United States Environmental Protection Agency
Region 7
Enforcement and Compliance Assurance Division

Air Branch

Air Branch Inspection Report
Unannounced Full Compliance Evaluation
Little Blue Valley Sewer District – Atherton Plant
21208 East Old Atherton Road
Independence, Missouri 64058
FRS: 110001449969

Inspection Date(s):
June 26-27, 2024

CHARLOTTE PAPP
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TABLES

APPENDICES

This Contents page shows all the sections contained in this report and provides a clear indication of the end of this report.

INSPECTION OVERVIEW

INSPECTION OBJECTIVE

The objective of the full compliance evaluation (FCE) inspection was to determine compliance of the facility with the Clean Air Act (CAA), specifically those requirements listed in **Table 1**. The inspection was part of the U.S. Environmental Protection Agency's (EPA) core program.

Table 1. APPLICABLE PERMIT CONDITIONS, REGULATIONS AND STANDARDS	
Code of Federal Regulation	**Standard Name**
40 CFR Part 60	Subpart O—Standards of Performance for Sewage Treatment Plants
40 CFR Part 60	Subpart LLLL—Standards of Performance for New Sewage Sludge Incineration Units
40 CFR Part 61	Subpart E—National Emission Standard for Mercury
40 CFR Part 63	Subpart C—List of Hazardous Air Pollutants, Petitions Process, Lesser Quantity Designations, Source Category List

Table 2 lists the inspection team members.

Table 2. PROJECT TEAM MEMBERS		
Team Member	**Organization**	**Project Role**
Charlotte Papp	EPA Region 7, ECAD, Air Branch	Lead inspector
Jonathan Boyd	EPA Region 7, ECAD	Field team member
Hunter Strom	EPA Region 7, ECAD	Field team member
Christina Kerr	Missouri Department of Natural Resources	Inspector

FACILITY CONTACT INFORMATION

Table 3 lists the primary facility contacts in order of contact during the inspection.

Table 3. FACILITY CONTACT INFORMATION		
Name, Title	**Phone No.**	**Email Address**
James Coles, Environmental Manager	816-299-4603	jcoles@lbvsd.org
Garret Siemer, Incinerator Operator	-	-
Shelli Botts, Maintenance Planner	-	-

FACILITY OVERVIEW

Little Blue Valley Sewer District (LBVSD) – Atherton Plant is a wastewater treatment facility serving the Little Blue Valley drainage basin in Missouri. The facility uses the NAICS code 221320 for Sewage Treatment Facilities, as well as the SIC code 4952 for Sewerage Systems. The facility was opened in approximately 1980. It currently has 55 staff members, operates 24/7, and processes a daily flow between 40-250 million gallons per day (MGD). The facility is not considered a major source of emissions but is required to obtain a Title V operating permit for the sewage sludge incinerator.

The facility was previously inspected on June 28, 2023, by MoDNR. There are no findings resulting from this inspection listed in EPA's Enforcement and Compliance History Online (ECHO) database. Recent enforcement actions include an administrative order on consent issued by MoDNR on November 11, 2022, for mercury emission exceedances. The state also issued a warning letter on March 25, 2024, citing minor deviations to the approved alternative monitoring plan for the granular activated carbon control device. The facility has already submitted a revised plan for review.

According to LBVSD's Title V operating permit issued by MoDNR on October 2, 2018, the facility is subject to the regulations and standards subject to review during this inspection as noted in **Table 1.**

FACILITY OPERATIONS SUMMARY

Wastewater is treated at the facility, using "a biological treatment process, primary and secondary clarifiers, and UV disinfection," according to the facility's website. The sludge that results as a waste from these processes is incinerated onsite with the fluidized bed sewage sludge incinerator. Sludge from the water treatment plant is first de-watered and then brought to the incinerator controlled with selective non-catalytic reduction. The exhaust is passed through a primary heat exchanger, secondary heat exchanger, and then the quencher. After the quencher, the exhaust passes through a scrubber, wet electrostatic precipitator, demister, and fixed bed granular activated carbon adsorber (GAC) before finally being released to the atmosphere. CEMS devices are located after the final treatment at the GAC.

The facility also has an emergency generator located onsite.

FIELD ACTIVITIES SUMMARY

The inspection team arrived at the facility on June 26, 2024, at 1:13 p.m. and completed a drive by surveillance inspection. I did not observe visible emissions. We made entry at the front gate, and I introduced myself and members of the inspection team, presented my credentials, and provided my business card to Mr. Coles. I conducted an opening conference during which I explained that the purpose of the visit was to conduct an inspection to determine compliance with the CAA, specifically, to determine compliance with the regulations and standards listed in **Table 1**. I explained that after asking for some general business information, I would observe emission units and control equipment, and also review associated records demonstrating compliance with the permit and underlying regulations. I explained to Mr. Coles that the facility would have an opportunity to make a claim of business confidentiality at the end of the inspection and provided him with a Confidential Business Information (CBI) form. Mr. Coles did not make a claim of confidentiality (**Appendix A**).

The inspection team was given a facility tour by Mr. Coles following a facility safety briefing. We were asked to wear the following PPE for general site safety: hard hats and steel toed boots.

The tour started with the incinerator control room. The incinerator was not operating at that time. We continued with observing the control equipment and then the Continuous Emission Monitoring System (CEMS) control room. We broke for the day at 3:18 p.m. and returned to the facility the following morning at 10 a.m. We resumed the inspection with records review. I reviewed numerous records onsite and on June 27, 2024 I sent an email confirming which records needed to be sent to me digitally by July 11, 2024. On July 11, 2024, Mr. Coles uploaded all documents (as noted in **Appendix B**) via a OneDrive folder.

At 11:50 a.m. we saw the emergency generator and went to the incinerator control room. The centrifuge was not operating at the time so the incinerator was not burning. We returned to the conference room at 12:12 p.m. and began preparing for the closing conference.

I conducted a closing conference with Mr. Coles, Mr. Boyd, and Ms. Kerr. I provided the facility with copies of the Small Business Resource Information sheet and collected the completed CBI form. I departed the facility at 12:52 p.m.

INVESTIGATION OBSERVATIONS AND POTENTIAL FINDINGS

Ambient weather, site conditions, and field activities were documented in the field records. All photographs are attached as **Appendix C**. I made the following observations during the inspection. I discussed all observations with facility representatives during the closeout meeting unless otherwise noted in the observation description.

These observations are not final compliance determinations. The EPA Region 7 Air Branch case review team will make the final compliance determinations based on its review of this report and other technical, regulatory, and facility information.

Per Permit Condition 001 requirements, pipeline grade natural gas for the incinerator is purchased through a broker and provided by Southern Star Pipeline. According to Mr. Coles, the facility has not burned any additional types of fuel in over five years.

Per Permit Condition 002 requirements, maintenance logs for the incinerator and control devices appear well documented and complete.

The agenda for the 2022 Incinerator Operator Refresher Training (which was followed in 2023) appears to have all required elements present. A list of participants was kept, totalling eight operators at the 2023 training as is required by 40 CFR Part 60 Subpart LLLL.

Site specific monitoring plans were provided for the ash handling system, CEMS, and scrubber system. They appear complete and in compliance with requirements in 40 CFR Part 60 Subpart LLLL.

Yearly calibration records demonstrating compliance for 40 CFR Part 60 Subpart LLLL and 40 CFR Part 60 Subpart O for the CEMS were provided and appear complete.

The most recent performance test of the sewage sludge incinerator was provided and demonstrates compliance with 40 CFR Part 60 Subparts O, LLLL, and Part 61 Subparts C, and E . The testing dates were February 28 through March 2, 2023. These results included test runs with the Wet Electrostatic Precipitator both in operation and not in operation.

End of report.