

REPORT OF RCRA COMPLIANCE EVALUATION INSPECTION

At

A-ONE GEOTHERMAL

1645 135th Street
Earlham, Iowa 50072
515-758-2559

EPA ID Number: IAR000526152

On

January 24, 2024

By

TOEROEK ASSOCIATES, INC.

For

U.S. ENVIRONMENTAL PROTECTION AGENCY

Region 7

Enforcement and Compliance Assurance Division

INTRODUCTION

At the request of the Enforcement and Compliance Assurance Division/Chemical Branch/RCRA Section (ECAD/CB/RCRA) of the U.S. Environmental Protection Agency (EPA) Region 7, Toeroek Associates, Inc., and its subcontractor CLAENE Group (Toeroek team) conducted a hazardous waste compliance evaluation inspection (CEI) at A-One Geothermal (A-ONE) at 1645 135th Street in Earlham, Iowa. The CEI was conducted under the authority of Section 3007 of the Resource Conservation and Recovery Act (RCRA), as amended. The CEI covered hazardous waste generator requirements, used oil management, and universal waste requirements, as applicable. This report and its attachments present the results of the CEI.

PARTICIPANTS

A-One:

Lucas McNair, President
Derek Jorgensen, Service Technician

Toeroek Team:

Clifford Nelles, Inspector, 816-213-5192

INSPECTION PROCEDURES

Prior to the CEI at A-ONE on January 24, 2024, I conducted a drive-by visual inspection. I did not observe any areas of concern during the drive-by. At approximately 8:05 a.m., I entered the main office and explained to Mr. McNair that I was there to conduct a CEI. I asked to speak with Ms. Lori McNair, who was listed as the RCRA site contact on the Notification Acknowledgment/Verification Report (Verification Report) provided by EPA prior to the inspection (Attachment 1). Mr. McNair explained that Mr. Derek Jorgensen was the person who handled environmental concerns. He stated that Mr. Jorgensen had the day off, but that he would contact him. Mr. Jorgensen arrived at the facility approximately 10 minutes later. I introduced myself to Mr. Jorgensen and explained the purpose and scope of the CEI. Messrs. McNair and Jorgensen and I adjourned to a conference room where I proceeded to conduct an entry briefing with them.

During the entry briefing, I presented my business card and EPA credentials to Messrs. McNair and Jorgensen. I explained the scope and procedures for the CEI. I explained the facility's right to make confidentiality claims for any or all the information obtained and provided a Notice Regarding Proprietary/Confidential Business Information. I stated that at the conclusion of the CEI, Mr. Jorgensen would be presented with a Confidentiality Notice (Notice) with which he could make or not make a claim of confidentiality for the facility. I also provided Messrs. McNair and Jorgensen a copy of U.S. Federal Codes 1001 and 1002, concerning communication of false statements and documents to federal inspectors, and RCRA Section 3007, explaining EPA's inspection authority, both of which they read.

Copies of the following documents were left with Mr. Jorgensen during the inspection:

- RCRA Facility Access Information Sheet
- RCRA Section 3007
- U.S. Federal Codes 1001 and 1002
- Notice Regarding Proprietary/Confidential Business Information

The following documents were left electronically with Messrs. McNair and Jorgensen.

- E-Manifest Fact Sheet: Generators
- Managing your Hazardous Waste: A Guide for Small Businesses
- U.S. EPA Small Business Resources Information Sheet
- Solvent-Contaminated Wipes Final Rule Summary Chart
- IDNR Excluded Solvent-Contaminated Wipes Rule: Management Practices for Wipes, Rags, and Shop Towels
- Recycling Electronics: A Guide for Businesses
- Lead-Based Paint Activities: Handling and Disposal
- Battery Recycling/Disposal
- Management of Fluorescent Lamps for Businesses
- Incompatible Chemicals
- Universal Wastes – Including Aerosol Cans
- TCLP – Toxicity Characteristic Leaching Procedure
- Part 279 Requirements: Used Oil Management Standards

- EPA Region 7 Emergency Response Program
- Chemical Facility Anti-Terrorism Standards
- Iowa Environmental Guide for Businesses

I reviewed the Verification Report (Attachment 1) with Messrs. McNair and Jorgensen during the CEI. Based on this review, I changed the facility's hazardous waste generator status from large quantity generator (LQG) to nongenerator. I also changed the site contact information to reflect Mr. Jorgensen as the site contact. I made no other changes to the Verification Report.

I conducted a visual inspection of the facility, accompanied by Mr. Jorgensen. After the visual inspection, I reviewed safety data sheets (SDSs) for chemicals used at the facility. I prepared and completed a site-specific inspection checklist to document my observations.

At the conclusion of the CEI, I conducted an exit briefing with Messrs. McNair and Jorgensen. During the exit briefing, I provided a Receipt for Documents and Samples, which Mr. Jorgensen signed, acknowledging receipt (Attachment 2). I provided Mr. Jorgensen the Notice, which he signed indicating no confidential business information had been provided (Attachment 3). I made no preliminary findings during the inspection so a Notice of Preliminary Findings (NOPF) was not left with the facility at the conclusion of the CEI. However, I explained to Messrs. McNair and Jorgensen that findings might be added by EPA after review of the inspection report.

A Google Earth aerial photograph of the facility is included as Attachment 4. The three photographs taken during the CEI are in Attachment 5, all of which are described in this report.

FINDINGS AND OBSERVATIONS

1. Facility Description and General Information

A-ONE constructs geothermal heating and cooling systems for homes and businesses. The facility also lays fiber optic cables and recently purchased a business that cleans out industrial boilers. All of the work is performed at customer sites and not at the facility.

The process of cleaning the boilers begins with draining the water. Hydrochloric acid is added to the boiler and, after circulating, the acid is removed. Sodium hydroxide is then added to the boiler for neutralization of residual acid. After neutralization, the sodium hydroxide is removed and Bonderite is used to coat the interior of the boiler. No wastes are generated during the cleaning process, as the cleaning chemicals are refreshed with new product and reused. Copies of the SDS for hydrochloric acid, sodium hydroxide, and Bonderite are included as Attachments 6 through 8.

Bonderite product is stored in an area above the office (Attachment 5, Photograph 1). Sodium Hydroxide is stored in the maintenance shop. Mr. Jorgensen stated that all of the hydrochloric acid is contained in a 3,000-gallon tractor trailer tanker. Mr. Jorgensen stated that the facility has two 5,000 gallon poly tanks situated on the north end of the garage and storage area that will be used for acid storage in the future (Attachment 4, Photographs 2 and 3). The tanks currently hold water for stabilization until the secondary containment walls can be constructed.

I asked Mr. Jorgensen if and how the facility has managed waste acid from boiler cleaning. He stated that the facility has not yet generated any acid waste. The facility will continue to add product until the acid no longer performs its job. At that point, the facility will have the waste tested and will ship the waste to Vickery Environmental in Vickery, Ohio for neutralization. The sodium hydroxide will also be refreshed and reused until it is no longer effective. If the sodium hydroxide is determined to be a waste, it will be tested and shipped to Vickery Environmental for neutralization.

A-ONE is located in a rural area on the south side of Earlham, Iowa. A-ONE began operating at this location in 2009 and currently employs approximately 15 full-time employees, who work one shift (8:00 a.m. to 5:00 p.m.) Monday through Friday. The facility consists of one building (office and maintenance shop), with approximately 5,400 square feet under roof, and an additional 6,000-square-foot garage and storage area north of the main building. A-ONE's primary North American Industrial Classification System (NAICS) code is 237110 (Water and Sewer line and related structures construction).

A-ONE had never been inspected by EPA or an EPA contractor.

2. RCRA Status

The Verification Report (Attachment 1) indicates that A-ONE is registered with EPA, under EPA ID IAR000526152, as a LQG of hazardous waste (generating more than 1,000 kilograms [kg] of hazardous waste per calendar month). A-ONE notified as a LQG as they did not know at the time of notification what their generation rate would be. During the CEI, I determined that A-ONE is currently operating as a nongenerator of hazardous waste.

Mr. Jorgensen stated that all equipment maintenance is performed at an offsite garage in Earlham, Iowa, and any wastes, such as used oil, are managed at the offsite maintenance garage.

3. Waste Streams

This section of the CEI report describes the waste streams generated by the facility, including the facility's waste determination, generation and management processes, and ultimate disposition. The following discussion of waste streams is based on conversations with facility representatives and the visual inspection. Mr. Jorgensen accompanied me during the visual inspection.

General trash is generated during facility maintenance. The facility has determined that general trash is nonhazardous waste based on product and process knowledge. General trash includes, but is not limited to, floor sweepings, paper, and cardboard packaging. General trash is transported by Republic Services, and is landfilled at the Madison County Landfill. During the CEI, I observed accumulation of general trash and noted no deficiencies.

4. Summary of Preliminary Findings

In summary, as part of the CEI, I made no preliminary findings.

Other than items specifically noted in the narrative, I observed no additional issues. However, further review by EPA may change or add to my findings.

Clifford A.
Nelles

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A. Nelles
Date: 2024.03.28
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Date: _____

Clifford A. Nelles, Inspector
CLAENE Group

Whisnant,
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Amber Whisnant, Section Chief
ECAD/CB/RCRA, EPA Region 7

Attachments:

1. Hazardous Waste Site Info Verification Report for Inspector (2 pages)
2. Receipt for Documents and Samples (1 page)
3. Confidentiality Notice (1 page)
4. Google Earth Photograph of Facility (1 page)
5. Photographic Documentation (Photolog and 3 Photographs) (3 pages)
6. Copy of SDS for Hydrochloric Acid (8 pages)
7. Copy of SDS for Sodium Hydroxide (8 pages)
8. Copy of SDS for Bonderite S-AD 213 SF ACHESON (7 pages)