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

B887543842

FACILITY: Crop Production Services, Inc.		**SRN / ID:** B8875
LOCATION: 6901 SILBERHORN HWY., BLISSFIELD		**DISTRICT:** Jackson
CITY: BLISSFIELD		**COUNTY:** LENAWEE
CONTACT: Les Jones ,		**ACTIVITY DATE:** 03/28/2018
STAFF: Mike Kovalchick	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MINOR
SUBJECT: Inspection of 3 ammonia tanks.		
RESOLVED COMPLAINTS:		

Minor Source-

Facility Contacts

Les Jones-Facility manager.

Les.jones@cpsagu.com

Purpose

On March 28, 2017, I conducted an unannounced compliance inspection of Crop Production Services, Inc. (Company) located in Blissfield, 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) #'s 245-06, 246-06, 247-06 and 91-10.

Facility Location

The facility is located in agricultural/commercial area outside of Blissfield. See aerial photo.

Facility Background

The facility was last inspected on 8/31/2010 and found to be in compliance.

Regulatory Applicability

PTI 245-06, 246-06, 247-06 and 91-10 are General PTI permits; each for a separate ammonia tank that is 30,000 gallons or less in size. One of the four tanks was removed in the 2014/2015 timeframe but isn't clear from the file review on exactly which tank goes with a particular permit.

There is over 1 million gallons of ammonium polyphosphate fertilizer solution present in various storage tanks. Based on previous inspection reports, no emissions are expected from these tanks. (

Arrival & Facility Contact

Visible emissions or odors were not observed upon my approach to the Company's facility. I arrived at 9:20 am, proceeded to the facility office to request access for an inspection, provided my identification and spoke with Les Jones(LJ)-facility operator. He was the only one present at the facility during the inspection. I informed him of my intent to conduct a facility inspection and to review the various records as necessary.

LJ extended his full cooperation and fully addressed my questions.

Pre-Inspection Meeting

LJ outlined that they had just started ammonia operations this week for the season and will continue until about July. LJ indicated that there had not been any recent changes at the facility other than the removal of one of the ammonia tanks in the 2014/2015 time frame. This particular tank failed a thickness test and so was removed. LJ indicated the 3 main storage tanks and all the nurse tanks were just topped off with ammonia to the 85% fill level on all the tanks. We then went through all permit conditions with responses written below in the checklist.

Applicable Requirements	Compliance Status & Date	Comments
Process/Operational Limits 1.1 Except where specific requirements of these special conditions are applicable and more stringent, EU-AMMONIA shall comply with "Part 78, Storage and Handling of Anhydrous Ammonia" (MIOSHA 1910.111), hereinafter Rule 7801. 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, P.O. Box 30643, Lansing, MI 48909-8143, shall be maintained for inspection at the facility. [R336.1201a(1)]	March 28, 2018 Compliance	
1.2 The permittee shall not operate EU-AMMONIA unless the inspection and maintenance program specified in Appendix A has been implemented and maintained. [R336.1201a(1)]	March 28, 2018 Compliance	They use a checklist similar to what is found in Appendix A of the PTI's permits. I recommended that they just use Appendix A.
1.3 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. [R336.1201a(1)]	March 28, 2019 Compliance	Attachment (1) contains Operating Procedures and Emergency Response Procedures. LJ indicated that despite repeated attempts recently, he hasn't been able to get the local volunteer fire department to come out to review the plan and make any updates as needed.
1.4 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.	March 28, 2018 Compliance	LJ is considered a "reliable person" has he has 20 years experience in this field.
1.5 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. [R336.1201a(1)]	March 28, 2018 Compliance	The setback requirements appear to be met since they are not located close to any of the receptors.
1.6 Nurse tank filling shall be done only from a permanent stationary storage tank.	March 28, 2018 Compliance	There are 3 permanent anhydrous ammonia storage tanks and numerous nurse tanks at this location today.
1.7 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. [R336.1201a(1)]	March 28, 2018 Compliance	All nurse tanks have volume gauge installed. The supply tanks also have volume gauges. Onsite inspection shows all tanks at 85% fill level.
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. [R336.1201a(1)]	March 28, 2018 Compliance	LJ showed me that all 3supply tanks are hooked in parallel to the dual loading station where 4 nurse tanks can be loaded at once. They can load on either side of the rack. They have vapor return lines to regulate the pressure.
1.9 Nitrogen stabilizer shall not be added to any permanent stationary storage tank or to rail or truck transport tanks. [R336.1201a(1)]	March 28, 2018 Compliance	The nitrogen stabilizer is only added to the nurse tanks.
Equipment	March 28, 2018 Compliance	Verification of safety relief valves was not done due to the unsafe conditions of reaching the top of the supply storage tanks. Relief values were all replace in the Fall of 2017.

1.10 All containers shall be filled 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. [R336.1201a(1)]		
1.11 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. [R336.1201a(1)]	March 28, 2018 Compliance	A manual shut off is located near the storage tanks.
1.12 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. [R336.1201a(1)]	March 28, 2018 Compliance	They have a dry lock triggered on pull off's according to LJ.
1.13 The permittee shall not operate EU-AMMONIA unless any liquid lines in rail and transport transfer areas are equipped with back pressure check valves and al 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. [R336.1201a(1)]	March 28, 2018 Compliance	The liquid and vapor lines are recirculated back to the supply tank.
1.14 All hoses shall be replaced five years after date of manufacture or more often if there is evidence of damage or deterioration. [R336.1201a(1)]	March 28, 2018. Compliance	All hoses replaced in Fall, 2018.
1.15 Any vapor or liquid line, exclusive or 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)]	March 28, 2018 Compliance	A tank larger than 55 gallons is utilized. It was confirmed later during the inspection.
1.16 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. [R336.1201a(1)]	March 28, 2018 Compliance	Several signs were in place.
1.17 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. [R336.1201a(1)]	March 28, 2018 Compliance	The setback requirements appear to be met since they are not located close to any of the receptors.
Recordkeeping/Reporting/Notification 1.18 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 EU-AMMONIA. 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. All records shall be kept on file for a period of at least five years and made available to the Department upon request. [R336.1201a(1)]	March 28, 2018 Compliance	There has been no abnormal releases to report.
1.19 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	March 28, 2018 Compliance	There has not been any malfunctions or spills.

shall be kept on file for a period of at least five years and made available to the Department upon request. [R336.1201a(1)]		
1.20 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 for a period of at least five years and made available to the Department upon request. [R336.1201a(1)]	March 28, 2018. Compliance	See previous comment.
Miscellaneous/Allowed Modification 1.21 The permittee shall not replace or modify EU-AMMONIA or any portion of EU-AMMONIA, or install new equipment unless all of the following conditions are met. [R336.1201a(1)] 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/additional equipment a minimum of 10 days before the equipment is replaced, modified or installed. 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. All records shall be kept on file for a period of at least five years and made available to the Department upon request.	August 31, 2010 Compliance	Nothing new has been added recently. LJ mentioned that they may remove all ammonia storage tanks from the facility in a few years.

Onsite Inspection

LJ 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 all the permanent storage tanks were checked and found to be at 85%. The loading rack area appeared to be in good shape with the new hoses evident. LJ pointed out the emergency pullaway protection system in place. See Attachment (2). 2 rows of nurse tanks were present. LJ 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. LJ indicated that all the permanent tanks would be painted this Summer. Some chipped paint was noted on the exterior of the tanks.

Recordkeeping/Permit Requirements Review

Attachment (3) is example NTIP DOT inspection report for one of the nurse tanks. All of the nurse tanks were pressure tested last summer. (They are tested every 5 years.)

Post-Inspection Meeting

I held a brief post-inspection meeting with LJ. I indicated to them that I didn't have any findings but suggested he keep trying to arrange for the fire department to come out to the review the plan or contact the local county emergency agency instead to do the review of the emergency plan. I thanked LJ for his time and cooperation, and I departed the facility at approximately 10:20 am.

Compliance Summary

The Company is in compliance.

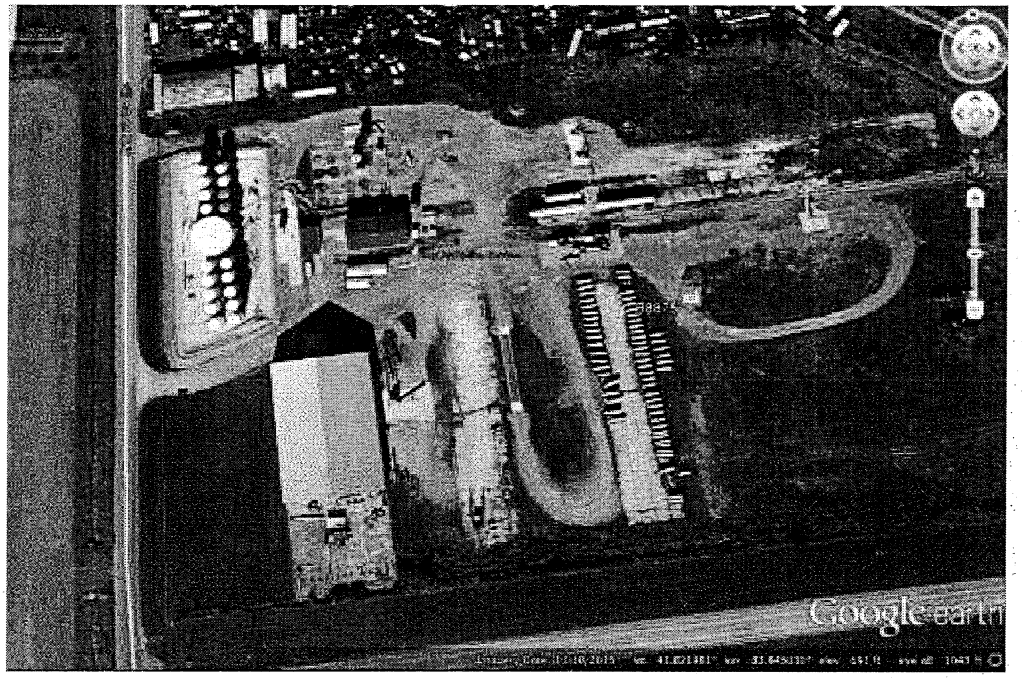


Image 1(Aerial photo) : Aerial photo.

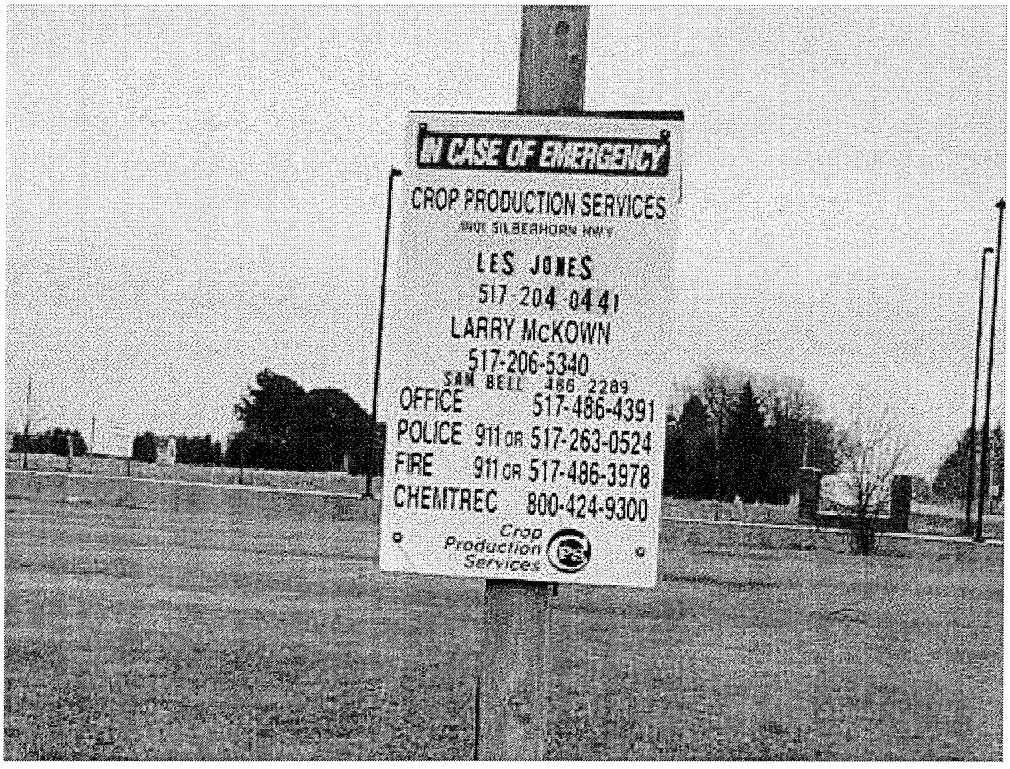


Image 2(Sign) : In Case of Emergency sign

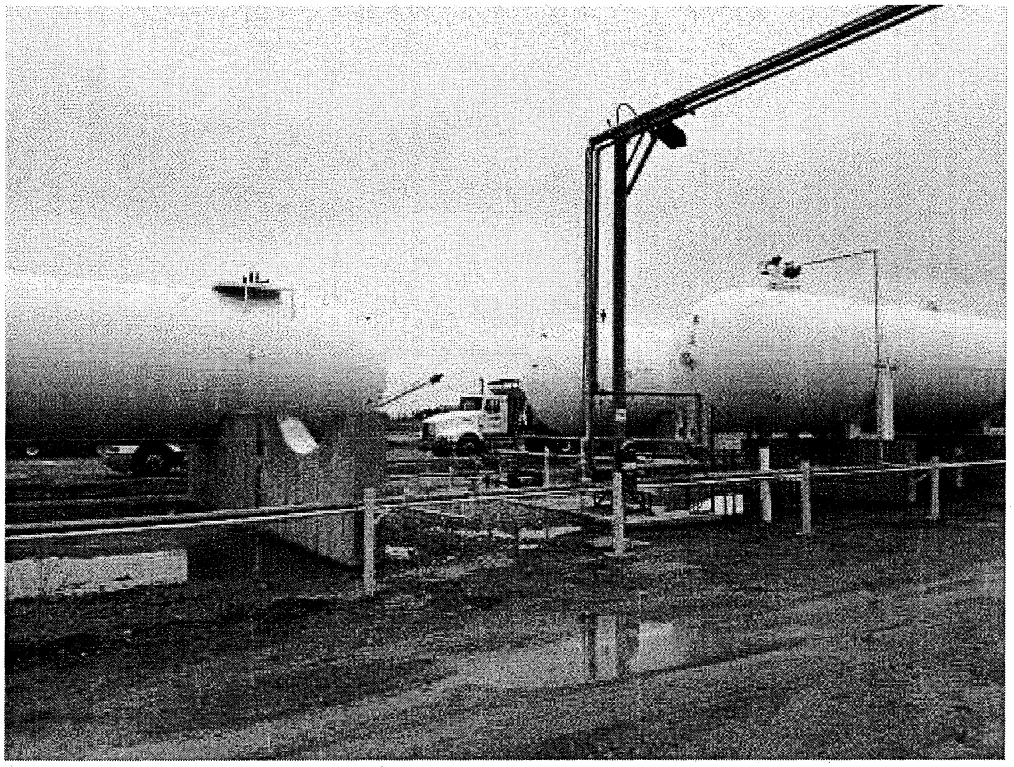


Image 3(Ammonia tnaks) : The 3 ammonia tanks.

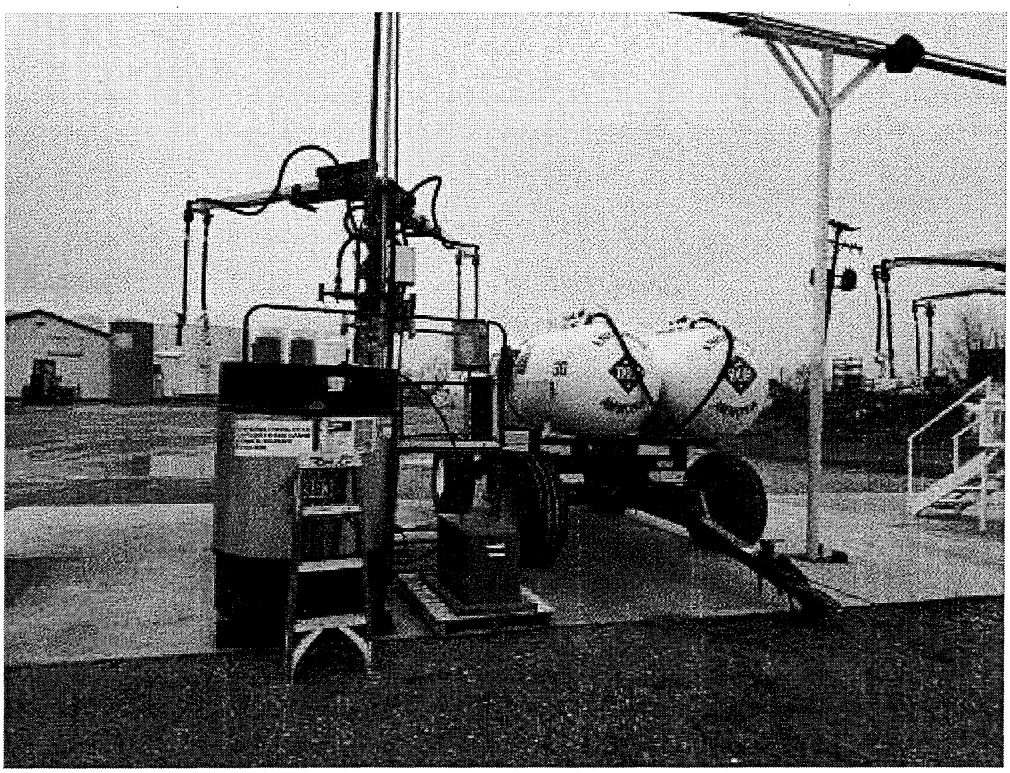


Image 4(Loading rack) : Loading rack.

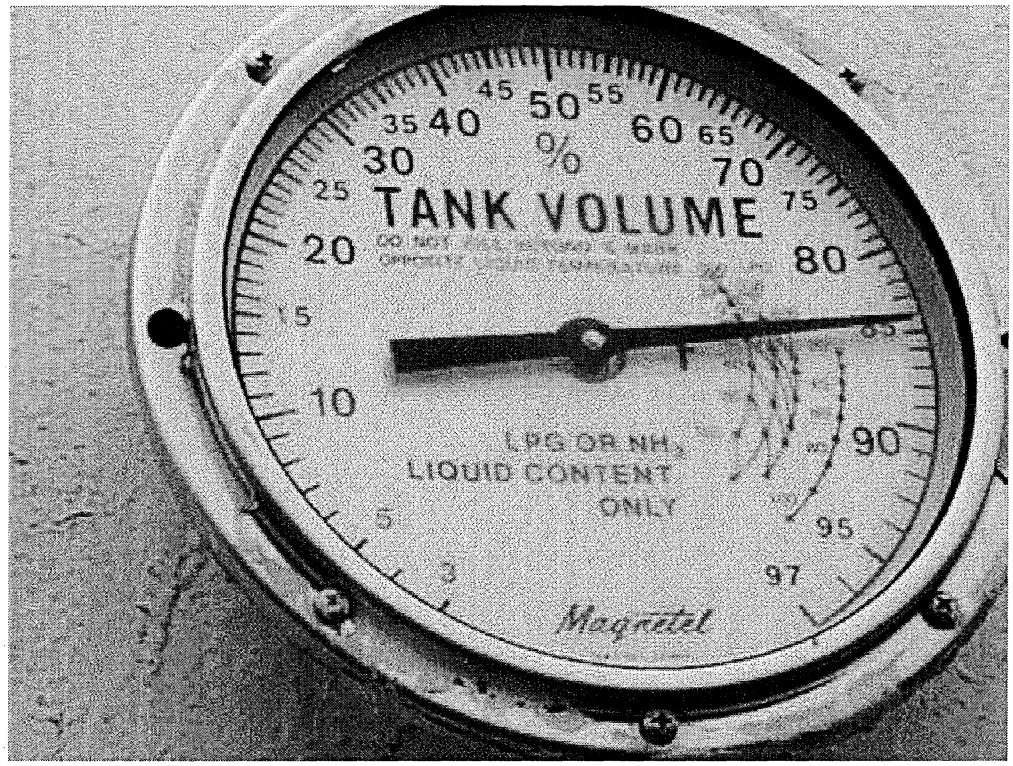


Image 5(Gauge) : Gauge on one of the ammonia tanks showing 85% full.

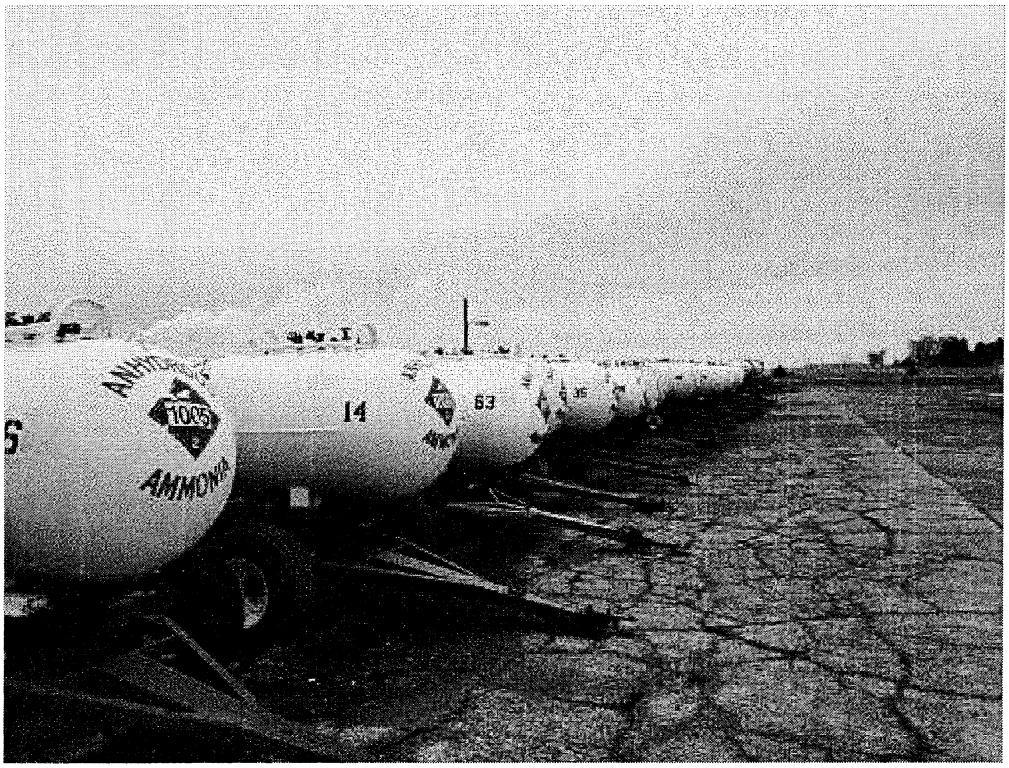


Image 6(Nurse tanks) : Nurse tanks.

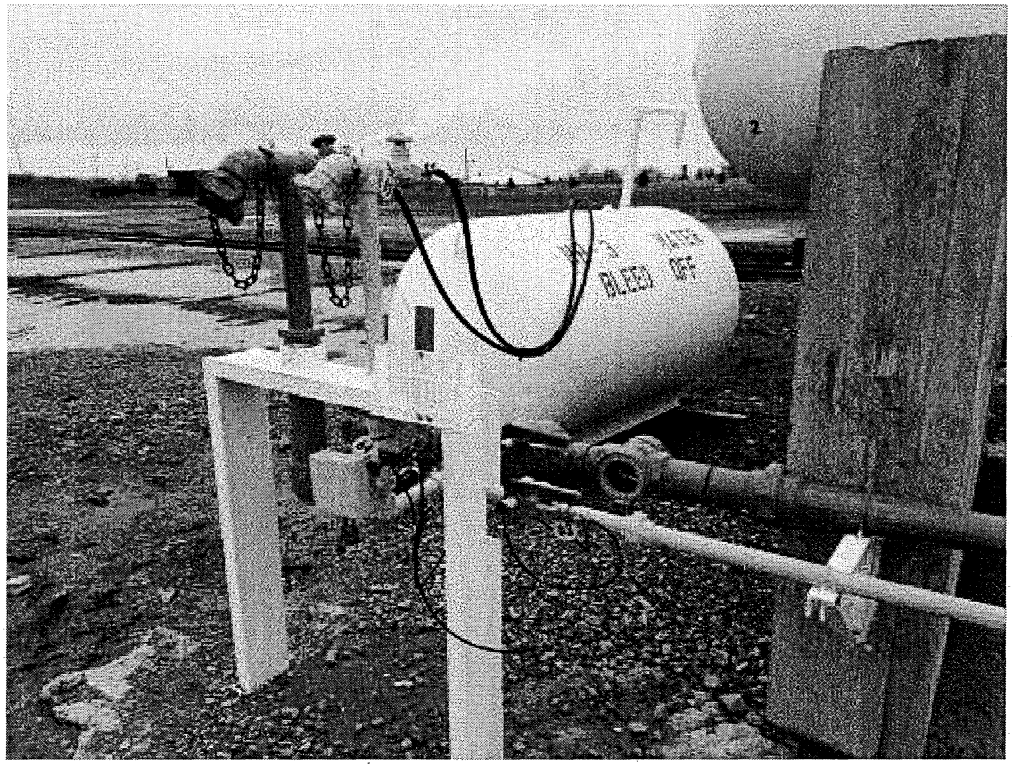
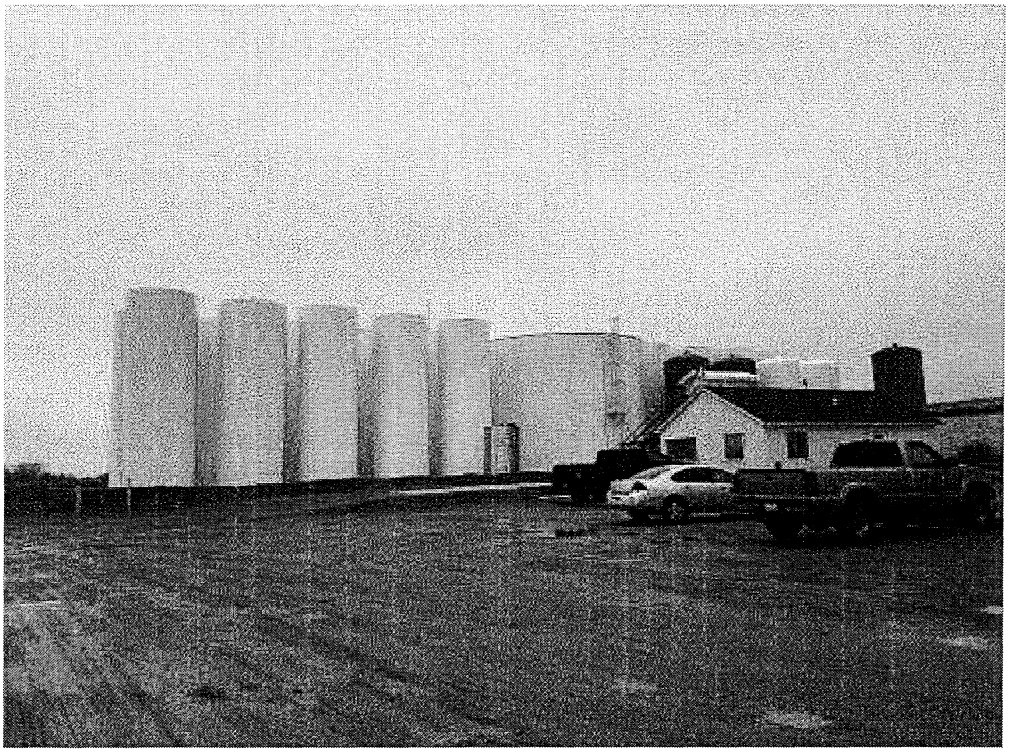


Image 7(Bleed off tank) : Trucks attach vapor lines to this tank when unloading ammonia into main ammonia storage tanks.



[redacted]

NAME M. Kowalchuk DATE 3/30/18 SUPERVISOR