REPORT OF RCRA COMPLIANCE EVALUATION INSPECTION

At

MILLER PRODUCTS COMPANY
1015 N. Main Street
Osceola, Iowa 50213
(641) 342-2103

EPA RCRA ID No. IAD005275672

ON

November 15, 2023

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 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 Miller Products Company (Miller), at 1015 N. Main Street, Osceola, 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, used oil, and universal waste requirements as applicable. This report and its attachments present the findings of the CEI.

PARTICIPANTS

Miller:
- Julie Long, Manufacturing Engineer
- Kerry Richardson, General Manager (exit briefing only)
- Jeff Link, Plant Manager (exit briefing only)

Toeroek Team:
- William F. Starks, Environmental Consultant, (816) 286-6951

INSPECTION PROCEDURES

Prior to the CEI at Miller on November 15, 2023, I conducted a drive-by visual inspection. I did not observe any areas of concern during the drive-by. Upon my arrival, I entered the main entrance and explained the purpose of the CEI to the receptionist. I asked to speak with Ms. Long, who was identified as the site contact on the on the Notification Acknowledgement/Verification Report (Verification Report) (Attachment 1). The receptionist contacted Ms. Long and advised her of my arrival. The receptionist asked me to sign the visitor's log book, which I did. Ms. Long arrived at the lobby and escorted me to a conference room where I proceeded to conduct an entry briefing with her.

During the entry briefing, I presented my business card and EPA credentials to Ms. Long. I explained the scope and procedures for the CEI. I explained the facility's right to make confidentiality claims and provided a Notice Regarding Proprietary/Confidential Business Information. I stated that at the conclusion of the CEI, she would be presented with a Confidentiality Notice (Notice) with which she could make or not make a claim of confidentiality for the facility. I also provided Ms. Long 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. Ms. Long read both of these documents.

A copy of each of the following documents was left with the facility during the inspection:

- RCRA Facility Access Information Sheet
- Mr. Trevor Urban's contact information
- 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
- U.S. EPA Small Business Resources Information Sheet
- Chemical Facility Anti-Terrorism Standards
- E-Manifest Fact Sheet: Generators
- Small Quantity Generator Reminder to Re-notify
- Managing your Hazardous Waste: A Guide for Small Businesses
- Part 279 Requirements: Used Oil Management Standards
- EPA Region 7 Emergency Response Program
- Recycling Electronics: A Guide for Businesses
- Management of Fluorescent Lamps for Businesses
- Incompatible Chemicals
- TCLP – Toxicity Characteristic Leaching Procedure
- Iowa Environmental Guide for Businesses

I reviewed the Verification Report with Ms. Long (Attachment 1). Based on this review, as well as observations during the CEI, I made no updates or changes to the Verification Report.

I conducted the visual inspection and the records review on November 15, 2023, accompanied by Ms. Long. During the records review, I reviewed facility documentation such as training records,

shipping records, and hazardous waste determination records. I prepared and completed a site-specific inspection checklist to document my observations.

At the conclusion of the CEI on November 15, 2023, I conducted an exit briefing with Ms. Long, Mr. Richardson, and Mr. Link. During the exit briefing, I provided a Receipt for Documents and Samples, which Ms. Long signed, acknowledging receipt (Attachment 2). I provided Ms. Long the Notice, which she signed indicating no confidential business information had been provided (Attachment 3). I then provided Ms. Long a Notice of Preliminary Findings (NOPF), which she signed to acknowledge receipt (Attachment 4).

Diagrams of the facility were obtained during the CEI and are in Attachment 5. An aerial photograph of the facility was downloaded after the CEI and is in Attachment 6. The 52 photographs taken during the CEI are included in Attachment 7, of which 51 are described in this report.

FINDINGS AND OBSERVATIONS

1. Facility Description and General Information

Miller has been operating at its current location since 1950. The facility is a contract screw machine shop and a manufacturer of non-threaded fasteners (for example, hitch pins and related parts). Ms. Long provided a capability statement document which describes Miller's core capabilities (Attachment 8).

Miller receives various rounded metal stock that is drilled, milled, broached, and bent to customer specifications. The primary metal used is carbon steel and alloy steel. Brass, copper, bronze, and stainless steel are also used, but less often (that is, only one rod of brass is used per year). The parts may go through a plating process that includes zinc plating. Some parts receive an additional coating using trivalent chromium passivation, and/or custom sealing. The products are then packaged and shipped to customers.

Wastes from the metal working process include scrap metal, waste coolant, and used oil. Scrap metal is considered excluded from the definition of solid waste as it is recycled. Scrap metal is segregated by type and self-transported to P&L Recycling in Weldon, Iowa, or Leon Recycling & Auto Part in Leon, Iowa, for recycling. Waste coolant utilized in milling operations is a water miscible coolant and is considered to be nonhazardous waste. Waste coolant is containerized in 55-gallon containers and transported to Spring Grove Resource Recovery (Cincinnati, Ohio) for recycling.

Cutting oil utilized in milling operations is managed as used oil according to provisions of Title 40 *Code of Federal Regulations* (40 CFR) Part 279. Used oil is transferred to 55-gallon used oil storage containers upon generation. Used oil is transported to Safety-Kleen Systems (Des Moines, Iowa) for recycling

Ms. Long supplied a diagram of the plating operations and wastewater treatment plant (WWTP) (Attachment 9). Plating operations include immersing the parts through a series of soap and rinse tanks followed by an acid tank and rinse tank. This is followed by a series of zinc plating tanks

and a rinse tank. Some parts receive and additional clear or yellow chromate coating which is followed by two rinse tanks. Some parts receive an additional sealant coat. Cyanide is not used during plating operations.

I asked Ms. Long if any of the tanks in the plating process are ever cleaned out for maintenance. Ms. Long stated the zinc plating tanks are cleaned out every two to three years. She added that all of the process wastewater from rinse tanks is transferred to the WWTP. Ms. Long stated that the acid and chromate tanks are not cleaned out, and product is added to each tank as needed.

Wastes from the plating process include process wastewater, and zinc plating bath solids. All process wastewater is treated in Millers WWTP. Zinc plating bath solids are collected in 55-gallon containers upon generation and transferred to the warehouse.

Wastes from the WWTP include process wastewater and WWTP sludge. After treatment, process wastewater is discharge to the City of Osceola, Iowa publicly owned treatment works (POTW) under permit number 2038002. According to Ms. Long, the city tests the effluent daily and Miller receives the monthly report. Ms. Long supplied a copy of the July, August, and September reports showing there have been no violations over this time period (Attachment 10).

WWTP sludge is generated from the filter press in the WWTP. It is accumulated in a satellite accumulation container (SAC) before transfer to a hazardous waste accumulation container (HWAC).

Wastes from incoming/outgoing shipments include waste fiberboard and general trash. Waste fiberboard is transferred to a two-cubic-yard waste fiberboard container on the south side of the facility. General trash is accumulated in various containers and transferred to a four-cubic-yard container on the south side of the facility. Waste fiberboard and general trash are transported by Jim's Sanitation of Creston, Iowa, to South Central Iowa Landfill Agency in Winterset, Iowa, for recycling and landfill disposal.

Maintenance activities generate used solvent, used oil (motor and hydraulic oils), used oil filters, waste coolant, waste aerosol cans, used lamps, and general trash. Used solvent is generated during maintenance of facility parts washers. It is transferred to 55-gallon containers upon generation. Full containers are transferred to the warehouse. Used solvent is transported to Safety-Kleen Systems in Des Moines, Iowa, for recycling. Used oil is generated during maintenance of facility vehicles and machinery, and is managed according to provisions of 40 CFR 279. Used oil is transferred to a 55-gallon used oil storage container upon generation in the warehouse. Used oil filters are punctured, hot drained, and disposed into the general trash.

Waste coolant is generated during maintenance of facility machines. The waste is transferred to 55-gallon containers in the warehouse. Ms. Long stated that waste coolant is approximately 70 percent water and 30 percent coolant. Waste aerosol cans are accumulated in a 55-gallon satellite accumulation container located in the Steel Pile area.

Used lamps include used light-emitting diode (LED) lamps, used fluorescent lamps, and used mercury vapor lamps. All used lamps are managed as universal waste according to provisions

of 40 CFR 273, and are sent for recycling. The facility generates used lamps during facility lighting projects and not on a consistent basis. The last lighting project occurred in 2020.

Miller has two structures on approximately 3.4 acres. One structure houses the manufacturing processes and the WWTP, and has approximately 26,000 square feet of floor space under roof. The other structure serves as a warehouse that has approximately 14,000 square feet of floor space under roof. The warehouse is utilized to store finished product, hazardous and nonhazardous waste prior to shipment. The warehouse is also utilized to service facility vehicles. Ms. Long estimated the facility employs 38 full-time personnel. The facility operates one shift (7:00 a.m. to 3:30 p.m.) on a Monday through Friday schedule. Miller's primary North American Industrial Classification System (NAICS) code is 332721 (Precision Turned Product Manufacturing).

On September 12, 2017, Miller was inspected by an EPA contractor. During the CEI, the inspector left the following preliminary findings:

- Failure to conduct a hazardous waste determination on the floor sweep disposed in the general trash, as required by 40 CFR 262.11(a).
- Failure to designate an emergency coordinator and that person is on site or on call, as required by 40 CFR 262.16(b)(9)(i).
- Failure to post emergency coordinator's name and phone number. Fire department's phone number, and location of fire extinguishers and spill control equipment near the phone, as required by 40 CFR 262.16(b)(9)(ii).
- Failure to make arrangements with local emergency agencies, as required by 40 CFR 262.16(b)(8)(vi)(A).
- Failure to familiarize coordinating agencies with layout, waste types, access points, evacuation routes, and likely casualty types, as required by 40 CFR 262.16(b)(8)(vi)(A)(2).
- Failure to maintain records documenting arrangements with response agencies, as required by 40 CFR 262.16(b)(8)(vi)(B).
- Failure to familiarize all employees with waste handling and emergency procedures relevant to their responsibilities, as required by 40 CFR 262.16(b)(9)(iii).
- Failure to label containers as "hazardous waste," as required by 40 CFR 262.16(b)(6)(i)(A).
- Failure to label containers with an indication of the nature of the hazard, as required by 40 CFR 262.16(b)(6)(i)(B).
- Failure to mark containers with an accumulation start date, as required by 40 CFR 262.16(b)(6)(i)(C).
- Failure to label containers of used oil with the words "used oil," as required by 40 CFR 279.22(c).

Of these preliminary findings, failure to label hazardous waste accumulation containers with the words "hazardous waste," an indication of the nature of the hazard, and accumulation start dates; and failure to label containers of used oil with the words "used oil" were repeated during this inspection.

2. RCRA Status

Miller was identified as a SQG of hazardous waste (generating more than 100 kilograms [kg] or 220 pounds and less than 1,000 kg or 2,200 pounds of hazardous waste per month) on the Verification Report provided by EPA (Attachment 1). During the CEI, I determined Miller's generator status through a review of current operations, interview with Ms. Long, and a review of waste shipping records and current accumulation on site.

During the entry briefing, Ms. Long stated that Miller' primary hazardous waste is waste filter cake sludge (D007 characteristic hazardous waste) from the WWTP. She explained that filter cake sludge was previously managed as nonhazardous waste, based on testing, and transported to the South Central Iowa Sanitary Landfill under a Special Waste Authorization (SWA) (63-SWA-04-11).

It appears that before waste filter cake sludge became a hazardous waste, Miller was operating as a very small quantity generator (VSQG) of hazardous waste, as the only hazardous waste generated at the site was waste aerosol cans.

Ms. Long provided a copy of the analytical report for filter cake sludge, dated January 3, 2020 (Attachment 11). I noted the toxicity characteristic leaching procedure (TCLP) for metals in the analytical report listed chromium (D007) as 0.031 milligrams per liter (mg/L), which is below the RCRA regulatory limit of 5.0 mg/L.

However, when Ms. Long submitted the renewal application for SWA 63-SWA-04-11 in January 2023, the analytical report submitted as part of the renewal application indicated a TCLP result of 47.8 mg/L for chromium, which is above the RCRA regulatory limit of 5.0 mg/L. Ms. Long provided a copy of the analytical report sent in with the SWA renewal application (Attachment 12).

Ms. Long was unsure why the chromium TCLP results increased so drastically from 2020. She thought it may have been due to an increase of product receiving the clear or yellow chromate coating. However, the wastewater effluent testing had not indicated any changes. Ms. Long stated that she retested the filter cake sludge October 2023, and supplied a copy of the analytical report (Attachment 13). I noted the TCLP for chromium was 9.88 mg/L, which is significantly lower than the 47.8 mg/L from the previous test, but still above the RCRA regulatory limit of 5.0 mg/L.

Ms. Long stated that filter cake sludge is generated fairly consistently throughout the year. She estimated that the facility generates one cubic yard of filter cake sludge every two months. Ms. Long estimated that one cubic yard of filter cake sludge weighed approximately 1,800 pounds. Based on this information, I estimated that Miller's generates approximately 900 pounds of hazardous filter cake sludge per month.

Based on the generation rate of waste filter cake sludge and waste aerosol cans (less than one pound per month), I determined that the facility is a SQG of D001 and D007 characteristic hazardous waste, and inspected the facility as such. Miller generates up to 146 pounds of universal waste lamps during lighting projects. Based on the universal waste generation rates,

I inspected Miller as a small quantity handler (SQH) of universal waste (accumulating less than 5,000 kg of universal waste at any time). Miller is also a generator of used oil.

3. Waste Streams

This section of the CEI report describes waste streams generated by the facility, including the facility's waste determination and waste codes, generation process and rate, management at the facility, and ultimate disposition. The following discussion of waste streams is based on my interviews with Ms. Long, the visual inspection, and my review of available documentation.

Waste filter cake sludge is generated during wastewater treatment in the WWTP. The waste is accumulated in a 30-gallon satellite accumulation container (SAC) under the filter press. The waste is transferred to a one-cubic-yard hazardous waste accumulation container (HWAC) located in the WWTP. The HWAC is transferred to the warehouse and the waste placed in one-cubic-yard HWAC (bulk bag). Waste filter cake sludge is considered hazardous waste (D007) based on product and process knowledge and testing.

Safety data sheets (SDSs) for the zinc plating (High Grade Zinc and Zicon) are included in Attachments 14 and 15. SDSs for the chromate process (KCL K3 Starter, ZCL Brt II, Hyproti Yellow, and Hyprotec) are included in Attachments 16 through 19. The SDS for the special rust inhibitor coating applied to some products (Hyprocoat 330) is included in Attachment 20. Based on the SDSs and the analytical reports in Attachments 12 and 13, the hazardous waste determination appears to be adequate.

Based on the current accumulation, the facility generates approximately 900 pounds of waste filter cake sludge per month. Waste filter cake sludge was last collected in December 2022 and was transported to South Central Landfill Agency in Winterset, Iowa, for landfill disposal as nonhazardous waste. Ms. Long stated that waste filter cake sludge is due to be transported on December 4, 2023, to Clean Harbors Lone Mountain Facility in Waynoka, Oklahoma as hazardous waste. Ms. Long stated she was unsure of the ultimate disposition (i.e. treatment, storage, or disposal) of this waste at Clean Harbors Lone Mountain Facility.

During the visual inspection, I observed a 30-gallon SAC of waste filter cake sludge under the filter press in the WWTP (Attachment 7, Photographs 5 and 7). The filter press was operating and adding waste to the SAC. The SAC was in good condition, near the point of generation, under the control of an operator, and held approximately 20 gallons of waste filter cake sludge. However, the SAC was not labeled with the words "hazardous waste" and was not labeled with an indication of the nature of the hazard, as required by 40 CFR 262.15(a)(5)(i and ii) **(NOPF Nos. 9 and 10)**.

These preliminary findings were not on the NOPF form left at the facility. The facility was notified by email on November 28, 2023 of the additions to the NOPF form. I also telephoned Ms. Long on November 28, 2023 and provided compliance assistance on the management of SACs. I also requested Ms. Long to provide a response to the EPA on NOPF Nos. 9 and 10.

HWACs of waste filter cake sludge are discussed in the CAA section of this report (Section 4).

Process wastewater is generated during zinc plating operations. This waste is collected in a sump and then transferred, via piping, to the WWTP above-ground treatment tank (identified on the Attachment 9 diagram as "Comp 2 Tanks"). The facility has determined that the wastewater is exempt from the definition of solid waste according to 40 CFR 261.4(a)(2). Treated water is discharged to the City of Osceola POTW, under the terms of WWTP permit 2038002. According to Ms. Long, the facility discharges approximately 3,000 gallons of process wastewater per day.

SDSs for chemicals (Sulfuric Acid, Caustic Soda Liquid, and Calcium Chloride Flakes) utilized in the WWTP are included in Attachments 21 through 23.

A facility diagram of the plating process and WWTP is included in Attachment 9. I observed the plating process that generates process wastewater in the plating room (Attachment 7, Photographs 1 through 4).

Daily testing of the effluent is performed by the city. Test results from July 2023 through September 2023 are included in Attachment 10, and revealed no violation of the permit conditions.

Zinc plating bath solids are generated during cleanout of the zinc tanks in the plating room. The waste is accumulated in 55-gallon containers upon generation and transferred to the warehouse. The facility has determined that the waste is nonhazardous based on product and process knowledge. SDSs for zinc plating chemicals are included in Attachments 14 and 15. Based on the SDSs, it appears the hazardous waste determination is adequate.

The facility generates approximately 110 gallons of zinc plating bath solids every two to three years. The waste is transported by Safety-Kleen Systems. However, Ms. Long was unable to find shipping documents to confirm when or where the waste was transported. Ms. Miller stated she contacted Safety-Kleen Systems, but has not received an answer to when or where the waste plating bath solids where transported. During the CEI, I observed two 55-gallon containers of zinc plating bath solids in the warehouse (Attachment 7, Photographs 38, 39, and 40). I did not observe any deficiencies in the management of zinc plating bath solids.

Waste aerosol cans are generated during facility maintenance. Waste aerosol cans are empty prior to the waste aerosol can being transferred to a 55-gallon SAC. The facility has determined that the waste is hazardous (D001 characteristic) based on product knowledge. I advised Ms. Long that if the waste aerosol can is not empty, a D003 characteristic waste code may be applicable to the waste. The facility generates approximately one or two waste aerosol cans per month. Ms. Long stated the last shipment of waste aerosol cans occurred before she became employed at Miller (approximately 3 years ago) and could not locate the uniform hazardous waste manifest for the shipment. Ms. Long added that the waste was transported by Safety-Kleen Systems. Ms. Long stated she contacted Safety-Kleen Systems about the shipment, but had not received a reply from the vendor. Based on the generation rate and the amount in accumulation during the CEI, I estimated that the shipment occurred approximately five years ago.

During the CEI, I observed a 55-gallon SAC of waste aerosol cans in the maintenance area (Attachment 7, Photographs 49 and 50). The SAC was in good condition, near the point of

generation, under the control of an operator, labeled with the words "hazardous waste," labeled with an indication of the nature of the hazard, and held approximately 50 gallons of waste aerosol cans. I did not observe any deficiencies in the management of waste aerosol cans.

Spent parts washer solvent is generated during maintenance of parts washers. The waste is accumulated in 55-gallon containers upon generation and transferred to the warehouse. The facility has determined that the waste is nonhazardous based on product and process knowledge. Ms. Long stated the facility uses Safety-Kleen Premium Solvent to degrease oily parts and facility equipment. She added that the solvent has a flash point of 148 degrees Fahrenheit (°F). Based on the use of the solvent as a degreaser and a flash point above 142°F, it appears that the hazardous waste determination is adequate.

The facility generates approximately 55 gallons of spent parts washer solvent per month. Spent parts washer solvent is transported to Safety-Kleen Systems in Des Moines, Iowa, for recycling. The waste was last collected on June 21, 2023.

Ms. Long provided a copy of the Clean Harbors GENR Waste Reports for 2021, 2022, and 2023 (Attachments 24 through 26). Based upon the amount of spent parts washer solvent shipped, the days between shipments, and the amount in accumulation, it appears that Miller generates approximately 40 to 60 gallons of spent parts washer solvent monthly. I also noted the last shipment of the waste was on June 21, 2023 (Attachment 26, Page 2).

During the CEI, I observed two, 55-gallon containers of spent parts washer solvent in the warehouse (Attachment 7, Photograph 21). I did not observe any deficiencies in the management of spent parts washer solvent.

Used oil is generated during maintenance of facility vehicles and machines. The waste is transferred to 55-gallon used oil storage containers upon generation in the warehouse. Used oil is managed as used oil per 40 CFR 279. The facility generates approximately 6 gallons of used oil per year from the maintenance of facility vehicles, and approximately 5 gallons of used oil per quarter from maintenance of facility machines.

Ms. Long stated that the generation rate of used oil has dropped due to the reduction in the number and frequency of facility vehicles being serviced. Ms. Long stated the last shipment of used oil occurred before she became employed at Miller (approximately 3 years ago), and could not locate shipping records for the shipment. Ms. Long added that the waste was transported by Safety-Kleen Systems. Ms. Long stated she contacted Safety-Kleen Systems about the shipment, but had not received a reply from the vendor.

During the CEI, I observed six, 55-gallon used oil storage containers in the warehouse (Attachment 7, Photograph 22). All six used oil storage containers were in good condition with no visible leaks. However, none of the six used oil storage containers were labeled with the words "used oil," (Attachment 7, Photographs 23 through 29, and 31 and 32) as required by 40 CFR 279.22(c)(1) **(NOPF No. 5)**. This finding is repeated from the 2017 inspection. Ms. Long was not sure which, if any, of the containers remained from those identified as mislabeled during the previous inspection.

I explained this preliminary finding to Ms. Long during the CEI. Prior to leaving the area, facility personnel marked the six used oil storage containers with the words "used oil" (Attachment 7, Photographs 33 through 37).

Used oil filters are generated during maintenance of facility vehicles and machines. Used oil filters are punctured and hot drained prior to disposal in general trash. The facility estimates it generates approximately 5 to 10 used oil filters per year. The facility has determined that the waste is nonhazardous based on product and process knowledge. The waste is transported to South Central Iowa Landfill Agency in Winterset, Iowa, for landfill disposal.

I advised Ms. Long that the State of Iowa prohibits used oil filters from being disposed into landfills (567-119.3 – Prohibited disposal). I explained that alternatives would be to recycle the punctured and hot drained used oil filter as scrap metal, or collect the used oil filters, manage as used oil, and transport off site through a service vendor for recycling.

Scrap metal is generated during manufacturing and equipment maintenance. Scrap metal is segregated, accumulated in various containers and transferred to a scrap metal container located by the receiving bay. Scrap metal is considered to be exempt from the definition of solid waste when recycled. The facility generates approximately 15,000 pounds of scrap metal per month. Scrap metal is self-transported to P&L Recycling in Weldon, Iowa, or Leon Recycling & Auto Parts in Leon, Iowa, for recycling.

During the CEI, I observed a scrap metal container in the machining area (Attachment 7, Photograph 8). I did not observe any deficiencies related to scrap metal.

Waste fiberboard is generated during receiving and distribution process. The waste is accumulated and transferred to a two-cubic-yard waste fiberboard container located on the south side of the main facility. The facility considers waste fiberboard to be nonhazardous based on product and process knowledge. The facility generates approximately 1.5 cubic yards of waste fiberboard per week. The waste is transported by Jim's Sanitation to South Central Iowa Landfill Agency in Winterset, Iowa, for recycling.

During the CEI, I observed a two-cubic-yard waste fiberboard container located on the south side of the main facility (Attachment 7, Photograph 42). I noted no deficiencies with management of waste fiberboard during the CEI.

Used lamps are generated during facility lighting projects, and consist of waste LED, fluorescent, and mercury vapor lamps. All waste lamps are managed as universal waste according to provisions of 40 CFR Part 273. Used lamps are transferred to universal waste accumulation containers in a mezzanine above the break room upon generation. The last lighting project generated 146 pounds of universal waste lamps. The waste is transported to Safety-Kleen Systems in Des Moines, Iowa, for recycling. The last shipment of universal waste lamps was on September 16, 2020 (Attachment 27). I observed no universal waste lamps during the CEI. I noted no deficiencies with management of used lamps during the CEI.

Waste coolant is generated during maintenance of facility machinery. Upon generation, it is accumulated in 55-gallon containers and transferred to the warehouse. The facility considers

waste coolant to be nonhazardous based on product and process knowledge. Based on the Clean Harbor GENR Waste Reports (Attachments 24, 25, and 26), the facility generates between 300 to 630 gallons of waste coolant per year. The waste is transported to Clean Harbors in Chattanooga, Tennessee, or Spring Grove Resource Recovery in Cincinnati, Ohio, for recycling. The waste was last collected on January 6, 2023 (Attachment 28).

Waste coolant was not observed during the CEI. I noted no deficiencies with management of waste coolant during the CEI.

General trash is generated during production and facility maintenance. It is accumulated in various containers throughout the facility and transferred to a 4-cubic-yard container located on the south side of the facility. General trash is considered nonhazardous based on product/process knowledge. The facility generates approximately three to four cubic yards of general trash per week. General trash is transported to South Central Iowa Landfill Agency in Winterset, Iowa, for landfill disposal. I observed the 2-cubic-yard general trash during the CEI (Attachment 7, Photograph 41). I noted no deficiencies with management of general trash.

4. Container Accumulation Area

Miller maintains a CAA in the warehouse. In the CAA, I observed five HWACs of waste filter cake sludge (Attachment 7, Photographs 9 and 10). All five HWACs are in good condition and closed. However, the HWACs were not labeled with the words "hazardous waste" or an indication of the nature of the hazard, and not marked with an accumulation date (Attachment 7, Photographs 11 through 20), as required by 40 CFR 262.16(b)(6)(i)(A, B, and C) **(NOPF Nos. 2, 3, and 4)**.

I explained these preliminary findings to Ms. Long during the CEI. Prior to the conclusion of the CEI, I returned to the area and observed that facility personnel labeled the HWACs with the words "hazardous waste," an indication of the nature of the hazard, and accumulation dates (Attachment 7, Photographs 43 through 47).

I noted the HWACs were dated with an accumulation start date and fill date. The table below list the container numbers, accumulation start date, fill date, and days in accumulation for the HWACs shown in Attachment 7, Photograph 9.

HWAC Number	Accumulation Start Date	Accumulation Fill Date	Days in Accumulation
HWAC 1	January 03, 2023	February 28, 2023	316
HWAC 2	March 01, 2023	April 28, 2023	259
HWAC 3	May 01, 2023	July 30, 2023	198
HWAC 4	August 01, 2023	September 30, 2023	106
HWAC 5	October 01, 2023	November 03, 2023	45

The oldest accumulation start date was January 3, 2023 (316 days). The waste was previously managed as nonhazardous waste and shipped to South Central Iowa Landfill Agency, in Winterset, Iowa (33 miles). The designated facility for hazardous waste filter cake sludge has not been determined. If the designated facility is more than 200 miles from Miller, then the facility

had one HWAC stored longer than 270 days without a RCRA permit, prohibited by Section 3005 of RCRA **(NOPF No. 6)**.

If the designated facility is less than 200 miles from Miller, then the facility had three HWACs stored longer than 180 days without a RCRA permit, prohibited by Section 3005 of RCRA **(NOPF No. 6)**.

I explained this preliminary finding to Ms. Long during the CEI. I also advised Ms. Long to have the hazardous waste removed as soon as possible.

I asked Ms. Long if the CAA is inspected. Ms. Long stated the CAA is not inspected. It appears that Miller has not inspected the CAA weekly, as required by 40 CFR 262.16(b)(2)(iv) **(NOPF No. 1)**.

I explained this preliminary finding to Ms. Long during the CEI. I also provided compliance assistance for the regulatory requirements for CAAs.

In the CAA, I observed fire extinguishers and emergency equipment for emergency response (Attachment 7, Photograph 48).

In the WWTP, I observed a one-cubic-yard HWAC of waste filter cake sludge (Attachment 7, Photograph 6). The HWAC was not closed, not labeled with the words "hazardous waste" or an indication of the nature of the hazard, and not marked with an accumulation, as required by 40 CFR 262.16(b)(6)(i)(A, B, and C), and 262.16(b)(2)(iii)(A) **(NOPF Nos. 2, 3, 4, and 8)**.

I explained preliminary findings 2, 3, and 4, to Ms. Long during the CEI. NOPF No. 8 was not on the NOPF form left at the facility. The facility was notified by email on November 28, 2023 of the addition to the NOPF form. I also telephoned Ms. Long on November 28, 2023 and provided compliance assistance on the management of HWACs. I also requested Ms. Long to provide a response to the EPA on NOPF No. 8.

Based on the fill date of HWAC No. 5 (November 03, 2023), it appears that the accumulation start date of the HWAC in Attachment 7, Photograph 6 would be November 3, 2023. As such, the waste has been in accumulation for 12 days.

I explained to Ms. Long that I would view this area as a CAA. I asked Ms. Long if the CAA is inspected. Ms. Long stated the CAA is not inspected. It appears that Miller has not inspected the CAA weekly, as required by 40 CFR 262.16(b)(2)(iv) **(NOPF No. 1)**.

I observed fire extinguishers and emergency equipment for emergency response in the area. I also observed a working telephone nearby to summon emergency assistance.

5. Preparedness and Prevention

Per 40 CFR 262.16(b)(9)(i), a SQG must have identified an emergency coordinator (EC) familiar with facility operations. According to Ms. Long, she is the primary EC.

Per 40 CFR 262.16(b)(9)(ii), a SQG must post by the telephone the name and contact information for the EC; the phone number of the fire department; and locations of fire extinguishers, spill response equipment, and, if present, fire alarms. During my inspection, I observed this information posted by the telephone in the CAA (Attachment 7, Photographs 51 and 52). However, the telephone in the CAA was inoperable and not able to summon emergency assistance, as required by 40 CFR 262.16(b)(8)(ii)(B) **(NOPF No. 7)**.

I explained this preliminary finding to Ms. Long during the CEI.

Per 40 CFR 262.16(b)(8)(vi), a SQG must make arrangements with local emergency response agencies and familiarize responders with the facility layout. Ms. Long stated that the fire department comes to Miller annually to review the facility.

6. Manifests, Bills of Lading

The facility has not generated a uniform hazardous waste manifest in the last three years. The Manifest Inspectors Report supplied by the EPA (Attachment 29) indicates that Miller did not generate a uniform hazardous waste manifest from September 26, 2020 to September 26, 2023.

As such, I reviewed no manifests or associated land disposal restriction (LDR) notifications during the CEI. Manifest 00863255SKS for a shipment of nonhazardous waste coolant is in Attachment 28.

7. Personnel Training Requirements

Per 40 CFR 262.16(b)(9)(iii), a SQG must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies. I asked Ms. Long if hazardous waste training occurs. She stated that all employees who manage hazardous waste receive training annually. I noted the training materials included procedures for responding to emergencies at the facility. However, due to the number of findings related to labeling and management that I identified during the inspection, it does not appear that all employees are thoroughly familiar with proper waste handling procedures. As a result, I concluded that the facility had failed to adequately train employees in management of hazardous waste, as required by 40 CFR 262.16(b)(9)(iii) **(NOPF No. 11)**.

This preliminary finding was not on the NOPF form left at the facility. This preliminary finding was added to the form on January 19, 2024. The facility was notified by telephone and email of the addition on January 19, 2024.

8. Summary of Preliminary Findings

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

1) Failure to inspect a CAA weekly, as required by 40 CFR 262.16(b)(2)(iv) **(NOPF No. 1)**.
2) Failure to label six hazardous waste accumulation containers with the words “hazardous waste,” as required by 40 CFR 262.16(b)(6)(i)(A) **(NOPF No. 2)**.

3) Failure to label six hazardous waste accumulation containers with an indication of the nature of the hazard, as required by 40 CFR 262.16(b)(6)(i)(C) **(NOPF No. 3)**.
4) Failure to label six hazardous waste accumulation containers with an accumulation start date, as required by 40 CFR 262.16(b)(6)(i)(B) **(NOPF No. 4)**.

The following preliminary findings were not on the NOPF form left at the facility. Ms. Long was notified by email on November 28, 2023 of the additions.

5) Failure to label 6 used oil storage containers with the words "used oil," as required by 40 CFR 279.22(c)(1) **(NOPF No. 5)**.
6) Storage of hazardous waste longer than 270 days without a RCRA permit, as required by Section 3005 of RCRA **(NOPF No. 6)**.
7) Failure to provide a device for summoning emergency assistance, as required by 40 CFR 262.16(b)(8)(ii)(B) **(NOPF No, 7)**.
8) Failure to close one HWAC, as required by 40 CFR 262.16(b)(2)(iii)(A) **(NOPF No. 8)**.
9) Failure to label one satellite accumulation container with the words "hazardous waste," as required by 40 CFR 262.15(a)(5)(i) **(NOPF No. 9)**.
10) Failure to label one satellite accumulation container with an indication of the nature of the hazard, as required by 40 CFR 262.15(a)(5)(ii) **(NOPF No. 10)**.

The following preliminary finding was not on the NOPF form left at the facility. It was added to the NOPF form on January 19, 2024. Ms. Long was notified, by telephone and email, on January 19, 2024 of the addition.

11) Failure to adequately train personnel responsible for management of hazardous waste, as required by 40 CFR 262.16(b)(9)(iii) **(NOPF No. 11).**

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.

William F Starks
Digitally signed by William F Starks
Date: 2024.01.19 13:56:15 -06'00'

Date: _____

William F. Starks
Environmental Consultant
CLAENE Group, LLC.

Mike Martin - signing for Amber Whisnant
Digitally signed by Mike Martin - signing for Amber Whisnant
Date: 2024.01.31 11:29:52 -06'00'

Date: _____

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

Attachments:

1. Notification Acknowledgement/Verification Report (1 Page)
2. Receipt for Documents and Samples (1 Page)
3. Confidentiality Notice (1 Page)
4. Notice of Preliminary Findings (NOPF) (2 Pages)
5. Facility Diagrams (2 Pages)
6. Google Maps Aerial Image of the Facility (1 Page)
7. Photographic Documentation (52 Photos and Photolog) (32 Pages)
8. Mill Products Capability Statement (2 Pages)
9. Plating Room and WWTP Diagram (1 Page)
10. WWTP Test Results for July, August, and September (9 Pages)
11. Analytical Report for Waste Filter Cake Sludge, Dated January 15, 2020 (17 Pages)
12. Analytical Report for Waste Filter Cake Sludge, Dated January 13, 2022 (10 Pages)
13. Analytical Report for Waste Filter Cake Sludge, Dated November 2, 2022 (3 Pages)
14. SDS for High Grade Zinc (7 Page)
15. SDS for Zicon (14 Pages)
16. SDS for ZCL K3 Starter (7 Pages)
17. SDS for ZCL BRT II (7 Pages)
18. SDS for Hyprotri Yellow (7 Pages)
19. SDS for Hyprotec (7 Page)
20. SDS for Hyprocoat 330 (7 Page)
21. SDS for Sulfuric Acid (8 Pages)
22. SDS for Caustic Soda Liquid (8 Pages)
23. SDS for Calcium Chloride Flakes (18 Pages)
24. Clean Harbors GENR Waste Report for 2021 (7 Pages)
25. Clean Harbors GENR Waste Report for 2022 (5 Pages)
26. Clean Harbors GENR Waste Report for 2023 (5 Pages)
27. Universal Waste Invoice, Dated September 16, 2020 (1 Page)
28. Waste Coolant Manifest 008632555SKS, Dated January 16, 2023 (1 Page)
29. Manifest Inspectors Report (2 Pages)