

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection

N784269865

FACILITY: CLARK FARMS		SRN / ID: N7842
LOCATION: 10641 W CLARK RD, EAGLE		DISTRICT: Lansing
CITY: EAGLE		COUNTY: CLINTON
CONTACT: Jake Clark , Co-owner		ACTIVITY DATE: 11/14/2023
STAFF: David Rauch	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: A routine inspection of the facility was conducted to ensure compliance with General PTI 252-07 for Anhydrous Ammonia that is stored on site.		
RESOLVED COMPLAINTS:		

On November 14, 2023, I conducted an unannounced routine inspection for compliance with both General Permit to Install (GPTI) 252-07 and 37-22 for two anhydrous ammonia storage tanks and any associated handling process, nurse tanks or applicator tanks located at Clark Farms in Eagle. This process was last inspected in June 2017.

The Environmental Contact:

Jake Clark, 517-449-5320, jakeclark@clarkfarmscompanies.com

Facility Description:

Clark Farms grows corn and soybeans and utilizes anhydrous ammonia as a fertilizer for their crops. The usage of anhydrous ammonia is a seasonal operation occurring mainly in May with one month to at most three months of operation. The process consists of two permanent storage tanks (1) 18,000 gallon anhydrous ammonia tank, and (1) 19,900 gallon anhydrous ammonia tank used for a filling station for nurse tanks, and (10) nurse tanks for application of anhydrous ammonia as a fertilizer.

Location:

Clark Farms; 10641 W. Clark Road. Eagle, Michigan.

Clark Farms is located north of the City of Grand Ledge and north of I-96. The area surrounding the farm is rural and agricultural with some residential housing. The closest house is north of the filling station and is located approximately 612 feet from the fenced-in storage area with the permanent storage tank, nurse tank storage.

Regulatory Overview:

The facility is a minor source of any regulated air contaminants including hazardous air pollutants (HAPs) and not subject to the Title V Renewable Operating Permit (ROP) program.

Other applicable regulations include the following -

Part 78, Storage and Handling of Anhydrous Ammonia", (MIOSHA 1910.111) hereinafter Rule 7801. Michigan Occupational Safety and Health Act (MIOSHA) safety standards.

Emergency Response Plan and Risk Management Plan (40 CFR 68)

Emission Units:

18,000 gallon Anhydrous Ammonia Tank

19,900 gallon Anhydrous Ammonia Tank

(10) 500 Gallon Nurse Tanks

Inspection:

I arrived at Clark Farms at 9:10AM and met Jake in the farm office. We discussed why I was on site and proceeded to view the tank area and observe the farm. The tanks, nurse tanks and filling station are all located a few hundred feet from the office. It was a brisk morning so we drove back to the tank location. When we arrived I noted the permanent storage tank, the nurse tank loading station (south of the permanent storage tank), and nurse tanks (wagons) are located in a fenced and gated area on the south side of the southern large pole barn. All of the tanks, hoses, valves and gages appeared to be in good working condition. We discussed the farm operations and returned to the office. While in the office we went over the special conditions in the permits and reviewed records. While on site we discussed the facility compliance and how to continue to maintain compliance. The special conditions for GPTI 252-07 and GPTI 37-22 are as follows:

III.1 Except where specific requirements of these special conditions are applicable and more stringent, EU-AMMONIA shall comply with the Department Of Labor and Economic Growth General Industry Safety Standards, Part 78. Storage and Handling of Anhydrous Ammonia – (1910.111) hereinafter Rule 7801. A copy of this document, which may be obtained by contacting the Michigan Occupational Safety and Health Administration, MIOSHA Standards Section, 7150 Harris Drive, P.O. Box 30643, Lansing, MI 48909-8143, shall be maintained for inspection at the facility. (R 336.1901) *Facility keeps a copy of this standard on file in the office.*

III.2 The permittee shall not operate EU-AMMONIA unless the inspection and maintenance program specified in Appendix A has been implemented and maintained. (R 336.1901) *The inspection logs for the tanks were viewed, and copies of logs were provided for dates in October of 2023.*

III.3 The permittee shall not operate EU-AMMONIA 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). *The emergency response plan is located in the farm office with all the emergency contact information. The plan is also on the telephone poll outside of the office. Plan is reviewed with licensing agencies and the local fire departments in the area; Grand Ledge, Eagle and Watertown.*

III.4 EU-AMMONIA 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 336.1901) *The tanks are kept more than 600ft from any residence and more than 50ft from the property line. No schools, hospitals or nursing homes are in the area.*

III.5 The permittee shall not operate EU-AMMONIA 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) *Only the drivers and trained staff handle the transfer of the ammonia.*

III.6 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 336.1901). *This condition is met as the nurse tanks are stored with the permanent storage tanks.*

III.7 Nurse tank filling shall be done only from a permanent stationary storage tank. (R 336.1901). *The nurse tanks are only filled at the filling station and nurse tanks are stored in same enclosure as permanent fill tanks making the process easier when filling prior to applying.*

III.8 Nurse and applicator tanks shall be filled to no more than 85 percent of liquid capacity by volume. Storage tanks may be filled according to temperature density correction tables in Rule 7801(b)(11) where tanks have a thermometer well and suitable level gauge. (R 336.1901) *Observed gages on tanks below 85% and Jake confirmed that the tanks are filled to no more than 85%.*

III.9 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 336.1901) *Observed the filling lines that were labeled at the filling station and on the nurse tanks.*

III.10 Nitrogen stabilizer shall not be added to any permanent stationary storage tank or to rail or truck transport tanks. (R 336.1901) *Jake confirmed that nitrogen stabilizer is not used. Can cause rust which is why it is not used.*

IV.1 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 336.1225, R 336.1901) *Safety relief valves are installed. All appeared to be in good condition on the permanent tanks and the nurse tanks.*

IV.2 The permittee shall not operate EU-AMMONIA 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 336.1225, R 336.1901). *Confirmed that the shut-off valve is installed on the permanent storage tanks.*

IV.3 The permittee shall not operate EU-AMMONIA 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 336.1225, R 336.1901) *Observed an installed break away area at the fill station.*

IV.4 The permittee shall not operate EU-AMMONIA 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 336.1225, R 336.1901) *Reviewed with Jake and confirmed install.*

IV.5 All hoses shall be replaced five years after date of manufacture or more often if there is evidence of damage or deterioration. (R 336.1225, R 336.1901) *Discussed with Jake and records were checked, the new hoses were installed in 2021. Hoses are good for 7yrs but Michigan law requires 5yr change out.*

IV.6 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. (R 336.1225, R 336.1901) *A 55-gallon water trap for vapor bleed off is located by the bulkhead. Jake pointed out areas where safety water access is located.*

IV.7 A sign shall be present and conspicuously placed 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 336.1901) *Confirmed with Jake and is present at front of facility.*

VI.1 The permittee shall keep, in a satisfactory manner, records of the date, duration, and description of any malfunction or spill occurring from EU-AMMONIA, including the estimated amount of ammonia released into the atmosphere. Do not include trace amounts from normal hose coupling bleed downs. All records shall be kept on file and made available to the Department upon request. (R 336.1201(3)) *No known release per Jake.*

VI.2 The permittee shall keep, in a satisfactory manner, records of the date of annual review and approval of the emergency response plan with the local fire department. All records shall be kept on file and made available to the Department upon request. (R 336.1201(3)) *Reviewed files with Jake and the files are now kept in a folder in the office.*

IX.1 The permittee shall not replace or modify any portion of EU-AMMONIA, nor install new equipment unless all of the following conditions are met: (R 336.1201)

- a) The permittee shall update the general permit by submitting a new Process Information Form (EQP5731) to the Permit Section and District Supervisor, identifying the existing and new equipment a minimum of 10 days before the replacement, modification, or installation of new equipment.
- b) The permittee shall continue to meet all general permit to install applicability criteria after the replacement, modification or installation of new equipment is complete.
- c) The permittee shall keep records of the date and description of any replacement, modification, or installation of new equipment at the source. All records shall be kept on file for a period of at least five years and made available to the Department upon request.

No modifications or installation of new equipment has occurred since the second GPTI was issued.

Fee Status:

This facility is not subject to MAERS Fees due to them not meeting the Fee Category of F as a minor source.

Conclusions:

No visible emissions (VEs) were observed from the facility upon arrival. No ammonia odors were identified surrounding the facility. The facility appeared to be in compliance with GPTI 252-07 and GPTI 37-22. Facility will continue to keep records of maintenance and all records from the local fire department inspections. Facility appears to be in compliance and no violations were observed. Facility also no longer transports any ammonia or diesel but instead just has it delivered.

NAME David RauchDATE 12/5/2023SUPERVISOR RB