

REPORT OF RCRA COMPLIANCE EVALUATION INSPECTION

At

LHB Industries
8833 Fleischer Place
St. Louis, MO 63134
(314) 423-4333 ext. 103

EPA ID Number: MOD981712425

On

July 5 and 6, 2023

By

U.S. ENVIRONMENTAL PROTECTION AGENCY
Region 7
Enforcement & Compliance Assurance Division (ECAD)

1.0 INTRODUCTION

I performed a Resource Conservation and Recovery Act (RCRA) compliance evaluation inspection (CEI) at LHB Industries (LHB), located in St. Louis, Missouri, on July 5 and 6, 2023. I conducted the inspection under the authority of RCRA Section 3007(a), as amended. During the inspection, I collected the information necessary to determine compliance with the applicable regulatory and statutory requirements. This report and attachments present the results of the inspection. Based on the information obtained during the inspection, I inspected the facility as a Large Quantity Generator (LQG) of hazardous waste, a small quantity handler of universal waste, and used oil generator. LHB was last inspected for RCRA compliance on July 15, 2020, by the Missouri Department of Natural Resources (MoDNR). Seven potential findings or violations were observed or cited as a result of the 2020 MoDNR RCRA inspection.

2.0 PARTICIPANTS

LHB:

Doug Gabel, Shipping Supervisor
Scott Lemmons, Senior QHSE Manager
Clint Cruse, Chief Operating Officer/Vice President Operations (Exit Briefing)
Eric Warnhoff, President and CRO (Exit Briefing)
James Evans, Lead Compound Mixer/Batcher
Andre Liu, Research and Development Manager

MoDNR:

Jamie Valentine, Environmental Program Analyst

U.S. Environmental Protection Agency (EPA):

Timothy Evans, Life Scientist, ECAD (Lead Inspector)

3.0 INSPECTION PROCEDURES

On July 5, 2023, Ms. Valentine and I arrived at the facility at approximately 1:00 p.m. A drive-by inspection was only possible on the east, west, and south sides of the facility. No apparent issues were observed. Ms. Valentine and I then proceeded to the facility entry/lobby area, used the phone and called to ask for Mr. Lemmons, who was listed as site contact on the Notification Acknowledgement/Verification Report form (Attachment 6). Ms. Valentine and I were greeted by Patricia (last name not documented) who stated that Mr. Lemmons was not currently at the facility and that she would find someone to help us. Ms. Valentine and I were then greeted by Mr. Gabel, who escorted us to a conference room for the in-briefing. I provided Mr. Gabel with my business card, and I presented my EPA credentials. Mr. Lemmons joined the in-briefing by phone at approximately 1:25 p.m. During the in-briefing, I presented Mr. Gabel with a copy of the Notification Acknowledgement/Verification Report form and asked if all information appeared to be accurate. I then presented Mr. Gabel with the RCRA Facility Access Information Sheet, March 2013, which provides inspection authority. I also explained my need to collect accurate information and presented Mr. Gabel with a copy of Title 18 U.S. Code, Sections 1001 and 1002. As part of the in-briefing, Messrs. Gabel and Lemmons were made aware of LHB's confidentiality rights and informed that a Confidentiality Notice would be provided at the end of the inspection to make, or not to make, any claims. Messrs. Gabel and Lemmons acted as the facility representatives during the on-site inspection activities.

During the inspection, discussions consisted of wastes generated and waste management practices. Document photocopies and photographs were collected as inspection documentation (see Attachments 1-14, including Photos 1-55).

Ms. Valentine and I conducted a visual inspection of the following areas:

7/5/23

FG 09 - Partial Pallet, Less Than 90-Day Accumulation Area

Rack, Less Than 90-Day Accumulation Area

"Haz Waste Aerosols Only", Less Than 90-Day Accumulation Area

Aerosol Line Number 2

Aerosol Filling Room

Gas House

Small Mix Area

Paint Mix Room

7/6/23

Large Mix Room
Pine oil Room
QC Satellite Lab
Raw Material Storage
Tree Mark Filling
Maintenance
Compressor Room
Outside Maintenance Shed
Staging/Reject/Return Area
QC Lab
Soap Labelling
SRO Rework and Rejected Material Area
Water-Based Product Packaging/Soap Packaging

Information collected during the inspection was documented on the MoDNR checklist entitled, "Hazardous Waste Large Quantity Generator Inspection Checklist." Additional information was documented in a bound field note logbook, on field sheets, and as discussed below.

At the conclusion of the inspection, I summarized the findings and recommendations with Messrs. Lemmons, Cruse, and Warnhoff. I provided Mr. Lemmons with a Confidentiality Notice (Attachment 3) which he signed as acknowledgement of receipt. Mr. Lemmons made no confidentiality claims. I provided Mr. Lemmons with a Receipt for Documents and Samples (Attachment 4) and Notice of Preliminary Findings (NOPF) (Attachment 5), which Mr. Lemmons signed as acknowledgement of receipt.

The following inspection documents were provided to LHB:

Inspection Documents

Confidentiality Notice

*Notice Regarding Proprietary/Confidential Business Information Submitted to or Collected by
EPA In Connection with Inspections
Receipt of Documents and Samples*

EPA Compliance Assistance Handouts (Provided by e-mail on July 7, 2023)

U.S. EPA Small Business Resources

EPA Industry Sector Notebooks List

EPA Compliance Assistance Centers

Security Awareness

Chemical Facility Anti-Terrorism Standards

*RCRA Organic Air Emission Standards for TSDFs and Large Quantity Generators, December
2022, EPA 530-F-22-007*

Managing Used Oil – Advice for Small Businesses

Overview of 2013 Solvent-Contaminated Wipes Final Rule

I followed the inspection procedures discussed in the RCRA CEI Standard Operating Procedure (No. 2321.1E), unless noted differently. Any federal regulatory citations noted in this report are as adopted by reference in the authorized Missouri regulations.

4.0 FINDINGS AND OBSERVATIONS

4.1 General Information/Facility Description and RCRA Status

According to the company website, Lighthouse for the Blind is a 501(c)3 non-profit organization headquartered in St. Louis, Missouri that provides employment opportunities and services to individuals who are legally blind. Lighthouse for the Blind operates two facilities in St. Louis, Missouri - the liquid and aerosol manufacturing plant (the facility described in this report as “LHB”) and a packaging and kitting facility located at 10440 Trenton Avenue where over 300 commercial and government products are manufactured, filled, assembled, and packaged.

Aside from the discontinued use of the distillation unit, processes at the facility have not changed since the MoDNR 2020 RCRA inspection. LHB Industries is a contract packaging facility that fills, assembles, and packages commercial and government products including, but not limited to, liquid and aerosol cleaners, hand soaps, paints, and coatings.

The facility consists of a maintenance shop, a QC laboratory, liquid fill lines, paint mixing and batching areas, aerosol fill lines, warehouse storage, and a tank farm located outside northeast of the facility building. The tank farm consists of several tanks used to store raw materials such as solvents (e.g., acetone, toluene, methanol, and xylene) and gases used as propellant (e.g., Hydrocarbon Aerosol Propellant, which is a mixture propane, butane, and isobutene; nitrogen, and carbon dioxide).

The hours of operation for the facility are 7-3:30 Monday through Friday, and occasionally some Saturday hours. The facility consists of one building at approximately 92,500 square feet under roof (See Attachment 2 for facility diagram and aerial photo). LHB employs approximately 50 people. According to Mr. Lemmons, approximately 35 of the 50 LHB employees are legally blind.

Hazardous waste generated at the facility includes, but may not be limited to, waste aerosols, Waste Solids Containing Flammable Liquid, Waste Paint Related Material, Waste Isopropanol, Waste Flammable Liquids, and Waste Corrosive Liquids. The facility is also a small quantity handler of universal wastes batteries and a generator of used oil. See Attachment 7 for additional information related to waste streams generated at the facility.

4.2 RCRA Status

According to the RCRAInfo database, LHB has notified as an LQG of D001 and D002 characteristic hazardous waste and F003, F005, and U154 listed hazardous waste, last notifying on April 17, 2023. I provided Messrs. Gabel and Lemmons with a Notification Acknowledgement/Verification Report form for review (Attachment 6).

Neither Messrs. Gabel nor Lemmons made changes to the form. Based upon the amount and type of hazardous waste generated at LHB, I inspected the facility as an LQG of hazardous waste, small quantity handler of universal waste, and used oil generator.

4.3 Previous Inspection and Related Findings

LHB was previously inspected by the MoDNR on July 15, 2020. The 2020 MoDNR inspection report, included the following potential findings or violations:

1. Satellite container not marked with words “Hazardous Waste” or with other words identifying the contents—10 CSR 25-5.262(2)(C)3 incorporating 40 CFR 262.34(c)(1)(ii).
2. Based on types of waste handled and potential need for services, the owner or operator has not attempted to make arrangements with police, fire department and emergency response teams to familiarize them with the layout of facility, properties of waste handled, associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility and possible evacuation routes – 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(a)(4) referencing 40 CFR 265.37(a)(1).
3. The owner or operator has not attempted to make agreements with state emergency response teams, emergency response contractors and equipment suppliers – 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(a)(4) referencing 40 CFR 265.37(a)(3).
4. The owner or operator has not attempted to make arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and types of injuries and illnesses that could result from fires, explosions or releases at the facility – 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(a)(4) referencing 40 CFR 265.37(a)(4).
5. Each lamp or lamp container or package not marked or labeled clearly as "Universal Waste Lamps" or "Waste Lamp(s)" or "Used Lamps" - 10 CSR 25-16.273(1) incorporating 40 CFR 273.14(e).
6. Containers are not labeled “Excluded Solvent Contaminated Wipes” 40CFR 261.4(a)(26)(iv).
7. Batteries or battery containers not clearly labeled or marked as “Universal Waste-Battery(ies)” or “Waste Battery(ies)” or “Used Battery(ies)” – 10 CSR 25-16.273(1) incorporating 40 CFR 273.14(a).

4.4 Changes Since Previous Inspection

Changes that have occurred at LHB since the previous inspection include, but are not limited to:

- Doug Gabel became the new Shipping Supervisor in March of 2023.
- According to Mr. Lemmons, LHB stopped using the facility distillation unit, located in the Paint Mix Room, approximately one and a half years ago.
- According to Mr. Lemmons, the facility switched from fluorescent to light-emitting diode (LED) lighting fixtures, in 2020.

4.5 Waste Streams and Waste Management

Information related to waste streams is listed in the Waste Stream Table (Attachment 7). It should be noted that LHB had previously notified the MoDNR of their intent to manage Satellite Accumulation Area (SAA) containers under the Missouri regulations. SAA container management regulations can be found in the 2020 MoDNR inspection report, which includes the Hazardous Waste Large Quantity Generator Inspection Checklist (Attachment 8).

4.6 Areas Visually Inspected and Related Preliminary Findings

4.6.1 Aerosol Filling Room

Hazardous Waste Satellite Accumulation Container Not Closed, 10 CSR 25-5.262(1) referencing 40 CFR 265.173(a) (NOPF 1) - During inspection of the Aerosol Filling Room, I observed one, approximately 1/2-full SAA 55-gallon drum of what was described as D001, F003, and F005 hazardous waste solids containing flammable liquid (Photos 11 and 12). The drum lid was not making a complete seal.

Exceeding 55 Gallons Total for Waste Accumulation in Satellite Area, 10 CSR 25-5.262(c)(3), referencing 40 CFR 262.34(c)(1) (NOPF 2); Satellite Accumulation Containers Not Moved to Less Than 90-Day Accumulation Area Within Three Days of Becoming Full, 10 CSR 25-5.262(c)(3), referencing 40 CFR 262.34(c)(2) (NOPF 3) - During inspection of the Aerosol Filling Room, I observed two, 55-Gal. SAA drums – 1, 3/4-full and 1 full (Photos 6 and 9). According to the accumulation start date on the full drum (“6/14/23”) and the 3/4-full drum (“6/21/23”), the full drum would have needed to be shipped or placed in a less than 90-day accumulation area within three days of becoming full.

Solvent-Contaminated Wipes Containers Not Closed, 40 CFR 261.4(a)(26)(i) (NOPF 4); Container Not Labeled with the Words “Excluded Solvent-Contaminated Wipes”, 40 CFR 261.4(a)(26)(iv) (NOPF 5) - During inspection of the Aerosol Filling Room, I observed two, 5-gallon step cans used to accumulate solvent-contaminated cloth wipes (Photo 10). The 5-gallon step can on the right in the photo was ~1/4-full of solvent-contaminated cloth wipes. The can was not labeled with the words “Solvent-Contaminated Wipes” and the lid was not able to be closed. Mr. Lemmons transferred the solvent-contaminated cloth wipes to the container in the left of the photo, addressing NOPF4 and part of NOPF 5 at the time of the inspection.

4.6.2 Aerosol Line Number 2

Exceeding 55 Gallons Total for Waste Accumulation in Satellite Area, 10 CSR 25-5.262(c)(3), referencing 40 CFR 262.34(c)(1) (NOPF 2); Satellite Accumulation Containers Not Moved to Less Than 90-Day Accumulation Area Within Three Days of Becoming Full, 10 CSR 25-5.262(c)(3), referencing 40 CFR 262.34(c)(2) (NOPF 3) - During inspection of Aerosol Line Number 2, I observed two, 55-gal. SAA drums of hazardous waste aerosol cans, located against north wall of Aerosol Line 2 – one 1/2-full and one full. The full 55-gal. SAA hazardous waste drum was labeled “Start 6.16.23” and “Finish 6.22.23” (Photos 4 and 5).

According to the accumulation start date, the drum would have needed to be shipped or placed in a less than 90-day accumulation area within three days of becoming full.

4.6.3 Gas House

Exceeding 55 Gallons Total for Waste Accumulation in Satellite Area, 10 CSR 25-5.262(c)(3), referencing 40 CFR 262.34(c)(1) (NOPF 2); Satellite Accumulation Containers Not Moved to Less Than 90-Day Accumulation Area Within Three Days of Becoming Full, 10 CSR 25-5.262(c)(3), referencing 40 CFR 262.34(c)(2) (NOPF 3) - During inspection of the Gas House, I observed two 55-Gal. SAA drums of hazardous waste aerosol cans – 1, 1/4-Full and 1 Full (Photo 13). The full 55-gallon drum was not labeled with a date when it became full.

4.6.4 Paint Mix Room

Hazardous Waste Satellite Accumulation Containers Not Closed, 10 CSR 25-5.262(1) referencing 40 CFR 265.173(a) (NOPF 1) - During inspection of the Paint Mix Room, I observed one ~1/3-full green metal 55-gallon SAA drum containing paint related liquid hazardous waste and one ~2/3-full white metal 55-gallon SAA drum containing hazardous waste solvent-contaminated absorbent pads (Photos 15 and 16). Grounding clamps, attached to the drum rims, were keeping the lids from making a complete seal.

Hazardous Waste Satellite Accumulation Container Not Labeled with the Words “Hazardous Waste”, 10 CSR 25-5.262(C)3 referencing 40 CFR 262.34(c)(1)(ii) (NOPF 7) - During inspection of the Paint Mix Room, I observed one ~1/3-full green metal 55-gallon SAA drum containing paint related liquid hazardous waste (Photos 15 and 16). The drum was not labeled with the words “Hazardous Waste.” This is the same drum described in NOPF 1, above.

Container Not Labeled with the Words “Excluded Solvent-Contaminated Wipes”, 40 CFR 261.4(a)(26)(iv) (NOPF 5) - During inspection of the Paint Mix Room, I observed one, 5-gallon step can used to accumulate solvent-contaminated cloth rags (Photos 17 and 18). The 5-gallon step can was ~3/4-full of solvent-contaminated cloth rags. The step can was not labeled with the words “Solvent-Contaminated Wipes.”

4.6.5 Distillation Unit

Hazardous Waste Satellite Accumulation Container Not Closed, 10 CSR 25-5.262(1) referencing 40 CFR 265.173(a) (NOPF 2); Hazardous Waste Satellite Accumulation Container Not Labeled with the Words “Hazardous Waste”, 10 CSR 25-5.262(2)(C)3 referencing 40 CFR 262.34(c)(1)(ii) (NOPF 7); Container Used to Accumulate Hazardous waste Not Labeled with Hazard of the Contents, 10 CSR 25-5.262(2)(C)1. (NOPF 14 Added After Inspection); Container Not Marked with Beginning Date of Satellite Accumulation, 10 CSR 25-5.262(2)(C)3.C. (NOPF 15 Added After Inspection) - During inspection of the Distillation Unit, I observed one, metal 5-gallon SAA bucket containing approximately 1/2-gallon of material. I asked Mr. Lemmons if he knew what the material in the bucket was. Mr. Lemmons stated that the material was still bottoms from the distillation unit.

According to the 2020 MoDNR RCRA inspection, when generated, distillation bottoms had been determined to be, and managed as, D001, F003, and F005 hazardous waste. The bucket was not labeled with the words “Hazardous Waste”, an indication of the hazard class, and a Missouri option satellite accumulation start date. The bucket was also not closed.

An e-mail was sent to the facility on August 10, 2023, informing the facility of the additional NOPF (Attachment 9).

Hazardous Waste Determination Not Conducted, 10 CSR 25-5.262(1) referencing 40 CFR 262.11. (NOPF 6) - During inspection of the Distillation Unit secondary containment, I observed two closed white and two closed black 5-gallon containers sitting in the distillation unit secondary containment. There was also approximately 10 gallons of what appeared to be dried paint in the secondary containment. I asked Mr. Lemmons if he knew what was in the four 5-gallon containers and what the material was within the secondary containment. Mr. Lemmons stated that he did not know what was in the 5-gallon containers and wasn’t sure what the material was in the secondary containment. I asked Mr. Lemmons if a waste determination needed to be conducted for the material in the buckets and secondary containment. Mr. Lemons stated that a waste determination needed to be conducted for the material in the buckets and secondary containment.

4.6.6 Large Mix Room

Hazardous Waste Determination Not Conducted, 10 CSR 25-5.262(1) referencing 40 CFR 262.11. (NOPF 6) - During inspection of the Large Mix Room, I observed the following material:

- Approximately 1-gallon of liquid material on the concrete floor (Photos 21-23). According to James Evans, Lead Compound Mixer/Batcher, the liquid material could be a mix of Pro Lube, Pine Oil, and Mineral Spirits. Mr. Evans suggested that the yellow-colored material mixed into the liquid material could be insulation from the ceiling.
- Two gray plastic ~5-gallon capacity totes containing unknown white crystalline powder, located on top of used oil drums in the Large Mix Room (Photos 27-30). Each tote contained approximately 50 pounds of the unknown white crystalline powder. One tote was labeled, but not limited to, “Metso Beads 2048” and “12/19/19.”

I asked Mr. Lemmons if he knew what was in the two totes. Mr. Lemmons stated that he did not know what was in the totes. I asked Mr. Lemmons if a waste determination needed to be conducted for the material in the totes. Mr. Lemons stated that a waste determination needed to be conducted for the material in the totes.

Because Mr. Lemmons and Mr. Evans could not state definitively what the material was on the floor, and in what percentages, I added this to the citation after the inspection. Safety Data Sheets for Pro Lube, Pine Oil, and Mineral Spirits are included in this report as Attachment 10. Although not listed as part of the NOPF shared with the facility, absorbent pads observed in the Large Mixing Room should be included with this citation.

An e-mail was sent to the facility on August 10, 2023, informing the facility of the additional NOPF (Attachment 9).

Used Oil Containers Not Marked or Labeled with the Words “Used Oil”, 10 CSR 25-11.279(1) referencing 40 CFR 279.22(c)(1) (NOPF 11) - During inspection of the Large Mix Room, I observed three full 55-gallon black metal drums containing compressor used oil and water mixture. The drums were not labeled with the words “Used Oil” (Photos 24-26). Mr. Lemmons labeled the drums with the words “Used Oil”, addressing part of NOPF 11 at the time of the inspection (Photos 31 and 32).

4.6.7 Maintenance

Length of Time Universal Waste Has Been Accumulated Not Documented, 10 CSR 25-16.273(1) referencing 40 CFR 273.15(c) (NOPF 10) - During inspection of the facility Maintenance area, I observed one 5-gallon white polyethylene bucket containing two NiCad scale batteries and two Li-Ion power tool batteries (Photos 42 and 43). The container was labeled but not marked with an accumulation start date. I asked Mr. Lemmons if the facility employed an alternative method for recording the accumulation start date for universal waste batteries. Mr. Lemmons stated that the facility did not employ an alternative method for recording the accumulation start date. Facility personnel marked the bucket with an accumulation start date, addressing NOPF 10 at the time of the inspection (Photo 44).

4.6.8 Compressor Room

Used Oil Containers Not Marked or Labeled with the Words “Used Oil”, 10 CSR 25-11.279(1) referencing 40 CFR 279.22(c)(1) (NOPF 3) - During inspection of the Compressor Room, I observed two metal drums containing compressor used oil and water mixture – one ~1/2-full and one full. The drums were not labeled with the words “Used Oil” (Photos 45-47). Mr. Lemmons labeled the drums with the words “Used Oil”, addressing part of NOPF 11 at the time of the inspection (Photos 48 and 49).

During inspection of the Compressor Room, underneath the compressor, I observed one approximately 2-gallon capacity plastic container, containing compressor used oil. The container was not labeled with the words “Used Oil” (Photo 50). Mr. Lemmons labeled the container with the words “Used Oil”, addressing part of NOPF 11 at the time of the inspection (photo 51).

4.6.9 Records Review and Related Preliminary Findings

Weekly Inspections

Weekly Inspections of Less Than 90-Day Accumulation Areas Not Conducted, 10 CSR 25-5.262(1) referencing 40 CFR 265.174 (NOPF 8) - During review of records, Ms. Valentine reviewed weekly inspection documentation related to satellite and less than 90-day accumulation areas. Ms. Valentine noted that hazardous waste inspections had not been documented since November 11, 2022, and that inspections prior to November of 2022 were sporadic. Subsequent to the inspection, Mr. Lemmons provided me with examples of inspection documentation for inspections conducted in August and November of 2022 (Attachment 11).

According to an August 10, 2023 e-mail from Mr. Lemmons, approximately 115 inspections had been conducted for the past three years (Attachment 9).

Personnel Training

Annual Review of Personnel Training Not Provided to Facility Employees, 10 CSR 25-5.262(1) referencing 40 CFR 265.16(c) (NOPF 12) – During review of records, Mr. Lemmons stated to Ms. Valentine that all facility personnel receive a general orientation about flammable hazardous waste handled at the facility, employees should work according to their training, and all employees are familiarized with general chemical and hazardous waste safety measures. Mr. Lemmons provided Ms. Valentine with a written description of hazardous waste training topics including, but not limited to:

- Hazardous Waste Handling and Disposal
- Emergency Procedures for Minor Chemical Spills
- Hazardous Waste Shipping

Mr. Lemmons stated that he had usually provided annual in-house training to LHB employees. However, according to Mr. Lemmons, training had not been provided in several years.

Uniform Hazardous Waste Manifests and Land Disposal Restriction (LDR) Notification Forms

Prior to arriving at the facility, I had conducted an inspection of electronic manifests from July 2020 through June 2023, using RCRAInfo. During the inspection, I reviewed the following LDR notification forms associated with hazardous waste generated at, and shipped from, the facility:

- Waste Solids Containing Flammable Liquids – D001, F003, and F005 (Treatment Method H141)
- Waste Aerosols – D001 (Clean Earth of Calvert City, LLC Calvert City, KY – Treatment Method H141)
- Waste Pain Related Material – D001, F003, and F005 (Lone star Industries, Inc. Cape Girardeau, MO – Treatment Method H050)

No apparent issues were observed during review of manifests and LDR notification forms.

2021 Comprehensive Biennial Report

Prior to arriving at the facility, I was able to review the facility 2021 biennial report using RCRAInfo. No apparent issues were observed during review of the 2021 comprehensive biennial report.

Contingency Plan

Contingency Plan Not Updated to Include New Alternate Emergency Coordinator, 10 CSR 25-5.262(1) referencing 40 CFR 265.152(d) (NOPF 13 Added After Inspection) - During review of the facility's contingency plan, I noted that Mike Schaub was listed as the Alternate Incident Commander and Emergency Response Team Specialist (Attachment 12). According to Mr. Lemmons, Tonia Walters replaced Mr. Schaub as an Alternate Incident Commander. Mr. Schaub's employment with LHB ended in October of 2021.

An e-mail was sent to the facility on August 10, 2023, informing the facility of the additional NOPF (Attachment 9).

During review of the facility's contingency plan the following information was noted:

- The contingency plan contains a description of emergency response equipment, their capabilities, and locations listed on Page 12, under Emergency Response (E/R) Resources. The pieces of equipment included, but were not limited to:
 - Fire alarm pull boxes
 - Class 4-A:60-B:C Chemical Fire extinguishers
 - Class 10-B:C CO2 extinguishers
 - 21/2 Gallon Foam extinguisher
 - Plant and in-rack sprinklers
 - Spill control dikes
 - Drum Spill Container
 - SpillFyter kits
 - Drain Stopper composite pads for sealing drains
 - First Aid emergency oxygen supply
 - Protective Tychem 7500 Chemical Resistant suits
 - One drum of liquid 56% acetic acid to neutralize bases
 - One drum of powdered bicarbonate of soda to neutralize acids
- The Contingency Plan is made available to the Berkeley Fire Department and Police Department through an exterior lock box located at the facility. The Berkeley Fire Department audits/tours the facility at least twice annually. When sending personnel to the DePaul Hospital Emergency Room, information related to which chemical an employee has, or employees have, been exposed to (amount, route of exposure, SDS), will be sent with employee.

Aside from the need to update the Alternate Incident Commander/Emergency Response Team Specialist, the facility contingency plan appeared to be complete with no apparent issues.

Preparedness and Prevention

During the inspection, I noted several ABC-rated fire extinguishers throughout the facility had been inspected by Fire Safety, Inc., Wood River, Illinois, in March of 2023. Fire extinguishers were also inspected by facility personnel in April of 2023.

The facility is equipped with a water fire suppression system. However, testing and inspection documentation related to the water fire suppression was not reviewed during the inspection.

A spill kit containing absorbent pigs and plastic bags was observed in the Tree Mark cage. An approximately 30-gallon spill kit was observed in the Large Mix Room.

Communication Devices and Alarms

The facility is equipped with multiple fire alarm pull boxes. The facility is also equipped with an internal paging system and an emergency shutdown (panic button)/auto shut down system. If no fire or immediate danger, verbal signals are also used at the facility.

4.6.6 Additional Observations

Raw Material/Product on Walls and Floor, Inside Facility - During the visual inspection, I observed what was described as incidental spilling of raw material/product on walls and floors at the facility (Photos 6-9, 14, 17-20, and 36-41). According to facility personnel, the material is unintentionally released as part of the manufacturing process(es).

The material in Photos 6-9, 14, 17-20, and 36-41 is paint which would otherwise be containerized/packaged and sold as a product. The SDS for paints used at the facility appears to indicate that it would not be a hazardous waste when spilled onto the concrete floor inside the facility (Attachments 13).

Off-Specification Material

During inspection of the Raw Material Storage Area, I observed 10, full 55-gallon drums labeled as Corrosion Preventive Compound (CPC) Blue paint and one 55-gallon drum labeled Paraloid B-67 45% Resin (Photos 33-35). According to Mr. Lemmons, the CPC Blue paint had been mixed incorrectly and the Paraloid B-67 Resin was determined to be outdated raw material. According to Mr. Lemmons, LHB had made several attempts to have the material shipped off-site with their waste transporter Univar Solutions. Mr. Lemmons provided me with copies of an e-mail chain, documenting attempts to have the material transported to a disposal facility (Attachment 14).

Waste Not at or Near the Point of Generation

During inspection of the facility QC Lab, I observed one, approximately 2/3-full SAA 55-Gal. drum of Waste Paint Related Material (Paint, Mineral Spirits, Acetone, and Toluene), located outside and east of the QC Lab, in the Staging/Returns/Rework/Rejected Material Area (Photo 54). I discussed the regulatory requirements for satellite accumulation of hazardous waste, and stated to Mr. Lemmons that I wasn't sure if the drum met the conditions to be at or near the point of generation, since the drum was outside of the QC Lab. According to Andre Liu, Research and Development Manager, LHB made the decision to place the drum outside of the QC Lab due to space constraints and for safety reasons. To ensure proper use of the hazardous waste SAA drum, QC Lab personnel had placed a lock on the drum funnel (Photo 55).

5.0 SUMMARY

I inspected LHB as an LQG of hazardous waste, small quantity handler of universal waste, and used oil generator. The following preliminary findings were noted as discussed above:

1. Hazardous Waste Satellite Accumulation Containers Not Closed, 10 CSR 25-5.262(1) referencing 40 CFR 265.173(a) (NOPF 1)
2. Exceeding 55 Gallons Total for Waste Accumulation in Satellite Area, 10 CSR 25-5.262(c)(3), referencing 40 CFR 262.34(c)(1) (NOPF 2)
3. Satellite Accumulation Containers Not Moved to Less Than 90-Day Accumulation Area Within Three Days of Becoming Full, 10 CSR 25-5.262(c)(3), referencing 40 CFR 262.34(c)(2) (NOPF 3)
4. Solvent-Contaminated Wipes Containers Not Closed, 40 CFR 261.4(a)(26)(i) (NOPF 4)

5. Container Not Labeled with the Words “Excluded Solvent-Contaminated Wipes”, 40 CFR 261.4(a)(26)(iv) (NOPF 5)
6. Hazardous Waste Determination Not Conducted, 10 CSR 25-5.262(1) referencing 40 CFR 262.11. (NOPF 6)
7. Hazardous Waste Satellite Accumulation Container Not Labeled with the Words “Hazardous Waste”, 10 CSR 25-5.262(2)(C)3 referencing 40 CFR 262.34(c)(1)(ii) (NOPF 7)
8. Weekly Inspections of Less Than 90-Day Accumulation Areas Not Conducted, 10 CSR 25-5.262(1) referencing 40 CFR 265.174 (NOPF 8)
9. Less Than 90-Day Accumulation Area Drums Not Clearly Marked and Labeled with Accumulation start Dates and Words “Hazardous Waste”, 10 CSR 25-5.262(1) referencing 40 CFR 262.34(a)(2) and (3) (NOPF 9)
10. Length of Time Universal Waste Has Been Accumulated Not Documented, 10 CSR 25-16.273(1) referencing 40 CFR 273.15(c) (NOPF 10)
11. Used Oil Containers Not Marked or Labeled with the Words “Used Oil”, 10 CSR 25-11.279(1) referencing 40 CFR 279.22(c)(1) (NOPF 11)
12. Annual Review of Personnel Training Not Provided to Facility Employees, 10 CSR 25-5.262(1) referencing 40 CFR 265.16(c) (NOPF 12)
13. Contingency Plan Not Updated to Include New Alternate Emergency Coordinator, 10 CSR 25-5.262(1) referencing 40 CFR 265.152(d) (NOPF 13 Added After Inspection)
14. Container Used to Accumulate Hazardous waste Not Labeled with Hazard of the Contents, 10 CSR 25-5.262(2)(C)1. (NOPF 14 Added After Inspection)
15. Container Not Marked with Beginning Date of Satellite Accumulation, 10 CSR 25-5.262(2)(C)3.C. (NOPF 15 Added After Inspection)

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

**TIMOTHY
EVANS**

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TIMOTHY EVANS
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Timothy R. Evans
Life Scientist
ECAD/CB/RCRA, EPA Region 7

**Whisnant,
Amber**

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

Attachments

1. Digital Image Log (60 pages/55 photos)
2. Aerial Photo and Facility Diagrams (4 pages)
3. Confidentiality Notice (1 page)

4. Receipt for Document (1 page)
5. NOPF (3 pages)
6. Notification Acknowledgement/Verification Report Form (2 pages)
7. Waste Stream Table (10 pages)
8. 2020 MoDNR Report Including Hazardous Waste Large Quantity Generator Inspection Checklist (128 pages)
9. Additional NOPF E-Mail (2 pages)
10. Pro Lube, Pine Oil, and Mineral Spirits SDS (42 pages)
11. Examples of Weekly Inspection Documentation (5 pages)
12. Emergency Response Contingency Plan (34 pages)
13. Paint SDS (16 pages)
14. E-Mail Chain with Univar Solutions (9 pages)