

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection

B609244148

FACILITY: Crop Production Services		SRN / ID: B6092
LOCATION: 209 E COOMER ST, MORENCI		DISTRICT: Jackson
CITY: MORENCI		COUNTY: LENAWEE
CONTACT: Larry McKown , Location Manager		ACTIVITY DATE: 04/12/2018
STAFF: Mike Kovalchick	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Inspection of 2 ammonia tanks.		
RESOLVED COMPLAINTS:		

Minor Source-**Facility Contacts**

Larry McKown-Location Manager larry.mckown@cpsagu.com ph. 517-486-4391

Caleb Fox-Operations Supervisor caleb.fox@cpsagu.com

Purpose

On April 12, 2018, I conducted an unannounced compliance inspection of Crop Production Services, Inc. (Company) located in Morenci, Michigan in Lenawee County. The purpose of the inspection was to determine the facility's compliance status with the applicable federal and state air pollution regulations, particularly Michigan Act 451, Part 55, Air Pollution Control Act and administrative rules and Permit to Install (PTI) # 86-03.

Facility Location

The facility is located adjacent to a residential area in the town of Morenci. See aerial photo.

Facility Background

The facility was last inspected on 07/21/2010 and found to be in compliance. There was a PEAS incident at this facility on 6/6/2017. (PEAS Incident Number 17305). A customer returned an empty 1500 gallon nurse tank that had no liquid in it but still contained vapor and left a valve open. It resulted in an estimated 10 pounds of ammonia to be released.

Regulatory Applicability

PTI 86-03 applies one 18,000 and one 12,000 gallon anhydrous ammonia storage tank. The ammonia is delivered by truck as the rail tracks have been removed.

Arrival & Facility Contact

Visible emissions or odors were not observed upon my approach to the Company's facility. I arrived at 8:45 am, proceeded to the facility office to request access for an inspection, provided my identification and spoke via phone with Larry McKown (LM)-manager for the both the Morenci & Blissfield facility. I informed him of my intent to conduct a facility inspection and to review the various records as necessary.

LM extended his full cooperation and fully addressed my questions.

Pre-Inspection Meeting

LM outlined that he had took over management of this facility 3 weeks ago. We discussed the requirement of PTI 86-03 and that I would follow-up with an email to request records. He suggested that Caleb Fox (CF)-operations supervisor show me the tanks. It was noted that the facility will be changing its name in July to Nutrien Ag Solutions as this Company just recently merged with another company. The Company currently has 8 full time employees.

Onsite Inspection

CF gave me a brief tour of the facility. See attached photos. No ammonia odors were noted. Everything appeared to be well maintained. The fill gauges on the permanent storage tanks were checked and found to be at 85% or less. The loading rack area appeared to be in good shape with hoses also appeared to be in good shape. The hoses were marked either to be replaced in 2018 or in 2020. CF pointed out the emergency pull-away protection system in place. Approximately 50 nurse tanks were present. CF indicated that farmers come with pick-up trucks and haul the nurse tanks to the farm as needed. All ammonia arrives by truck. A tank filled with water is used for the vapor lines coming out of trucks unloading ammonia to the permanent tanks. See attached photo. The water/ammonia water is later applied to a field. CF indicated that he was meeting with the local fire department next Wednesday for the required annual emergency plan review. CF also indicated that the required 5 year tank thickness test on all the permanent tanks would be conducted in August.

Recordkeeping/Permit Requirements Review

Applicable Requirements	Compliance Status & Date	Comments
<p>I. Design Parameters</p> <p>A. Site Criteria</p> <p>FGAMMONIATNKS 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 or institutional occupancy, and not less than 1000 feet from a hospital or nursing home.</p>	<p>July 21, 2010</p> <p>Compliance</p>	<p>The 12,000 gallon tank was installed in 1964 and is grandfathered. The 18,000 gallon tank was moved in 2005 or 2006 and went through a local hearing in order to ensure set back distances would be met.</p>
<p>I. Design Parameters</p> <p>B. Storage & Handling Equipment Standards</p> <ol style="list-style-type: none"> 1. Except where specific requirements of these special conditions are applicable and more stringent, FGAMMONIATANKS 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. [R336.1224, R336.1225, R336.1901] 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. [R336.1224, R336.1225, R336.1901] 3. The permittee shall not operate FGAMMONIATANKS 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. [R336.1224, R336.1225, R336.1901] 4. The permittee shall not operate 	<p>July 21, 2010</p> <p>Compliance</p>	<ol style="list-style-type: none"> 1. Company has a copy of this rule. 2. The values last replaced in 2013 and probably to be replaced as part of thickness test inspection planned for August 2018. 3. The emergency shutoff is manually operated. 4. Visually observed hoses that allow safe breakaway, which is swivel jointed to hoses next to shut-off. The bulkhead is shared between the two supply tanks and is located inside a locked fence area. 5. The pressure relief valves on the supply tank are checked annually and are replaced when needed. They do not receive any supply by rail. 6. Dates on the current hoses indicate that they are due for replacement this year or in 2020. 7. The storage tanks are gated and locked and the In Case of Emergency Numbers are located on sign near the supply tanks.

<p>FGAMMONIATANKS 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. [R336.1224, R336.1225, R336.1901]</p> <p>5. The permittee shall not operate FGAMMONIATANKS 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. [R336.1224, R336.1225, R336.1901]</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. [R336.1224, R336.1225, R336.1901]</p> <p>7. A sign shall be present and conspicuously placed at FGAMMONIATANKS entrance stating the emergency phone numbers for the owner, primary operator, local & state police, local fire department, and ambulance service. [R336.1224, R336.1225, R336.1901]</p>		
<p>II. Compliance Evaluation</p> <p>A. Monitoring/Reporting – In addition to General Conditions</p> <p>1. Parameter to be Recorded and Frequency</p> <p>1. Date, duration and description of any malfunction/spill occurring at FGAMMONIATANKS including estimated amount of ammonia released into the atmosphere. Do not include trace amounts from normal hose coupling bleed downs. [R336.1224, R336.1225, R336.1901]</p> <p>2. Date of review and approval of emergency response plan with local fire department. [R336.1224, R336.1225, R336.1901]</p> <p>3. Date and description of any modification or new installation of any anhydrous ammonia process</p>	<p>July 21, 2010</p> <p>Compliance</p>	<p>1. PEAS incident in June, 2017. See facility background section.</p> <p>2. The fire department is volunteer status. They are scheduled to review the emergency plan next Wednesday. The fire department failed to show up for the review last year.</p> <p>3. There have been no modifications or new installations of anhydrous ammonia process equipment.</p>

<p>equipment. [R336.1224, R336.1225, R336.1901]</p>		
<p>II. Compliance Evaluation</p> <p>A. Monitoring/Reporting – In addition to General Conditions</p> <p>2. Reports and Schedules</p> <p>Submitted only upon request by the Air Quality Division. [R336.1224, R336.1225, R336.1901]</p>	<p>July 21, 2010</p> <p>Compliance</p>	<p>Copies of storage tank and nurse tank inspections were reviewed after the time of the inspection. See Attachment (1).</p>
<p>III. Operational Parameters</p> <p>1. The permittee shall not operate FGAMMONIATANKS unless the inspection and maintenance program specified in Appendix A has been implemented and maintained. [R336.1224, R336.1225, R336.1901]</p> <p>2. The permittee shall not operate FGAMMONIATANKS 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. [R336.1224, R336.1225, R336.1901]</p> <p>3. The permittee shall not operate FGAMMONIATANKS 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. [R336.1224, R336.1225, R336.1901]</p> <p>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 or institutional occupancy, and no less than 1000 feet from a hospital or nursing home. [R336.1224, R336.1225, R336.1901]</p> <p>5. Nurse tank filling shall be done only from a permanent stationary storage tank. [R336.1224, R336.1225, R336.1901]</p> <p>6. Nurse and applicator tanks shall be filled to no more than 85% of liquid capacity by</p>	<p>July 21, 2010</p> <p>Compliance</p>	<p>1. See Attachment (1).</p> <p>2. Emergency response plan is Attachment (2). It will be reviewed by the Fire Department on April 18, 2018.</p> <p>3. CF has 17 years experience.</p> <p>4. The nurse tanks would meet the distance requirements because they have to be near to the supply tank. The nurse tanks are all stored together behind the supply tank. See aerial map attached.</p> <p>5. They comply with this requirement, because there is no other source of ammonia.</p> <p>6. The facility has gauges on the nurse tanks to determine amount filled. CF indicated that when a leak is detected in a nurse tank, they immediately cease loading it and then off load the ammonia from one nurse tank to another nurse tank.</p> <p>7. Visually observed 55+ gallon tote used solely for this purpose.</p> <p>8. Whenever liquid is pumped into a vessel, the vapor is returned to the vessel that the liquid is being pumped from. The valves will shut off if they sense too much pressure.</p> <p>9. To prevent contamination of supply ammonia, stabilizer is located in a different area where it can be added to nurse/applicator tanks.</p>

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. [R336.1224, R336.1225, R336.1901]

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. [R336.1224, R336.1225, R336.1901]
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. [R336.1224, R336.1225, R336.1901]

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 FGAMMONIATANKS. 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. [R336.1224, R336.1225, R336.1901]

10. One PEAS incident in June, 2017.

Post-Inspection Meeting

I held a brief post-inspection meeting with CF. I indicated to him that I would be following up with LM via email to request some records. I thanked CF for his time and cooperation, and I departed the facility at approximately 9:45 am.

Compliance Summary

The Company is in compliance.

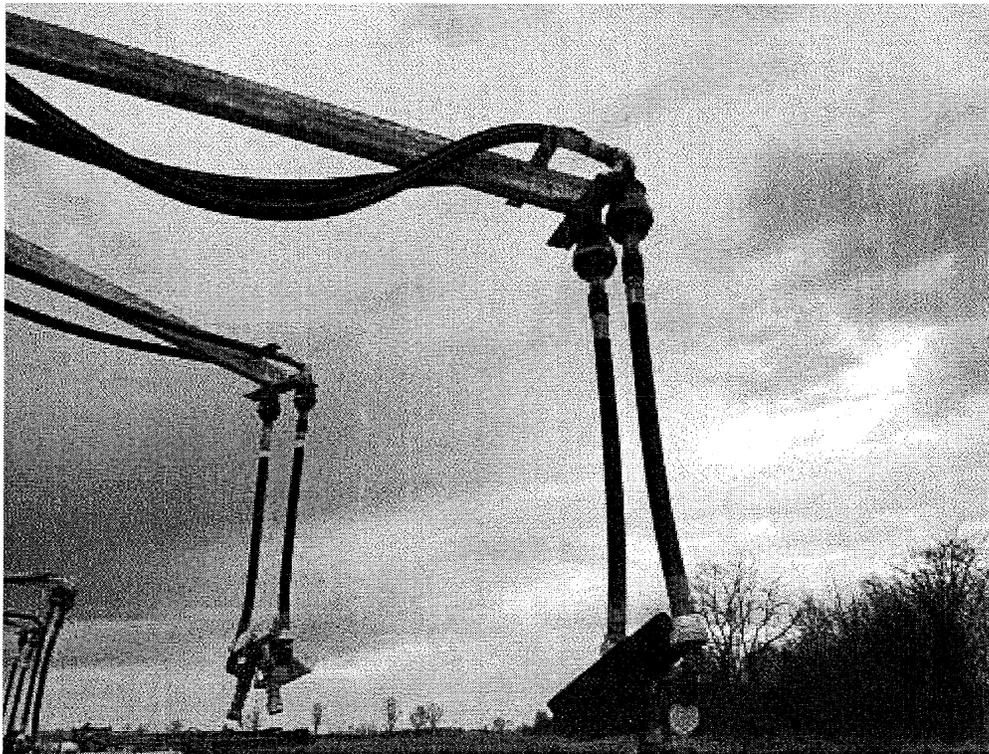


Image 1(Loading arms) : Loading arms which show break-away shutoff device.

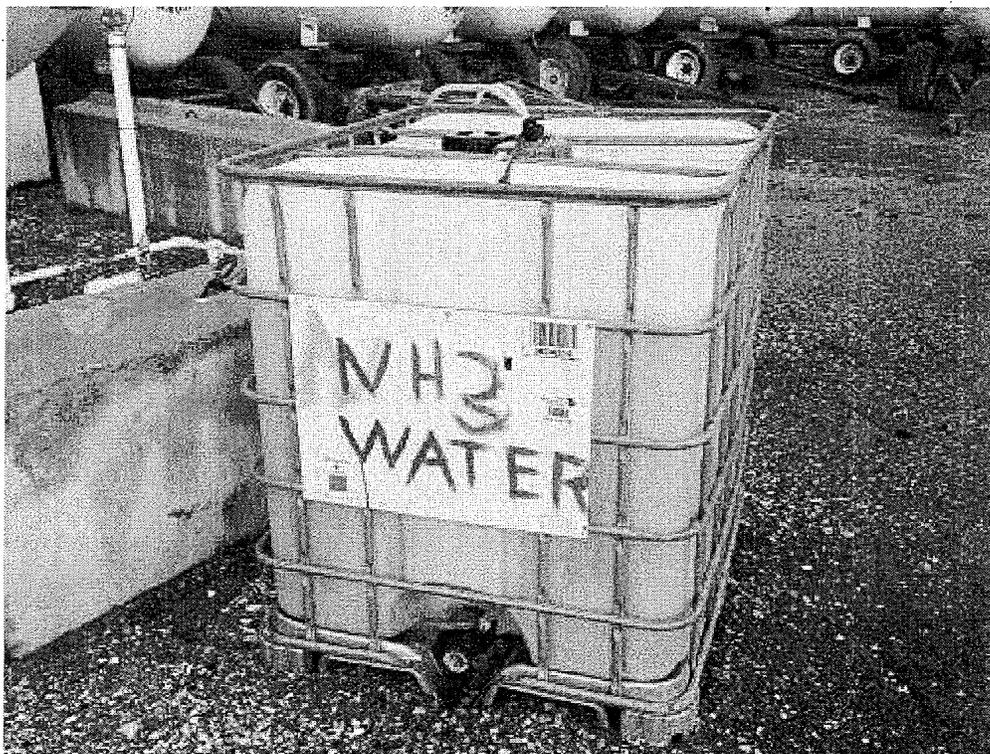


Image 2(Ammonia/water tank) : Tank used during ammonia truck delivery vapor return line goes to this tank.



Image 3(Aerial photo) : Aerial photo

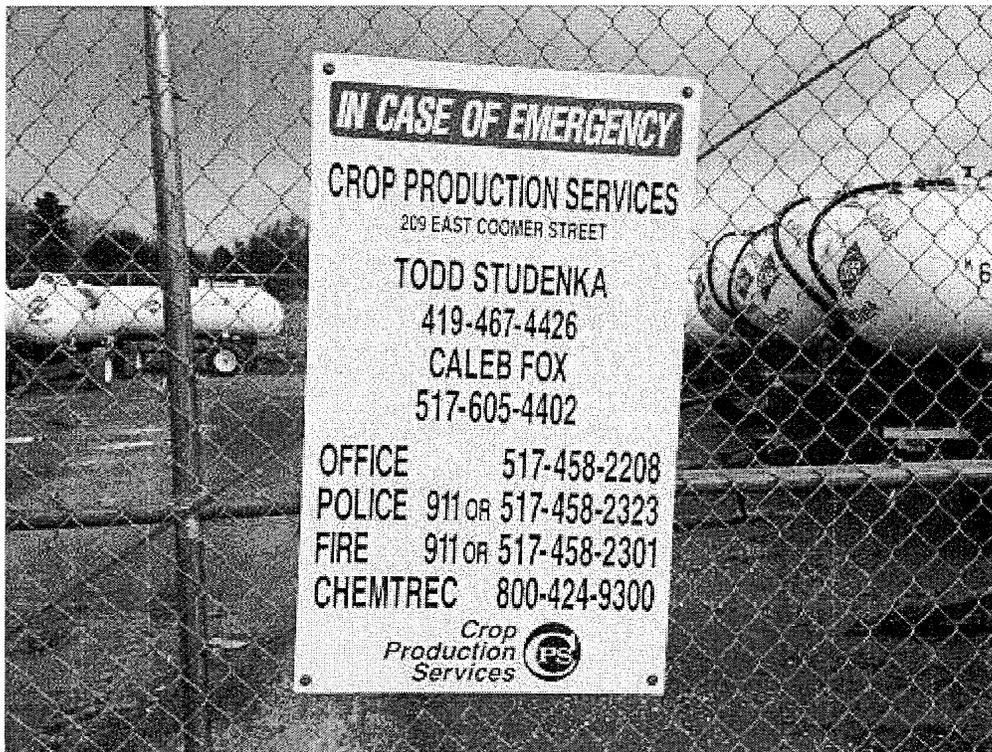


Image 4(Emergency sign) : Emergency sign



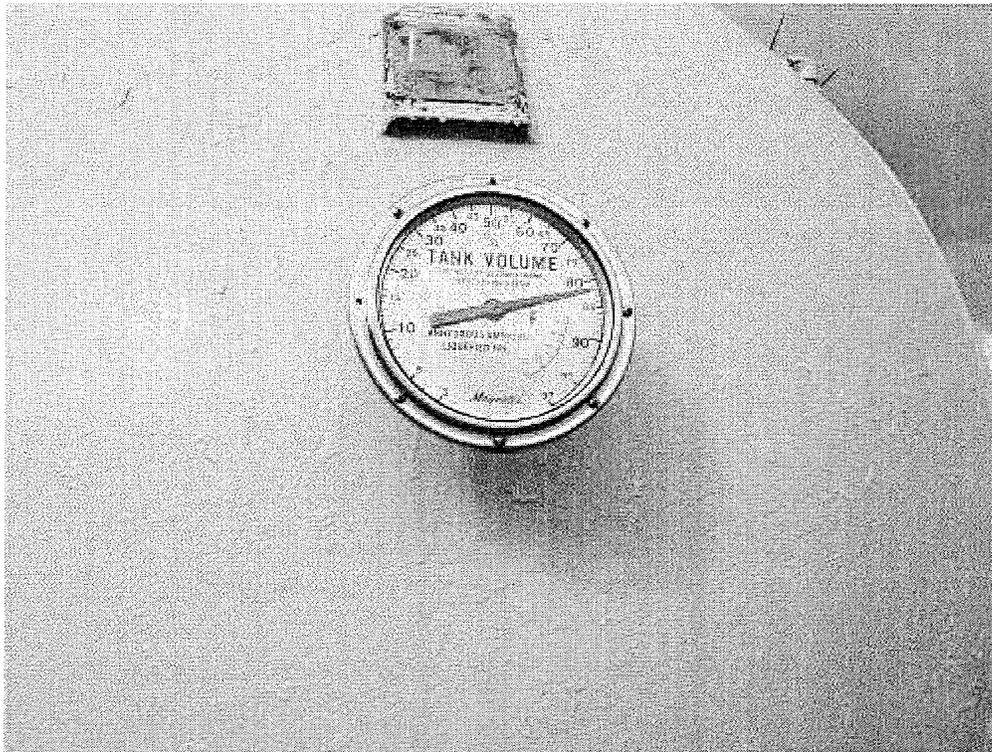
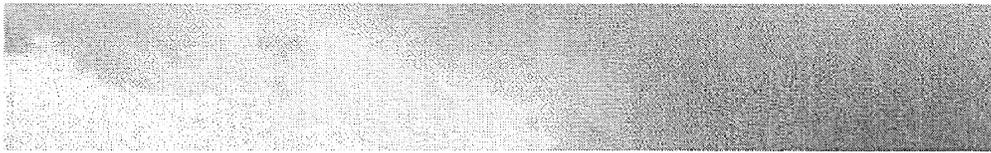


Image 6(Ammonia storage) : Ammonia storage tank showing 85% full.

NAME M. Kozelchuk

DATE 4/18/2018

SUPERVISOR 