REPORT OF RCRA COMPLIANCE EVALUATION INSPECTION

At

WINNEBAGO INDUSTRIES, INC.
605 W. Crystal Lake Road
Forest City, Iowa 50436
641-585-3535

EPA ID Number: IAD005300751

On

June 9, 2021

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 Winnebago Industries, Inc. (Winnebago), at 605 W. Crystal Lake Road, Forest City, 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 findings of the CEI.

PARTICIPANTS

Winnebago:

Wayne Venzke, Environmental Engineer

Toeroek Team:

John D. Dixon, Inspector, 703-473-8717

INSPECTION PROCEDURES

Due to the spread of coronavirus disease 2019 (COVID-19) at the time of the CEI, I contacted Winnebago via telephone one week prior to the scheduled inspection. The purpose of the initial contact was to identify the appropriate facility representatives, ensure the representatives would be available during the CEI, and to discuss protocols, procedures, and any other requirements adopted by the facility to mitigate the spread of COVID-19. I spoke with Mr. Venzke during this initial contact.

Prior to the CEI at Winnebago on June 9, 2021, I conducted a drive-by visual inspection of the facility. I did not observe any areas of concern during the drive-by. I drove to the security checkpoint at the facility's entrance and gave my name to the security guard. The guard cleared me to proceed and gave me directions to Mr. Venzke's office. I entered the building identified by the security guard and went to Mr. Venzke's office. I introduced myself to Mr. Venzke, explained the purpose of the CEI, and conducted an entry briefing with him.

During the entry briefing, I presented my business card and EPA credential letter to Mr. Venzke. I explained the scope of the CEI and the data gathering procedures that would be employed (for example, interviews, visual inspection, records review, and digital photography). I then informed Mr. Venzke of the facility's right to make confidentiality claims for any or all of the information obtained. I stated that at the conclusion of the CEI, he 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. Venzke 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 the facility 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
- Environmental Compliance Assistance Centers
- Solvent-Contaminated Wipes Final Rule Summary Chart
- IDNR Excluded Solvent-Contaminated Wipes Rule: Management Practices for Wipes, Rags, and Shop Towels
- Battery Recycling/Disposal
- Management of Fluorescent Lamps for Businesses
- Incompatible Chemicals
- Universal Wastes – Including Aerosol Cans
- TCLP – Toxicity Characteristic Leaching Procedure
- RCRA Online: A Quick Reference Guide

- Part 279 Requirements: Used Oil Management Standards
- EPA Region 7 Emergency Response Program
- Commercial Motor Vehicle Transportation System Security and Safety
- Security Awareness
- Chemical Facility Anti-Terrorism Standards

I reviewed the Hazardous Waste Site Info Verification Report (Verification Report) with Mr. Venzke (Attachment 1). Based on this review and observations during the CEI, I added P.O. Box 152 to the facility's mailing address. I deleted entries related to large quantity handler (LQH) of universal waste and used oil marketer from the Type(s) of Regulated Activity section of the report. I added small quantity handler (SQH) of universal waste and used oil generator to the Type(s) of Regulated Activity and hazardous waste code F019 to the Hazardous Waste Handled section of the report.

I conducted the visual inspection of the facility on June 9, 2021, accompanied by Mr. Venzke. I also reviewed available facility records, including manifests with land disposal restriction (LDR) notifications, nonhazardous waste bills of lading, waste tracking records, waste profile and analytical testing records, safety data sheets (SDS), inspection records, Contingency Plan, training records, and other documentation related to waste generation and management. Facility information gathered during the CEI is documented on the Data Gathering Worksheets and Checklists (Attachment 2).

At the conclusion of the CEI, I conducted an exit briefing with Mr. Venzke. During the exit briefing, I provided a Receipt for Documents and Samples, which Mr. Venzke signed, acknowledging receipt (Attachment 3). I provided Mr. Venzke the Notice, which he signed indicating no confidential business information had been provided (Attachment 4). I also provided Mr. Venzke a Notice of Preliminary Findings (NOPF), which he signed to acknowledge receipt (Attachment 5).

A facility map obtained during the CEI is included in Attachment 6. An aerial photograph of the facility was downloaded after the CEI and is included in Attachment 7. The 56 photographs taken during the CEI are included in Attachment 8.

FINDINGS AND OBSERVATIONS

1. Facility Description and General Information

Winnebago is a manufacturer of motor homes. The facility also provides maintenance and repair of motor homes in its Customer Service Building. Winnebago began operation at its current location in the early 1960s and consists of multiple buildings on approximately 250 acres. According to Mr. Venzke, the facility has approximately 1.3 million square feet of production, 500,000 square feet of warehouse, and 200,000 square feet of support services under roof. Winnebago currently employs 1,542 personnel. Work shifts vary, but main production line personnel work one shift (7:00 a.m. to 3:30 p.m.), Monday through Friday.

Motor home manufacturing begins with receipt of chassis from automotive manufacturers. The chassis are prepared in the Chassis Prep and Metal Stamping Buildings, where they are built up using steel parts. Steel parts used for the build-up are cleaned in a nine-stage cleaning assembly and then coated by electrodeposition (e-coated). Following build-up in Chassis Prep, the motor homes are finished on the main production line in the Bertha Building using aluminum parts extruded and finished in the Extrusion Building, wood and fiberglass components fabricated in the Sawmill Building, water holding tanks manufactured in the Rotocast Building, and plastic and stitchcraft components fabricated in their respective buildings.

Hazardous production wastes generated throughout the facility include waste rags used for wipe cleaning, waste paint-related materials (WPRM), waste aerosol cans, and waste aerosol foam cans. Each of these wastes is considered by the facility to be hazardous waste by product and process knowledge. Spent paint booth filters, scrap aluminum, and scrap steel are also generated throughout the facility and are considered to be nonhazardous waste.

In the Fiberglass Area of the Sawmill Building, fiberglass is sprayed onto molds by use of spray guns. Acetone is used to clean the spray guns. In addition, gelcoat catalyst containers are rinsed in the Fiberglass area prior to disposal in the general trash. Waste acetone and catalyst rinse water are considered by the facility to be hazardous wastes by product and process knowledge. Sawmill wastes including sawdust, waste wood, and waste water/glue and glue, are considered to be nonhazardous wastes by product and process knowledge and/or testing.

Aluminum parts are manufactured in the Extrusion Building. Aluminum billets are extruded, and parts are washed via a multi-stage cleaning assembly prior to powder coat painting. A heated corrosive bath is used to clean dies between extrusions. The Extrusion Building also includes a paint stripper dip tank to remove paint from parts that must be repainted. Waste corrosive liquid and waste paint stripper are both considered by the facility to be hazardous waste based on product and process knowledge.

The facility has two wastewater treatment systems—one in the Chassis Prep Building and one in the Extrusion Building. Both wastewater treatment systems employ a filter press to remove sludge. Wash and e-coat wastewater treatment in the Chassis Prep Building generates a wastewater treatment sludge that is considered by the facility to be nonhazardous waste by product and process knowledge and testing. Manufacturing processes in the Extrusion Building include chemical conversion coating of aluminum. Therefore, the facility considers wastewater treatment sludge from the Extrusion Building system to be F019 hazardous waste based on product and process knowledge.

Facility and equipment maintenance generate spent parts washer solvent, used oil, used oil filters, used antifreeze, waste lamps, waste batteries, and general trash. Used oil, used oil filters, and used antifreeze are also generated during repair and maintenance of customer motor homes. The facility considers spent parts washer solvent, used antifreeze, and general trash to be nonhazardous wastes based on product and process knowledge. Used oil and used oil filters are managed as used oil according to Title 40 *Code of Federal Regulations* (40 CFR) Part 279. Waste lamps and batteries are managed as universal wastes according to 40 CFR Part 273.

On April 9, 2014, Tetra Tech, Inc., an EPA contractor, conducted a CEI for EPA at Winnebago. Following the CEI on April 9, 2014, the inspector made the following preliminary findings:

- NOPF No. 1 – Failure to close containers of universal waste lamps
- NOPF No. 2 – Failure to label containers of universal waste lamps
- NOPF No. 3 – Failure to date or otherwise track universal waste lamps accumulation time
- NOPF No. 4 – Accumulation of universal waste lamps for longer than 1 year
- NOPF No. 5 – Failure to provide training in universal waste management
- NOPF No. 6 – Failure to label used oil storage containers with the words "used oil"
- NOPF No. 7 – Failure to close SAA containers
- NOPF No. 8 – Failure to label SAA containers with their contents
- NOPF No. 9 – Failure to label SAA containers with the words "hazardous waste"
- NOPF No. 10 – Failure to mark HWCAA containers with accumulation start dates
- NOPF No. 11 – Failure to accumulate hazardous waste in a HWCAA container in good condition
- NOPF No. 12 – Storage of hazardous waste for longer than 90 days without a permit
- NOPF No. 13 – Failure to designate a primary emergency coordination in the Contingency Plan
- NOPF No. 14 – Failure to include evacuation routes in the Contingency Plan
- NOPF No. 15 – Failure to maintain training documentation
- NOPF No. 16 – Failure to provide job titles linked to employee names
- NOPF No. 17 – Failure to perform weekly inspections of a HWCAA
- NOPF No. 18 – Failure to accumulate hazardous waste in a SAA container in good condition.

Of the violations listed above, NOPF No. 10 was repeated during this inspection.

2. RCRA Status

Winnebago 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, Mr. Venzke provided copies of a spreadsheet used to track production waste shipments in 2020 sorted by shipping date and by waste type (Attachments 9 and 10, respectively). He also provided a copy of the tracking spreadsheet for 2019 sorted by waste type (Attachment 11). I reviewed manifests and bills of lading for waste shipments in 2021 to date and noted that the types and quantities of wastes shipped in 2021 are similar to those shipped in 2020. Copies of manifests and bills of lading from January 19, 2021, through June 4, 2021, are in Attachment 12.

I used the waste tracking spreadsheet for 2020, sorted by waste type (Attachment 10) to determine Winnebago's hazardous waste generation rate. Per the spreadsheet, the facility shipped a total of 56,388 pounds of production waste in 2020. I subtracted 16,896 pounds of nonhazardous water/glue and 5,770 pounds of nonhazardous adhesive (glue) for a total of 33,722 pounds (15,296 kg) of hazardous waste shipped in 2020. The hazardous waste generation rate is

relatively consistent from month to month. The total of 15,296 kg over a 12-month period (15,296 kg ÷ 12 months = 1,274.7 kg average per month) indicates that Winnebago operated as a LQG of hazardous waste for most, if not all, calendar months in 2020. Based on similar waste shipment rates noted during my review of 2021 hazardous waste manifests, 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 SQH of universal waste lamps and batteries (accumulating less than 5,000 kg of universal waste at any time) as well as 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 interview with Mr. Venzke, the visual inspection, and my review of available documentation.

The visual inspection included waste generation and management areas within the Sawmill Building (Fiberglass, Tool Mold, Research and Development [R&D], and Woodworking areas), Chassis Prep Building, Bertha Building (main production), Extrusion Building, Rotocast Building, Customer Service Building, Warehouse, and Maintenance Building. I also inspected the two wastewater treatment systems (Chassis Prep and Extrusion), and waste accumulation areas within the Uninsured Warehouse (HWCAA and a separate area utilized for universal waste and used oil accumulation). Mr. Venzke accompanied me throughout the visual inspection.

During the records review, I obtained copies of building maps from the Contingency Plan showing locations of SAAs in each building or area (Attachment 13). Some of the SAA locations on the building maps indicate use of more than one drum (55-gallon container). Mr. Venzke explained that these areas may be indicated on the maps as a single SAA, but most are separate SAAs collecting different wastes from different processes. This was consistent with my observations during the visual inspection, as most SAAs were observed to consist of a single 55-gallon SAA container. However, I observed multiple 55-gallon containers within a single SAA in the following areas:

- Sawmill, R&D Area: two 55-gallon containers (waste aerosol cans and waste aerosol foam cans) (Attachment 8, Photograph 12).
- Sawmill, R&D Area: two 55-gallon containers within the same, two-drum capacity safety cabinet with a partial divider between the containers (WPRM and waste rags)
- Customer Service: two 55-gallon containers (waste aerosol cans and waste aerosol foam cans)
- Bertha Building: two 55-gallon containers (waste aerosol cans and waste aerosol foam cans)

At each of the locations above, the total volume of hazardous waste in accumulation was less than 55 gallons at the time of the CEI. Therefore, I did not make any findings related to satellite accumulation of hazardous waste during the CEI. I provided compliance assistance to Mr. Venzke regarding satellite accumulation limits, container sizes, and accumulation time limits for satellite accumulation. He was aware of the 55-gallon limit for satellite accumulation. I also

provided compliance assistance regarding management of waste aerosol cans as universal waste. Mr. Venzke stated that he would review his options and determine the best way to manage accumulation of wastes at these areas.

Waste rags consists of disposable paper rags used for wipe cleaning of hands, equipment, and products throughout the facility. The facility uses a variety of solvents (such as acetone, isopropyl alcohol, methyl ethyl ketone [MEK], and solvent blends), paints, and other materials such as gasoline or catalyst that may be cleaned using rags. The facility considers waste rags to be hazardous waste (D001, D018, F005 or D001, F003, F005 depending on where the waste rags were generated) based on product and process knowledge. Based on the facility's waste tracking records, Winnebago shipped 971 pounds (418 kg) of waste rags in 2020. Waste rags are accumulated in 5- or 55-gallon SAA containers throughout the facility. Full SAA containers are transferred to the HWCAA. Waste rags are primarily collected by Hydrite Chemical Company of Waterloo, Iowa, (Hydrite) and transported to Tradebe Treatment and Recycling in East Chicago, Indiana, (Tradebe) for solvent recovery. The waste was last collected on May 26, 2021 (Attachment 12, Page 13).

During the CEI, I observed waste rags SAA containers in the Sawmill, Chassis Prep, Bertha, Extrusion, Rotocast, and Customer Service Buildings. Each SAA container was near the point of generation, under control of the operator, structurally sound, and closed. Each SAA container was labeled with the words "hazardous waste" and an indication of the nature of the hazard. Representative photographs of waste rags SAA containers are in Attachment 8, Photographs 1, 2, 8, 9 and 51.

I observed one HWAC of waste rags in the HWCAA at the time of the CEI. The HWAC was structurally sound, closed, labeled with the words "hazardous waste" and an indication of the nature of the waste, and marked with an accumulation start date of June 3, 2021 (Attachment 8, Photograph 31).

WPRM consists of spent solvent and paint generated during paint gun and vessel cleaning, paint line flushing, and other activities such as discarding unwanted or excess paints or solvents. Winnebago uses a variety of solvents (such as acetone, isopropyl alcohol, MEK, and solvent blends) and paints throughout the facility. The facility considers WPRM to be hazardous waste (D001, D018, D035, F003, F005) based on product and process knowledge. Based on the facility's waste tracking records, Winnebago shipped 3,979 pounds (1,805 kg) of WPRM in 2020. WPRM is accumulated in 55-gallon SAA containers throughout the facility. Full SAA containers are transferred to the HWCAA. WPRM is primarily collected by Hydrite and transported to Tradebe for solvent recovery or fuel blending. The waste was last collected on May 26, 2021 (Attachment 12, Page 13).

During the CEI, I observed WPRM SAA containers in the Sawmill, Bertha, Maintenance, Rotocast, and Customer Service Buildings. Each SAA container was near the point of generation, under control of the operator, structurally sound, and closed. Each SAA container was labeled with the words "hazardous waste" and an indication of the nature of the hazard. Representative photographs of WPRM SAA containers are in Attachment 8,

Photographs 13, 14, 21, 22 and 52. No HWACs of WPRM were in the HWCAA at the time of the CEI.

Waste paint stripper is generated during changeout of the stripper dip tank fluid in the Extrusion Building. The stripper dip tank is used to remove paint from aluminum parts that must be repainted. The facility considers waste paint stripper to be hazardous waste (D001, D002) based on product and process knowledge. Based on the facility's waste tracking records, Winnebago shipped 4,912 pounds (2,228 kg) of waste paint stripper in 2020. Waste paint stripper is accumulated in a 55-gallon SAA container in the Extrusion Building. Full SAA containers are transferred to the HWCAA. Waste paint stripper is primarily collected by Hydrite and transported to Tradebe for fuel blending. The waste was last collected on May 28, 2021 (Attachment 12, Page 14). I observed the stripper dip tank during the CEI, but did not observe waste paint stripper in accumulation.

Waste acetone is generated in the Fiberglass area of the Sawmill Building from spray gun and equipment cleaning. The facility considers waste acetone to be hazardous waste (D001, F003) based on product and process knowledge. Based on the facility's waste tracking records, Winnebago shipped 5,364 pounds (2,433 kg) of waste acetone in 2020. Waste acetone is accumulated in 55-gallon SAA containers in the Fiberglass area, and full SAA containers are transferred to the HWCAA. Waste acetone is primarily collected by Hydrite and transported to Tradebe for fuel blending. The waste was last collected on May 28, 2021 (Attachment 12, Page 14).

During the CEI, I observed two waste acetone SAA containers in the Fiberglass area of the Sawmill Building. Each SAA container was near the point of generation, under control of the operator, structurally sound, and closed. Each SAA container was labeled with the words "hazardous waste" and an indication of the nature of the hazard. Photographs of one of the waste acetone SAA containers are in Attachment 8, Photographs 6 and 7.

I observed one HWAC of waste acetone in the HWCAA at the time of the CEI. The HWAC was structurally sound, closed, labeled with the words "hazardous waste" and an indication of the nature of the waste, and marked with an accumulation start date of June 4, 2021 (Attachment 8, Photograph 26).

Waste corrosive liquid is generated in the Extrusion Building. Aluminum billets are extruded through dies, which results in a small amount of aluminum remaining in the die after extrusion is complete. The facility uses a heated caustic bath to clean the dies between extrusions. Waste corrosive liquid is generated during changeout of the caustic bath solution. The facility considers waste corrosive liquid to be hazardous waste (D002) based on product and process knowledge. Based on the facility's waste tracking records, Winnebago shipped 7,236 pounds (3,282 kg) of waste corrosive liquid in 2020. Waste corrosive liquid is accumulated in a 55-gallon HWACs upon generation and is transferred immediately to the HWCAA. Waste corrosive liquid is primarily collected by Hydrite and transported to Evoqua Water Technologies, LLC in Roseville, Iowa, for treatment. The waste was last collected on April 30, 2021 (Attachment 12, Page 9). I observed the caustic bath in the Extrusion Building during the CEI, but did not observe waste corrosive liquid in accumulation.

Waste aerosol cans are generated throughout the facility during small-scale and touchup painting applications. The facility uses a variety of aerosol paints, including paints with MEK. The facility considers waste aerosol cans to be hazardous waste (D001, D035) based on product and process knowledge. Based on the facility's waste tracking records, Winnebago shipped 2,022 pounds (917 kg) of waste aerosol cans in 2020. Waste aerosol cans are accumulated in 55-gallon SAA containers throughout the facility. Full SAA containers are transferred to the HWCAA. Waste aerosol cans are primarily collected by Hydrite and transported to Tradebe for bulking and offsite transfer. The waste was last collected on May 28, 2021 (Attachment 12, Page 14).

During the CEI, I observed waste aerosol cans SAA containers in the Sawmill, Chassis Prep, Bertha, Rotocast, Uninsured Warehouse, and Customer Service Buildings. Each SAA container was near the point of generation, under control of the operator, structurally sound, and closed. Each SAA container was labeled with the words "hazardous waste" and an indication of the nature of the hazard. Representative photographs of waste aerosol cans SAA containers are in Attachment 8, Photographs 10-12.

I observed three HWACs of waste aerosol cans in the HWCAA at the time of the CEI. The HWACs were structurally sound, closed, labeled with the words "hazardous waste" and an indication of the nature of the waste, and marked with accumulation start dates of June 7 or June 8, 2021 (Attachment 8, Photographs 24 and 25).

Waste aerosol foam cans are generated throughout the facility during application of foaming fill in the manufacturing process. Waste aerosol foam cans are accumulated separately from the waste aerosol paint cans at the request of the waste vendor. The facility considers waste aerosol foam cans to be hazardous waste (D001) based on product and process knowledge. Based on the facility's waste tracking records, Winnebago shipped 471 pounds (214 kg) of waste aerosol foam cans in 2020. Waste aerosol foam cans are accumulated in 55-gallon SAA containers throughout the facility. Full SAA containers are transferred to the HWCAA. Waste aerosol foam cans are primarily collected by Hydrite and transported to Tradebe for bulking and offsite transfer. The waste was last collected on March 3, 2021 (Attachment 12, Page 3).

During the CEI, I observed waste aerosol foam cans SAA containers in the Sawmill, Chassis Prep, Bertha, Rotocast, and Customer Service Buildings. Each SAA container was near the point of generation, under control of the operator, structurally sound, and closed. Each SAA container was labeled with the words "hazardous waste" and an indication of the nature of the hazard. A representative photographs of waste aerosol foam cans SAA containers is in Attachment 8, Photograph 12.

I observed one HWAC of waste aerosol foam cans in the HWCAA at the time of the CEI. The HWAC was structurally sound, closed, labeled with the words "hazardous waste" and an indication of the nature of the waste (Attachment 8, Photograph 27). However, the HWAC was marked with an accumulation start date of March 2, 2021 (Attachment 8, Photographs 28 and 32). This date was 99 days prior to the date of the CEI.

Mr. Venzke said that wastes were recently collected from the HWCAA, and a HWAC of waste aerosol foam cans should not have remained in accumulation for longer than 90 days. He asked the employee who manages the HWCAA about the waste aerosol foam cans HWAC.
Mr. Venzke explained that the employee was certain he transferred the waste aerosol foam cans to the HWCAA the previous week. He noticed the container was marked with an accumulation start date; however, he did not notice that the date appeared to be the date the satellite accumulation container was started. Based on the information provided, I determined that it did not appear the waste aerosol foam cans had been accumulating for longer than 90 days. However, I determined the facility failed to mark an accurate accumulation start date on a HWAC, as required by 40 CFR 262.17(a)(5)(i)(C) **(NOPF No. 1)**.

Chassis Prep Building wastewater treatment sludge is generated from a filter press at the final stage of wastewater treatment. The wastewater in this building is from multi-stage cleaning and e-coating of steel parts. According to Mr. Venzke, the e-coating paints are Axalta AquaEC products and are nonhazardous. The facility considers wastewater treatment sludge from the Chassis Prep Building to be nonhazardous waste by product and process knowledge as well as analytical testing. I did not review SDSs for e-coating paints, but I did review the analytical test results for the sludge. No hazardous constituents were reported above characteristic hazardous waste levels. Mr. Venzke estimated the wastewater treatment sludge generation rate to be approximately 500 pounds per week. The waste is collected in a container beneath the filter press and is added to the facility's general trash waste stream for disposal at the Landfill of North Iowa in Clear Lake, Iowa.

During the CEI, I observed the Chassis Prep Building wastewater treatment system, filter press, and sludge accumulation container (Attachment 8, Photographs 15 and 16). No wastewater treatment sludge was in accumulation at the time of the CEI.

Extrusion Building wastewater treatment sludge is generated from a filter press at the final stage of wastewater treatment in the Extrusion Building. The wastewater in this building is from multi-stage cleaning and powder painting of aluminum parts. According to Mr. Venzke, sludge was previously considered to be nonhazardous waste. However, the facility recently began a chemical conversion coating process that makes the sludge F019 listed hazardous waste by definition. The facility currently considers Extrusion Building wastewater treatment sludge to be hazardous waste (F019) by product and process knowledge and analytical testing. I reviewed analytical test results for the sludge and confirmed no hazardous constituents were reported above characteristic hazardous waste levels in addition to the F019 listing. Based on the facility's waste tracking records, Winnebago shipped 7,145 pounds (3,241 kg) of Extrusion Building wastewater treatment sludge in 2020. The waste is collected in a container beneath the filter press and immediately transferred to an adjacent 55-gallon SAA container. Extrusion Building wastewater treatment sludge is primarily collected by Hydrite and transported to Tradebe for bulking and offsite transfer. The waste was last collected on April 28, 2021 (Attachment 12, Page 8).

During the CEI, I observed the Extrusion Building wastewater treatment system, filter press, and SAA container (Attachment 8, Photographs 17 and 18). The SAA container was near the point of

generation, under control of the operator, structurally sound, and closed. Labeling on the SAA container included the words “hazardous waste” and “toxic” to indicate the nature of the hazard.

I observed six HWACs of Extrusion Building wastewater treatment sludge in the HWCAA at the time of the CEI. The HWACs were structurally sound, closed, labeled with the words “hazardous waste” and “toxic” to indicate the nature of the waste, and marked with accumulation start dates ranging from April 21 to June 2, 2021 (Attachment 8, Photographs 23 and 30).

Catalyst rinse water is generated in the Fiberglass area of the Sawmill Building from rinsing empty gelcoat catalyst containers prior to placement in the general trash. The facility considers catalyst rinse water to be hazardous waste (D001) based on product and process knowledge. The generation rate could not be determined during the CEI as the waste is included in the WPRM totals and not separately tracked. Catalyst rinse water is accumulated in a 55-gallon SAA container near the gelcoat booth, and full SAA containers are transferred to the HWCAA. Catalyst rinse water is primarily collected by Hydrite and transported to Tradebe. I did not determine its ultimate disposition or the date of last collection.

During the CEI, I observed a 55-gallon catalyst rinse water SAA container near a gelcoat booth (Attachment 8, Photographs 3 and 4). The SAA container was near the point of generation, under control of the operator, structurally sound, closed, and labeled with the words “hazardous waste” and an indication of the nature of the hazard. I also observed a container holding empty catalyst containers that had been rinsed (Attachment 8, Photograph 5).

Waste water/glue and glue are generated in the Sawmill Building. Waste water/glue is generated from daily cleaning of the glue vessel, and waste glue consists of off-specification, contaminated, or unwanted adhesives. The facility considers waste water/glue and glue to be nonhazardous waste based on product and process knowledge as well as analytical testing. Based on the facility’s waste tracking records, Winnebago shipped a total of 22,666 pounds of waste water/glue and glue in 2020. The waste is primarily collected by Hydrite and transported to Tradebe for bulking and offsite transfer. The waste was last collected on June 4, 2021 (Attachment 12, Page 15). I did not observe waste water/glue or glue in accumulation during the CEI.

Spent parts washer solvent is generated during servicing of the facility’s parts washer units. The facility has five parts washer units, and each uses high flashpoint parts washer solvent as its cleaning agent (Safety-Kleen 150 Solvent). Winnebago considers spent parts washer solvent to be nonhazardous waste based on product and process knowledge. The parts washer units are serviced by Safety-Kleen on a staggered 16- or 24-week schedule, with a service event occurring nearly every month. Parts washer servicing generates approximately 17 to 34 gallons of spent parts washer solvent per month. Spent parts washer solvent is containerized during servicing and transported to Safety-Kleen in Des Moines, Iowa, for recycling. The waste was last collected on May 26, 2021 (Attachment 12, Page 12). I did not observe the parts washer units during the CEI.

Waste paint booth filters are generated during maintenance of wet paint booth filters. The paint booths are used to spray coat water tanks manufactured in the building. The facility considers waste paint booth filters to be nonhazardous waste by product and process knowledge as well as

analytical testing. Paint line and gun cleaning solvent is collected in a WPRM SAA container and is not sprayed onto the filters. Waste paint booth filters were landfilled under a Special Waste Authorization (SWA) in the past; however, the Landfill of North Iowa has determined that a SWA is no longer necessary for the waste (Attachment 14). The paint booth filters are changed out approximately twice per year, and the waste paint booth filters (which are dry at the time of removal) are added to the general trash for disposal at the Landfill of North Iowa in Clear Lake, Iowa. I did not determine the independent generation rate for waste paint booth filters.

During the CEI, I observed the two Rotocast Building paint booths (Attachment 8, Photographs 49 and 50). I did not observe waste paint booth filters in accumulation.

Used oil is generated from maintenance of facility equipment and motor homes. Used oil is managed by the facility according to requirements of 40 CFR Part 279. Used oil is stored in 55-gallon used oil storage containers at the point of generation, and full containers are transferred to the Uninsured Warehouse. Used oil is collected by Safety-Kleen and transported to Safety-Kleen in Des Moines, Iowa, for recycling. Based on facility records, Safety-Kleen collected approximately 12,000 pounds of used oil in 2020.

During the CEI, I observed 55-gallon used oil storage containers in the Uninsured Warehouse and the Customer Service Building. Both used oil storage containers were structurally sound and labeled with the words “used oil” (Attachment 8, Photographs 45, 53 and 54).

Used oil filters are generated from maintenance of facility equipment and motor homes. Used oil filters are punctured and hot drained upon generation; however, they are managed by the facility according to requirements of 40 CFR Part 279. Used oil filters are stored in 55-gallon used oil storage containers at the point of generation, and transferred to a used oil filter storage container in the Uninsured Warehouse. Used oil filters are collected by Safety-Kleen and transported to Safety-Kleen in Des Moines, Iowa, for recycling. I did not determine a generation rate for used oil filters during the CEI.

During the CEI, I observed a storage container for used oil filters in the Customer Service Building and another container in the Uninsured Warehouse. Both used oil storage containers were structurally sound and labeled with the words “used oil” (Attachment 8, Photographs 46-48, 53, 55 and 56).

Used antifreeze is generated from maintenance of motor homes. Used antifreeze is considered by the facility to be nonhazardous waste based on product and process knowledge. Used antifreeze is stored in 55-gallon containers at the point of generation, and full containers are transferred to the Uninsured Warehouse. Used antifreeze is collected by Safety-Kleen and transported to Safety-Kleen in Des Moines, Iowa. I did not determine a generation rate for used antifreeze during the CEI. The waste was last collected on April 27, 2021 (Attachment 12, Page 6). During the CEI, I observed a 55-gallon used antifreeze storage container in the Customer Service Building and noted no concerns (Attachment 8, Photograph 53).

Waste lamps are generated during maintenance of facility lighting. The facility manages waste lamps as universal waste according to requirements of 40 CFR Part 273. Waste lamps are

accumulated in fiberboard universal waste accumulation containers in the Uninsured Warehouse. The waste is collected by The Retrofit Companies in Owatonna, Minnesota, for recycling. I did not determine a generation rate for waste lamps during the CEI. The waste was last collected on April 8, 2021 (Attachment 12, Page 5).

During the CEI, I observed four fiberboard universal waste lamps accumulation containers in the Uninsured Warehouse for accumulation of waste 4-foot fluorescent and high intensity discharge (HID) lamps (Attachment 8, Photographs 36-41). The universal waste accumulation containers were structurally sound, closed, and labeled with the words "universal waste – lamp(s)." Each of the containers was marked with an accumulation start date, and the earliest accumulation start date was April 7, 2021.

Waste batteries are generated during maintenance of facility equipment. The facility manages waste batteries as universal waste according to requirements of 40 CFR Part 273. Waste lamps are accumulated in plastic universal waste accumulation containers in the Uninsured Warehouse. The waste is collected by The Retrofit Companies in Owatonna, Minnesota, for recycling. I did not determine a generation rate for waste batteries during the CEI. The waste was last collected on April 8, 2021 (Attachment 12, Page 5).

During the CEI, I observed three universal waste lamps accumulation containers in the Uninsured Warehouse for accumulation of waste alkaline, lead-acid, and nickel-cadmium batteries (Attachment 8, Photographs 42-44). The universal waste accumulation containers were structurally sound, closed, and labeled with the words "universal waste – battery(ies)." Each of the containers was marked with an accumulation start date, and the earliest accumulation start date was April 20, 2021.

Waste sawdust is generated during cutting of raw wood in the Sawmill Building. The facility considers waste sawdust to be nonhazardous waste based on product and process knowledge. Waste sawdust is collected in containers and added to the general trash for disposal at the Landfill of North Iowa in Clear Lake, Iowa. Based on facility records, Winnebago generated approximately 187,000 pounds of waste sawdust in 2019. I did not observe waste sawdust being accumulated during the CEI.

Waste wood consists of wood scraps generated during woodworking in the Sawmill Building as well as broken wooden pallets. The facility considers waste wood to be nonhazardous waste based on product and process knowledge. Waste wood is collected by various facilities for reuse, including companies that make landscaping mulch from wood scraps and the Was Broken Pallet Company in Moorland, Iowa, that reconditions broken wooden pallets. Based on facility records, Winnebago generated approximately 2.8 million pounds of waste wood in 2019 that was sent for reuse. I observed accumulation of waste wood during the CEI and noted no deficiencies.

Scrap steel is generated during motor home manufacturing and includes cuttings and damaged parts. The facility considers scrap steel to be exempt from the definition of solid waste per 40 CFR 261.4(a)(13) or exempt from hazardous waste regulation per 40 CFR 261.6(a)(3)(ii) when recycled. Scrap steel is accumulated in containers throughout the facility and is collected by Alter Metal Recycling in Mason City, Iowa, for recycling. Based on the facility's tracking

records, the facility generated approximately 4.3 million pounds of scrap steel in 2019. During the CEI, I observed scrap steel accumulation containers at the facility and noted no deficiencies.

Scrap aluminum is generated during extrusion and motor home manufacturing. The facility considers scrap aluminum to be exempt from the definition of solid waste per 40 CFR 261.4(a)(13) or exempt from hazardous waste regulation per 40 CFR 261.6(a)(3)(ii) when recycled. Larger, bulk aluminum scraps are sent back to the aluminum billet vendor (Sapa) for recycling. Smaller pieces of scrap aluminum are collected by Alter Metal Recycling in Mason City, Iowa, for recycling. Based on the facility's tracking records, the facility sent approximately 1.9 million pounds of scrap aluminum back to the vendor and recycled approximately 122,000 pounds of scrap aluminum through Alter Metal Recycling in 2019. During the CEI, I observed scrap aluminum accumulation containers at the facility and noted no deficiencies (Attachment 8, Photograph 20).

General refuse consists of office- and packaging-type refuse generated at the facility as well as production wastes that are added to the waste stream (Chassis Prep Building wastewater treatment sludge, waste paint booth filters, and waste sawdust). The facility considers general refuse to be nonhazardous waste based on product and process knowledge. The waste is collected for landfill disposal at the Landfill of North Iowa in Clear Lake, Iowa. During the CEI, I observed several general refuse accumulation containers 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 of the HWCAA and SAAs, I observed telephones and two-way radios for summoning emergency assistance if needed. I observed emergency response materials and equipment such as fire extinguishers, emergency eye wash stations, brooms, and spill response kits with absorbent materials. Photographs of emergency response materials near the HWCAA are in Attachment 8, Photographs 33-35. I did not observe any deficiencies related to emergency response equipment.

5. HWCAAs

The facility maintains a central HWCAA in the Uninsured Warehouse, which was inspected during the CEI. I also reviewed weekly inspection checklists for the HWCAA for the last three years and noted no missed inspections. A copy of a weekly inspection log for December 18, 2020, is in Attachment 15 as an example of the areas and items checked during each weekly inspection.

6. Manifests and Biennial Report

Hazardous wastes are collected approximately monthly at the facility. During the CEI, I reviewed approximately 21 manifests and LDR notifications, including all 2021 manifests and every other manifest from 2019 and 2020. I noted no deficiencies or concerns during the manifest review. Copies of manifests and bills of lading from January 19, 2021, through June 4, 2021, are in Attachment 12. The Hazardous Waste Biennial Report for 2019 was submitted in February 2020, and a copy is maintained at the facility.

7. Preparedness and Prevention, and Contingency Plan

LQG facilities are required by 40 CFR 262.17(a)(6) to meet the emergency preparedness, prevention, and procedures requirements outlined in 40 CFR 262 Subpart M, including preparation of a RCRA Contingency Plan and documented arrangements with response agencies. During the CEI, I reviewed the facility's RCRA Contingency Plan against the Contingency Plan content requirements of 40 CFR 262.261 and noted that each required element appeared to be included.

Mr. Venzke stated that he is in the process of updating and revising the facility's Contingency Plan. He explained that no changes or emergencies have occurred recently that would require revision of the Contingency Plan, only that the plan has not been revised for several years. Mr. Venzke also stated that he is preparing a Quick Reference Guide as part of the Contingency Plan update.

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. Winnebago provides general awareness training (Level 1) to all production employees, and general awareness plus Contingency Plan training (Level 2) to personnel who perform waste management duties or respond to emergencies. These trainings are provided upon initial hiring and annually thereafter. A copy of the facility's written training plan outlining the types of training provided for specific job titles is in Attachment 16. I reviewed documentation of training conducted in the last three years and noted no RCRA concerns with types, frequency, and content of training provided.

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 found 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. Winnebago is not subject to the Subpart AA regulations because the facility does not manage hazardous waste in equipment with 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. Winnebago 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 volatile organic compounds (VOC) concentration that exceeds 500 ppmw. The Subpart CC standards are applicable at Winnebago because the facility accumulates hazardous waste that contains VOCs in containers larger than 26 gallons in capacity. During the CEI, I determined

that the facility complies with the Subpart CC requirements for 55-gallon containers by using Container Level 1 controls (containers smaller than 122 gallons that are U.S. Department of Transportation [DOT]-approved). I noted no deficiencies regarding 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 mark an accurate accumulation start date on a HWAC, as required by 40 CFR 262.17(a)(5)(i)(C) **(NOPF No. 1)**

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.

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John D. Dixon
Inspector, CLAENE Group

AMBER WHISNANT Digitally signed by AMBER WHISNANT
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Amber Whisnant
Section Chief, ECAD/CB/RCRA

Attachments:

1. Hazardous Waste Site Info Verification Report (2 Pages)
2. Data Gathering Worksheets and Checklists (33 Pages)
3. Receipt for Documents and Samples (1 Page)
4. Confidentiality Notice (1 Page)
5. Notice of Preliminary Findings (1 Page)
6. Facility Map (1 page)
7. Aerial Image of the Facility (1 Page)
8. Photographic Documentation (Photolog and 56 Images) (35 Pages)
9. Production Waste Tracker 2020 By Date (2 Pages)
10. Production Waste Tracker 2020 By Waste Type (2 Pages)
11. Production Waste Tracker 2019 By Waste Type (2 Pages)
12. Manifests and Fills of Lading for 2021 (15 Pages)
13. Building Maps with SAA Locations (14 Pages)
14. SWA Letter for Paint Booth Filters (1 Page)
15. Example Weekly Inspection Log (1 Page)
16. Training Plan (2 Pages)

NOTICE OF PRELIMINARY FINDINGS

FACILITY NAME: Winnebago Industries, Inc
ADDRESS: 605 W. Crystal Lake Rd.
Forest City, IA 50436
EPA ID NUMBER: IAD005300751 **DATE:** 06/09/2021

NOTICE: I am not an employee of the Environmental Protection Agency ("EPA"). I am a contractor for EPA retained to conduct compliance evaluation inspections. The following is a list of observations/recommendations found during this inspection which will be reported back to EPA. This is not to be construed as a complete list of observations/recommendations. The EPA will be evaluating the report prepared as a result of this inspection and making the determinations as to what violations may have occurred at your facility.

1. Failed to mark an accurate accumulation start date on one hazardous waste accumulation container. 40 CFR 262.17(a)(5)(i)(C).
2.
3.
4.
5.
6.
7.

If you have any questions regarding these findings please contact Mr. Trevor Urban, USEPA

The undersigned person hereby acknowledges receipt of a copy of this document and has read the same.

PRINTED NAME: WAYNE VENZKE **TITLE:** ENV ENG.

SIGNATURE: Wayne Venzke

This document was prepared by John D. Dixon / John D. Dixon

Page 1 of 1