

REPORT OF RCRA COMPLIANCE EVALUATION INSPECTION

At

JOHN DEERE DUBUQUE WORKS

18600 S. John Deere Road
Dubuque, Iowa 52001
563-589-5782

EPA ID Number: IAD005269527

On

April 24, 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 (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 John Deere Dubuque (John Deere) at 18600 S. John Deere Road, Dubuque, 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

John Deere:

Austin Shoemaker, Environmental Engineer

James Hensley, Senior Environmental Engineer (Exit Briefing)

Brianna Lofton-Part time Student (Exit Briefing)

Toeroek Team:

Clifford Nelles, Inspector, 816-213-5192

INSPECTION PROCEDURES

Prior to the CEI at John Deere on April 24, 2023, I conducted a drive-by visual inspection. I did not observe any areas of concern during the drive-by. At approximately 7:20 a.m., I entered the lobby of the facility and informed the receptionist of my intent to conduct a CEI. The receptionist contacted Mr. Shoemaker, who met me in the lobby. After brief introductions, I explained the purpose and scope of the CEI to Mr. Shoemaker. Mr. Shoemaker and I adjourned to a conference room where I proceeded to conduct an entry briefing with him.

During the entry briefing, I presented my business card and EPA credentials to Mr. Shoemaker. 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. Shoemaker 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. Shoemaker 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. Shoemaker during the inspection:

- RCRA Facility Access Information Sheet
- Mr. Trevor Urban's business card
- 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
- 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 Notification Acknowledgement/Verification Report (Verification Report) with Mr. Shoemaker (Attachment 1). Based on this review, I made no changes to the Verification Report.

I conducted a visual inspection of the facility, accompanied by Mr. Shoemaker. Following the visual inspection, I reviewed facility records including hazardous waste manifests with land disposal restriction (LDR) notifications, safety data sheets (SDS), contingency plan, inspection records, and training documentation. 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. Shoemaker and Hensley and Ms. Lofton. During the exit briefing, I provided a Receipt for Documents and Samples, which Mr. Shoemaker signed, acknowledging receipt (Attachment 2). I provided Mr. Shoemaker 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. Shoemaker and Hensley and Ms. Lofton that findings might be added by EPA after review of the inspection report.

A map of the facility obtained during the CEI is included in Attachment 4, and a Google Earth aerial photograph of the facility is included as Attachment 5. All 26 photographs taken during the CEI are included in Attachment 6.

FINDINGS AND OBSERVATIONS

1. Facility Description and General Information

The John Deere facility at Dubuque produces heavy equipment for the construction and forestry industries. Various pieces of equipment are assembled at the plant, including crawlers, backhoes, skid steers, log loaders, and feller bunchers. The majority of the parts used in assembly are produced at offsite locations by other John Deere plants or various subcontractors, or are obtained through parts suppliers. Some parts are fabricated on site. Operations at the facility include metal cutting and forming, parts cleaning and painting, and assembly of parts into final products. John Deere cleans parts that are to be painted in a phosphate and water bath. The wastewater from the cleaning bath is treated in an onsite Waste Water Treatment Plant (WWTP). John Deere also receives wastewater from its facility in Davenport, Iowa, approximately one or two times per year when the Davenport, Iowa, facility cleans out their washing system.

Painting operations at the facility generate waste paint related materials (WPRM), gun flush, and waste rags and wipes. WPRM consists of spent solvent and paint generated at automated paint booths by paint line flushes. WPRM is considered hazardous based on product and process knowledge. WPRM is collected by Veolia ES Technical Solutions (Veolia) and transported to Veolia in Menomonee Falls, Wisconsin, for fuel blending. Gun flush consists of spent solvent and paint generated at automated paint booths by paint gun flushing. Gun flush is considered hazardous secondary material (HSM) upon generation and is reclaimed in the facility's two onsite distillation units. Gun flush in excess of the volume that the distillation units can process is considered hazardous waste based on product and process knowledge. Waste rags and wipes

are generated at the touchup paint booths and are considered hazardous based on product and process knowledge. The waste is considered hazardous based on product and process knowledge. Waste gun flush and waste rags and wipes are collected by Veolia and transported to Veolia in Menomonee Falls, Wisconsin, for fuel blending.

Distillation bottoms generated through reclamation of HSM are considered nonhazardous based on product and process knowledge. The waste is collected by Veolia and transported to Veolia in Menomonee Falls, Wisconsin, for fuel blending.

Fueling and equipment testing operations generate waste diesel fuel. The facility considers waste diesel fuel hazardous based on product and process knowledge. The waste is collected by Veolia and transported to Veolia in Menomonee Falls, Wisconsin, for fuel blending.

Facility and equipment maintenance activities generate used oil, used oil filters, paint booth filters, waste aerosol cans, waste lamps, waste batteries, and general trash. Used oil and used oil filters are managed as used oil according to provisions of Title 40 *Code of Federal Regulations* (40 CFR) Part 279. Used oil and oily wastewater are processed in an onsite oil/water separation system. John Deere generates approximately 2,619 gallons of used oil and 25 used oil filters per month during equipment and fork truck maintenance. These wastes are collected for offsite recycling. Paint booth filters are considered nonhazardous based on analytical testing and are added to general trash for landfill disposal. Waste aerosol cans are considered hazardous based on product and process knowledge and are shipped off site for recycling or disposal. Waste lamps and waste batteries are managed as universal wastes according to provisions of 40 CFR Part 273. Universal wastes are collected for offsite recycling. General trash is considered nonhazardous and is collected for landfill disposal at the Dubuque Metropolitan Area Solid Waste Agency (DMASWA) landfill.

John Deere is located in a rural area north of Dubuque, Iowa, on the west bank of the Mississippi River. The facility began operations at this location in 1947. Mr. Shoemaker estimated the facility has approximately four million square feet of floor space under roof, on approximately 1,450 acres of contiguous property. He stated that the facility employs approximately 2,500 personnel, with the fabrication areas operating on three shifts (6:00 a.m. to 2:30 p.m., 2:00 p.m. to 10:30 p.m., and 10:00 p.m. to 6:30 a.m.) Monday through Friday. Assembly area personnel work one shift (6:00 a.m. to 2:30 p.m.) Monday through Friday. John Deere's primary North American Industrial Classification System (NAICS) code is 333120 (Construction Machinery Manufacturing).

John Deere was last inspected by an EPA inspector on June 18, 2018. No findings or violations were made during the June 18, 2018, inspection.

2. RCRA Status

The Verification Report (Attachment 1) indicates that John Deere is registered with EPA, under EPA ID IAD005269527, as a large quantity generator (LQG) of hazardous waste, generating more than 1,000 kilograms (kg) or 2,200 pounds of hazardous waste per month. I confirmed the facility's generator status through review of the facility's 2021 hazardous waste biennial report, current operations, interviews, and review of waste disposal records.

John Deere's 2021 hazardous waste biennial report (Attachment 7, page 4) includes re-notification to EPA of the facility's management and reclamation of an estimated 70 short tons of HSM. The HSM is reclaimed in onsite distillation units for continued use at the facility. Under the October 30, 2008 Definition of Solid Waste (DSW) rule, HSM generated, managed, and reclaimed per 40 CFR §261.4(a)(23) is exempt from the definition of solid waste and does not count toward the facility's hazardous waste generator status.

John Deere's 2021 Hazardous Waste Biennial Report summary (Attachment 8) includes a total of 152,430 pounds (69,141 kg) of hazardous waste generated and shipped offsite in 2021. Based on the biennial report, John Deere generates more than 2,200 pounds of hazardous waste every month. Therefore, I inspected John Deere as a LQG of hazardous waste.

John Deere runs two Finish Thompson distillation units with a capacity of 55 gallons each. I asked Mr. Shoemaker how John Deere manages HSM when problems with the distillation units arise. He stated that when the distillation units are not able to keep up with production of the waste solvent from the gun flushes, the gun flush solvent is considered WPRM and transferred to the less than 90 days hazardous waste container accumulation area (HWCAA). The 55-gallon containers are marked with an accumulation start date when they arrive at the HWCAA.

I asked Mr. Shoemaker for WPRM distillation records showing the quantity of hazardous waste generated and recycled at John Deere. Mr. Hensley emailed distillation records for April 2023 on May 2, 2023 (Attachment 9). These records show the amount of hazardous waste generated, distilled, and designated for offsite shipment. A total of sixty-seven 55-gallon containers were "received from the booths" from April 1 through April 30, 2023, and fifty-four 55-gallon containers were shipped off site for non-HSM disposal. I inspected John Deere as a generator and onsite recycler of HSM.

Universal wastes are shipped off site for recycling approximately every six months. Based on the quantities of universal waste lamps and batteries accumulated onsite between shipments, it appears that John Deere is operating below the small quantity handler (SQH) accumulation threshold of 5,000 kilograms (11,000 pounds) of universal waste onsite at any time. Therefore, I inspected John Deere as a SQH of universal waste.

John Deere generates used oil from facility gear box oil changes and fork truck maintenance. The facility also processes used oil/wastewater generated at the facility and received from the John Deere facility in Davenport, Iowa by oil/water separation. Therefore, I also inspected John Deere as a used oil generator and used oil processor. A copy of the Used Oil Processor Biennial Report for 2021 is included as Attachment 10.

3. Waste Streams

This section of the CEI report describes the 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 conversations with facility representatives, the visual inspection, and my review of waste shipping documents. Mr. Shoemaker accompanied me during the visual inspection.

WPRM is generated from spent solvent and paint generated from flushing lines and cleaning of spray gun nozzles at touchup paint booths. The facility has determined that WPRM is hazardous (D001, D010, D035) based on product and process knowledge. Copies of the SDSs for components of the WPRM (Duraspar Prime High Speed Light Gray Epoxy, R-Cure 800 Urethane JDM F9LA Industrial Yellow Enamel, R-Cure 800 JDM F9A John Deere Green Urethane Enamel, R-Cure 800 JDM F9TC Industrial Charcoal Urethane, and methyl amyl ketone [MAK]) are included as Attachments 11 through 15. Based on the 2021 Biennial Report (Attachment 8, page 5), the facility generates approximately 3,416 pounds per month. The waste is accumulated in 20-gallon satellite accumulation containers (SACs) and full SACs are transferred to the HWCAA. The waste is collected by Veolia ES Technical Solutions and transported to Veolia ES Technical Solutions in Menomonee Falls, Wisconsin, for fuel blending.

During the CEI, I observed 20-gallon SACs of WPRM at the following locations:

- Maintenance touch-up booth at bay location S77 E43 (Attachment 6, Photograph 11 and 12)
- Backhoe Paint Kitchen at bay location S69 E39, East and West Kitchens
- Crawler Prime Paint Kitchen both East and West Kitchens

The volume of hazardous waste in each satellite accumulation area was less than 55 gallons. Each SAC was at or near the point of generation and under control of the operator. Each SAC was structurally sound, labeled with the words “hazardous waste” and an indication of the nature of the hazard, and closed.

I also observed one 20-gallon hazardous waste accumulation container (HWAC) and seven 55-gallon HWACs of WPRM and/or gun flush considered to be WPRM in the HWCAA (Attachment 6, Photographs 21 through 23). Each HWAC was structurally sound, closed, labeled with the words “hazardous waste” and an indication of the nature of the hazard, and dated. The oldest accumulation start date was February 28, 2023. I noted no deficiencies with management of WPRM during the CEI.

Waste wipes and rags are generated from the touch-up paint booths. The facility has determined that waste rags and wipes are hazardous (D001, D035) based on product and process knowledge. Based on the 2021 Biennial Report (Attachment 8, page 6), the facility generates approximately 1,079 pounds of waste wipes and rags per month. The waste is accumulated in 20-gallon SACs and full SACs are transferred to the HWCAA. The waste is collected by Veolia ES Technical Solutions and transported to Veolia ES Technical Solutions in Menomonee Falls, Wisconsin, for fuel blending.

During the CEI, I observed 20-gallon SACs of waste wipes and rags at the following locations:

- Satellite 1 at bay location N100 E13 (Attachment 6, Photograph 8)
- Maintenance touch-up booth at bay location S77 E43 (Attachment 6, Photograph 13)
- Backhoe Paint Kitchen at bay location S69 E39, East and West Kitchens
- Crawler Prime Paint Kitchen both East and West Kitchens
- Backhoe Paint Kitchen Entrance

The volume of hazardous waste in each satellite accumulation area was less than 55 gallons. Each SAC was at or near the point of generation and under control of the operator. Each SAC was structurally sound, labeled with the words “hazardous waste” and an indication of the nature of the hazard, and closed.

I also observed two 20-gallon HWACs and three 55-gallon HWACs of waste wipes and rags in the HWCAA (Attachment 6, Photographs 21 and 24). Each HWAC was structurally sound, closed, labeled with the words “hazardous waste” and an indication of the nature of the hazard, and dated. The oldest accumulation start date was March 2, 2023. I noted no deficiencies with management of waste wipes and rags during the CEI.

Gun flush is generated during the paint changes by purging of paint guns in the automated paint booths. The facility considers gun flush to be hazardous (D001, D010, D035) based on product and process knowledge. Gun flush is collected in 20-gallon containers, and full containers of gun flush are transferred to the distillation area in C27. Gun flush that can be reclaimed in the distillation units is considered HSM. Excess gun flush above the volume that the distillation units can reclaim is considered hazardous waste. Hazardous waste gun flush containers are marked with accumulation start dates and transferred to the HWCAA. Based on the 2021 Biennial Report (Attachment 8, page 8) the facility generates approximately 7,772 pounds of hazardous waste gun flush per month. The waste is collected by Veolia ES Technical Solutions and transported to Veolia ES Technical Solutions in Menomonee Falls, Wisconsin, for fuel blending.

During the CEI I observed 20-gallon containers of gun flush at the following locations:

- Satellite 1 at bay location N100 E13 (Attachment 6, Photograph 9)
- Backhoe W Paint Kitchen at bay location S69 E39
- Crawler Prime Paint Kitchen both East and West Kitchens

Each container was at or near the point of generation and under control of the operator. Each container was structurally sound, labeled with the words “hazardous waste” and an indication of the nature of the hazard, and closed.

I observed one 20-gallon HWAC and seven 55-gallon HWACs of WPRM and/or gun flush considered to be WPRM in the HWCAA (Attachment 6, Photographs 21 through 23). Each HWAC was structurally sound, closed, labeled with the words “hazardous waste” and an indication of the nature of the hazard, and dated. The oldest accumulation start date was February 28, 2023.

I also observed twenty-four 55-gallon HWACs of gun flush in C27 ready to be sent to the HWCAA (Attachment 6, Photographs 14 through 19). This waste consisted of HSM gun flush that was generated over several days. The solvent still operator assessed the total volume of HSM gun flush on hand and transferred the excess gun flush that could not be distilled to 55-gallon HWACs. All of the HWACs were structurally sound, closed, labeled with the words “hazardous waste” and an indication of the nature of the hazard, and marked with accumulation start dates of April 24, 2023. The accumulation start date marked on the containers reflected the date of the waste determination for the excess gun flush.

Waste diesel fuel is generated from fueling and testing equipment. The facility has determined that waste diesel fuel is hazardous (D001, D018) based on product and process knowledge. Based on the 2021 Biennial Report (Attachment 8, page 7), the facility generates approximately 230 pounds per month. Waste diesel fuel is accumulated in a 55-gallon SAC in the maintenance shop and full SACs are transferred to the HWCAA. The waste is collected by Veolia ES Technical Solutions and transported to Veolia ES Technical Solutions in Menomonee Falls, Wisconsin, for fuel blending. I did not observe waste diesel fuel in accumulation during the CEI.

Aerosol cans are generated during maintenance of facility equipment and buildings. The facility has determined that waste aerosol cans are hazardous (D001, U117) based on product and process knowledge. Based on the 2021 Biennial Report (Attachment 8, page 5), the facility generates approximately nine pounds of aerosol cans per month. The waste is accumulated in a 55-gallon SAC, and full SACs are transferred to the HWCAA. The waste is picked up by Veolia ES Technical Solutions and transported to Veolia ES Technical Solutions in Menomonee Falls, Wisconsin, for recycling or disposal.

During the CEI, I observed one 55-gallon HWAC of aerosol cans in the HWCAA (Attachment 6, Photograph 20). The HWAC was structurally sound, closed, labeled with the words “hazardous waste” and an indication of the nature of the hazard, and marked with an accumulation start date of April 24, 2023. I noted no deficiencies with management of aerosol cans during the CEI.

Distillation bottoms are generated during distillation of the HSM gun flush. This is a new waste stream at the point of generation, which the facility has determined is nonhazardous based on product and process knowledge. Approximately 263 gallons of distillation bottoms were generated during the month of April 2023 (Attachment 9). Distillation bottoms are accumulated in 55-gallon containers in the distillation room at C26. The waste is collected by Veolia ES Technical Solutions and transported to Veolia ES Technical Solutions in Menomonee Falls, Wisconsin, for fuel blending.

During the CEI, I observed three 55-gallon containers of distillation bottoms in the distillation room at C26. The containers were structurally sound, closed, and labeled. I was not able to photograph the containers due to health and safety concerns with potentially-explosive atmospheres in the distillation room. I noted no deficiencies with management of distillation bottoms during the CEI.

Used oil is generated during the maintenance of facility equipment and fork trucks, as well as processing (treatment) of oily wastewater generated on site and received from the John Deere facility in Davenport, Iowa. The facility manages used oil according to provisions of 40 CFR Part 279. According to Mr. Shoemaker, John Deere processes all used oil and oily wastewater through an onsite oil/water separator to remove used oil from the combined waste stream. Based on the 2021 Used Oil Processor Biennial Report (Attachment 10). John Deere generates approximately 2,619 gallons of used oil per month. Used oil is collected by Safety-Kleen for recycling.

During the CEI, I observed a 55-gallon used oil storage container at bay location N26 E13 (Attachment 6, Photograph 1). The 55-gallon container appeared to be structurally sound, was

labeled with the words “used oil,” and held approximately 10 gallons of used oil. I observed another used oil storage container that held used oil mats and absorbents at N100 E13 (Attachment 6, Photograph 10). The 55-gallon container appeared to be structurally sound, was labeled with the words “used oil,” and held approximately 10 gallons of absorbent mats with used oil.

During the CEI, I also observed two 6,000-gallon used oil processing tanks (Attachment 6, Photograph 25), and one used oil 6,000-gallon storage tank (Attachment 6, Photograph 26). The tanks and piping were labeled with the words “used oil,” and the 6,000-gallon used oil storage tank held approximately 3,200 gallons of used oil. I noted no deficiencies with management of used oil during the CEI.

Used oil filters are generated during maintenance of fork trucks and machinery. The facility manages used oil filters as used oil according to provisions of 40 CFR Part 279. John Deere generates approximately 25 used oil filters per month (based on interview with Mr. Shoemaker). The used oil filters are stored in a 55-gallon used oil storage container and are collected by Oil Filters Recycling (location not obtained) for recycling. I did not observe used oil filters in accumulation during the CEI.

Universal waste lamps are generated by maintenance personnel replacing spent lamps. The facility manages waste lamps as universal waste according to provisions of 40 CFR Part 273. Universal waste lamps are accumulated in universal waste accumulation containers at bay location N26 E13. Based on universal waste shipping documentation, the facility generates approximately 500 pounds of universal waste lamps per month (Attachment 16). The waste is collected by Veolia ES Technical Solutions and transported to Veolia ES Technical Solutions in Port Washington, Wisconsin, or A-TEC Recycling in Des Moines, Iowa, for recycling.

During the CEI, I observed three universal waste lamps accumulation containers at bay location N26 E13 (Attachment 6, Photographs 2 through 4). The universal waste accumulation containers were structurally sound, closed, labeled with the words “universal waste lamps,” and marked with accumulation start dates ranging from March 7, 2023, to March 25, 2023. I noted no deficiencies with management of universal waste lamps during the CEI.

Universal waste batteries are generated by maintenance personnel replacing spent batteries. John Deere manages waste batteries as universal waste according to provisions of 40 CFR Part 273. Universal waste batteries are accumulated in universal waste accumulation containers at bay location N26 E13. Based on universal waste shipping documentation, the facility generates approximately 150 pounds of universal waste batteries per month (Attachment 16). The waste is collected by Veolia ES Technical Solutions and transported to Veolia ES Technical Solutions in Port Washington, Wisconsin, or A-TEC Recycling in Des Moines, Iowa, for recycling.

During the CEI, I observed three universal waste batteries accumulation containers at bay location N26 E13 (Attachment 6, Photographs 5 through 7). The universal waste accumulation containers were labeled with the words “universal waste batteries” and dated February 28, 2023. I noted no deficiencies with management of universal waste batteries during the CEI.

Paint booth filters are generated when synthetic fiber filters in the touch-up paint booths are changed out. John Deere has determined that waste paint booth filters are nonhazardous based on product/process knowledge and testing. A copy of an analytical report for toxicity characteristic leaching procedure (TCLP) testing for paint booth filters, dated March 31, 2022, is included as Attachment 17. Based on this report, it appears the nonhazardous waste determination is adequate. The facility generates approximately 3,000 pounds of paint booth filters per month. Paint booth filters are added to the general trash waste stream, which is collected by Waste Management for disposal at the DMASWA landfill in Dubuque, Iowa. I did not observe paint booth filters in accumulation during the CEI.

Filter cake is generated from the sludge press at the final stage of wastewater treatment. The facility has determined filter cake is nonhazardous based on analytical testing. A copy of an analytical report for TCLP testing for filter cake, dated February 23, 2022, is included as Attachment 18. Based on this report, it appears the nonhazardous waste determination is adequate. I did not determine the waste generation rate during the CEI. Filter cake waste is accumulated in a 20-cubic-yard roll-off container and is collected by Waste Management for disposal at the DMASWA landfill in Dubuque, Iowa, under a Special Waste Authorization (SWA). A copy of the SWA is included in Attachment 19.

General trash consists of office-type refuse, such as waste packaging materials and food containers. The facility has determined that general trash is nonhazardous based on product and process knowledge. General trash is accumulated in several containers throughout the facility and transferred to a 4-cubic-yard roll-off container or compactor. General trash is collected by Waste Management for disposal at the DMASWA landfill in Dubuque, Iowa. During the CEI, I observed accumulation of general trash 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

John Deere maintains one HWCAA at C26. During the CEI, I observed 14 HWACs in the HWCAA (Attachment 6, Photographs 20 through 24). The HWACs held aerosol cans, WPRM and/or hazardous waste gun flush, and waste wipes and rags. All HWACs were structurally sound, closed, labeled with the words “hazardous waste” and an indication of the nature of the hazard, and dated. The earliest accumulation start date was February 28, 2023.

I asked Mr. Shoemaker if the HWCAA is inspected. He stated that he and Mr. Hensley conduct the inspections of the HWCAA twice per week. I asked Mr. Shoemaker if he maintained an inspection log and he confirmed that an inspection log is maintained. I reviewed the inspection

log and noted no weeks where an inspection was not performed. A copy of the HWCAA inspection log from July 8, 2022, to April 20, 2023, is included as Attachment 20. I asked Mr. Shoemaker how someone would summon emergency assistance in the HWCAA. He stated that all of the workers that handle hazardous waste carry two-way radios or company-supplied cellular phones.

6. Manifests and Biennial Report

John Deere generated manifests for 94 hazardous waste shipments from April 24, 2020, to April 24, 2023. During the CEI, I reviewed manifests and LDR notifications for five shipments in 2020, five in 2021, five in 2022, and seven in 2023. A copy of the manifest and LDR for a shipment dated March 8, 2023, is included as Attachment 21. The facility submitted its 2021 Biennial Report on February 28, 2022 (Attachment 7). I noted no deficiencies during my review of manifests, LDR notifications, and the Biennial Report.

7. Preparedness and Prevention Plan

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. Shoemaker, John Deere is the subject of a regular inspection by the Dubuque Fire Department hazardous materials team. He explained the fire department is shown the layout of the facility, the location of the hazardous waste HWCAAs, and other facility features during inspections.

The facility's Contingency Plan was last updated August 9, 2022. I reviewed the Contingency Plan against the content requirements of 40 CFR 262.261. I noted 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 with a description of the signals used, as required by 40 CFR 262.17(a)(6) Referencing 262.261(a, c, e, and f). The Contingency Plan included telephone numbers of the primary emergency coordinator, Mr. Shoemaker, and the alternate emergency coordinators, as required by 40 CFR 262.17(a)(6) Referencing 262.261(d). It also included a Quick Reference Guide, as required by 40 CFR 262.17(a)(6) Referencing 262.262(b). Copies of the Contingency Plan contact information and Quick Reference Guide are included as Attachments 22 and 23. I noted no deficiencies with the facility's emergency preparedness, prevention, and procedures during the CEI, including content of the Contingency Plan.

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. Shoemaker 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 six months of hiring or being assigned to a job that handles hazardous waste. He also stated that annual refresher training is conducted. I asked Mr. Shoemaker who conducts the training. He stated that all training is conducted in person by

John Deere corporate trainers. I reviewed the training records for the last three years for Messrs. Gary Ames, Mr. Craig Barth, and Mr. David Buelow (production workers who handle hazardous waste). Copies of training records for Messrs. Ames, Barth, and Buelow are included in Attachment 24. The 2022 training records for Messrs. Shoemaker and Hensley are included in Attachment 25. I reviewed the written job descriptions for Messrs. Shoemaker and Hensley and noted that it appears to meet requirements of 40 CFR 262.17(a)(7)(iv). A copy of the Job Description for an Environmental Health and Safety Manager is included as Attachment 26.

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. John Deere 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. John Deere is not subject to the Subpart BB regulations because it does not have equipment that contains or comes in contact with 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 John Deere 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.

9. 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
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Date: _____

Clifford A. Nelles, Inspector
CLAENE Group

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AMBER WHISNANT
Date: 2023.06.23
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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. Site Map (1 page)
5. Google Earth Aerial Photograph (1 page)
6. Photographic Documentation (Photolog and 26 Photographs) (17 pages)
7. Copy of 2021 Biennial Report Filing (15 pages)
8. Copy of 2021 Biennial Report EPA (13 pages)
9. Copy of Email from James Hensley Dated May 2, 2023 (3 pages)
10. Copy of 2021 Used Oil Processor Biennial Report (2 pages)
11. Copy of SDS for Duraspar Prime High Speed Light Gray Epoxy (10 pages)
12. Copy of SDS for R-Cure 800 Urethane JDM F9LA Industrial Yellow Enamel (9 pages)
13. Copy of SDS for R-Cure 800 JDM F9A John Deere Green Urethane Enamel (10 pages)
14. Copy of SDS for R-Cure 800 JDM F9TC Industrial Charcoal Urethane (18 pages)
15. Copy of SDS for Methyl Amyl Ketone (12 pages)
16. Copies of Universal Waste Shipment Documentation Dated November 23, 2022 and March 8, 2023 (3 pages)
17. Copy of Analytical Report from Environment Testing on Paint Booth Filters (15 pages)
18. Copy of Analytical Report from Environment Testing on Wastewater Filter Cakes (17 pages)
19. Copy of Special Waste Authorization for Wastewater Filter Cakes (1 page)
20. Copy of Inspection Log (4 pages)
21. Copy of Manifest and LDR for a Shipment on March 8, 2023 (3 pages)
22. Copy of Contingency Plan Contact List (1 page)
23. Copy of Quick Reference Guide (10 pages)
24. Copies of Training Records for Gary Ames, Craig Barth, and David Buelow (3 pages)
25. Copies of Training Records for James Hensley and Austin Shoemaker (2 pages)
26. Copy of Job Description for Environmental, Health, and Safety Manager (4 pages)