

CAA112(r) INSPECTION REPORT

Name: Heartland Co-op - Earlham	
Address: 1409 105 th Street, Earlham, Iowa	Date of Inspection: September 20, 2022
County: Madison	Case No: 22IA0920
Phone: (515) 974-4323	RMP No: 1000082584
High Risk: Yes	FRS No: 1000 0000 4817
CAA Title V: No	Program Level: Program 2
Mailing Address: 2829 Westown Parkway, Suite 220, West Des Moines, Iowa 50266	
Process: Anhydrous ammonia storage tanks, nurse tanks, bulk ammonia receiving and dispensing appurtenances	

SUMMARY OF OBSERVATIONS

As a result of the inspection at the Heartland Co-op - Earlham facility and post-inspection review of the documents and information obtained during the inspection, the following deficiency(ies) was/were identified:

- 1. Heartland Cooperative failed ensure that the process is designed in compliance with ANSI CGA G-2.1 2014 as per 68.48(b).**
- 2. Heartland Cooperative failed to maintain the on-going mechanical integrity of the process equipment as per §68.56(d).**

INTRODUCTION

A compliance inspection of the Heartland Co-op – Earlham facility was performed on September 20, 2022 by Diana Chaney lead inspector, and Lynelle Ladd, inspector-in-training, with the U.S. Environmental Protection Agency (EPA), Region VII.

Heartland Co-op - Earlham was selected for inspection because of an anhydrous ammonia release on May 13th, 2019. On September 19, 2022, the inspection was coordinated with Bill Chizek, EVP of Operations via a telephone call. An email confirmation of the inspection date and time was provided and included some information on CAA 112(r) and CERCLA non 313. A follow-up telephone call was received from Nick Steinbach to confirm the inspection date, time and other specifics.

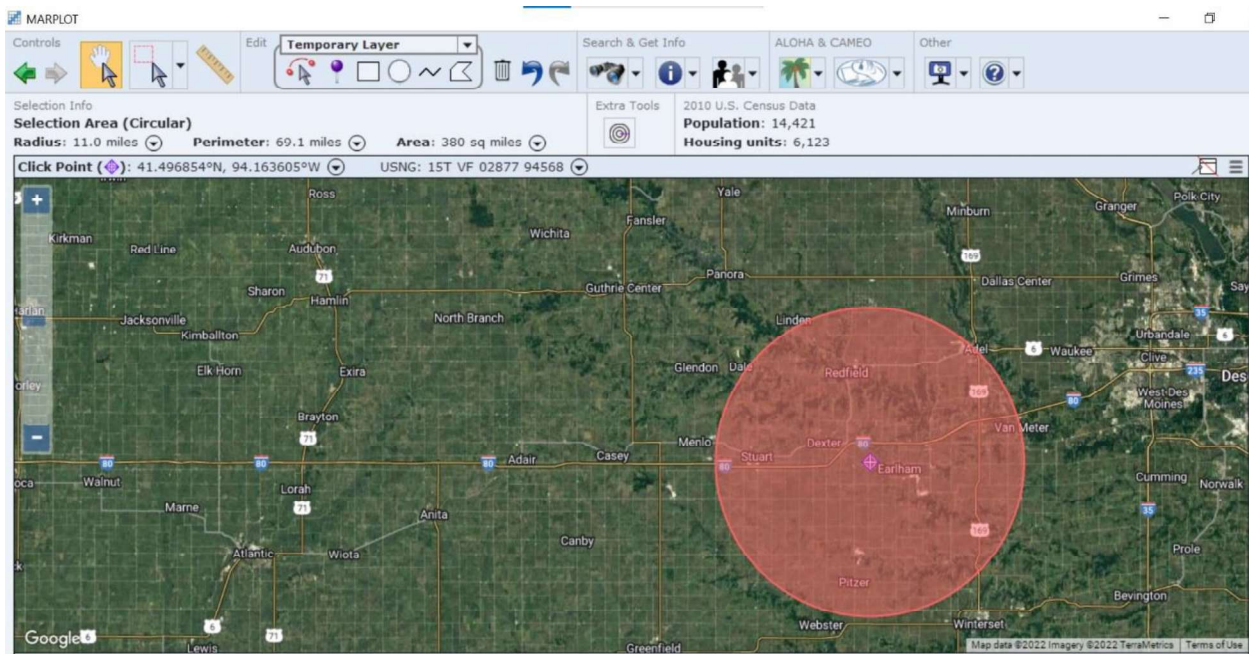
The purpose of the inspection was to determine if the facility complies with Section 112(r) of the Clean Air Act (CAA), as amended in 1990, the reporting provisions of the Emergency Planning and Community Right to Know Act (EPCRA), and the release reporting provisions of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

HISTORY OF BUSINESS

Heartland Co-op – Earlham is an Anhydrous Ammonia Retailer and provider of agronomy products located in Earlham, Iowa. Heartland Co-op - Earlham was previously owned and operated by Landus Cooperative and was purchased by [Heartland Co-op](#) in March 2022. The parent company, Heartland Co-op, has been in business since 1987 and has approximately 750 employees and operates 90 other agronomy facilities in addition to the facility in Earlham. The

Heartland Co-op - Earlham uses the North American Industry Classification System (NAICS) code 424910, Agricultural chemicals merchant wholesalers, to classify its primary industrial operations.

Heartland Co-op - Earlham is located at 1409 105th Street, Earlham, Madison County, Iowa. Based on the 2010 Census, 14,421 residents which includes 6,123 housing units live within an 11 mile radius of the facility.



PERSONS INTERVIEWED AND INDIVIDUAL RESPONSIBILITIES

Name	Title/Responsibilities
Mattea Contreras	Safety & Compliance Specialist
Nick Steinbach	Director of Safety & Compliance
Donald Unti	Safety & Compliance Specialist
Lee Irwin	Location Manager

OPENING CONFERENCE

The opening conference and inspection began at 9:09 am on September 20th, 2022. Introductions of EPA inspection staff and facility representatives participating in the opening conference were made. Facility representatives participating in the opening conference were Nick Steinbach, Donald Unti, and Mattea Contreras. The facility representatives were told that the inspection would be performed under the authority of the CAA's Chemical Accident Prevention Provisions. The inspection process was detailed to the facility representatives which includes discussing facility operations, reviewing, and obtaining scans or copies of applicable records, a facility walk-through and photographs of facility processes and operations. The facility representatives were notified that at the end of the inspection, an exit interview to explain inspection findings would be performed. At the end of the exit interview any questions the facility representatives had would be answered, they would be given copies of forms completed and a receipt for documents copied or scanned during the inspection.

The facility representatives were informed they had the right to claim Confidential Business Information (CBI) and informed that a Confidentiality Notice would be provided at the end of the inspection to make any CBI claims. The representatives were shown the CBI form. In addition to CBI, the facility representatives were told and provided with a copy of U.S. Federal Code 1001 and 1002 pertaining to false statements and documents.

RISK MANAGEMENT PLAN

Landus Cooperative seems to have completed the executive summary, off-site consequences analysis, and section nine information in an accurate & timely fashion. The risk management plan was submitted September 19th, 2019, and can be seen in Appendix #2.

HAZARD ASSESSMENT

The hazard assessment was requested, and the facility provided the documents which can be found in Appendix 4. The parameters for offsite consequence analysis were followed. RMP*Comp was utilized for the worst-case scenario (WCS) and alternative release scenario (ARS). The distance-to-endpoint (DTE) for Anhydrous Ammonia was 11 miles for the WCS and 0.7 miles for the ARS. The population potentially affected by WCS is 14,500. The offsite consequence analysis was generated on April 2nd, 2022.

SAFETY INFORMATION

Regarding the regulated chemical, Anhydrous Ammonia, at Heartland Cooperative:

Quantity - pounds	
Maximum Intended Inventory	719,415
Actual Quantity at the Time of Inspection	598,050
Quantity Listed on RMP	628,000

Heartland Cooperative compiled information on the hazards of the regulated substances stored on site. The safety information included information pertaining to the hazards of Anhydrous Ammonia, which can be seen in Appendix 5.

HAZARD REVIEW

The Earlham facility's most recent hazard review was completed while still under Landus Cooperative's management, it was completed on October 1st, 2018 using "What If" method. A document regarding how the hazard review is to be conducted was provided. The hazard review addresses hazards, safeguards, and equipment. The most recent process hazard analysis and extended accident history documents can be seen in Appendix 6.

STANDARD OPERATING PROCEDURES (SOPs)

The operating procedures for Heartland Cooperative can be found in Appendix 7. The SOPs covered process that addressed all seven elements of each operating phase. The operating limits, consequences of deviation, steps required to correct or avoid deviation were all addressed as well as the safety and health considerations.

TRAINING

Heartland Cooperative trains on employees on the hazards of anhydrous ammonia, as well as proper operating procedures. Employees are trained when they begin working at Heartland Cooperative and refresher training is performed annually. The annual training tests attendee's knowledge of anhydrous ammonia hazards. Training Policy and supporting documentation can be seen in Appendix 8.

MAINTENANCE

Heartland Cooperative has a maintenance policy which includes Bulk tanks and Nurse tanks. The maintenance schedules are in accordance with ANSI CGA G-2.1 2014. The maintenance policy and inspection schedule for a bulk tank and nurse tank can be found in Appendix 9.

Heartland Cooperative was in the process of painting the bulk tanks the day of the inspection, the portions of the bulk tanks that were not yet painted had visible rust. Proper signage was missing from the tanks due to the stage of painting. Some of the nurse tanks needed fresh paint and signage. Not all the bulk tanks had 1/3 circumference supports as specified in ANSI CGA G-2.1 2014. Two of the three bulk tanks were filled past 85% as specified in ANSI CGA G-2.1 2014, these can be seen in photos 27 & 37 of the photo log. The North tank's data plate is illegible. Due to deviation from ANSI CGA G-2.1 2014, I find the deficiency:

- 1. Heartland Cooperative failed ensure that the process is designed in compliance with ANSI CGA G-2.1 2014 as per 68.48(b).**
- 2. Heartland Cooperative failed to maintain the on-going mechanical integrity of the process equipment as per §68.56(d).**

COMPLIANCE AUDIT

Heartland Cooperative provided the August 16, 2022 compliance audits, as well as, the November 4, 2019 compliance audit which was performed under Landus Cooperative management. The compliance audits can be seen in Appendix 10.

INCIDENT INVESTIGATION

Heartland Cooperative has prepared for Incident Investigation with a form can be found in Appendix 11. The form includes date of incident, date investigation began, incident description, contributing factors, and recommendations as a result. Incidents are also tracked in the RCI platform, the electronic system heartland uses.

EMERGENCY PLAN

The facility plans to CALL 911 in the event of a release. Heartland Cooperative coordinates with the Madison County LEPC.

MANAGEMENT SYSTEM

Heartland Cooperative provided a risk management program organization chart to document their management system, which can be seen in Appendix 13. Lee Irwin and Nick Steinbach oversees the majority of the implementation of the RMP at the facility.

CLOSING CONFERENCE AND EXIT INTERVIEW

All scanned Recorded on the Receipt of Samples and Documents form, which was signed by Nick Steinbach. Preliminary Findings were reviewed, and it was explained that more maybe identified upon further review. Nick Steinbach signed the Preliminary Findings form. The signed forms can be seen in Appendix 1. The next steps were described to the facility, the report would be written, then reviewed by management, a case review officer would be assigned and finally the facility will be sent a copy of the finalized report. The inspection ended on September 20, 2022 5:12pm.

Chaney, Diana Digitally signed by Chaney, Diana
Date: 2023.04.10 10:24:41 -05'00'

Diana Chaney
Compliance Inspector

DAVE HENSLEY Digitally signed by DAVE
HENSLEY
Date: 2023.04.11 09:07:34 -05'00'

Dave Hensley
Chemical Accident Prevention
Section Chief

APPENDICES

- 1 – Inspection Forms
- 2 – Risk Management Plan
- 3 – Tier II
- 4 – Hazard Assessment
- 5 – Safety Information
- 6 – Hazard Review
- 7 – Standard Operating Procedures
- 8 – Training
- 9 – Maintenance
- 10 – Compliance Audit
- 11 – Incident Investigation
- 12 – Emergency Plan
- 13 – Management System
- 14 – Photo Log