LSASD Project ID: 25-0065

Dlubak Glass Company

NPDES Compliance Evaluation Inspection

Location: 1050 Industry Rd., Lawrenceburg, KY 40342

Project Date(s): November 18th, 2024

Report Date: December 23rd, 2024

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Analytical Support:

None

Approvals:

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1. Introduction

On November 18th, 2024, staff of the United States Environmental Protection Agency (EPA) Region 4, Laboratory Services and Applied Science Division (LSASD), conducted a National Pollutant Discharge Elimination System (NPDES) Compliance Evaluation Inspection (CEI) at Dlubak Glass Company in Lawrenceburg, Kentucky. The inspection was conducted under the authority of Section 308 of the Clean Water Act (CWA), as amended, and followed the procedures listed in the LSASD Project No. 25 – 0065 Sample and Analysis Plan (SAP). This report presents the results of the inspection. Table 1 lists the inspection participants and facility staff.

Table 1 - Inspection Personnel

Name	Organization	Date on Site	Contact Info
Chris McHugh	EPA Region 4 LSASD Inspection	11/18/2024	Mchugh.christopher@epa.gov
Deborah Singleton	KDEP Frankfort Regional Office	11/18/2024	Singleton.deborah@ky.gov
Jarod Jones	KDEP Frankfort Regional Office	11/18/2024	Jones.Jarod@ky.gov
Robert Daniell	KDEP Frankfort Regional Office	11/18/2024	Daniell.robert@ky.gov

There were no responsible officials available the day of the inspection to answer questions or provide documents. Facility access was granted by the front desk associate inside the main office.

2. Inspection Procedures

The objective of this inspection was to evaluate the condition of the facility's NPDES stormwater best management practices (BMP) and the permittee's self-monitoring program and offer compliance assistance as needed. Specific tasks included conducting an opening conference, interviewing facility staff, conducting a facility walkthrough, observing the receiving waters, and conducting a closing conference.

3. Facility Description

Dlubak Glass Company recycles glass brought onsite from automotive, cathode light tubes, lighting, plate, fiberglass, container, and specialty glass industries. It is permitted by KY0113433 and authorized to discharge to receiving waters: unnamed tributaries (UT) to Cedar Brook. The permit expires on December 31st, 2027.

Figure 1 – Facility Grounds from Main Office Parking Lot

The facility grounds are a mix of concrete impervious surface with gravel made from crushed glass pathway between different piles of glass and vinyl sheathing (Figure 1). There are two main crushing stations located in the center of Figure 2.

Outfall 002, 003, 004 are spaced alongside the northside of the property with a berm put in place to detain stormwater runoff before discharge (Figure 2 and Table 2 below). Outfall 001 is on the southside of the property. Near the main entrance is the vinyl sheathing pile that has previously burned (Figure 3). Figure 4 shows the condition of the vinyl sheathing pile that was not burned heading North. The berm in Figure 2 and pictured in Figure 5 extends down the property line around the crushed glass pile.

The concrete containment wall along the North and East sides of the property was buried and overtopped by glass products (Figure 6, 7, and 8).

Near the main pile of glass products awaiting to be crushed (Figure 9) is a large area that retains surface water (Figure 10).

Figure 2 - Aerial View of Facility Grounds

Figure 3 - Vinyl Sheathing Pile Burned Section

Figure 4 - Vinyl sheathing pile and pathway to northside of property

Figure 5 - Berm facing East down property line.

Figure 6 - East side of property, Crushed glass pile over top of concrete walls

Figure 7 - Glass overtop of concrete containment structure

Figure 8 - Glass product spilled outside of containment structure.

Figure 9 - Main pile of glass products.

Table 2 - Facility Stormwater Outfalls

Outfall No.	Type	Latitude (N)	Longitude (W)	Receiving Water	Description
001	External	38.030683°	-84.886849°	UT to Cedar Brook	Stormwater runoff from facility grounds
002	External	38.033250°	-84.883889°	UT to Cedar Brook	Stormwater runoff from facility grounds
003	External	38.032778°	-84.884444°	UT to Cedar Brook	Stormwater runoff from facility grounds
004	External	38.033056°	-84.88500°	UT to Cedar Brook	Stormwater runoff from facility grounds

For each outfall 001, 002, and 003, the facility is subject to the following permit effluent limitations and monitoring requirements show in Table 3. Outfall 004 is subject to the limitations in Table 4.

Table 3 – Effluent Limitations and Monitoring Requirements

Effluent Limitations								Monitoring Requirements	
Parameters	Units	Loadings (lb/d)		Concentrations				Frequency	Sample Type
		Monthly Avg.	Daily Max.	Min	Monthly Avg.	Daily Max.	Max.		
Flow	MGD	Report	Report	N/A	N/A	N/A	N/A	Monthly	Instantaneous
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	Monthly	Grab
Total Suspended Solids	mg/L	N/A	N/A	N/A	30	60	N/A	Monthly	Grab
Oil and Grease	mg/L	N/A	N/A	N/A	10	15	N/A	Monthly	Grab
Hardness (as mg/L $CaCo_3$)	mg/L	N/A	N/A	N/A	Report	Report	N/A	Monthly	Grab
Biological Oxygen Demand	mg/L	N/A	N/A	N/A	Report	Report	N/A	Monthly	Grab
Chemical Oxygen Demand	mg/L	N/A	N/A	N/A	Report	Report	N/A	Monthly	Grab
Total Recoverable Iron	mg/L	N/A	N/A	N/A	Report	Report	N/A	Monthly	Grab
Total Recoverable Lead	mg/L	N/A	N/A	N/A	Report	Report	N/A	Monthly	Grab

Table 4 – Outfall 002 Effluent Limitations and Requirements

Effluent Limitations								Monitoring Requirements	
Parameters	Units	Loadings (lb/d)		Concentrations				Frequency	Sample Type
		Monthly Avg.	Daily Max.	Min.	Monthly Avg.	Daily Max.	Max.		
Flow	MGD	Report	Report	N/A	N/A	N/A	N/A	Monthly	Instantaneous
pH	SU	N/A	N/A	6.0	N/A	N/A	9.0	Monthly	Grab
Total Suspended Solids	mg/L	N/A	N/A	N/A	30	60	N/A	Monthly	Grab
Hardness (as mg/L $CaCo_3$)	mg/L	N/A	N/A	N/A	Report	Report	N/A	Monthly	Grab
Biological Oxygen Demand	mg/L	N/A	N/A	N/A	Report	Report	N/A	Monthly	Grab
Chemical Oxygen Demand	mg/L	N/A	N/A	N/A	Report	Report	N/A	Monthly	Grab
Total Recoverable Iron	mg/L	N/A	N/A	N/A	Report	4.0	N/A	Monthly	Grab
Total Recoverable Lead	mg/L	N/A	N/A	N/A	Report	Report	N/A	Monthly	Grab

4. Records and Reports

I. Discharge Monitoring Reports (DMR) Review

The facility has repeated permit effluent exceedances over the last 12 quarters for Total Suspended Solids and Oil & Grease violations via discharge from Outfall 001, 002, and 004 that has led to the facility being listed on the Significant/Category 1 Noncompliance (SNC) list. The KDEP Frankfort Regional Office is currently assessing these exceedances.

II. Records Review

There were no representative officials present during the inspection to provide records.

III. Sampling Review

There were no representative officials present during the inspection to provide sampling protocol information.

5. Effluent and Receiving Waters

Outfalls 002, 003, and 004 were observed with discharge during the inspection. Outfall 001 was not accessible. The discharge from outfall 002 had an oily, iridescent sheen on the surface of the water.

Figure 10 - Outfall 002 sheen

6. State Enforcement and Sampling

The KDEP Frankfort Regional Office is currently working with Dlubak Glass Company to address the SNC status of the facility. State inspectors sampled each outfall as well as upstream and downstream of the facility. The results are attached to this report. Based on the upstream and downstream data for metals and total suspended solids along with the data from each outfall, Table 5 includes several notable metal concentrations and Table 6 includes one exceedance for total suspended solids.

Table 5 – State Sampling 11/07/24 Results Comparison.

Parameter	Upstream concentration (µg/L)	Downstream concentration (µg/L)
Aluminum	83.1	1130
Molybdenum	1.26	21.3
Boron	Not detected	.210
Lithium	Not detected	30.7
Sodium	15200 (15.2 mg/L)	38600 (38.6 mg/L)
Chromium	0.775	1.89
Copper	3.00	6.54
Lead	0.51	1.26
Vanadium	Not detected	2.86
Total Suspended Solids	3.5 (mg/L)	12.0 (mg/L)

Table 6 – NPDES Permit exceedances from state sampling 11/07/24.

Parameter	Location	Result	Daily Maximum Limit
Total Suspended Solids	Outfall 001	270 mg/L	60 mg/L

7. Discussions and Findings

The following are recommendations based on the inspection:

- Dlubak Glass Company should continue to engage with the KDEP Frankfort Regional Office to address state inspector concerns found during previous state inspection.
- Dlubak Glass Company should maintain and upkeep the existing Stormwater BMP to mitigate pollutant concentration levels in the Stormwater discharge below permit limitations.
- Dlubak Glass Company should consider additional BMPs to help meet the NDPES permit limitations.

End of Report