

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

N774638679

FACILITY: CROP PRODUCTION SERVICES		SRN / ID: N7746
LOCATION: 1100 N FOREST HILL, SAINT JOHNS		DISTRICT: Lansing
CITY: SAINT JOHNS		COUNTY: CLINTON
CONTACT: Steve Popp , Operations Manager		ACTIVITY DATE: 02/14/2017
STAFF: Julie Brunner	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Inspection to check compliance with PTIs 13-07, 14-07, and 15-07.		
RESOLVED COMPLAINTS:		

On February 14, 2017, I conducted an unannounced, scheduled inspection of Crop Production Services (CPS) in Saint Johns. This facility was last inspected on June 26, 2014.

Facility Name/Address:

N7746 – Crop Production Services (CPS)
1100 N. Forest Hill Road, Saint Johns, Michigan

Facility Contact:

Mr. Steve Popp, Operations Manager, 877-725-7933, steve.popp@cpsagu.com
Mr. David Sterner, On-Site Facility Manager, 989-640-1166

Facility Description:

CPS is a crop consultation service, grain buyer/seller, and provides fertilizer. The Forest Hill Road facility is a seasonal operation specifically used for receiving anhydrous ammonia into permanent storage tanks, filling associated nurse tanks, and renting the nurse tanks out to local farmers for agricultural purposes.

CPS is located west of the City of Saint Johns. The area surrounding the plant is mainly rural and agricultural with some residential housing located on the west side and south side of the facility. The closest house is to the west located 365 feet from the permanent storage tanks, and 321 feet from the nurse tank fill loading stations.

Commencement of Mfg. Operations: ~1950 to 1960 and was originally a dry fertilizer operation

Plant Capacity: Storing 189 tons of anhydrous ammonia for next season

Staff #: 1 - 4 Shifts/Day: 1 shift (8 to 16 hours) Days of Operation/Week: Up to 7 days / week
The operation is seasonal from March to August with a couple of weeks in October and November.

Boilers for process heat or steam? No

Emergency Generators? No

Cold Cleaners? Yes

One cold cleaner in the shop which was empty of mineral spirits.

Any Additional Exempt Equipment? No

List of Active Air Use Permits:

Permit to Install (PTI) 13-07: EUMIDDLE - One 6000 gallon anhydrous ammonia storage tank.
Anhydrous ammonia is used for agricultural purposes.

PTI 14-07: EUNORTH - One 6000 gallon anhydrous ammonia storage tank. Anhydrous ammonia is used for agricultural purposes.

PTI 15-07: EUSOUTH - One 18,000 gallon anhydrous ammonia storage tank. Anhydrous ammonia is used for agricultural purposes.

PTI 155-07: EUBIG - One 30,000 gallon anhydrous ammonia storage tank. Anhydrous ammonia is used for agricultural purposes.

Regulatory Review:

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)

Michigan Air Emissions Reporting System (MAERS):

The facility is not required to report emission information to MAERS.

Inspection:

Arrived: 9:00 am

Departed: 10:40 am

Weather: 35°F, WSW@12 MPH, UV Index 0 Low

No visible emissions (VEs) were observed from the facility upon arrival. No odors were identified surrounding the facility.

The facility is unmanned this time of year and not operating. The facility is gated and locked. A conspicuously placed sign labeled "In Case of Emergency" with emergency contact information for the owner, operator, police, fire, and Chemtrec services was located beside the west gate. Based on the information on the sign, I called Mr. David Sterner (On-Site Facility Manager) who answered right away and came out promptly for the inspection. A pre-inspection meeting was then conducted. The purpose of my visit and the status of the facility operations were discussed. Then a facility tour was taken followed by a records review.

Three permanent storage tanks containing anhydrous ammonia which has been bought in the off season were on-site. The 30,000 gallon anhydrous ammonia tank permitted on PTI 155-07 was removed in July of 2016. The anhydrous ammonia tanks on-site are identified in the records as follows.

Tank Identification: A-2 (PTI 13-07, EUMIDDLE - 6000 gallons)

Tank Identification: A-1 (PTI 14-07, EUNORTH - 6000 gallons)

Tank Identification: 3A (PTI 15-07, EUSOUTH - 18000 gallons)

The nurse tank loading station is just south of the permanent storage tanks. It has piping for loading four (4) nurse tanks at a time.

CPS has 64 nurse tanks (wagons) that they rent out to farmers. The tanks were stored in a fenced and gated area in the southeast corner of the facility.

The facility just had an EPA inspection. Mr. James Entzminger (Chemical Emergency Preparedness and Prevention) visited on January 30, 2017. According to David, EPA took some pictures and got copies of the SARA Title III reporting. No noncompliance instances or concerns were identified by the EPA inspector according to David.

Inspection notes per the conditions of PTIs 13-07, 14-07, and 15-07:

- 1.1 Except where specific requirements of these special conditions are applicable and more stringent, EUMIDDLE, EUNORTH, and 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)

Notes – This was not specifically discussed but this is the basis of the facility's Process Safety Management (PSM) plan which was developed to comply with OSHA Standard 29 CFR 1910.119(c). The plan was not on-site at the time of inspection because the facility was currently unmanned. The plan was at the central office in Henderson and was being updated. I talked to Steve Popp (Operations Manager) who stated that the plan will be returned to the facility when operations resume for the new season. Copies of the PSM plan were sent and are attached for the file.

1.2 The permittee shall not operate EUMIDDLE, EUNORTH, and EUSOUTH unless the inspection and maintenance program specified in Appendix A has been implemented and maintained. (R 336.1901)

Notes – Inspection logs for all the tanks were viewed. The inspections are logged (using Appendix A) twice a year at the beginning and end of the season, and repairs are noted. Maintenance records are maintained for each tank and loading station. Relief and excess flow valves, temperature gauges, and piping were replaced in January 2016.

1.3 The permittee shall not operate EUMIDDLE, EUNORTH, and 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)

Notes – David provided his certificate for the "Ammonia Technician Course" which he last took on August 9-11, 2016. The PSM plan covers training. Evidence points to the fact that CPS is in compliance with this condition.

1.4 The permittee shall fill nurse tanks only from a permanent stationary storage tank. (R 336.1901)

Notes – The nurse tank loading station is directly connected to the permanent storage tanks. Filling of nurse tanks was not occurring during the inspection but it would be difficult for filling of nurse tanks to occur anywhere else in the yard.

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)

Notes – David stated that tanks are filled to 82% capacity and no more than 85%. The liquid level gauges are located on the top of the tanks.

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)

Notes – The nurse tanks are stored (for the winter) 240 feet from the nearest residence. The closest houses are 365 feet from the permanent storage tanks and 327 feet from where nurse tanks are stored when filled. Storage of any tank is greater than 20 feet from property boundaries with the closest tanks being at least 30 from property boundaries.

1.7 The permittee shall not operate EUMIDDLE, EUNORTH, and 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)

Notes – The emergency response plan (RMP) which is called the "Handi-Plan" is hanging on the wall in the on-site office. According to David, the plan was last reviewed with the local fire department in July of 2016. A picture is attached of the 2017 Handi-Plan.

- 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)

Notes – Safety relief valves installed and last replaced in January of 2016 according to records.

- 1.9 The permittee shall not operate EUMIDDLE, EUNORTH, and 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)

Notes – Confirmed excess flow valves and back pressure valves are installed. See pictures for emergency shut-off valves.

- 1.10 The permittee shall not operate EUMIDDLE 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)

Notes – Confirmed installed. (See pictures.)

- 1.11 The permittee shall not operate EUMIDDLE, EUNORTH, and 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)

Notes – Confirmed installed. (See pictures.)

- 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)

Notes – All hoses in good shape and stamped with remove by 2019. (See pictures.)

- 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)

Notes – A 150 gallon water trap for vapor bleed off is located close to the tanks. (See picture.)

- 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)

Notes – Confirmed installed. (See attached picture.)

- 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 EUMIDDLE, EUNORTH, and 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)

Notes – According to David, there has not been a release in the last 8 years. The last PEAS incident on file is dated October 25, 2006.

Records Review:

Copies of the records are attached to this activity report.

1. Maintenance records dated 12-15-12 to 8-4-2016
2. Appendix A – Inspection and Maintenance Program logs dated 3-4-15, 9-9-15, and 4-1-16
3. Parts of the PSM+RMP and training certificate.

Summary:

The facility appeared to be in compliance with all applicable air quality rules and regulations, and PTIs 13-07, 14-07, and 15-07.

A request to void PTI 155-07 was submitted because the 30,000 gallon anhydrous ammonia storage tank has been removed from the facility.



Image 1(004) : 6000 gallon, 6000 gallon, and 18,000 gallon permanent storage tanks

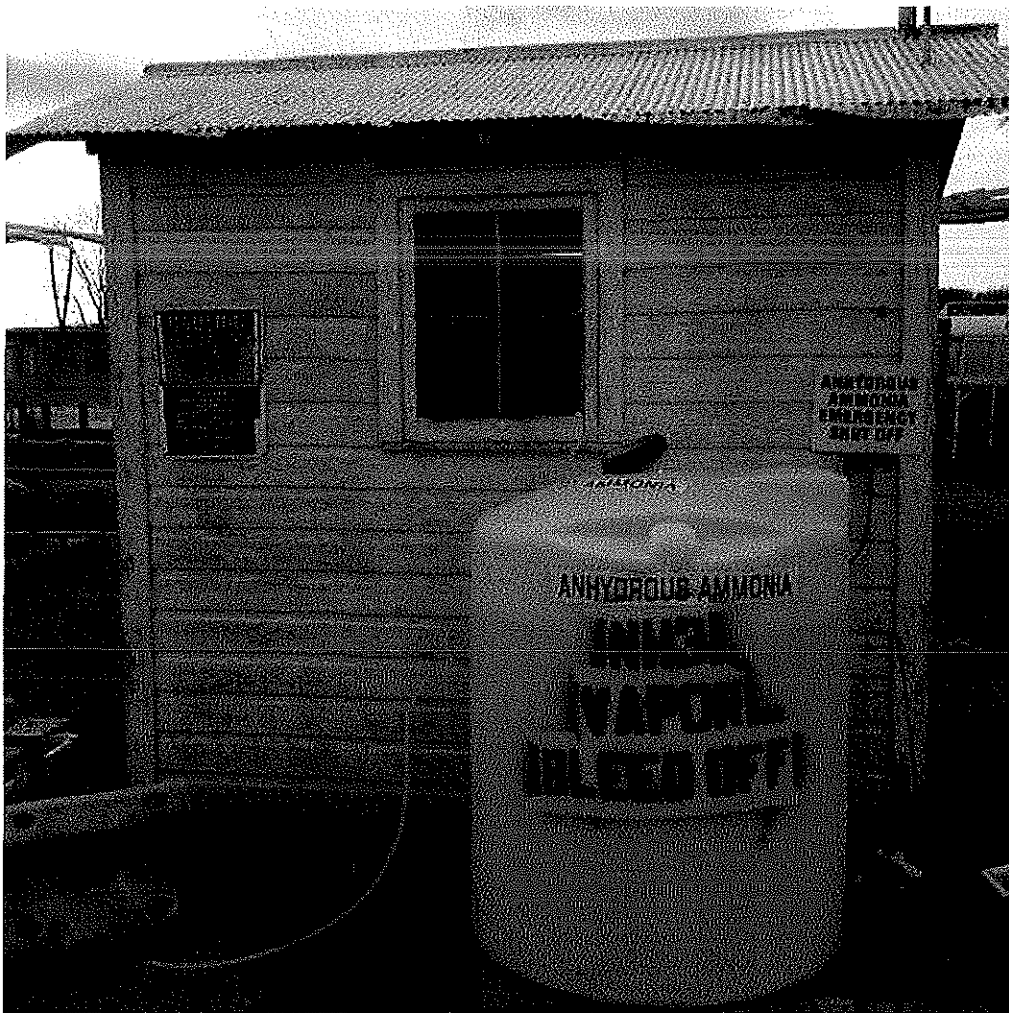


Image 2(005) : 150 gallon bleed off and one of the emergency shut off valves.



Image 3(007) : Emergency shut off valve



Image 4(008) : Remote emergency shut off valve



Image 5(011) : Emergency shut off valve at nurse tank loading



Image 6(013) : Nurse tank load out piping and break away valves

NAME Julie L. Bruner

DATE 2/20/17

SUPERVISOR B. M.