the air contaminants must be the same or limited to a small number of specific alternatives.
- d) The processes must be subject to the same emission limitations, monitoring requirements, federal standards, or state rules.

A person who owns or operates a stationary source, process or process equipment, which qualifies for a general permit to install approved by the Department, may apply for coverage under the terms and conditions of the general permit. Owners/operators who apply to the Department for coverage under the general permit to install must certify that the equipment they will be installing meets the necessary criteria for applicability and that they will comply with the special conditions of the permit. These conditions may include site restrictions, emission limits, material usage limits, and/or annual production limits, which are necessary to ensure that the equipment will operate in compliance with all applicable rules for air pollution control. A person also has the option of applying for a case-by-case

permit to install pursuant to Rule 201 if they are unable to comply with the conditions of the general permit to install.

On January 12, 1998, the Department proposed a general permit to streamline the review of the permit applications for anhydrous ammonia storage and handling. The Department held a comment period from January 12, 1998 to February 19, 1998 to receive comments on the proposed general permit. A public hearing was not requested and the Department received no written comments during the comment period.

APPLICABLE REQUIREMENTS

The following state and federal requirements are considered to be applicable to all sources, processes, or process equipment and are addressed in the General Conditions of the permit.

| <u>Citation</u> | <u>Description</u> |
|------------------------|---|
| R 336.1201a | State rule that gives the Department authority to issue a general permit to install. |
| R 336.1201(4) | State rule that gives the Department authority to void a permit. |
| R 336.1207(1) | State rule that gives the Department authority to deny a permit. |
| R 336.1219 | State rule that requires written notification of change of ownership. |
| R 336.1285 | State rule that requires a modification to a permit to install to use raw materials not listed in an approved permit. |
| R 336.1301 | State rule that sets the standards for density of particulate emissions. |
| R 336.1370 | State rule that requires the proper disposal of collected air contaminants. |
| R 336.1901 | State rule that prohibits the emission of air contaminants, which interfere with the enjoyment of life and property and/or has injurious effects to health or safety. |
| R 336.1910 | State rule that requires a pollution control device be operated properly. |
| R 336.1912 | State rule that requires notice of abnormal conditions or malfunctions, which result in emissions in excess of the standards. |
| R 336.2001, 2003, 2004 | State rules that allow the Department to request performance testing, and specify how the test should be conducted. |

The following state and federal requirements are applicable to anhydrous ammonia storage and handling and were considered in the development of the general permit to install. These requirements are addressed in the Special Conditions of the permit.

| <u>Citation</u> | <u>Description</u> |
|-----------------|---|
| R336.1225 | State rule that applies to sources of air toxics. This rule requires Best Available Control Technology for toxics (T-BACT) to be applied to sources emitting air toxics, and requires the emissions from the process meet the allowed impact levels. In the case of anhydrous ammonia storage and handling, the process is considered enclosed and requires no pollution control equipment. |

APPLICABILITY CRITERIA

To qualify for the general permit to install based on the listed applicable requirements, an anhydrous ammonia storage and handling process must meet the following criteria:

- The general permit to install shall apply to a single anhydrous ammonia storage tank with a nominal tank storage capacity not to exceed 30,000 gallons and any associated handling processes, nurse tanks or applicator tanks.
- The process must comply with the Department of Consumer and Industry Services safety standards for anhydrous ammonia, "Part 78. Storage and Handling of Anhydrous Ammonia" (MIOSHA 1901.111).

- The process must be located a minimum of 50 feet from the nearest property line, 300 feet from existing places of residence or private or public assembly, 500 feet from a school, apartment building, or institutional occupancy, and not less than 1000 feet from a hospital or nursing home.
- Nurse and applicator tank storage shall be no less than 50 feet from the nearest property line, 150 feet from any existing places of residence or private or public assembly, 250 feet from a school, apartment building, or institutional occupancy, and no less than 1000 feet from a hospital or nursing home.
- The process must comply with all local zoning requirements and permits.
- An emergency response plan, to be followed in the event of an emergency, must be developed and approved by the local fire department or county emergency response agency before any operation of the process.
- The general permit shall not apply to a source, process, or process equipment that is included in an existing permit to install pursuant to Rule 201 and is further referenced in an outstanding consent order or consent judgement.

PERMIT CONDITIONS

The general permit to install must be consistent with the permit content requirements of Rule 205(1)(a). This rule requires that if a permit to install includes limitations which restrict the potential to emit of a stationary source, process, or process equipment to a quantity below that which would constitute a major source, the permit shall contain emission limits which are enforceable as a practical matter.

Attachment A lists the terms and special conditions for this general permit to install. These terms and conditions prescribe the applicable site restrictions, performance standards, emission limits, monitoring, recordkeeping and reporting requirements, which are necessary to ensure that anhydrous ammonia storage and handling processes will comply with all state and federal applicable requirements. The following standards and regulations were considered in the development of the general permit to install and were used as the basis for the special conditions of the permit.

| <u>Citation</u> | <u>Description</u> |
|-----------------|--|
| ANSI K61.1-1989 | American National Standard, Safety Requirements for the Storage and Handling of Anhydrous Ammonia. |
| MIOSHA 1910.11 | Requirements for safe construction of ammonia tanks are summarized in "Part 78. Storage and Handling of Anhydrous Ammonia" (MIOSHA 1910.11). A copy of this document may be obtained from the Department of Consumer and Industry Services, Bureau of Safety and Regulation, Safety Standards Division, 7150 Harris Drive, PO Box 30643, Lansing, MI 48909-8143. |

EMISSIONS

Emissions from anhydrous ammonia storage and handling processes are released to the atmosphere from line disconnects after transfer of ammonia from rail tank car to storage or from storage to trucks. Each rail tank car or truck has two or three lines containing ammonia vapor to disconnect. These line disconnects will result in emissions of about three grams of ammonia per line. Fugitive emissions from pressure relief valves, valves, flanges, and compressor seals are estimated to be less than five pounds per day using emission factors from the Synthetic Organic Chemicals Manufacturing Industry (SOCMI). However, these fugitive emissions are very difficult to quantify and limit. The estimated emissions are based on normal operations and the special conditions of the general permit are designed to minimize all possible spills. No pollutants other than ammonia are expected to be emitted from these processes.

AMBIENT AIR IMPACTS

Operation of anhydrous ammonia storage processes under the general permit to install terms and conditions will impact the ambient air as summarized in the following table. This impact was calculated using an emission rate from the combined fugitive emissions and emissions from the hose disconnects, and a worst case dilution factor.

| Pollutant | Averaging Time | Acceptable Impact | Basis | Predicted Maximum Impact |
|-------------------|-----------------------|--------------------------|----------------|---------------------------------|
| Anhydrous Ammonia | 24 hours | 100 ug/m ³ | Rule 225 ITSL* | 0.04 ug/m ³ (trace) |

*Initial Threshold Screening Level as defined in R 336.1109(e)

APPLICATION FOR A GENERAL PERMIT

If the owner/operator of an anhydrous ammonia storage and handling process decides to install and operate the process under the terms of the general permit to install then it is the responsibility of the owner/operator to apply to the Department for coverage under the general permit. Installation of equipment prior to granting of a permit to install, including coverage under a general permit to install, is a violation of Rule 201. Application forms, which include all information necessary to determine qualification for and to ensure compliance with the general permit to install, are available on the Internet as part of this document, or may be obtained by contacting Ms. Pam Blue at 517-373-7074. The Air Quality Permit Web Page is located at <http://www.deq.state.mi.us/aps>.

The owner/operator shall submit the application forms to the AQD Permit Section. Upon receipt by the AQD, Permit staff will review the application for completeness. The general permit to install for anhydrous ammonia storage and handling will be granted by the Department to sources, processes or process equipment that qualify, within 30 days of receipt of a complete application. The AQD will mail to the facility a copy of the general permit to install and a letter acknowledging that the AQD is aware that the facility owner/operator intends to install and operate the anhydrous ammonia storage and handling process in accordance with the terms and conditions of the general permit. The Department will maintain and make available to the public, upon request, a list of the persons that have been authorized to install and operate a stationary source, process or process equipment pursuant to each general permit to install issued by the Department.

**ATTACHMENT A
GENERAL CONDITIONS**

1. The process or process equipment covered by this general permit to install shall not be reconstructed, relocated, or modified unless a Permit to Install pursuant to Rule 201 authorizing such action is issued by the Department, or an application for coverage under a General Permit to Install pursuant to Rule 201a, is submitted to and approved by the Department. For the purpose of a general permit to install, the permittee is defined as any person who owns or operates a process or process equipment at the source for which coverage under the general permit has been granted.
2. Operation of any process or process equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **[R336.1901]**
3. Operation of this equipment shall not interfere with the attainment or maintenance of the air quality standard for any air contaminant. **[R336.1207(1)(b)]**
4. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5).
5. Coverage under this general permit to install does not exempt the permittee from complying with any future regulation, which may be promulgated under Part 55 of 1994 PA 451.
6. Coverage under this general permit to install does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
7. The permittee shall notify any public utility of any excavation, tunneling and discharging of explosives or demolition of buildings which may affect said utility's facilities in accordance with Act 53 of the Public Acts of 1974, being sections 460.701 to 460.718 of the Michigan Compiled laws and comply with each of the requirements of that Act.
8. The restrictions and conditions of this general permit to install shall apply to any person or legal entity which now or shall hereafter own or operate the equipment for which coverage under this general permit to install is issued. A written request to the Department for a change in ownership or operational control of the process or process equipment shall be made pursuant to Rule 219.
9. If the installation of the equipment for which coverage under this general permit to install has been issued, has not commenced within, or has been interrupted for, 18 months, then the general permit to install shall become void unless otherwise authorized by the Department as a condition of the permit. Furthermore, the permittee shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation or construction of the equipment allowed by this general permit to install. **[R336.1201(4)]**

**ATTACHMENT A
GENERAL CONDITIONS**

10. Except as provided in subrules (2) and (3) or unless the special conditions of the general permit to install include an alternate opacity limit established pursuant to subrule (4) of R336.1301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R336.1303. **[R336.1301(1)]**
 - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
 - b) A visible emission limit specified by an applicable federal new source performance standard.
 - c) A visible emission limit specified as a condition of this general permit to install.
11. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R336.1370(2). **[R336.1370]**
12. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R336.2001 and R336.2003, under any of the conditions listed in R336.2001. **[R336.2001]**
13. Any required testing protocol shall conform to a format acceptable to the AQD. **[R336.2003(1)]**
14. Any required test results, which must be submitted to the AQD, shall conform to a format acceptable to the AQD. **[R336.2001(4)]**
15. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. **[R336.1910]**
16. Except as allowed by Rule 285(a), (b), and (c) the permittee shall not substitute any fuels, coatings, nor raw materials for those described in the application and allowed by this general permit, nor make changes to the process or process equipment described in the application, without prior notification to and approval by the Air Quality Division.
17. For a stationary source that becomes a major source, as defined by R336.1211(1)(a), upon receipt of approval for coverage under this general permit to install, an administratively complete application for a renewable operating permit shall be submitted not more than 12 months after the stationary source commences operation as a major source. Commencing operation as a major source occurs upon commencement of trial operation of the new or modified process or process equipment that increased the potential to emit of the stationary source to more than or equal to the applicable major source definition specified in R336.1211(1)(a).
18. For a stationary source that is already a major source with an existing renewable operating permit, the source shall notify the Department of the installation of the process or process equipment covered by this general permit, pursuant to R336.1215(3) or apply for a modification pursuant to R336.1216(2) prior to commencing operation. The notification or application to modify the renewable operating permit shall be made using a form approved by the Department.

**ATTACHMENT A
SPECIAL CONDITIONS**

| I. DESIGN PARAMETERS | |
|--|---|
| A. Process Equipment Covered by General Permit | A single anhydrous ammonia storage tank and any associated handling process, nurse tanks or applicator tanks. The nominal tank storage capacity shall not exceed 30,000 gallons. (R 336.1201a(1)) |
| B. Site Criteria | The anhydrous ammonia storage and handling process shall be located a minimum of 50 feet from the property line, 300 feet from any existing places of residence or private or public assembly, 500 feet from a school, apartment building, or institutional occupancy, and not less than 1000 feet from a hospital or nursing home. (R 336.1201a(1)) |
| C. Storage & Handling Equipment Standards | <p>1. Except where specific requirements of these special conditions are applicable and more stringent, the anhydrous ammonia storage and handling process shall comply with "Part 78. Storage and Handling of Anhydrous Ammonia" (MIOSHA 1910.111), hereinafter Rule 7801. A copy of this standard shall be maintained for inspection at the facility. (R 336.1201a(1))</p> <p>2. All containers shall be fitted with safety relief valves in accordance with Rule 7801(b)(9). Such valves shall be stamped with the date manufactured, and shall be replaced, or re-tested and re-certified, at least every five years or more often if there is evidence of damage or deterioration. (R 336.1201a(1))</p> <p>3. The permittee shall not operate the process unless a remotely operated internal or external positive shut-off valve is installed to allow access for emergency shut-off of all flow from stationary storage containers. (R 336.1201a(1))</p> <p>4. The permittee shall not operate the process unless a bulkhead, anchorage, or equivalent system is used at each transfer area so that any break resulting from a pull will occur at a predictable location while retaining intact the valves and piping on the plant side of the transfer area. (R 336.1201a(1))</p> <p>5. The permittee shall not operate the process unless any liquid lines in rail and transport transfer areas are equipped with back pressure check valves and all liquid lines not requiring a back check valve and all vapor lines are equipped with properly sized excess flow valves. These valves shall be installed on the main container side of the predictable break point at the bulkhead. (R 336.1201a(1))</p> <p>6. All hoses shall be replaced five years after date of manufacture or more often if there is evidence of damage or deterioration. (R 336.1201a(1))</p> <p>7. A sign shall be present and conspicuously placed at the process entrance stating the emergency phone numbers for the owner, primary operator, local & state police, local fire department, and ambulance service. (R 336.1201a(1))</p> |
| II. COMPLIANCE EVALUATION | |
| Records of all of the following shall be maintained on file for a period of 5 years (R336.1201a(1)) | |
| A. MONITORING/REPORTING - In Addition to General Conditions | |
| 1. Parameter to be Recorded and Frequency | <p>1. Date, duration and description of any malfunction/spill occurring at the process including estimated amount of ammonia released into the atmosphere. Do not include trace amounts from normal hose coupling bleed downs. (R 336.1201a(1))</p> <p>2. Date of review and approval of emergency response plan with local fire department. (R 336.1201a(1))</p> <p>3. Date and description of any modification or new installation of any anhydrous ammonia process equipment. (R 336.1201a(1))</p> |
| 2. Reports and Schedules | Submitted only upon request by the DEQ-AQD. (R 336.1201a(1)) |

**ATTACHMENT A
SPECIAL CONDITIONS**

III. OPERATIONAL PARAMETERS

1. The permittee shall not operate the process unless the inspection and maintenance program specified in Appendix A has been implemented and maintained. **(R 336.1201a(1))**
2. The permittee shall not operate the process unless an emergency response plan, to be followed in the event of an emergency, has been approved by the local fire department or county emergency response agency and is implemented and maintained. Prior to each spring season, the permittee shall review this plan with the local fire department or emergency response agency and make any necessary updates. **(R 336.1201a(1))**
3. The permittee shall not operate the process unless all transfer operations including transport deliveries are performed by a reliable person properly trained and made responsible for proper compliance with all applicable procedures. **(R 336.1201a(1))**
4. Nurse and applicator tank storage shall be no less than 50 feet from the property line, 150 feet from any existing places of residence or private or public assembly, 250 feet from a school, apartment building, or institutional occupancy, and no less than 1000 feet from a hospital or nursing home. **(R 336.1201a(1))**
5. Nurse tank filling shall be done only from a permanent stationary storage tank. **(R 336.1201a(1))**
6. Nurse and applicator tanks shall be filled to no more than 85% of liquid capacity by volume. Storage tanks may be filled according to temperature density correction tables (Rule 7801(b)(11)) where tanks have a thermometer well and suitable level gauge. **(R 336.1201a(1))**
7. Any vapor or liquid line, exclusive of couplings, requiring venting after ammonia transfer shall be vented through a water trap of 55 gallons minimum size. Safety water shall not be used for this purpose. **(R336.1201a(1))**
8. Vapor return lines shall be employed whenever necessary to ensure an accidental release from pressure relief valves will not occur during ammonia transfer operations. **(R 336.1201a(1))**
9. Nitrogen stabilizer shall not be added to any permanent stationary storage tank or to rail or truck transport tanks. **(R 336.1201a(1))**
10. The permittee shall notify the **POLLUTION EMERGENCY ALERT SYSTEM (PEAS) 1-800-292-4706** and/or the District Supervisor immediately of any abnormal release of anhydrous ammonia from the facility. A normal release includes only hose coupling bleed downs, operation of hydrostatic relief valves, and normal pressure relief from the safety relief valve(s). Relief due to overfilling is **not** normal. **(R 336.1201a(1))**

IV. ALLOWED MODIFICATIONS

1. The permittee may replace anhydrous ammonia storage and handling equipment, or may install new anhydrous ammonia storage and handling equipment without applying for a new general permit to install, provided all of the general permit to install applicability criteria will continue to be met after the replacement or modification.
2. The permittee shall update the general permit by submitting a new Process Information form EQP5731 to the Permit Section and the District Supervisor, listing all existing and new/additional equipment a minimum of 10 days before the equipment is installed.

Appendix A – Page 1 of 2
Inspection and Maintenance Program
 Nurse and Applicator Tanks

Inspections to be performed daily and documented at the permittee's discretion. Permittee shall document all maintenance and repairs.

| Tank Identification: | Satisfactory? | | | Satisfactory? | | | Satisfactory? | | |
|---|---------------|----|--------|---------------|----|--------|---------------|----|--------|
| | Yes | No | Date * | Yes | No | Date * | Yes | No | Date * |
| 1. Tank free of leaks | | | | | | | | | |
| 2. Paint in good condition | | | | | | | | | |
| 3. Valves and fittings free from leaks and in good condition | | | | | | | | | |
| 4. Protective guards in place and in good condition | | | | | | | | | |
| 5. Outlet openings on valves and lines free of dirt and rust with protective caps in place | | | | | | | | | |
| 6. Safety relief valves free of debris with rain caps installed | | | | | | | | | |
| 7. Gages, pressure and liquid level, are operable | | | | | | | | | |
| 8. Excess flow valves installed and in good condition | | | | | | | | | |
| 9. Valves properly labeled "liquid" and "vapor" | | | | | | | | | |
| 10. Vapor and liquid hoses are proper ammonia-type and free of damage or deterioration | | | | | | | | | |
| 11. Hoses, including those on nurse tanks, securely clamped to the nipples | | | | | | | | | |
| 12. Hoses suitably racked to prevent kinking and hose on delivery tanks securely fastened to prevent dragging | | | | | | | | | |
| 13. Tanks securely attached | | | | | | | | | |
| 14. Trailer tongues, hitches, and safety chains in sound condition | | | | | | | | | |
| 15. Nurse tank valves locked or capped if site is unattended or not fenced in | | | | | | | | | |
| 16. Nurse tanks properly labeled | | | | | | | | | |
| 17. Five gallon or larger can filled with clean water for transport vehicles | | | | | | | | | |
| 18. Quick disconnects annually reconditioned | | | | | | | | | |

Date Inspected: _____

Inspector: _____

* For each tank, check if condition is satisfactory or not satisfactory. If condition is not satisfactory, complete date when corrected. If condition is not applicable, write NA.

Appendix A – Page 2 of 2
Inspection and Maintenance Program
 Permanent Ammonia Storage Tank

Permittee shall conduct inspections and complete form at least twice per year, prior to spring and fall application seasons.

| Tank Identification: | Satisfactory? | | |
|---|---------------|----|-------|
| | Yes | No | Date* |
| 1. Tank free of leaks | | | |
| 2. Tank supports in good condition (no cracked or crumbled concrete, etc.) | | | |
| 3. Paint in good condition | | | |
| 4. Equipment locked when not in use | | | |
| 5. Tank properly labeled | | | |
| 6. Valves and fittings free from leaks and in good condition | | | |
| 7. Piping properly supported and guards in place | | | |
| 8. Pipes free of physical damage and rust and properly painted | | | |
| 9. Employees trained in proper filling procedures | | | |
| 10. Provisions provided for bleeding of transfer hose from the transport truck | | | |
| 11. Wheels properly chocked on the transport truck or rail tank car while unloading | | | |
| 12. Information and warning signs displayed and in good condition | | | |
| 13. Area free of weeds, trash and other unsafe conditions | | | |
| 14. Unused equipment stored out of the way | | | |
| 15. Chemical safety goggles available and in good condition | | | |

| | Satisfactory? | | |
|---|---------------|----|-------|
| | Yes | No | Date* |
| 16. Protective gloves, boots, suits or slickers available and in good condition | | | |
| 17. Gas masks with ammonia type canisters and refill canisters within date limits available | | | |
| 18. Emergency clean water, shower or 75 gallon tank available nearby | | | |
| 19. Hoses in good condition | | | |
| 20. Hoses no older than 5 years from date of manufacture and marked | | | |
| 21. Vapor and liquid hoses are proper ammonia-type and free of damage or deterioration | | | |
| 22. Hoses suitably racked to prevent kinking | | | |
| 23. Hoses, including those on nurse tanks, securely clamped to the nipples | | | |
| 24. Gages, pressure and liquid level, operable | | | |
| 25. Valves properly labeled "liquid" and "vapor" | | | |
| 26. Safety relief valves within 5 years of manufacture or recertification and marked | | | |
| 27. Outlet openings on valves and lines free of dirt and rust with protective caps in place | | | |
| 28. Safety relief valves free of debris with rain caps installed | | | |
| 29. Safety relief valve manifold operable | | | |
| 30. Remote shut-off valve in working order | | | |

Date Inspected: _____

Inspector: _____

* For each item, check if condition is satisfactory or not satisfactory. If condition is not satisfactory, complete date when corrected. If condition is not applicable, write NA.

**GENERAL PERMIT TO INSTALL APPLICATION****GENERAL INFORMATION**

FOR DEQ USE ONLY

PERMIT NUMBER

Authorized under 1994 PA 451, as amended. Completion of form is required. Applicant may be subject to civil and/or criminal penalties for providing false information.

Instructions: Use this form to request authority to install and operate a source, process or process equipment under the terms and conditions of a general permit to install pursuant to Rule 201a. Prepare this form together with one or more of the forms identified in Item 19, according to type of source, process or process equipment, which will be installed and operated. Please submit all information, including forms, in duplicate. **NOTE:** This general permit does not apply to a source, process, or process equipment that is included in a Permit to Install pursuant to Rule 201 and is further referenced in an outstanding consent order or consent judgement.

| | | | | | |
|--|---------------------|--|--|--|----------------------|
| 1. FACILITY CODES | | STATE REGISTRATION NUMBER (SRN) <input type="text"/> | | STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODE <input type="text"/> | |
| 2. APPLICANT NAME (<i>Business license name of the corporation, partnership, individual or government agency that owns the facility</i>) | | | | | |
| 3. APPLICANT MAILING ADDRESS (<i>Street Address or P.O. Box Number</i>) | | | | | |
| 4. CITY | | 5. STATE | | 6. ZIP CODE | |
| 7. NAME OF AUTHORIZED COMPANY MEMBER | | | | | |
| 8. TITLE (<i>person identified in Item 7</i>) | | | | 9. TELEPHONE NO. (<i>person identified in Item 7</i>) () - | |
| 10. CONTACT PERSON (<i>technical point of contact, if different than name in Item 7</i>) | | | | 11. TELEPHONE NO. (<i>contact person</i>) () - | |
| 12. EQUIPMENT OR PROCESS LOCATION (<i>complete Items 12 - 15 if different than mailing address</i>) | | | | | |
| 13. CITY | | 14. ZIP CODE | | 15. COUNTY | |
| 16. EQUIPMENT IS (<i>check one</i>) <input type="checkbox"/> New <input type="checkbox"/> Existing | | | | 17. PRIOR AIR PERMIT NO. (<i>existing equipment only</i>) | |
| 18. EQUIPMENT OR PROCESS INSTALLATION TIMETABLE (<i>enter dates in Items 18a - 18d for those which apply</i>) | | | | | |
| FOR NEW EQUIPMENT (PROCESS INSTALLATION OR CONSTRUCTION) | | | | 18a. START DATE | 18b. COMPLETION DATE |
| FOR EXISTING EQUIPMENT (PROCESS MODIFICATION OR RELOCATION) | | | | 18c. START DATE | 18d. COMPLETION DATE |
| 19. THE FOLLOWING COMPLETED FORMS ARE ATTACHED TO AND MADE A PART OF THIS PERMIT APPLICATION (<i>check all that apply</i>) | | | | | |
| TYPE OF FORM | | | | | NUMBER ATTACHED |
| <input type="checkbox"/> EQP <input type="text"/> | PROCESS INFORMATION | | | | |
| <i>(complete one form for each process - insert form number and type of process in spaces provided)</i> | | | | | |
| <input type="checkbox"/> EQP5729 - ADDITIONAL INFORMATION | | | | | |

Applicant Certification: I certify, under penalty of law, that this permit application and the attachments identified in Item 19 were prepared by me, or under my direction or supervision in accordance with a system to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. In addition, the equipment described in this application meets the necessary criteria for applicability for a General Permit to Install. Furthermore, I certify that I can and will comply with all conditions outlined in the General Permit to Install. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

| | | | |
|--|--|----------|--|
| 20. SIGNATURE (<i>person identified in Item 7</i>) | | 21. DATE | |
|--|--|----------|--|

Submit this completed application and the attachments identified in Item 19 to:

**PERMIT SECTION, AIR QUALITY DIVISION
MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
P.O. BOX 30260, LANSING, MI 48909-7760**

| | |
|--|--|
| DEQ USE ONLY - DO NOT WRITE BELOW | |
| DATE APPLICATION COMPLETE | DATE OF DETERMINATION OF NON-APPLICABILITY |
| DATE GENERAL PERMIT TO INSTALL GRANTED | SIGNATURE |
| DATE GENERAL PERMIT TO INSTALL REVOKED | SIGNATURE |



GENERAL PERMIT TO INSTALL APPLICATION

ADDITIONAL INFORMATION

| |
|------------------|
| FOR DEQ USE ONLY |
| PERMIT NUMBER |

Authorized under 1994 PA 451, as amended. Completion of form is required if additional information is needed to make an application complete. Applicant may be subject to civil and/or criminal penalties for providing false information.

Instructions: Use this form to include additional information or attachments. Prepare and submit this form with General Information form (EQP5727).

| | |
|--|--|
| <p>1. FACILITY CODE</p> <p>STATE REGISTRATION NUMBER (SRN) <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p> | <p>2. ID <i>(Provide the identification number of the device, emission unit or stack/vent for which additional information is being submitted.)</i></p> <p><input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p> |
|--|--|

3. WHAT TYPE OF ADDITIONAL INFORMATION ARE YOU SUBMITTING WITH THIS APPLICATION? *(check all that apply)*

ATTACHMENT *(if checked, describe and list what is attached. May include drawings, charts, calculations, assumptions, etc.)*

TECHNICAL *(Specialized information regarding the installation, construction, or use of a process or stack/vent)*

GENERAL *(Any supplemental information that is not technical information)*

4. ADDITIONAL INFORMATION NARRATIVE *(A brief description of the information or attachment. May include calculations, design parameters, small diagrams, etc.)*



GENERAL PERMIT TO INSTALL APPLICATION

PROCESS INFORMATION - ANHYDROUS AMMONIA STORAGE AND HANDLING

FOR DEQ USE ONLY

PERMIT NUMBER

Authorized under 1994 PA 451, as amended. Completion of form is required. Applicant may be subject to civil and/or criminal penalties for providing false information.

Instructions: Use this form to request authority to install and operate an anhydrous ammonia storage and handling process under the terms and conditions of a general permit to install pursuant to Rule 201a. Complete a separate General Permit to Install application for each storage tank at this facility. Prepare and submit this form with the General Information form (EQP5727).

1. FACILITY CODE
STATE REGISTRATION NUMBER (SRN)
2. DESCRIPTION (Briefly describe if the storage and handling process is agricultural, industrial, or other. Include the tank manufacturer, manufactured date and model number.)

Instructions for completing Item 3: Each tank must have a unique identification number (ID). The ID may be any combination of up to 10 letters, numbers or keyboard characters with no spaces between characters. If this equipment already has an ID assigned from a previous Permit to Install or Renewable Operating Permit, please use the existing ID. If Item 3 is left blank, an ID will be assigned by the AQD.

3. EMISSION UNIT ID (Assign an identification number for this storage tank.) EU
4. MAXIMUM DAILY THROUGHPUT (gallons)
5. MAXIMUM ANNUAL THROUGHPUT (gallons)
6. MAXIMUM OPERATING SCHEDULE (hours per day)
7. MAXIMUM OPERATING SCHEDULE (days per year)
8. TANK WATER CAPACITY (gallons)
9. TANK SURFACE AREA (square feet)
10. DOES EACH VAPOR LINE HAVE AN EXCESS FLOW VALVE?
11. DOES EACH LIQUID LINE HAVE EITHER A BACK PRESSURE CHECK VALVE OR AN EXCESS FLOW VALVE?
12. INTERNAL EMERGENCY SHUT-OFF VALVE EXTERNAL EMERGENCY SHUT-OFF VALVE
13. IS THE EMERGENCY SHUT-OFF VALVE REMOTELY OPERATED?
14. FOR EACH SAFETY RELIEF VALVE DATE MANUFACTURED DATE REPLACED/RECERTIFIED
15. FOR EACH HOSE DATE MANUFACTURED DATE LAST REPLACED
16. DISTANCE TO NEAREST PROPERTY LINE (feet)
17. DISTANCE TO NEAREST RESIDENCE, PRIVATE OR PUBLIC ASSEMBLY (feet)
18. DISTANCE TO NEAREST SCHOOL, APARTMENT, OR INSTITUTIONAL OCCUPANCY (feet)
19. DISTANCE TO NEAREST HOSPITAL OR NURSING HOME (feet)
20. IS THIS TANK IN COMPLIANCE WITH ALL LOCAL ZONING REQUIREMENTS?
21. HAS AN EMERGENCY RESPONSE PLAN BEEN APPROVED BY THE LOCAL FIRE DEPARTMENT OR COUNTY EMERGENCY RESPONSE AGENCY?

Certification: I certify, under penalty of law that this process complies with "Part 78. Storage and Handling of Anhydrous Ammonia" (MIOSHA 1910.111). I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

22. SIGNATURE
23. DATE