

# REPORT OF RCRA COMPLIANCE EVALUATION INSPECTION

At

## **SIEGWERK USA COMPANY**

3535 SW 56<sup>th</sup> Street  
Des Moines, Iowa 50321  
515-471-2193

EPA ID Number: IAR000007377

On

February 19, 2025

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 Siegwirk USA Company (Siegwerk) at 3535 SW 56th Street in Des Moines, Iowa. The CEI was conducted under the authority of Section 3007 of Resource Conservation and Recovery Act (RCRA), as amended. The CEI covered hazardous waste generator requirements, waste transporter requirements, used oil management, and universal waste requirements, as applicable. This report and its attachments present the results of the CEI.

## **PARTICIPANTS**

Siegwerk:

Jeff Lambert, Senior Engineering Manager  
Gary Klukow, Regional HSE Manager (Phone conversation)

Toeroek Team:

Clifford Nelles, Inspector, 816-213-5192

## INSPECTION PROCEDURES

Prior to the CEI at Siegwark on February 19, 2025, I conducted a drive-by visual inspection. I did not observe any areas of concern during the drive-by. At approximately 8:00 a.m., I entered the main office and informed the receptionist that I was there to conduct a CEI. I asked to speak with Ms. Julie Backstrom, who was listed as the site contact on the Notification Acknowledgment/Verification Report (Verification Report) provided by EPA prior to the inspection (Attachment 1). The receptionist stated that Ms. Backstrom was no longer at the facility and that Mr. Klukow was the head of the environmental department. The receptionist then explained that Mr. Klukow was traveling and was in South Carolina. I asked the receptionist to contact the next person in line in the environmental department. The receptionist contacted Mr. Lambert, who met me in the lobby approximately 10 minutes later. I introduced myself and explained that I was there to conduct a hazardous waste CEI. Mr. Lambert escorted me to a conference room where I conducted an entry briefing with him.

During the entry briefing, I presented my business card and EPA credentials to Mr. Lambert. 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. Lambert 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 Mr. Lambert with 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 he read.

A copy of each of the following documents was left with Mr. Lambert during the inspection:

- RCRA Facility Access Information Sheet
- RCRA Section 3007
- U.S. Federal Codes 1001 and 1002
- Instructions for Responding to a Notice of Preliminary Findings
- Notice Regarding Proprietary/Confidential Business Information

The following documents were sent electronically to Mr. Lambert.

- 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 with Mr. Lambert (Attachment 1). Based on this review, I changed the site contact information section to reflect Mr. Klukow as the site contact. I made no other edits or changes to the Verification Report.

I conducted the visual inspection of the facility on February 19, 2025, accompanied by Mr. Lambert. Mr. Lambert then contacted Mr. Klukow by telephone and informed him of the CEI. I informed Messrs. Lambert and Klukow that I needed to review documentation related to hazardous waste generation and management, such as uniform hazardous waste manifests and land disposal restriction (LDR) notifications, training records, inspection records, safety data sheets (SDSs), and waste profile documentation during the CEI. Mr. Lambert stated that he did not have access to the documentation and that only Mr. Klukow had access. I sent an email to Mr. Klukow on February 19, 2025, requesting the following documentation electronically:

- All hazardous waste manifests from October 4, 2024, through February 19, 2025
- 2023 Hazardous Waste Biennial Report
- RCRA Contingency Plan and Quick Reference Guide
- Hazardous waste training records for the last 3 years for the emergency coordinator, alternate emergency coordinator, and one person whose job description includes hazardous waste handling
- Written job descriptions for the emergency coordinator, alternate emergency coordinator, and hazardous waste handler
- Hazardous waste central accumulation area (HWCAA) inspection records for the last 3 years
- Hazardous secondary material (HSM) distillation records, showing how much has been distilled, capacity of the still, run times, and recovery percentage
- Excluded solvent contaminated wipes (ESCW) records showing frequency of collection and accumulation start date tracking
- SDSs for butyl acetate, ethyl acetate, ethyl alcohol, n-propyl acetate, petroleum naphtha and nitrocellulose with alcohol
- Special waste authorization (SWA) for waste pigment dust
- Waste profiles for dirty filters and ink sludge

At the conclusion of the CEI on February 19, 2025, I conducted an exit briefing with Mr. Lambert. During the exit briefing, I provided a Receipt for Documents and Samples, which Mr. Lambert signed, acknowledging receipt (Attachment 2). I provided Mr. Lambert the Notice, which he signed indicating no confidential business information had been provided (Attachment 3). I also provided Mr. Lambert a Notice of Preliminary Findings (NOPF), which he signed to acknowledge receipt (Attachment 4).

On February 26, 2025, Mr. Klukow responded to my February 19 email with all of the documentation requested above except the 2023 Biennial Report. I informed Mr. Klukow that EPA had provided a copy of a biennial report summary to me prior to the CEI.

A map of the facility obtained during the CEI is included as Attachment 5, and a Google Earth aerial photograph of the facility is included as Attachment 6. The 18 photographs taken during the CEI are included in Attachment 7, of which 17 are described in this report.

## **FINDINGS AND OBSERVATIONS**

### **1. Facility Description and General Information**

Siegwerk is a manufacturer of solvent-based inks for consumer goods packaging. The facility began operation at its current location in the mid-to-late 1990s. Siegwerk occupies a footprint of approximately 180,000 square feet, which includes an approximately 70,000-square-foot manufacturing area and an approximately 42,000-square-foot Warehouse. The facility employs 165 personnel who generally work 6:00 a.m. to 6:00 p.m. or 6:00 p.m. to 6:00 a.m. on a four-shift, rotating schedule to cover continuous operation 24 hours per day, 7 days per week.

The manufacturing process utilized at the facility is an automated batch process regulated from a Control Room. Various non-chlorinated solvents (such as butyl acetate, ethyl acetate, ethyl alcohol, propyl acetate, propyl alcohol, petroleum naphtha, and nitrocellulose with alcohol) are received at the facility via railcar or truck. Bulk raw material solvents are stored in aboveground storage tanks (ASTs) in an outdoor tank farm east of the facility. The solvents are hard piped to the production areas and blended with dry resins and pigments in batch tanks. Finished products are dispensed into various containers and transferred to the Warehouse for distribution.

Manufacturing processes generate dirty solvent, distillation bottoms, ink sludge, dirty filters, excluded solvent-contaminated wipes, waste pigment, and aerosol can waste. Dirty solvent is generated through ink production, vessel cleaning, and equipment cleaning. The facility considers dirty solvent to be hazardous secondary material (HSM) excluded from the definition of solid waste according to Title 40 *Code of Federal Regulations* (40 CFR) 261.4(a)(23). The dirty solvent is collected in containers and recycled at the facility via an onsite distillation unit. Reclaimed solvent is transferred to a dedicated AST in the outdoor tank farm to be reused at the facility. Distillation bottoms are considered to be hazardous waste. They are consolidated with the ink sludge waste stream and are containerized and transferred to the Warehouse hazardous waste central accumulation area (HWCAA).

The majority of ink sludge generated at the facility consists of waste ink (such as ink retain samples that have met their quality assurance hold time) and mixtures of ink and solvent generated during manufacturing that are too contaminated for onsite solvent recycling. Ink manufacturing also includes filtration, which generates dirty filters contaminated with ink. The facility considers ink sludge and dirty filters to be hazardous wastes by product/process knowledge. These wastes are accumulated in satellite accumulation containers (SAC) and hazardous waste accumulation containers (HWACs) in production areas. Full containers are transferred to the Warehouse HWCAA, where the containers are collected for disposal.

Excluded solvent-contaminated wipes are generated during manufacturing and cleaning. These wipes are accumulated in dedicated containers and are collected by AbsorbTech in Milwaukee, Wisconsin. The wipes are laundered and returned to the facility for reuse. The facility considers excluded solvent-contaminated wipes to be excluded from the definition of solid waste according to 40 CFR 261.4(a)(26).

Waste pigment is collected in 55-gallon containers beneath one of three dust collector units outside the facility. The facility considers waste pigment to be nonhazardous waste by product/process knowledge. Waste pigment is collected for landfill disposal at the Metro Park East Sanitary Landfill in Mitchellville, Iowa, under a special waste authorization (SWA). Aerosol can waste is generated via puncturing and draining aerosol paint cans. The emptied cans are put in the facility's general trash. The facility considers residual paint generated through puncturing and draining aerosol cans to be hazardous waste by product/process knowledge. The aerosol paint waste is accumulated in a SAA container at the point of generation.

The fork lifts used at the facility are electric. All equipment that utilizes oil, such as pumps and compressors, are serviced by contractors who take any used oil generated during servicing back to their facility for accumulation and recycling. I did not observe used oil in accumulation at Siegwark and determined that the facility was a co-generator of used oil at the time of the CEI.

Maintenance activities generate waste lamps, waste batteries, and general refuse. The facility manages waste lamps and waste batteries as universal waste according to 40 CFR Part 273, and the universal wastes are collected for recycling. General refuse consists of office-type trash, packaging, and other nonhazardous wastes (including punctured and drained aerosol paint cans). General refuse is compacted onsite and collected for landfill disposal at the Metro Park East Sanitary Landfill in Mitchellville, Iowa.

Siegwerk was last inspected on May 10-11, 2021, by an EPA contractor. During this CEI, the inspector made the following preliminary findings:

- Failure to keep one container of excluded solvent-contaminated wipes closed, as required by 40 CFR 261.4(a)(26)(i)
- Failure to label two containers of excluded solvent-contaminated wipes with the words "excluded solvent-contaminated wipes" as required by 40 CFR 261.4(a)(26)(i)
- Failure to demonstrate that the 180-day accumulation time limit had not been exceeded for three containers of excluded solvent-contaminated wipes, as required by 40 CFR 261.4(a)(26)(v)(B)
- Failure to document the process to ensure excluded solvent-contaminated wipes do not contain free liquids, as required by 40 CFR 261.4(a)(26)(v)(C)
- Failure to maintain documentation of the HSM recycling legitimacy determination, as required by 40 CFR 261.4(a)(23)(ii)(E)
- Failure to demonstrate that HSM is not speculatively accumulated, as required by 40 CFR 261.4(a)(23)(ii)(B)
- Failure to include evacuation routes in the Contingency Plan, as required by 40 CFR 262.17(a)(6) referencing 40 CFR 262.261(f)

- Failure to maintain training records for calendar year 2019, as required by 40 CFR 262.17(a)(7)(v)

None of these preliminary findings were repeated during this CEI.

## 2. RCRA Status

Siegwerk is identified as a large quantity generator (LQG) of hazardous waste, generating more than 1,000 kilograms [kg] of hazardous waste per calendar month on the Verification Report provided by EPA (Attachment 1). During the CEI, I determined that the facility's largest hazardous waste stream is ink sludge, which includes waste solvent-based ink, solvent that is too contaminated for recycling, and bottoms from the onsite distillation unit. Based on manifests records, Siegwerk shipped approximately 118,750 pounds (53,977 kg) of ink sludge in January 2025 alone (Attachment 8). According to Mr. Lambert, the quantity of waste shipped in January 2025 is typical of the facility's monthly hazardous waste generation rate. Therefore, I determined that the facility is operating as a LQG of hazardous waste and inspected the facility as such. I also inspected the facility as a co-generator of used oil and a SQH of universal waste (accumulating less than 5,000 kg at any time). Siegwerk submitted its 2023 Biennial Report on January 2, 2024. A copy of the 2023 Biennial Report summary provided by the EPA prior to the inspection is included in Attachment 9.

## 3. Waste Streams

The visual inspection included the ink manufacturing areas, Research and Development (R&D) Lab, Quality Control (QC) Lab, distillation room, Warehouse, and other areas where wastes are generated and managed. I observed six satellite accumulation areas (SAA) during the visual inspection and did not observe accumulation of more than 55 gallons of hazardous waste in any SAA. I also observed the facility's two HWCAAs in the distillation room and Warehouse. Mr. Lambert accompanied me during the visual inspection.

**Dirty solvent** is generated ink manufacturing processes such as equipment cleaning and vessel cleaning. The solvent is a blend of non-chlorinated, non-listed solvents (butyl acetate, ethyl acetate, ethyl alcohol, propyl acetate, nitrocellulose with alcohol, petroleum naphtha). Copies of the SDS for butyl acetate, ethyl acetate, ethyl alcohol, propyl acetate, nitrocellulose with alcohol and petroleum naphtha are included as Attachments 10 through 15, respectively. The facility considers dirty solvent to be HSM. Siegwerk accumulates dirty solvent in 55-gallon containers throughout the ink manufacturing areas. Full containers are transferred to a staging area outside of the distillation area. HSM is pumped from the containers to a 550-gallon feed tank which feeds the distillation unit. Recycled solvent is hard-piped from the distillation unit to a dedicated AST in the outdoor tank farm for reuse in the manufacturing processes. The distillation unit is operated approximately four times per week.

I asked Mr. Lambert how much dirty solvent is reclaimed on a per month basis. A distillation data report for January 2025 is included as Attachment 16; this was provided by Mr. Klukow after the inspection. Based on this record, Siegwerk reclaims approximately 76% of the dirty solvent fed into the distillation unit. In the month of January 2025, the facility distilled 52,230 pounds of dirty solvent, reclaimed 39,811 pounds of solvent, and generated 10,801

pounds of distillation bottoms sludge. The facility relies on the distillation data report records to document the efficiency of the recycling process and demonstrate its legitimacy. The facility relies on container dating, recycling turnaround time, and the volume of dirty solvent recycled to demonstrate that speculative accumulation is not occurring.

During the CEI, I observed the 550-gallon distillation unit in the distillation room (Attachment 7, Photograph 7). I also observed twenty 55-gallon containers of dirty solvent in the staging area outside the distillation room (Attachment 7, Photographs 1 through 4). Each of these containers was structurally sound, closed, labeled with the words “hazardous waste,” flammable liquid, and dirty solvent, and dated February 18, 2025. I noted no deficiencies with management of dirty solvent during the CEI and concluded that management met the requirements of 40 CFR 261.4(23).

During my records review after the visual inspection, I noted that Siegwerk had not renotified of HSM management on the 2023 Biennial Report (Attachment 9). I asked Mr. Klukow about this during a subsequent telephone call. He stated that the person who submitted the Biennial Report was unsure if the dirty solvent was HSM and did not include it in the report. The facility still manages dirty solvent as HSM but did not notify of HSM management on the 2023 Biennial Report, as required by 40 CFR 261.4(23)(ii)(C) (**NOPF No. 4**). NOPF No. 4 was added on March 12, 2025, and Mr. Klukow was notified of its addition by email on that date.

**Distillation bottoms** are generated through distillation of dirty solvent. The facility considers distillation bottoms to be D001 characteristic hazardous waste based on product and process knowledge. Because the waste is of similar composition to Siegwerk’s ink sludge stream, distillation bottoms are consolidated with the ink sludge waste stream. Distillation bottoms are accumulated in a 55-gallon SAC beneath the distillation unit. Full SACs are transferred to the Warehouse HWCAA. Distillation bottoms are collected by Univar Solutions USA, Inc. (Univar) every 1 to 2 weeks and transported to Systech Environmental Corporation in Fredonia, Kansas, (Systech) for fuel blending.

During the CEI, I observed a 55-gallon container beneath the distillation unit that was empty. The container was not labeled. Mr. Lambert explained that the container would be labeled when the distillation unit is operated and distillation bottoms are first added to the container.

**Excluded solvent-contaminated wipes** are generated throughout the facility from cleaning ink and/or solvent from equipment, vessels, containers, or personnel. The facility considers excluded solvent-contaminated wipes to be excluded from the definition of solid waste according to 40 CFR 261.4(a)(26). The wipes are accumulated in 55-gallon containers throughout the manufacturing areas of the facility. Every other Tuesday, excluded solvent-contaminated wipes accumulation containers are transferred to the Warehouse for collection. Solvent-contaminated wipes are collected by AbsorbTech in Milwaukee, Wisconsin, every other week for laundering and are returned to the facility for reuse. Based on invoice records, Siegwerk maintains a rolling inventory of 17,000 wipes every 2 weeks (Attachment 17).

During the CEI, I observed 55-gallon accumulation containers for excluded solvent-contaminated wipes in the Nitrocellulose room, Whites and Varnish area, Milling Operations

area, and Dispensing Operations area. All containers were structurally sound, closed, labeled with the words “excluded solvent contaminated wipes,” and dated February 17, 2025. According to Mr. Lambert, the containers are dated to demonstrate that they have been accumulating wipes for less than 180 days. An example of the labeling on an excluded solvent-contaminated wipes container is in Attachment 7, Photograph 16. None of the containers held free liquid. Siegwirk has a written procedure for preventing free liquid in the excluded solvent-contaminated wipes containers and management of free liquid if observed in the containers. I reviewed the procedure after the CEI. I noted no deficiencies regarding management of excluded solvent-contaminated wipes during the CEI.

**Ink sludge** consists of waste ink, mixtures of ink and solvent that is too contaminated for distillation, and distillation bottoms. The facility determined ink sludge to be D001 characteristic hazardous waste based on product/process knowledge. Based on the January 2025 manifest records, which facility representatives stated were indicative of typical generation rates, I estimated the facility generates 118,750 pounds (53,977 kg) of ink sludge per month. Ink sludge is accumulated in 55-gallon SACs or HWACs throughout the manufacturing areas of the facility. Full containers are transferred to either the staging area HWCAA next to the distillation room or the Warehouse HWCAA. Ink sludge is collected by Univar and transported to Systech for fuel blending.

During the CEI, I observed 55-gallon SACs of ink sludge in the following areas:

- Northwest Dispenser room (two SACs in two separate accumulation areas) (Attachment 7, Photographs 5, 6, and 8)
- QC Lab
- R&D Lab
- Milling area

Each of the above SACs was structurally sound, near the point of generation, under control of the operator, closed, and labeled with the words “hazardous waste” and an indication of the nature of the hazard. Each of the SACs were also marked with accumulation start dates. I provided compliance assistance to Mr. Lambert regarding satellite accumulation requirements. Specifically, I explained to Mr. Lambert that SAC are not required to be dated until the 55-gallon limit is reached or the container is removed from satellite accumulation.

I also observed a 55-gallon SAC of ink sludge in the Mirror Solvent area (Attachment 7, Photographs 9 and 10). This SAC was structurally sound, near the point of generation, under control of the operator, closed, and held approximately 20 gallons of waste. However, the SAC was not labeled with the words “hazardous waste,” as required by 40 CFR 262.15(a)(5)(i) (**NOPF No. 1**) and was not labeled with an indication of the nature of the hazard, as required by 40 CFR 262.15(a)(5)(ii) (**NOPF No. 2**).

I provided compliance assistance to Mr. Lambert regarding labeling requirements for SACs. During the CEI, employees of Siegwirk affixed labeling with the words “hazardous waste” and an indication of the nature of the hazard to the SAC in the Mirror Solvent area (Attachment 7, Photographs 11 and 12).

In the Warehouse HWCAA, I observed 47 HWACs of ink sludge (Attachment 7, Photographs 13 through 15). All HWACs were 55-gallon drums. They were structurally sound, closed, dated, and labeled with the words “hazardous waste” and an indication of the nature of the hazard. The earliest accumulation start date was January 30, 2025. I noted no deficiencies with accumulation of ink sludge in the HWCAA during the CEI.

**Dirty filters** are generated during ink manufacturing and are contaminated with solvent-based ink. The facility considers dirty filters to be D001 characteristic hazardous waste based on product and process knowledge. A copy of the waste profile for dirty filters is in Attachment 18. Based on the 2023 Biennial Report (Attachment 9), I estimated the facility generates 2,275 pounds (1,034 kg) of dirty filters per month. The waste is accumulated in 55-gallon SACs or HWACs throughout the manufacturing areas. Full containers are transferred to the Warehouse HWCAA. Dirty filters are collected by Univar and transported to Systech for bulking and off-site transfer. I did not observe accumulation of dirty filters in SACs or HWACs during the CEI.

**Waste pigment** consists of granulated pigments collected by three dust collection units outside of the facility. The waste is accumulated in 55-gallon containers beneath the dust collectors. The facility considers waste pigment to be nonhazardous waste based on product and process knowledge. Because it is used for consumer goods packaging, it does not contain any heavy metals. The waste is collected by Waste Connections of Iowa and transported to the Metro Park East Sanitary Landfill in Mitchellville, Iowa, for landfill disposal under a SWA. A copy of the Special Waste Permit issued by the Metro Waste Authority in conjunction with the SWA (Permit No. 318) is in Attachment 19. The waste pigment generation rate is not tracked by the facility; however, the Special Waste Permit authorizes disposal of 600 tons per year. I noted no deficiencies with management or accumulation of waste pigment during the CEI.

**Aerosol can waste** is generated from puncturing and draining empty or spent aerosol paint cans primarily used for container marking in the manufacturing areas. The facility considers aerosol can waste to be D001 characteristic hazardous waste by product and process knowledge. The waste generation rate is not tracked by the facility and was not determined during the CEI; however, facility representatives estimated that no more than 10 empty aerosol cans are generated per day. Waste aerosol cans are punctured and drained by use of an aerosol can puncturing unit affixed to a SAC. The punctured and drained cans are disposed with general refuse. Full SAC are transferred to the Warehouse HWCAA. Aerosol can waste is collected by Univar and transported to Systech for fuel blending or bulking and off-site transfer. The waste has not been collected for several years, and I could not determine when the waste was last collected during the CEI. I did not observe the aerosol can waste SAC during the CEI.

**Waste batteries** are generated during maintenance of small equipment. The facility manages waste batteries as universal waste according to provisions of 40 CFR Part 273. Waste batteries are accumulated in universal waste accumulation containers in a maintenance closet. The waste is collected by A-TEC Recycling, Inc. in Des Moines, Iowa, for recycling. According to Mr. Lambert, the facility generates approximately 10 pounds of universal waste batteries per year. No waste batteries were in accumulation in the maintenance closet at the time of the CEI.

**Waste lamps** are generated by maintenance replacing spent lamps. The facility manages waste lamps as universal waste according to provisions of 40 CFR Part 273. The facility generates approximately 10 waste lamps per year. Waste lamps are accumulated in universal waste accumulation containers and are collected by A-TEC Recycling, Inc. in Des Moines, Iowa, for recycling.

During the CEI, I observed a fiberboard container of waste lamps in the maintenance shop (Attachment 7, Photograph 18). The container was structurally sound, closed, and labeled with the words “universal waste” and “used lamps.” However, the accumulation start date was marked as January 8, 2024. Based on the accumulation start date, the waste lamps had been accumulating for longer than one year, prohibited by 40 CFR 273.15(a) (**NOPF No. 3**). I provided compliance assistance to Mr. Lambert regarding accumulation of universal waste during the CEI.

**General trash** consists of office-type refuse, such as waste packaging materials and food containers. The facility has determined general trash to be nonhazardous based on product and process knowledge. General trash is accumulated in several containers throughout the facility. General trash is collected by Waste Management for landfilling at Metro Park East Landfill Metro Waste Authority. During the CEI, I observed accumulation of general trash throughout the facility and noted no deficiencies.

#### **4. Required Response Equipment and Hazard Management**

Per 40 CFR 262.15(a)(8) and 262.17(a)(6), a LQG must operate to minimize the possibility of a fire, explosion, or spill, and must maintain emergency response equipment. During the visual inspection, I observed spill response equipment comprised of mats, absorbent materials, shovels, and brooms, as well as the presence and availability of fire extinguishers. I determined that the spill and fire response equipment was adequate for the hazardous wastes generated and accumulated at the facility.

#### **5. Container Accumulation Areas**

The facility maintains two HWCAAs, one in the staging area of the distillation room for HSM dirty solvent and the other HWCAA in the Warehouse. Both HWCAAs were inspected during the CEI. All HWACs were structurally sound and labeled, and adequate aisle space was maintained. I also reviewed weekly inspection checklists for the HWCAAs for the last 3 years and noted no missed inspections. A copy of the inspection log for 2024 and 2025 is included as Attachment 20. I asked Mr. Lambert how someone would summon emergency assistance in the HWCAAs. He stated that everyone who handles hazardous waste carries a two-way radio.

#### **6. Manifests and Biennial Report**

Siegwerk generated uniform hazardous waste manifests for 172 hazardous waste shipments from February 19, 2022, to February 19, 2025. After the CEI, I reviewed select entries in the Manifest Inspectors Report in RCRAInfo for manifests from February 19, 2022, through October 4, 2024 (five shipments in 2022, five in 2023, five in 2024). I also reviewed the manifest records for shipments in December 2024 and January 2025 that I received from Mr. Klukow after the

inspection. Attachment 8 includes copies of the manifest and land disposal restrictions (LDR) for shipments dated December 20, 2024; December 27, 2024; December 31, 2024; January 10, 2025; January 16, 2025; and January 24, 2025. The facility submitted its 2023 Hazardous Waste Biennial Report on January 2, 2024 (Attachment 9). I noted no deficiencies during my review of manifests and the biennial report.

## **7. Preparedness and Prevention**

LQG facilities are required by 40 CFR 262.17(a) to meet the emergency preparedness, prevention, and procedures requirements including documented arrangements with response agencies. According to Mr. Lambert, Siegwirk is the subject of a regular inspection by the Des Moines Fire Department hazardous materials team. During those inspections, he said the fire department is shown the layout of the facility, the location of the hazardous waste HWCAA, and other facility features.

During the CEI, I reviewed the facility's Contingency Plan and noted that the contingency plan appeared to meet all content requirements, including a Quick Reference Guide. Specifically, the Contingency Plan included a description of actions needed to respond to fires, explosions, and spills, a description of arrangements with the local emergency agencies, a list of emergency response equipment (including capabilities and location), and a complete evacuation plan. The Contingency Plan included the names and telephone numbers of the primary and alternate emergency coordinators. The contingency plan was last updated on October 25, 2024. A copy of the Emergency Coordinators is included as Attachment 21. I noted no deficiencies regarding preparedness and Prevention

## **8. Personnel Training Requirements**

Personnel training is required by LQG regulations specified in 40 CFR 262.17(a)(7) to ensure that employees are thoroughly familiar with proper waste handling procedures relevant to their responsibilities. During the CEI, I asked Mr. Lambert if hazardous waste training is provided to employees. He stated that hazardous waste management training is provided to all employees who handle hazardous waste within 6 months of hiring or being assigned to a job that handles hazardous waste. He also stated that annual refresher training is conducted.

In a subsequent telephone conversation, I asked Mr. Klukow who conducts the training. He stated that all training is performed online. I asked Mr. Klukow what training he has received. Mr. Klukow provided a copy of a training certificate for 2024 and explained that he did not start with the company until late 2023. Mr. Klukow also provided training records for Mr. Jose Barrera (Alternate Emergency Coordinator) and Ms. Tera Kennedy (waste handler) for 2022 through 2024. I noted that the records did not include hazardous waste training for Mr. Barrera in 2023. I asked Mr. Klukow why Mr. Barrera did not receive training in 2023. He stated that during 2023, Mr. Barrera was working on a job that did not require hazardous waste training. The training records for Mr. Klukow, Mr. Barrera, and Ms. Kennedy provided after the CEI are included in Attachment 22.

I reviewed the written job descriptions for Messrs. Klukow and Barrera and noted that the job descriptions appeared to be adequate. Copies of the Job Descriptions for an SCM Manager and Warehouse Manager are included in Attachment 23.

## **9. Air Emissions: 40 CFR Part 265 Subparts AA, BB, CC**

EPA regulations in 40 CFR Part 265, Subparts AA, BB, and CC apply to LQGs. If a LQG manages hazardous waste with an organic concentration greater than 10 parts per million by weight (ppmw), the standards specified in Subpart AA apply to hazardous waste air emissions from certain process vents. A process vent used in distillation, fractionation, solvent extraction, thin-film evaporation, air stripping, or steam stripping is regulated by Subpart AA. Siegwirk is not subject to the Subpart AA regulations because the facility does not have any of the process vents listed above.

If a LQG has equipment that contains or contacts hazardous waste composed of 10 percent or greater organics by weight, the facility is subject to Subpart BB standards for inspection and monitoring of the equipment. Siegwirk is not subject to the Subpart BB regulations because it does not have equipment that contains or comes in contact with hazardous waste. Dirty solvent that is reclaimed onsite via distillation is considered to be HSM and not hazardous waste.

The standards found in Subpart CC apply to LQGs that manage hazardous waste in containers with organic compounds (VOC) concentration that exceeds 500 ppmw. The Subpart CC standards are applicable because the facility accumulates hazardous waste that contains VOCs in 55-gallon hazardous waste accumulation containers. During the CEI, I determined that Siegwirk meets the Subpart CC requirements for containers by using Container Level 1 controls (hazardous waste accumulation containers smaller than 122 gallons that are Department of Transportation [DOT]-approved). I noted no concerns with management of hazardous waste per the Subpart CC air emissions requirements.

## **10. Summary of Preliminary Findings**

In summary, as part of the CEI, I made the following preliminary findings:

1. Failure to label a SAC with the words “hazardous waste,” as required by 40 CFR 262.15(a)(5)(i) (**NOPF No. 1**)
2. Failure to label a SAC with an indication of the nature of the hazard, as required by 40 CFR 262.15(a)(5)(ii) (**NOPF No. 2**)
3. Accumulation of universal waste lamps longer than one year, as prohibited by 40 CFR 273.15(a) (**NOPF No. 3**)
4. Failure to notify EPA of HSM management on the 2023 Biennial Report, as required by 40 CFR 261.4(23)(ii)(C) (**NOPF No. 4**)

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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Clifford A. Nelles, Inspector  
CLAENE Group

AMBER WHISNANT

Digitally signed by  
AMBER WHISNANT  
Date: 2025.04.02  
17:12:38 -05'00'

Date: \_\_\_\_\_

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

Attachments:

1. Notification Acknowledgement/Verification Report (2 pages)
2. Receipt for Documents and Samples (1 page)
3. Confidentiality Notice (1 page)
4. Notice of Preliminary Findings (1 page)
5. Site Map (1 page)
6. Google Earth Photograph of Facility (1 page)
7. Photographic Documentation (Photolog and 18 Photographs) (11 pages)
8. Copies of Manifests and LDRs for shipments in December 2024 and January 2025 (12 pages)
9. Copy of 2023 Biennial Report Summary (4 pages)
10. Copy of SDS for Butyl Acetate (14 pages)
11. Copy of SDS for Ethyl Acetate (14 pages)
12. Copy of SDS for Ethyl Alcohol (10 pages)
13. Copy of SDS for Propyl Acetate (12 pages)
14. Copy of SDS for Nitrocellulose With Alcohol (8 pages)
15. Copy of SDS for Petroleum Naphtha (13 pages)
16. Copy of Distillation Data Report for January 2025 (1 page)
17. Copy of Invoice from AbsorbTech for Solvent Wipes (1 page)
18. Copy of Waste Profile for Dirty Filters (7 pages)
19. Copy of Special Waste Permit for Pigment Dust (1 page)

20. Copy of Inspection Log for 2024 and 2025 (2 pages)
21. Copy of Contingency Plan Emergency Coordinator List (1 page)
22. Copies of Gary Klukow, Jose Barrera and Tara Kennedy Training Records (6 pages)
23. Copies of Job Descriptions for SCM Manager and Warehouse Manager (7 pages)