

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION**

March 5, 2007



**STATE REGISTRATION NUMBER
N7746**

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

| | |
|--|------------|
| DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203: 1/11/2007 | |
| DATE PERMIT TO INSTALL APPROVED: 3/5/2007 | SIGNATURE: |
| DATE PERMIT VOIDED: | SIGNATURE: |
| DATE PERMIT REVOKED: | SIGNATURE: |

PERMIT TO INSTALL

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Common Abbreviations / Acronyms

| Common Acronyms | | Pollutant/Measurement Abbreviations | |
|-----------------|---|-------------------------------------|--|
| AQD | Air Quality Division | Btu | British Thermal Unit |
| ANSI | American National Standards Institute | °C | Degrees Celsius |
| BACT | Best Available Control Technology | CO | Carbon Monoxide |
| CAA | Clean Air Act | dscf | Dry standard cubic foot |
| CEM | Continuous Emission Monitoring | dscm | Dry standard cubic meter |
| CFR | Code of Federal Regulations | °F | Degrees Fahrenheit |
| COM | Continuous Opacity Monitoring | gr | Grains |
| EPA | Environmental Protection Agency | Hg | Mercury |
| EU | Emission Unit | hr | Hour |
| FG | Flexible Group | H ₂ S | Hydrogen Sulfide |
| GACS | Gallon of Applied Coating Solids | hp | Horsepower |
| GC | General Condition | lb | Pound |
| HAP | Hazardous Air Pollutant | m | Meter |
| HVLP | High Volume Low Pressure * | mg | Milligram |
| ID | Identification | mm | Millimeter |
| LAER | Lowest Achievable Emission Rate | MM | Million |
| MACT | Maximum Achievable Control Technology | MW | Megawatts |
| MAERS | Michigan Air Emissions Reporting System | ng | Nanogram |
| MAP | Malfunction Abatement Plan | NO _x | Oxides of Nitrogen |
| MDEQ | Michigan Department of Environmental Quality | PM | Particulate Matter |
| MIOSHA | Michigan Occupational Safety & Health Administration | PM-10 | Particulate Matter less than 10 microns diameter |
| MSDS | Material Safety Data Sheet | pph | Pound per hour |
| NESHAP | National Emission Standard for Hazardous Air Pollutants | ppm | Parts per million |
| NSPS | New Source Performance Standards | ppmv | Parts per million by volume |
| NSR | New Source Review | ppmw | Parts per million by weight |
| PS | Performance Specification | psia | Pounds per square inch absolute |
| PSD | Prevention of Significant Deterioration | psig | Pounds per square inch gauge |
| PTE | Permanent Total Enclosure | scf | Standard cubic feet |
| PTI | Permit to Install | sec | Seconds |
| RACT | Reasonably Available Control Technology | SO ₂ | Sulfur Dioxide |
| ROP | Renewable Operating Permit | THC | Total Hydrocarbons |
| SC | Special Condition | tpy | Tons per year |
| SCR | Selective Catalytic Reduction | µg | Microgram |
| SRN | State Registration Number | VOC | Volatile Organic Compounds |
| TAC | Toxic Air Contaminant | yr | Year |
| TEQ | Toxicity Equivalence Quotient | | |
| VE | Visible Emissions | | |

* For High Volume Low Pressure (HVLP) applicators, the pressure measured at the HVLP gun air cap shall not exceed ten (10) pounds per square inch gauge (psig).

GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **(R 336.1201(1))**
2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent 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, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **(R 336.1201(4))**
3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **(R 336.1201(6)(b))**
4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**
5. The AQD District Supervisor shall be notified, in writing, of a change in ownership or operational control of the stationary source or emission unit(s) authorized by this Permit to Install pursuant to R 336.1219. The notification shall include all of the information required by R 336.1219(1)(a) and (b). In addition, a new owner or operator must submit a written statement pursuant to R 336.1219(1)(c), agreeing to and accepting the terms and conditions of this Permit to Install, and shall notify the AQD District Supervisor of any change in the contact person for this Permit to Install. **(R 336.1219)**
6. Operation of this 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. **(R 336.1901)**
7. 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 condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **(R 336.1912)**

8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law nor does it affect any liability for past violations under the Natural Resources and Environmental Protection Act, 1994 PA 451.
10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.
11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R 336.1301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R 336.1303. **(R 336.1301)**
 - 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 Permit to Install.
12. 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 R 336.1370(2). **(R 336.1370)**
13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. **(R 336.2001)**

SPECIAL CONDITIONS

Emission Unit Identification

| Emission Unit ID | Emission Unit Description | Stack Identification |
|--|--|----------------------|
| EUSOUTH | One 18,000 gallon anhydrous ammonia storage tank. Anhydrous ammonia is used for agricultural purposes. | N/A |
| Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290. | | |

The following conditions apply to: EUSOUTH

Process/Operational Limits

- 1.1 Except where specific requirements of these special conditions are applicable and more stringent, EUSOUTH shall comply with "Part 78, Storage and Handling of Anhydrous Ammonia", (MIOSHA 1910.111) hereinafter Rule 7801. The permittee shall maintain a copy of this standard, which may be obtained by contacting the Michigan Department of Consumer and Industry Services, Bureau of Safety and Regulations, Safety Standards Division, 7150 Harris Drive, Lansing, Michigan 48909-8143, for inspection at the facility. **(R 336.1901)**
- 1.2 The permittee shall not operate EUSOUTH unless the inspection and maintenance program specified in Appendix A has been implemented and maintained. **(R 336.1901)**
- 1.3 The permittee shall not operate EUSOUTH 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 336.1901)**
- 1.4 The permittee shall fill nurse tanks only from a permanent stationary storage tank. **(R 336.1901)**
- 1.5 The permittee shall fill nurse and applicator tanks to no more than 85 percent of liquid capacity by volume. The permittee may fill storage tanks according to temperature density correction tables in Rule 7801(b)(11) where tanks have a thermometer well and suitable level gauge. **(R 336.1901)**
- 1.6 Nurse and applicator tank storage shall be no less than 20 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 1,000 feet from a hospital or nursing home. **(R 336.1901)**
- 1.7 The permittee shall not operate EUSOUTH 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 336.1901)**
- 1.8 The permittee shall fit all containers with safety relief valves in accordance with Rule 7801(b)(9). The permittee shall stamp such valves with the date manufactured, and shall replace, or re-test and re-certify the valves, at least every five years or more often if there is evidence of damage or deterioration. **(R 336.1224, R 336.1225, R 336.1901)**

- 1.9 The permittee shall not operate EUSOUTH 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 336.1224, R 336.1225, R 336.1901)**
- 1.10 The permittee shall not operate EUSOUTH 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 336.1224, R 336.1225, R 336.1901)**
- 1.11 The permittee shall not operate EUSOUTH unless 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. The permittee shall install these valves on the main container side of the predictable break point at the bulkhead. **(R 336.1224, R 336.1225, R 336.1901)**
- 1.12 All hoses shall be replaced five years after date of manufacture or more often if there is evidence of damage or deterioration. **(R 336.1224, R 336.1225, R 336.1901)**
- 1.13 The permittee shall vent any vapor or liquid line, exclusive of couplings, requiring venting after ammonia transfer through a water trap of 55 gallons minimum size. The permittee shall not use safety water for this purpose. **(R 336.1224, R 336.1225, R 336.1901)**
- 1.14 The permittee shall present a conspicuously placed sign at the facility entrance stating the emergency phone numbers for the owner, primary operator, local and state police, local fire department, and ambulance service. **(R 336.1224, R 336.1225, R 336.1901)**
- 1.15 The permittee shall notify the Pollution Emergency Alert System (PEAS) 1-800-292-4706 and/or the AQD District Supervisor immediately of any abnormal release of anhydrous ammonia from EUSOUTH. 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 336.1201(3), R 336.1901)**

Appendix A
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 - Continued
Inspection and Maintenance Program
Permanent Ammonia Storage Tank

Permitee 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.