

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

B788467048

FACILITY: Co-Alliance LLP		SRN / ID: B7884
LOCATION: 16724 BAKERTOWN RD., BUCHANAN		DISTRICT: Kalamazoo
CITY: BUCHANAN		COUNTY: BERRIEN
CONTACT: Jeff Grove, Location Manager		ACTIVITY DATE: 04/11/2023
STAFF: Matthew Deskins	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Unannounced Scheduled Inspection		
RESOLVED COMPLAINTS:		

On April 11, 2023 AQD staff (Matt Deskins) went to conduct an unannounced scheduled inspection of the Co-Alliance LP (SRN: B7884) (f.k.a. LaPorte County Co-Op) facility located in Buchanan, Berrien County. The facility has two air use permits (PTI No. 600-81 and 243-03) for two Anhydrous Ammonia tanks, one 16,000 gallons and the other 30,000 gallons. The purpose of the inspection was to determine the facilities compliance with their permits as well as any other state or federal air regulations. Staff departed for the facility at approximately 9:15 a.m.

Staff arrived at the facility at approximately 10:45 a.m. Staff proceeded into the office where they introduced them self to an employee and stated the purpose of the visit. The employee stated that they would probably need to meet with Jeff Grove (Location manager). She then proceeded back to his office to let him know staff was present. Jeff came out to greet staff a few minutes later and staff introduced them self and then exchanged business cards. Staff then explained to Jeff that they had two anhydrous ammonia tanks that had air permits issued for them by our department which contain recordkeeping requirements of various items. Jeff then said he would try to assist staff the best they could but things were kind of chaotic at the present time. Apparently, the Co-Op had just opened the previous day to the local farming community for the start of planting season and they were having some equipment problems that had them really backed-up. Staff stated they understood and would try to move things along as quickly as possible. Jeff also mentioned that the 16,000 gallon tank had been disconnected, abandoned, and was no longer in use. Staff stated they would void out the permit for that tank then.

Staff then proceeded with Jeff out to the maintenance garage where the filing cabinet is kept that contained some of the records. The following lists the special conditions of PTI No. 243-03 and their compliance status with them.

DESIGN PARAMETERS

PROCESS EQUIPMENT COVERED BY THE GENERAL PERMIT: A single anhydrous ammonia storage tank and any associated handling process, nurse tanks or applicator tanks. The nominal tank storage capacity shall not exceed 30,000 gallons.

AQD Comment: Appears to be in COMPLIANCE. The tank doesn't exceed this capacity.

SITE CRITERIA: The anhydrous ammonia storage and handling process 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.

AQD Comment: Appears to be in COMPLIANCE. The process appears to meet all the above setback distances.

STORAGE AND HANDLING EQUIPMENT STANDARDS

Except where specific requirements with these special conditions are applicable and more stringent, the anhydrous ammonia storage and handling process 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 on site.

AQD Comment: Appears to be in COMPLIANCE.

All containers shall be fitted with safety and 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.

AQD Comment: Appears to be in COMPLIANCE. These valves are located on top of the tank and can only be accessed with an extension ladder or manlift. Jeff mentioned that they are changed out every 5 years as part of their maintenance program although he couldn't say in what year it was last done. Taking into account the equipment issues they were having elsewhere, staff asked that he follow up on it when things were less chaotic and let staff know the status. Jeff later followed up with staff and said that they valves are good until July 2023 and they will be replaced at that time.

The permittee shall not operate the process unless a remotely operated internal or external positive shut-off valve is installed to allow access for emergency shut-off of all flow from the stationary storage containers.

AQD Comment: Appears to be in COMPLIANCE. The tank is equipped with a remote shut-off valve that is operated with cables.

The permittee shall not operate the process 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.

AQD Comment: Appears to be in COMPLIANCE. The tank is equipped with a bulkhead.

The permittee shall not operate the process 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.

AQD Comment: Appears to be in COMPLIANCE. The lines for the tank appear to be equipped with the proper valve system.

All hoses shall be replaced five years after the date manufacture or more often if there is evidence of damage or deterioration.

AQD Comment: Appears to be in COMPLIANCE. The hoses appeared to be in good shape and were last replaced in 2022.

A sign shall be present and conspicuously placed at the process entrance stating the emergency phone numbers for the owner, primary operator, local & state police, local fire department, and ambulance service.

AQD Comment: Appears to be in COMPLIANCE. These numbers are located on a lighted sign out near the entrance and also posted on a placard near the tanks.

MONITORING AND REPORTING

The date, duration, and description of any malfunction/spill occurring at the process including estimated amount of ammonia released into the atmosphere. Do not include trace amounts from normal hose coupling bleed downs.

AQD Comment: Appears to be in COMPLIANCE. They have done these notifications in the past.

Date of review and approval of the emergency response plan with the local fire department.

AQD Comment: Appears to be in COMPLIANCE. They have an emergency response plan and had just reviewed it with the fire department the previous week on April 4, 2023.

Date and description of any modification or new installation of any anhydrous ammonia process equipment.

AQD Comment: Appears to be in COMPLIANCE. Staff was told that they haven't modified or installed any new equipment and staff didn't observe anything.

OPERATIONAL PARAMETERS

The permittee shall not operate the process unless the inspection and maintenance program specified in Appendix A has been implemented and maintained.

AQD Comment: Will Consider them to be in COMPLIANCE. The facility does the various inspections as required but they were using their own checklist and not the one included as Appendix A in the permit. Their checklist included a majority of the same things required to be inspected so staff won't consider them in non-compliance, but staff later sent Jeff the General Permit for Anhydrous Ammonia tanks that contains all the Special Conditions along with Appendix for Inspections.

The permittee shall not operate the process 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.

AQD Comment: Appears to be in COMPLIANCE. The facility has this an approved emergency response plan and it gets reviewed annually and updated if necessary.

The permittee shall not operate the process unless all transfer operations including transport deliveries are performed by a reliable person properly trained and made responsible for proper compliance with applicable requirements.

AQD Comment: Appears to be in COMPLIANCE. Employees receive training on transfer operations.

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.

AQD Comment: Appears to be in COMPLIANCE.

Nurse tank filling shall be done only from a permanent stationary storage tank

AQD Comment: Appears to be in COMPLIANCE. Staff was told all the nurse tank filling is done from the single 30,000 gallon tank.

Nurse and applicator tanks shall be filled to no more than 85% of liquid capacity by volume. Storage tanks may be filled according to temperature density correction tables where tanks have a thermometer and suitable level gauge.

AQD Comment: Appears to be in COMPLIANCE. The tank is equipped with a gauge based on percentage filled and it is policy only to fill it to 80%.

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.

AQD Comment: Appears to be in COMPLIANCE. The tank is vented through two approximately 500-gallon water filled propane tanks.

Vapor return lines shall be employed whenever necessary to ensure an accidental release from the pressure release valves will not occur during ammonia transfer operations.

AQD Comment: Appears to be in COMPLIANCE. The tank is equipped with vapor return lines.

Nitrogen stabilizer shall not be added to any permanent stationary storage tank or to rail or truck transport tanks.

AQD Comment: Appears to be in COMPLIANCE. Staff was told that they don't do this.

The permittee shall notify the PEAS and/or District Supervisor immediately of any abnormal release of anhydrous ammonia from the facility. A normal release includes only hose coupling bleed downs, operation of hydrostatic relief valves, and normal pressure relief from the safety relief valves. Relief due to overfilling is not normal.

AQD Comment: Appears to be in COMPLIANCE. The facility has notified both the PEAS and District Supervisor of past releases when necessary.

ALLOWED MODIFICATIONS

The permittee may replace anhydrous ammonia storage and handling equipment, or may install new anhydrous ammonia storage and handling equipment without applying for a new general permit to install, provided all of the general permit to install applicability criteria will continue to be met after the replacement or modification.

AQD Comment: Appears to be in COMPLIANCE. Staff was told that they haven't replaced or installed anything additional.

The permittee shall update the general permit by submitting a new Process Information form EQP5731 to the Permit Section and the District Supervisor, listing all existing and new/additional equipment a minimum of 10 days before the equipment is installed.

AQD Comment: Appears to be in COMPLIANCE. The facility hasn't added anything additional.

INSPECTION CONCLUSION: Staff will consider the facility to be in COMPLIANCE at the present time. Although the facility wasn't using the checklist included in Appendix A, their own checklist included the majority of the items that needed to be inspected. Staff later e-mailed Jeff the General Permit for Anhydrous Ammonia tanks that contains all the Special Conditions along with Appendix for Inspections. Staff made him aware that a violation notice could be issued in the future should it be found that they are not following these requirements.

Also, during the inspection staff noted that the facility numerous propane, gasoline, and fuel oil tanks. The propane tanks appear to be under the size limit to meet the Rule 284(b) permit exemption. The gas and fuel oil is sold to farmers. These tanks are above ground and are all 15,000 gallons or smaller. Staff felt that these tanks would meet the Rule 284(g)(i) permit exemption.

NAME Matt Dark

DATE 4-13-23

SUPERVISOR R12 4/13/23