



REGION 5

CHICAGO, IL 60604

MEMORANDUM

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
Ag-Land FS Inc. - Hanna City, Hanna City, Illinois

FROM: Sasa Dunovic, Inspector/Enforcement Officer
AECAB (IL/IN)

THRU: Nathan Frank, Section Supervisor
AECAB (IL/IN)

TO: File

BASIC INFORMATION

Facility Name: Ag-Land FS Inc. - Hanna City (Ag-Land)

Facility Location: 1213 S. Hanna City Glasford Rd, Hanna City, IL 61536

Date of Inspection: October 23, 2024

EPA Inspector(s):

1. Sasa Dunovic, Inspector/Enforcement Officer
2. Erin DuMontelle, Environmental Engineer

Other Attendees:

1. Eric Long, Operations Manager
2. Jarret Summers, Plant Manager
3. Court Hruska, HR
4. Jenny Poole, Safety and Environmental Specialist – Growmark, Inc.
5. Cory Merriman, Safety and Environmental Manager – Growmark, Inc.

Contact Email Address: elong@aglandfs.com - Eric Long

Purpose of Inspection: To assess compliance with the Chemical Accident Prevention Provisions (CAPP) at 40 C.F.R. Part 68

Facility Type: Storage of fertilizers for sale to farmers

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Date of Inspection: October 23, 2024

Regulations Central to Inspection: Clean Air Act, Part 68 – Chemical Accident Prevention Program

Arrival Time: 8:00 a.m.

Departure Time: 10:40 a.m.

Inspection Type:

- ☐ Unannounced Inspection
- ☒ Announced Inspection

OPENING CONFERENCE

- ☒ Presented Credentials
- ☒ Stated authority and purpose of inspection
- ☒ Provided Small Business Resource Information Sheet
- ☒ Provided CBI warning to facility

The following information was obtained verbally from Ag-Land personnel unless otherwise noted.

Process Description:

The primary activity at Ag-Land's facility (the Facility) is the storage of fertilizers for sale to farmers. Anhydrous ammonia is received, stored, and distributed for direct application as a crop production nutrient. The storage and handling system includes four storage tanks, one loading riser, associated plumbing, and 69 nurse tanks. The four storage tanks are interconnected through valves which can be opened or closed to equalize the amount of anhydrous ammonia between the tanks. 95 percent of the anhydrous ammonia sold at the Facility is delivered to farmers and applied to the ground by facility employees. The remaining 5 percent of the ammonia is sold directly to farmers. These farmers will either pickup nurse tanks or have them delivered and apply the anhydrous ammonia to the ground themselves. Ag-Land does not accept farmer-owned nurse tanks to be filled at the Facility.

Staff Interview:

The Facility typically operates from 7 a.m. to 4 p.m., but during the ammonia application seasons - spring (April through July) and fall (September through December) - it operates during all daylight hours. About 10 people are employed at the Ag-Land facility in Hanna City, with approximately 5 of them working in ammonia distribution. Ag-Land relies on Growmark, Inc. (Growmark) for safety, consulting, training, supply, and other logistical needs. Through Growmark, orders are scheduled, and contracted drivers deliver and offload anhydrous ammonia into the storage tanks at the Facility's offloading station. The delivery drivers can offload ammonia 24/7; if there are issues, the drivers are told not to fill and call management. The offloading, storage, and nurse tanks areas are not covered by video surveillance or ammonia detectors.

Ag-Land has installed two electronic E-Stop buttons, whose activation will de-energize pumps and valves on the storage tanks, and they will fail closed.

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One E-Stop button is installed next to the offloading station and the other on the riser. The Facility also has a handheld device that is located in the office building and would act as an E-stop to allow remote closing of the tanks' valves in an emergency.

The storage tanks are equipped with both digital and mechanical level indicators and never filled to more than 85% of their capacity. Growmark trains delivery drivers on safety ammonia handling, including the offloading procedures. A digital transmitter sends information to the Growmark servers, which send the information to the plant manager smartphone app; information includes ammonia levels in tanks and custom warnings and notifications chosen by the app user.

The majority of the mechanical integrity inspections and preventative maintenance are done in-house by Ag-Land employees. Ag-Land employees conduct visual inspections of nurse tanks twice a year, between application seasons. Additionally, the storage tanks and associated piping are inspected annually. For these inspections, they use a checklist developed as part of the facility's inspection and maintenance procedures for anhydrous ammonia storage. Furthermore, facility employees replace the pressure relief valves on the storage tanks every five years. Ag-Land uses a third-party contractor to complete pressure testing and wall thickness measurements for all the nurse tanks that are missing name plates on a 5-year basis. Along with the inspections completed by Ag-Land, there are annual safety inspections completed by Growmark, as well as the Illinois Department of Agriculture.

Ag-Land employees are trained on different topics when first hired, annually, and every three years after that. These trainings are provided by Growmark and Illinois Department of Agriculture as initial and refresher training.

On April 26, 2019, there was an accidental release of ammonia at the facility. The incident occurred during the filling of a nurse tank when an employee attempted to fix a small leak around the stem of the liquid withdrawal valve. This resulted in the valve stem, which has reverse threads, becoming unscrewed from the main valve body which lead to a release of anhydrous ammonia. The release caused burns and inhalation injuries to two employees, one of whom required hospitalization. Since the accident, no significant changes have been made to the process.

TOUR INFORMATION

EPA Toured the Facility: Yes

Data Collected and Observations:

During the inspection, EPA visited the offloading area, bulk storage tanks, and nurse tanks. The offloading area and hose connections were equipped with labels and warning signs, and there was one emergency stop (E-Stop) switch positioned in this area. All bulk storage tanks were equipped with level meters that indicated that they were full at the time of the inspection.

The riser was not in use. There were four possible loading stations located on the riser, and they, along with their associated loading valves, were locked in their boxes.

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EPA noted that there were no eyewash stations in the offloading area or near the riser. Representatives from Ag-Land explained that they maintain an open bucket of water in these areas for emergency use. During the inspection, the bucket was found to be less than half full.

Additionally, EPA observed that there were no wind indicators in the vicinity of the offloading area, bulk storage tanks, and nurse tanks. The Ag-Land representatives acknowledged this observation and stated they would install either a flag or a windsock soon. EPA also visually inspected some nurse tanks and checked the expiration dates of their associated hoses. The Ag-Land representatives confirmed that all nurse tanks were fully filled and ready for use in the application process.

Photos and/or Videos: were taken during the inspection and are listed in Appendix A.

Field Measurements: were not taken during this inspection.

RECORDS REVIEW

The following includes the categories and associated observations made by the EPA regarding the Risk Management Program documents that were reviewed before and during the inspection:

1. Management structure in terms of the RMP and who has responsibility for the different program elements and how that is documented.
2. Most current Off-site Consequence Analysis (OCA) for each process and all supporting documentation for the analysis.
 - The reviewed OCA was dated on May 30, 2019.
 - Growmark representatives stated that they have reviewed the OCA recently but did not change the previous OCA date or anything in it since the covered process and offsite characteristics did not change.
 - During the 2019 OCA, worst-case release scenario modeling information was obtained from lookup tables provided by The Fertilizer Institute (TFI) derived from the Dense gas dispersion (DEGADIS) model.
 - The DEGADIS model estimated the downwind distance to the toxic endpoint to be approximately one-third of what modern models, such as RMP*Comp, indicate. As a result, the potentially affected population was also significantly lower than it would have been if the analyses had been conducted using other models.

3. Process Safety Information including SDS, intended inventories, upper and lower limits, equipment specifications.
 - The reviewed information on the number of nurse tanks indicated a slight discrepancy compared to the actual number of these tanks. This deficiency was corrected during the inspection.
4. Two most recent Hazard Reviews for each covered process.
 - Ag-Land uses Ammonia Facility Hazard Review Checklist based on ANSI/CGA G-2.1-2014 for its Hazard Reviews.
 - The most recent Hazard Review was conducted on June 5, 2024, and no deficiencies or recommendations were identified.
 - The prior Hazard Review took place on May 28, 2019. Again, no deficiencies or recommendations were noted; however, Ag-Land did not include the accidental release that occurred on April 26, 2019, in that review.
5. Operating Procedures.
6. Training documentation on employees who operate and maintain the covered process.
7. Maintenance records including written procedures to maintain the on-going integrity of process equipment and documentation on inspections/testing/repairs of covered process equipment.
8. Compliance Audits, the two most recent audits, audit reports, findings of the audits, and how these findings have been resolved or corrected.
 - The most recent Compliance Audit was conducted on October 11, 2024 (October Compliance Audit). This audit revealed that it should have been done in 2022 and recommended that Compliance Audits be performed every three years.
 - The prior Compliance Audit was done on May 28, 2019, and resulted in no deficiencies or recommendations.
9. Incident Investigations performed for the covered process, reports from the investigations, documentation on how the report findings and recommendations were addressed and resolved.
 - Ag-Land did not investigate any incidents in the last 5 years.

10. Emergency Response Plan or Emergency Action Plan, including supporting documentation for the annual coordination activities with the local response organizations (LEPC and Fire Department).
11. Risk Management Plan
 - The most recent Risk Management Plan was submitted on June 5, 2024.
 - The prior Risk Management Plan was submitted on June 12, 2014, and updated on June 11, 2019.
 - The 2024 Risk Management Plan lacks the following information:
 - Date of last coordination with the Local Emergency Planning Committee (LEPC),
 - Date of last coordination with the Local Response Agency,
 - Date of the most recent notification exercise, as required in § 68.96(a).

CLOSING CONFERENCE

- ☒ Provided U.S. EPA point of contact to the facility.

Requested documents:

- The 2019 accident investigation report.

Compliance Assistance:

The importance of having accurate and up-to-date documentation regarding Ag-Land's offsite consequence analysis, process safety information, compliance audits, coordination with the LEPC and Local Response Agency, and risk management plan was stressed to the Facility.

Concerns:

- The reviewed OCA is dated May 30, 2019, and used model for the worst-case scenario estimated the downwind distance to the toxic endpoint to be approximately one-third of what modern models, such as RMP*Comp, indicate. As a result, the potentially affected population was also significantly lower than it would have been if the analyses had been conducted using other models.
- Ag-Land did not include the accidental release that occurred on April 26, 2019, in the May 28, 2019, Hazard Review.
- The October Compliance Audit was more than two years late since the prior one was done on May 28, 2019.
- The most recent Risk Management Plan was submitted on June 5, 2024, while the last one was submitted on June 12, 2014.
- The Facility does not currently have a water tank near the offloading station.
- The Facility did not have a way to indicate wind direction at the time of the inspection.

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DIGITAL SIGNATURES

Report Author: _____
Digitally signed by Dunovic, Sasa
Date: 2024.11.19 11:52:28 -06'00'

Section Supervisor: _____
Digitally signed by Frank, Nathan
Date: 2024.11.19 13:24:49 -06'00'

APPENDICES

- Appendix A: Digital Image Log and Digital Video Log

Facility Name: Ag-Land FS Inc. - Hanna City
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APPENDIX A: DIGITAL IMAGE LOG AND DIGITAL VIDEO LOG

Inspector Name: Erin DuMontelle **Archival Record Location:** [Images](#)

Image Number	File Name	Date and Time (CDT)	Description of Image
1	PA230110.JPG	10/23/2024 10:04	18,000-gallon storage tank with a level indicator, its digital transmitter, and a pump.
2	PA230111.JPG	10/23/2024 10:06	18,000-gallon storage tank and nurse tanks
3	PA230112.JPG	10/23/2024 10:08	Unloading area hose connections and emergency shut off button
4	PA230113.JPG	10/23/2024 10:08	Two sets of the pressure release valves with rain caps on one of the storage tanks.
5	PA230114.JPG	10/23/2024 10:09	12,000-gallon storage tank level indicator
6	PA230115.JPG	10/23/2024 10:19	Riser