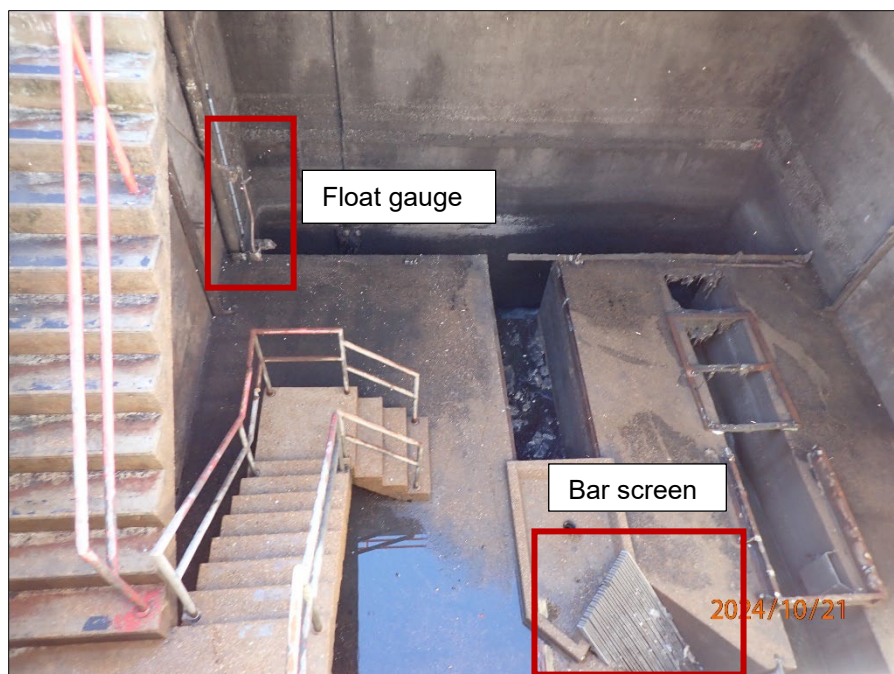


Appendix A

Photograph Log



Photograph 1. Influent wet well. Red outlines and labels were added indicating the bar screen and float gauge for the influent grinder pumps. Note the lack of safety railing around the perimeter of the wet well.



Photograph 2. Control panel for one of the three influent grinder pumps.



Photograph 3. Influent grinder pumps control system display.



Photograph 4. 55-gallon drum of oil without secondary containment, located near the influent pump station and wet well.



Photograph 5. Septic hauling discharge manhole with cracked concrete around the perimeter.



Photograph 6. Fine screen control panel.



Photograph 7. Fine screen at the headworks.



Photograph 8. Solids disposal chute for the fine screen.



Photograph 9. Fine screen and grit removal solids disposal location. The red outline is added to identify the solids disposal dumpster.



Photograph 10. Influent auto sampler located immediately after the fine screen process.



Photograph 11. Inside of the influent auto sampler.



Photograph 12. Grit removal system.



Photograph 13. Grit removal system solids disposal line. The solids are transferred to a dumpster for disposal.



Photograph 14. East and west primary clarifiers.



Photograph 15. East primary clarifier.



Photograph 16. Surface of the east primary clarifier. Note the air bubbles on the surface of the primary clarifier.



Photograph 17. Weir of the east primary clarifier. Note the air bubbles on the surface of the clarifier.



Photograph 18. Two aeration basins.



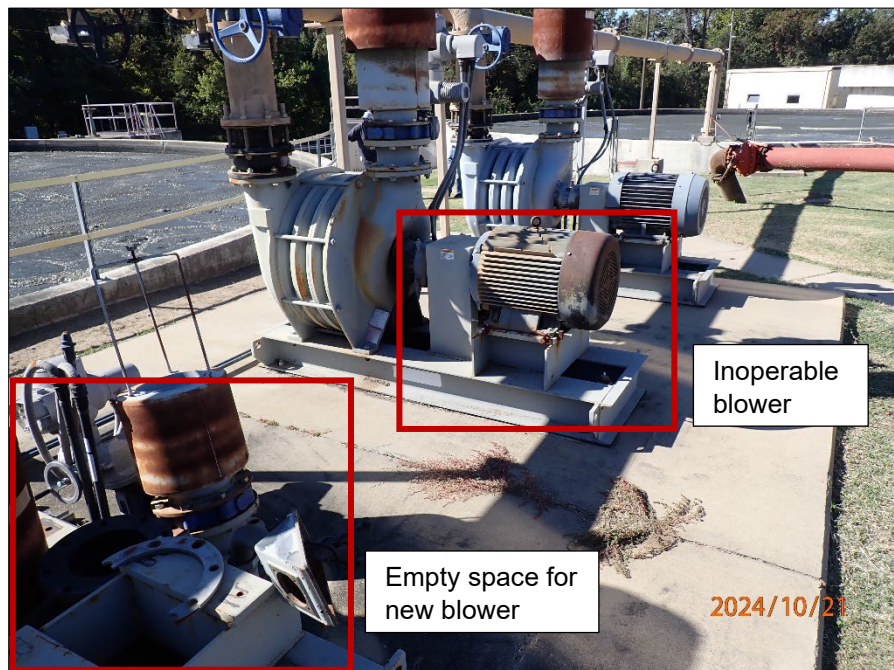
Photograph 19. East aeration basin.



Photograph 20. East aeration basin air flowmeter.



Photograph 21. Aeration basin blower control panels. Note that there are three control panels but that the facility only had two blowers at the time of the inspection.



Photograph 22. Aeration basin blowers. Red lines and labels were added for the inoperable blower and the empty space for a third blower.



Photograph 23. Aeration basin pumps wet well access ladder. The inspectors did not observe any confined space warning signs in or around the access ladder.



Photograph 24. East secondary clarifier and skimmer arm.



Photograph 25. East secondary clarifier weir. Note the suspended solids in the effluent from the secondary clarifier.



Photograph 26. East secondary clarifier weir.



Photograph 27. East secondary clarifier. Note the excessive bulking solids accumulation on the surface of the secondary clarifier.



Photograph 28. East secondary clarifier surface and skimmer arm. Note the excessive solids accumulation on the surface of the secondary clarifier.



Photograph 29. East secondary clarifier surface and skimmer arm. Note the excessive solids accumulation on the surface of the secondary clarifier.



Photograph 30. UV disinfection system.



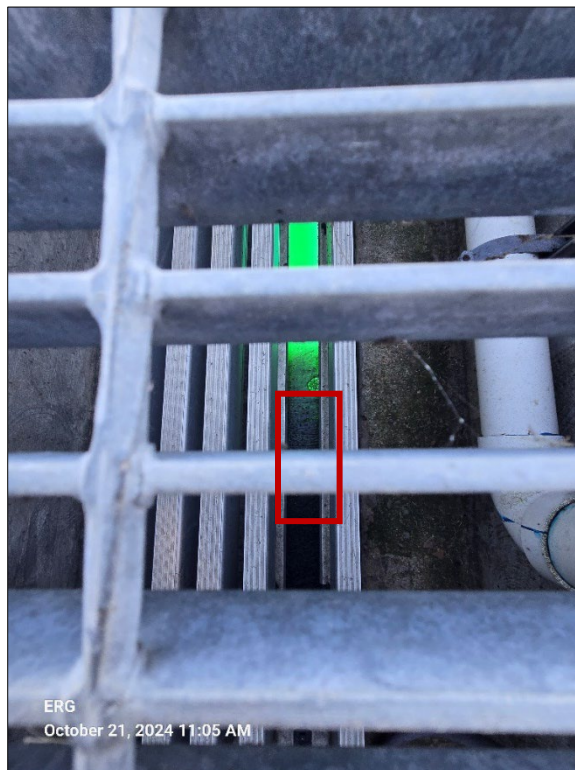
Photograph 31. UV disinfection system.



Photograph 32. UV disinfection system control panel. Note that the screen was inoperable at the time of the inspection.



Photograph 33. UV transmittance meter. Note that the transmittance meter was out of service at the time of the inspection.



Photograph 34. UV disinfection system bulbs. Note the biological growth on the UV bulbs, outlined in

red by the inspectors.



Photograph 35. UV disinfection system contact chamber. Note the floating solids in the wastewater.



Photograph 36. Baffle located at Outfall 001, prior to flowing over the effluent weir. Note the foam on

the surface of the wastewater.



Photograph 37. Effluent weir and Outfall 001. Note the red arrow indicating the auto sampler intake tubing.



Photograph 38. Outfall 001 concrete ditch that conveys wastewater to the Sunflower River.



Photograph 39. Outfall 001 effluent auto sampler.



Photograph 40. Outfall 001 effluent flowmeter.



Photograph 41. Out of service trickling filter, outlined in red by the inspectors.



Photograph 42. Two out of service bio-cells.



Photograph 43. North anaerobic digester. Note the sludge line to the sludge drying beds, outlined in red by the inspectors.



Photograph 44. South anaerobic digester. Note this digester was out of service at the time of the inspection due to sludge buildup and compaction within the digester.



Photograph 45. Top of the north anaerobic digester.



Photograph 46. North anaerobic digester sludge level measurement.



Photograph 47. Gas flare line for the anaerobic digesters. Note the flare was offline at the time of the inspection.



Photograph 48. Sludge drying beds with the water and polymer storage shed, outlined in red by the inspectors.



Photograph 49. Sludge drying beds. Note the drying beds are nearly at capacity.



Photograph 50. Water tanks are in a shed near the sludge drying beds. The water is added to the sludge prior to being piped to the drying beds.



Photograph 51. Polymer drum located in a shed near the sludge drying beds. The polymer is added to the sludge prior to being piped to the drying beds.



Photograph 52. Stormwater ditch where the water from the storage tanks is wasted.

Appendix B

Exhibit Log

Exhibit 1
EPA ECHO DMR Data for Outfall 001 (January 2023 to August 2024)

Parameter Name	Monitoring Location	Permit Limit	Limit Type	Monitoring Period End Date	DMR Value	Units
Oxygen, dissolved [DO]	Effluent Gross	6	MINIMUM	8/31/2024	6.2	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	25	MO AVG	8/31/2024	3.8	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	37.5	MX WK AV	8/31/2024	2.52	mg/L
pH	Effluent Gross	9	MAXIMUM	8/31/2024	7.98	SU
pH	Effluent Gross	6	MINIMUM	8/31/2024	6.4	SU
Solids, total suspended	Effluent Gross	30	MO AVG	8/31/2024	16.4	mg/L
Solids, total suspended	Effluent Gross	45	MX WK AV	8/31/2024	21	mg/L
Nitrogen, total [as N]	Effluent Gross		MX WK AV	8/31/2024	10.2	mg/L
Nitrogen, total [as N]	Effluent Gross		MO AVG	8/31/2024	10.2	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	7.5	MX WK AV	8/31/2024	1	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	5	MO AVG	8/31/2024	0.46	mg/L
Phosphorus, total [as P]	Effluent Gross		MX WK AV	8/31/2024	2	mg/L
Phosphorus, total [as P]	Effluent Gross		MO AVG	8/31/2024	2	mg/L
Copper, total recoverable	Effluent Gross	0.097	MO AVG	8/31/2024	0.0108	mg/L
Copper, total recoverable	Effluent Gross	0.17	MX WK AV	8/31/2024	0.0108	mg/L
E. coli	Effluent Gross	126	MO AVG	8/31/2024	17	#/100mL
E. coli	Effluent Gross	410	MX WK AV	8/31/2024	87	#/100mL
BOD, 5-day, percent removal	Percent Removal	85	MINIMUM	8/31/2024	96	%
Solids, suspended percent removal	Percent Removal	85	MINIMUM	8/31/2024	90	%
Oxygen, dissolved [DO]	Effluent Gross	6	MINIMUM	7/31/2024	0.2	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	37.5	MX WK AV	7/31/2024	9	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	25	MO AVG	7/31/2024	7	mg/L
pH	Effluent Gross	6	MINIMUM	7/31/2024	5.1	SU
pH	Effluent Gross	9	MAXIMUM	7/31/2024	9	SU
Solids, total suspended	Effluent Gross	45	MX WK AV	7/31/2024	19	mg/L
Solids, total suspended	Effluent Gross	30	MO AVG	7/31/2024	16	mg/L
Nitrogen, total [as N]	Effluent Gross		MO AVG	7/31/2024	9.3	mg/L

Parameter Name	Monitoring Location	Permit Limit	Limit Type	Monitoring Period End Date	DMR Value	Units
Nitrogen, total [as N]	Effluent Gross		MX WK AV	7/31/2024	9.3	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	5	MO AVG	7/31/2024	0.4	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	7.5	MX WK AV	7/31/2024	0.8	mg/L
Phosphorus, total [as P]	Effluent Gross		MO AVG	7/31/2024	2.6	mg/L
Phosphorus, total [as P]	Effluent Gross		MX WK AV	7/31/2024	2.6	mg/L
Copper, total recoverable	Effluent Gross	0.17	MX WK AV	7/31/2024	0.0163	mg/L
Copper, total recoverable	Effluent Gross	0.097	MO AVG	7/31/2024	0.0163	mg/L
E. coli	Effluent Gross	410	MX WK AV	7/31/2024	366	#/100mL
E. coli	Effluent Gross	126	MO AVG	7/31/2024	25	#/100mL
BOD, 5-day, percent removal	Percent Removal	85	MINIMUM	7/31/2024	91	%
Solids, suspended percent removal	Percent Removal	85	MINIMUM	7/31/2024	84	%
Oxygen, dissolved [DO]	Effluent Gross	6	MINIMUM	6/30/2024	7.1	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	25	MO AVG	6/30/2024	8	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	37.5	MX WK AV	6/30/2024	19	mg/L
pH	Effluent Gross	9	MAXIMUM	6/30/2024	8.1	SU
pH	Effluent Gross	6	MINIMUM	6/30/2024	6.8	SU
Solids, total suspended	Effluent Gross	30	MO AVG	6/30/2024	22	mg/L
Solids, total suspended	Effluent Gross	45	MX WK AV	6/30/2024	27	mg/L
Nitrogen, total [as N]	Effluent Gross		MX WK AV	6/30/2024	20	mg/L
Nitrogen, total [as N]	Effluent Gross		MO AVG	6/30/2024	20	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	7.5	MX WK AV	6/30/2024	2.4	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	5	MO AVG	6/30/2024	0.6	mg/L
Phosphorus, total [as P]	Effluent Gross		MX WK AV	6/30/2024	2	mg/L
Phosphorus, total [as P]	Effluent Gross		MO AVG	6/30/2024	2	mg/L
Copper, total recoverable	Effluent Gross	0.097	MO AVG	6/30/2024	0.017	mg/L
Copper, total recoverable	Effluent Gross	0.17	MX WK AV	6/30/2024	0.017	mg/L
E. coli	Effluent Gross	126	MO AVG	6/30/2024	10	#/100mL

Parameter Name	Monitoring Location	Permit Limit	Limit Type	Monitoring Period End Date	DMR Value	Units
E. coli	Effluent Gross	410	MX WK AV	6/30/2024	17	#/100mL
BOD, 5-day, percent removal	Percent Removal	85	MINIMUM	6/30/2024	95	%
Solids, suspended percent removal	Percent Removal	85	MINIMUM	6/30/2024	89	%
Oxygen, dissolved [DO]	Effluent Gross	6	MINIMUM	5/31/2024	7	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	37.5	MX WK AV	5/31/2024	19	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	25	MO AVG	5/31/2024	10	mg/L
pH	Effluent Gross	9	MAXIMUM	5/31/2024	8.7	SU
pH	Effluent Gross	6	MINIMUM	5/31/2024	6.4	SU
Solids, total suspended	Effluent Gross	45	MX WK AV	5/31/2024	23	mg/L
Solids, total suspended	Effluent Gross	30	MO AVG	5/31/2024	21	mg/L
Nitrogen, total [as N]	Effluent Gross		MO AVG	5/31/2024	14	mg/L
Nitrogen, total [as N]	Effluent Gross		MX WK AV	5/31/2024	14	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	5	MO AVG	5/31/2024	0.4	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	7.5	MX WK AV	5/31/2024	0.9	mg/L
Phosphorus, total [as P]	Effluent Gross		MO AVG	5/31/2024	2.5	mg/L
Phosphorus, total [as P]	Effluent Gross		MX WK AV	5/31/2024	2.5	mg/L
Copper, total recoverable	Effluent Gross	0.17	MX WK AV	5/31/2024	0.0188	mg/L
Copper, total recoverable	Effluent Gross	0.097	MO AVG	5/31/2024	0.0188	mg/L
E. coli	Effluent Gross	410	MX WK AV	5/31/2024	1481	#/100mL
E. coli	Effluent Gross	126	MO AVG	5/31/2024	49	#/100mL
BOD, 5-day, percent removal	Percent Removal	85	MINIMUM	5/31/2024	88	%
Solids, suspended percent removal	Percent Removal	85	MINIMUM	5/31/2024	82	%
Oxygen, dissolved [DO]	Effluent Gross	6	MINIMUM	4/30/2024	7.3	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	45	MX WK AV	4/30/2024	10	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	30	MO AVG	4/30/2024	7	mg/L
pH	Effluent Gross	9	MAXIMUM	4/30/2024	8.1	SU
pH	Effluent Gross	6	MINIMUM	4/30/2024	7	SU

Parameter Name	Monitoring Location	Permit Limit	Limit Type	Monitoring Period End Date	DMR Value	Units
Solids, total suspended	Effluent Gross	30	MO AVG	4/30/2024	14	mg/L
Solids, total suspended	Effluent Gross	45	MX WK AV	4/30/2024	17	mg/L
Nitrogen, total [as N]	Effluent Gross		MX WK AV	4/30/2024	5.55	mg/L
Nitrogen, total [as N]	Effluent Gross		MO AVG	4/30/2024	5.55	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	7.5	MX WK AV	4/30/2024	0.074	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	5	MO AVG	4/30/2024	0.024	mg/L
Phosphorus, total [as P]	Effluent Gross		MX WK AV	4/30/2024	0.63	mg/L
Phosphorus, total [as P]	Effluent Gross		MO AVG	4/30/2024	0.63	mg/L
Copper, total recoverable	Effluent Gross	0.097	MO AVG	4/30/2024	0.009	mg/L
Copper, total recoverable	Effluent Gross	0.17	MX WK AV	4/30/2024	0.009	mg/L
E. coli	Effluent Gross	126	MO AVG	4/30/2024	768	#/100mL
E. coli	Effluent Gross	410	MX WK AV	4/30/2024	7101	#/100mL
BOD, 5-day, percent removal	Percent Removal	85	MINIMUM	4/30/2024	88	%
Solids, suspended percent removal	Percent Removal	85	MINIMUM	4/30/2024	81	%
Oxygen, dissolved [DO]	Effluent Gross	6	MINIMUM	3/31/2024	5.4	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	30	MO AVG	3/31/2024	7	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	45	MX WK AV	3/31/2024	9	mg/L
pH	Effluent Gross	6	MINIMUM	3/31/2024	6.9	SU
pH	Effluent Gross	9	MAXIMUM	3/31/2024	8	SU
Solids, total suspended	Effluent Gross	30	MO AVG	3/31/2024	20	mg/L
Solids, total suspended	Effluent Gross	45	MX WK AV	3/31/2024	25	mg/L
Nitrogen, total [as N]	Effluent Gross		MO AVG	3/31/2024	4.88	mg/L
Nitrogen, total [as N]	Effluent Gross		MX WK AV	3/31/2024	4.88	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	5	MO AVG	3/31/2024	0.055	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	7.5	MX WK AV	3/31/2024	0.202	mg/L
Phosphorus, total [as P]	Effluent Gross		MO AVG	3/31/2024	0.82	mg/L
Phosphorus, total [as P]	Effluent Gross		MX WK AV	3/31/2024	0.82	mg/L

Parameter Name	Monitoring Location	Permit Limit	Limit Type	Monitoring Period End Date	DMR Value	Units
Copper, total recoverable	Effluent Gross	0.17	MX WK AV	3/31/2024	0.0157	mg/L
Copper, total recoverable	Effluent Gross	0.097	MO AVG	3/31/2024	0.0157	mg/L
E. coli	Effluent Gross	410	MX WK AV	3/31/2024	785	#/100mL
E. coli	Effluent Gross	126	MO AVG	3/31/2024	380	#/100mL
BOD, 5-day, percent removal	Percent Removal	85	MINIMUM	3/31/2024	84	%
Solids, suspended percent removal	Percent Removal	85	MINIMUM	3/31/2024	80	%
Oxygen, dissolved [DO]	Effluent Gross	6	MINIMUM	2/29/2024	0.4	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	45	MX WK AV	2/29/2024	9	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	30	MO AVG	2/29/2024	6	mg/L
pH	Effluent Gross	9	MAXIMUM	2/29/2024	8.1	SU
pH	Effluent Gross	6	MINIMUM	2/29/2024	7.4	SU
Solids, total suspended	Effluent Gross	45	MX WK AV	2/29/2024	38	mg/L
Solids, total suspended	Effluent Gross	30	MO AVG	2/29/2024	15	mg/L
Nitrogen, total [as N]	Effluent Gross		MO AVG	2/29/2024	6.7	mg/L
Nitrogen, total [as N]	Effluent Gross		MX WK AV	2/29/2024	6.8	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	7.5	MX WK AV	2/29/2024	0.07	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	5	MO AVG	2/29/2024	0.02	mg/L
Phosphorus, total [as P]	Effluent Gross		MX WK AV	2/29/2024	5	mg/L
Phosphorus, total [as P]	Effluent Gross		MO AVG	2/29/2024	3	mg/L
Copper, total recoverable	Effluent Gross	0.097	MO AVG	2/29/2024	0.0149	mg/L
Copper, total recoverable	Effluent Gross	0.17	MX WK AV	2/29/2024	0.0149	mg/L
E. coli	Effluent Gross	126	MO AVG	2/29/2024	10	#/100mL
E. coli	Effluent Gross	410	MX WK AV	2/29/2024	10	#/100mL
BOD, 5-day, percent removal	Percent Removal	85	MINIMUM	2/29/2024	89	%
Solids, suspended percent removal	Percent Removal	85	MINIMUM	2/29/2024	84	%
Oxygen, dissolved [DO]	Effluent Gross	6	MINIMUM	1/31/2024	4.5	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	30	MO AVG	1/31/2024	11	mg/L

Parameter Name	Monitoring Location	Permit Limit	Limit Type	Monitoring Period End Date	DMR Value	Units
BOD, 5-day, 20 deg. C	Effluent Gross	45	MX WK AV	1/31/2024	15	mg/L
pH	Effluent Gross	9	MAXIMUM	1/31/2024	8.3	SU
pH	Effluent Gross	6	MINIMUM	1/31/2024	7.4	SU
Solids, total suspended	Effluent Gross	30	MO AVG	1/31/2024	26	mg/L
Solids, total suspended	Effluent Gross	45	MX WK AV	1/31/2024	32	mg/L
Nitrogen, total [as N]	Effluent Gross		MX WK AV	1/31/2024	11	mg/L
Nitrogen, total [as N]	Effluent Gross		MO AVG	1/31/2024	11	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	5	MO AVG	1/31/2024	0.006	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	7.5	MX WK AV	1/31/2024	0.025	mg/L
Phosphorus, total [as P]	Effluent Gross		MO AVG	1/31/2024	2	mg/L
Phosphorus, total [as P]	Effluent Gross		MX WK AV	1/31/2024	2	mg/L
Copper, total recoverable	Effluent Gross	0.17	MX WK AV	1/31/2024	0.0229	mg/L
Copper, total recoverable	Effluent Gross	0.097	MO AVG	1/31/2024	0.0229	mg/L
E. coli	Effluent Gross	410	MX WK AV	1/31/2024	264	#/100mL
E. coli	Effluent Gross	126	MO AVG	1/31/2024	25	#/100mL
BOD, 5-day, percent removal	Percent Removal	85	MINIMUM	1/31/2024	71	%
Solids, suspended percent removal	Percent Removal	85	MINIMUM	1/31/2024	78	%
Oxygen, dissolved [DO]	Effluent Gross	6	MINIMUM	12/31/2023	0.1	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	30	MO AVG	12/31/2023	12	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	45	MX WK AV	12/31/2023	11	mg/L
pH	Effluent Gross	6	MINIMUM	12/31/2023	7.71	SU
pH	Effluent Gross	9	MAXIMUM	12/31/2023	8.15	SU
Solids, total suspended	Effluent Gross	30	MO AVG	12/31/2023	24	mg/L
Solids, total suspended	Effluent Gross	45	MX WK AV	12/31/2023	23	mg/L
Nitrogen, total [as N]	Effluent Gross		MO AVG	12/31/2023	16	mg/L
Nitrogen, total [as N]	Effluent Gross		MX WK AV	12/31/2023	16	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	7.5	MX WK AV	12/31/2023	0.03	mg/L

Parameter Name	Monitoring Location	Permit Limit	Limit Type	Monitoring Period End Date	DMR Value	Units
Nitrogen, ammonia total [as N]	Effluent Gross	5	MO AVG	12/31/2023	0.01	mg/L
Phosphorus, total [as P]	Effluent Gross		MX WK AV	12/31/2023	2.8	mg/L
Phosphorus, total [as P]	Effluent Gross		MO AVG	12/31/2023	2.8	mg/L
Copper, total recoverable	Effluent Gross	0.097	MO AVG	12/31/2023	0.0461	mg/L
Copper, total recoverable	Effluent Gross	0.17	MX WK AV	12/31/2023	0.0461	mg/L
E. coli	Effluent Gross	126	MO AVG	12/31/2023	10021	#/100mL
E. coli	Effluent Gross	410	MX WK AV	12/31/2023	5904	#/100mL
BOD, 5-day, percent removal	Percent Removal	85	MINIMUM	12/31/2023	85	%
Solids, suspended percent removal	Percent Removal	85	MINIMUM	12/31/2023	77	%
Oxygen, dissolved [DO]	Effluent Gross	6	MINIMUM	11/30/2023	0.2	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	45	MX WK AV	11/30/2023	9	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	30	MO AVG	11/30/2023	9	mg/L
pH	Effluent Gross	6	MINIMUM	11/30/2023	7.98	SU
pH	Effluent Gross	9	MAXIMUM	11/30/2023	8.09	SU
Solids, total suspended	Effluent Gross	45	MX WK AV	11/30/2023	24	mg/L
Solids, total suspended	Effluent Gross	30	MO AVG	11/30/2023	21	mg/L
Nitrogen, total [as N]	Effluent Gross		MO AVG	11/30/2023	21	mg/L
Nitrogen, total [as N]	Effluent Gross		MX WK AV	11/30/2023	21	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	5	MO AVG	11/30/2023	0.03	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	7.5	MX WK AV	11/30/2023	0.03	mg/L
Phosphorus, total [as P]	Effluent Gross		MO AVG	11/30/2023	3.7	mg/L
Phosphorus, total [as P]	Effluent Gross		MX WK AV	11/30/2023	3.7	mg/L
Copper, total recoverable	Effluent Gross	0.17	MX WK AV	11/30/2023	0.046	mg/L
Copper, total recoverable	Effluent Gross	0.097	MO AVG	11/30/2023	0.046	mg/L
E. coli	Effluent Gross	410	MX WK AV	11/30/2023	439	#/100mL
E. coli	Effluent Gross	126	MO AVG	11/30/2023	439	#/100mL
BOD, 5-day, percent removal	Percent Removal	85	MINIMUM	11/30/2023	89	%

Parameter Name	Monitoring Location	Permit Limit	Limit Type	Monitoring Period End Date	DMR Value	Units
Solids, suspended percent removal	Percent Removal	85	MINIMUM	11/30/2023	86	%
Oxygen, dissolved [DO]	Effluent Gross	6	MINIMUM	10/31/2023	1	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	25	MO AVG	10/31/2023		
BOD, 5-day, 20 deg. C	Effluent Gross	37.5	MX WK AV	10/31/2023		
pH	Effluent Gross	9	MAXIMUM	10/31/2023	8.2	SU
pH	Effluent Gross	6	MINIMUM	10/31/2023	7.2	SU
Solids, total suspended	Effluent Gross	30	MO AVG	10/31/2023	18	mg/L
Solids, total suspended	Effluent Gross	45	MX WK AV	10/31/2023	22	mg/L
Nitrogen, total [as N]	Effluent Gross		MO AVG	10/31/2023	13.5	mg/L
Nitrogen, total [as N]	Effluent Gross		MX WK AV	10/31/2023	13.5	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	7.5	MX WK AV	10/31/2023	4.77	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	5	MO AVG	10/31/2023	4.73	mg/L
Phosphorus, total [as P]	Effluent Gross		MX WK AV	10/31/2023	3.5	mg/L
Phosphorus, total [as P]	Effluent Gross		MO AVG	10/31/2023	3.5	mg/L
Copper, total recoverable	Effluent Gross	0.097	MO AVG	10/31/2023	0.0268	mg/L
Copper, total recoverable	Effluent Gross	0.17	MX WK AV	10/31/2023	0.0268	mg/L
E. coli	Effluent Gross	126	MO AVG	10/31/2023	114	#/100mL
E. coli	Effluent Gross	410	MX WK AV	10/31/2023	117	#/100mL
BOD, 5-day, percent removal	Percent Removal	85	MINIMUM	10/31/2023		
Solids, suspended percent removal	Percent Removal	85	MINIMUM	10/31/2023	88	%
Oxygen, dissolved [DO]	Effluent Gross	6	MINIMUM	9/30/2023	7	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	37.5	MX WK AV	9/30/2023		
BOD, 5-day, 20 deg. C	Effluent Gross	25	MO AVG	9/30/2023		
pH	Effluent Gross	6	MINIMUM	9/30/2023	7.3	SU
pH	Effluent Gross	9	MAXIMUM	9/30/2023	8.25	SU
Solids, total suspended	Effluent Gross	45	MX WK AV	9/30/2023	16	mg/L
Solids, total suspended	Effluent Gross	30	MO AVG	9/30/2023	11	mg/L

Parameter Name	Monitoring Location	Permit Limit	Limit Type	Monitoring Period End Date	DMR Value	Units
Nitrogen, total [as N]	Effluent Gross		MO AVG	9/30/2023	15	mg/L
Nitrogen, total [as N]	Effluent Gross		MX WK AV	9/30/2023	15	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	5	MO AVG	9/30/2023	4.75	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	7.5	MX WK AV	9/30/2023	4.9	mg/L
Phosphorus, total [as P]	Effluent Gross		MO AVG	9/30/2023	2.63	mg/L
Phosphorus, total [as P]	Effluent Gross		MX WK AV	9/30/2023	2.63	mg/L
Copper, total recoverable	Effluent Gross	0.17	MX WK AV	9/30/2023	0.0176	mg/L
Copper, total recoverable	Effluent Gross	0.097	MO AVG	9/30/2023	0.0176	mg/L
E. coli	Effluent Gross	410	MX WK AV	9/30/2023	123	#/100mL
E. coli	Effluent Gross	126	MO AVG	9/30/2023	115	#/100mL
BOD, 5-day, percent removal	Percent Removal	85	MINIMUM	9/30/2023		
Solids, suspended percent removal	Percent Removal	85	MINIMUM	9/30/2023	90	%
Oxygen, dissolved [DO]	Effluent Gross	6	MINIMUM	8/31/2023	7	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	25	MO AVG	8/31/2023	16.79	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	37.5	MX WK AV	8/31/2023	17.83	mg/L
pH	Effluent Gross	6	MINIMUM	8/31/2023	7.1	SU
pH	Effluent Gross	9	MAXIMUM	8/31/2023	7.4	SU
Solids, total suspended	Effluent Gross	30	MO AVG	8/31/2023	16.85	mg/L
Solids, total suspended	Effluent Gross	45	MX WK AV	8/31/2023	18.33	mg/L
Nitrogen, total [as N]	Effluent Gross		MO AVG	8/31/2023	16.2	mg/L
Nitrogen, total [as N]	Effluent Gross		MX WK AV	8/31/2023	16.2	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	7.5	MX WK AV	8/31/2023	4.71	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	5	MO AVG	8/31/2023	4.57	mg/L
Phosphorus, total [as P]	Effluent Gross		MX WK AV	8/31/2023	4.18	mg/L
Phosphorus, total [as P]	Effluent Gross		MO AVG	8/31/2023	4.18	mg/L
Copper, total recoverable	Effluent Gross	0.097	MO AVG	8/31/2023	0.0172	mg/L
Copper, total recoverable	Effluent Gross	0.17	MX WK AV	8/31/2023	0.0172	mg/L

Parameter Name	Monitoring Location	Permit Limit	Limit Type	Monitoring Period End Date	DMR Value	Units
E. coli	Effluent Gross	126	MO AVG	8/31/2023	110	#/100mL
E. coli	Effluent Gross	410	MX WK AV	8/31/2023	115	#/100mL
BOD, 5-day, percent removal	Percent Removal	85	MINIMUM	8/31/2023	93.11	%
Solids, suspended percent removal	Percent Removal	85	MINIMUM	8/31/2023	92.5	%
Oxygen, dissolved [DO]	Effluent Gross	6	MINIMUM	7/31/2023	7	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	37.5	MX WK AV	7/31/2023	17.6	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	25	MO AVG	7/31/2023	16.37	mg/L
pH	Effluent Gross	9	MAXIMUM	7/31/2023	7.5	SU
pH	Effluent Gross	6	MINIMUM	7/31/2023	7.1	SU
Solids, total suspended	Effluent Gross	45	MX WK AV	7/31/2023	16.67	mg/L
Solids, total suspended	Effluent Gross	30	MO AVG	7/31/2023	16.15	mg/L
Nitrogen, total [as N]	Effluent Gross		MO AVG	7/31/2023	14.2	mg/L
Nitrogen, total [as N]	Effluent Gross		MX WK AV	7/31/2023	14.2	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	5	MO AVG	7/31/2023	4.69	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	7.5	MX WK AV	7/31/2023	4.76	mg/L
Phosphorus, total [as P]	Effluent Gross		MO AVG	7/31/2023	2.56	mg/L
Phosphorus, total [as P]	Effluent Gross		MX WK AV	7/31/2023	2.56	mg/L
Copper, total recoverable	Effluent Gross	0.17	MX WK AV	7/31/2023	0.0201	mg/L
Copper, total recoverable	Effluent Gross	0.097	MO AVG	7/31/2023	0.0201	mg/L
E. coli	Effluent Gross	410	MX WK AV	7/31/2023	122	#/100mL
E. coli	Effluent Gross	126	MO AVG	7/31/2023	113	#/100mL
BOD, 5-day, percent removal	Percent Removal	85	MINIMUM	7/31/2023	93.18	%
Solids, suspended percent removal	Percent Removal	85	MINIMUM	7/31/2023	93.06	%
Oxygen, dissolved [DO]	Effluent Gross	6	MINIMUM	6/30/2023	7	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	25	MO AVG	6/30/2023	15.99	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	37.5	MX WK AV	6/30/2023	18.47	mg/L
pH	Effluent Gross	9	MAXIMUM	6/30/2023	7.5	SU

Parameter Name	Monitoring Location	Permit Limit	Limit Type	Monitoring Period End Date	DMR Value	Units
pH	Effluent Gross	6	MINIMUM	6/30/2023	7	SU
Solids, total suspended	Effluent Gross	45	MX WK AV	6/30/2023	15.83	mg/L
Solids, total suspended	Effluent Gross	30	MO AVG	6/30/2023	15.38	mg/L
Nitrogen, total [as N]	Effluent Gross		MX WK AV	6/30/2023	14.4	mg/L
Nitrogen, total [as N]	Effluent Gross		MO AVG	6/30/2023	14.4	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	7.5	MX WK AV	6/30/2023	4.77	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	5	MO AVG	6/30/2023	4.67	mg/L
Phosphorus, total [as P]	Effluent Gross		MX WK AV	6/30/2023	3.09	mg/L
Phosphorus, total [as P]	Effluent Gross		MO AVG	6/30/2023	3.09	mg/L
Copper, total recoverable	Effluent Gross	0.097	MO AVG	6/30/2023	0.0321	mg/L
Copper, total recoverable	Effluent Gross	0.17	MX WK AV	6/30/2023	0.0321	mg/L
E. coli	Effluent Gross	126	MO AVG	6/30/2023	112	#/100mL
E. coli	Effluent Gross	410	MX WK AV	6/30/2023	119	#/100mL
BOD, 5-day, percent removal	Percent Removal	85	MINIMUM	6/30/2023	93.37	%
Solids, suspended percent removal	Percent Removal	85	MINIMUM	6/30/2023	93.44	%
Oxygen, dissolved [DO]	Effluent Gross	6	MINIMUM	5/31/2023	7.1	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	37.5	MX WK AV	5/31/2023	17.35	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	25	MO AVG	5/31/2023	16.68	mg/L
pH	Effluent Gross	6	MINIMUM	5/31/2023	7.1	SU
pH	Effluent Gross	9	MAXIMUM	5/31/2023	7.5	SU
Solids, total suspended	Effluent Gross	30	MO AVG	5/31/2023	15.37	mg/L
Solids, total suspended	Effluent Gross	45	MX WK AV	5/31/2023	16.67	mg/L
Nitrogen, total [as N]	Effluent Gross		MO AVG	5/31/2023	17.2	mg/L
Nitrogen, total [as N]	Effluent Gross		MX WK AV	5/31/2023	17.2	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	5	MO AVG	5/31/2023	4.56	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	7.5	MX WK AV	5/31/2023	4.68	mg/L
Phosphorus, total [as P]	Effluent Gross		MO AVG	5/31/2023	3.5	mg/L

Parameter Name	Monitoring Location	Permit Limit	Limit Type	Monitoring Period End Date	DMR Value	Units
Phosphorus, total [as P]	Effluent Gross		MX WK AV	5/31/2023	3.5	mg/L
Copper, total recoverable	Effluent Gross	0.17	MX WK AV	5/31/2023	0.0157	mg/L
Copper, total recoverable	Effluent Gross	0.097	MO AVG	5/31/2023	0.0157	mg/L
E. coli	Effluent Gross	410	MX WK AV	5/31/2023	121	#/100mL
E. coli	Effluent Gross	126	MO AVG	5/31/2023	111	#/100mL
BOD, 5-day, percent removal	Percent Removal	85	MINIMUM	5/31/2023	93.39	%
Solids, suspended percent removal	Percent Removal	85	MINIMUM	5/31/2023	93.27	%
Oxygen, dissolved [DO]	Effluent Gross	6	MINIMUM	4/30/2023	7	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	30	MO AVG	4/30/2023	17.47	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	45	MX WK AV	4/30/2023	19.38	mg/L
pH	Effluent Gross	6	MINIMUM	4/30/2023	7	SU
pH	Effluent Gross	9	MAXIMUM	4/30/2023	7.4	SU
Solids, total suspended	Effluent Gross	45	MX WK AV	4/30/2023	18.33	mg/L
Solids, total suspended	Effluent Gross	30	MO AVG	4/30/2023	15.6	mg/L
Nitrogen, total [as N]	Effluent Gross		MO AVG	4/30/2023	7.32	mg/L
Nitrogen, total [as N]	Effluent Gross		MX WK AV	4/30/2023	7.32	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	7.5	MX WK AV	4/30/2023	4.88	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	5	MO AVG	4/30/2023	4.58	mg/L
Phosphorus, total [as P]	Effluent Gross		MO AVG	4/30/2023	1.03	mg/L
Phosphorus, total [as P]	Effluent Gross		MX WK AV	4/30/2023	1.03	mg/L
Copper, total recoverable	Effluent Gross	0.097	MO AVG	4/30/2023		
Copper, total recoverable	Effluent Gross	0.17	MX WK AV	4/30/2023		
E. coli	Effluent Gross	126	MO AVG	4/30/2023	115	#/100mL
E. coli	Effluent Gross	410	MX WK AV	4/30/2023	123	#/100mL
Mercury, total recoverable	Effluent Gross	0.000059	MO AVG	4/30/2023	0.000001	mg/L
Mercury, total recoverable	Effluent Gross	0.01	MX WK AV	4/30/2023	0.000001	mg/L
BOD, 5-day, percent removal	Percent Removal	85	MINIMUM	4/30/2023	92.81	%

Parameter Name	Monitoring Location	Permit Limit	Limit Type	Monitoring Period End Date	DMR Value	Units
Solids, suspended percent removal	Percent Removal	85	MINIMUM	4/30/2023	93.08	%
Oxygen, dissolved [DO]	Effluent Gross	6	MINIMUM	3/31/2023	7.1	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	45	MX WK AV	3/31/2023	17.79	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	30	MO AVG	3/31/2023	17.04	mg/L
pH	Effluent Gross	6	MINIMUM	3/31/2023	7	SU
pH	Effluent Gross	9	MAXIMUM	3/31/2023	7.4	SU
Solids, total suspended	Effluent Gross	30	MO AVG	3/31/2023	15	mg/L
Solids, total suspended	Effluent Gross	45	MX WK AV	3/31/2023	17.5	mg/L
Nitrogen, total [as N]	Effluent Gross		MX WK AV	3/31/2023	8.12	mg/L
Nitrogen, total [as N]	Effluent Gross		MO AVG	3/31/2023	8.12	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	7.5	MX WK AV	3/31/2023	4.93	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	5	MO AVG	3/31/2023	4.77	mg/L
Phosphorus, total [as P]	Effluent Gross		MX WK AV	3/31/2023	1.32	mg/L
Phosphorus, total [as P]	Effluent Gross		MO AVG	3/31/2023	1.32	mg/L
Copper, total recoverable	Effluent Gross	0.097	MO AVG	3/31/2023	0.014	mg/L
Copper, total recoverable	Effluent Gross	0.17	MX WK AV	3/31/2023	0.014	mg/L
E. coli	Effluent Gross	410	MX WK AV	3/31/2023	115	#/100mL
E. coli	Effluent Gross	126	MO AVG	3/31/2023	105	#/100mL
Mercury, total recoverable	Effluent Gross	0.01	MX WK AV	3/31/2023	7E-07	mg/L
Mercury, total recoverable	Effluent Gross	0.000059	MO AVG	3/31/2023	7E-07	mg/L
BOD, 5-day, percent removal	Percent Removal	85	MINIMUM	3/31/2023	92.96	%
Solids, suspended percent removal	Percent Removal	85	MINIMUM	3/31/2023	93.82	%
Oxygen, dissolved [DO]	Effluent Gross	6	MINIMUM	2/28/2023	7.1	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	30	MO AVG	2/28/2023	15.72	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	45	MX WK AV	2/28/2023	17.59	mg/L
pH	Effluent Gross	6	MINIMUM	2/28/2023	7.1	SU
pH	Effluent Gross	9	MAXIMUM	2/28/2023	7.4	SU

Parameter Name	Monitoring Location	Permit Limit	Limit Type	Monitoring Period End Date	DMR Value	Units
Solids, total suspended	Effluent Gross	45	MX WK AV	2/28/2023	17.5	mg/L
Solids, total suspended	Effluent Gross	30	MO AVG	2/28/2023	16.67	mg/L
Nitrogen, total [as N]	Effluent Gross		MO AVG	2/28/2023	13.4	mg/L
Nitrogen, total [as N]	Effluent Gross		MX WK AV	2/28/2023	13.4	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	7.5	MX WK AV	2/28/2023	4.8	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	5	MO AVG	2/28/2023	4.69	mg/L
Phosphorus, total [as P]	Effluent Gross		MO AVG	2/28/2023	2.02	mg/L
Phosphorus, total [as P]	Effluent Gross		MX WK AV	2/28/2023	2.02	mg/L
Copper, total recoverable	Effluent Gross	0.097	MO AVG	2/28/2023	0.0209	mg/L
Copper, total recoverable	Effluent Gross	0.17	MX WK AV	2/28/2023	0.0209	mg/L
E. coli	Effluent Gross	410	MX WK AV	2/28/2023	112	#/100mL
E. coli	Effluent Gross	126	MO AVG	2/28/2023	110	#/100mL
Mercury, total recoverable	Effluent Gross	0.000059	MO AVG	2/28/2023	6E-07	mg/L
Mercury, total recoverable	Effluent Gross	0.01	MX WK AV	2/28/2023	6E-07	mg/L
BOD, 5-day, percent removal	Percent Removal	85	MINIMUM	2/28/2023	93.58	%
Solids, suspended percent removal	Percent Removal	85	MINIMUM	2/28/2023	93.02	%
Oxygen, dissolved [DO]	Effluent Gross	6	MINIMUM	1/31/2023	7.1	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	45	MX WK AV	1/31/2023	17.55	mg/L
BOD, 5-day, 20 deg. C	Effluent Gross	30	MO AVG	1/31/2023	16.99	mg/L
pH	Effluent Gross	9	MAXIMUM	1/31/2023	7.5	SU
pH	Effluent Gross	6	MINIMUM	1/31/2023	7	SU
Solids, total suspended	Effluent Gross	45	MX WK AV	1/31/2023	20	mg/L
Solids, total suspended	Effluent Gross	30	MO AVG	1/31/2023	17.96	mg/L
Nitrogen, total [as N]	Effluent Gross		MO AVG	1/31/2023	6.22	mg/L
Nitrogen, total [as N]	Effluent Gross		MX WK AV	1/31/2023	6.22	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	5	MO AVG	1/31/2023	4.7	mg/L
Nitrogen, ammonia total [as N]	Effluent Gross	7.5	MX WK AV	1/31/2023	4.91	mg/L

Parameter Name	Monitoring Location	Permit Limit	Limit Type	Monitoring Period End Date	DMR Value	Units
Phosphorus, total [as P]	Effluent Gross		MX WK AV	1/31/2023	0.902	mg/L
Phosphorus, total [as P]	Effluent Gross		MO AVG	1/31/2023	0.902	mg/L
Copper, total recoverable	Effluent Gross	0.17	MX WK AV	1/31/2023	0.0128	mg/L
Copper, total recoverable	Effluent Gross	0.097	MO AVG	1/31/2023	0.0128	mg/L
E. coli	Effluent Gross	410	MX WK AV	1/31/2023	128	#/100mL
E. coli	Effluent Gross	126	MO AVG	1/31/2023	119	#/100mL
Mercury, total recoverable	Effluent Gross	0.01	MX WK AV	1/31/2023	0.026	mg/L
Mercury, total recoverable	Effluent Gross	0.000059	MO AVG	1/31/2023	0.026	mg/L
BOD, 5-day, percent removal	Percent Removal	85	MINIMUM	1/31/2023	90.6	%
Solids, suspended percent removal	Percent Removal	85	MINIMUM	1/31/2023	89.13	%

Exhibit 2

Laboratory Equipment Calibration Logs

Clarksdale Public Utilities – Clarksdale POTW (MS0020311)
Inspection Report Exhibit Log

COHRING
SCIENTIFIC INSTRUMENTS
Model 2

Month October Year 2024

Laboratory
pH Calibrations Log + P.O.

All Calibrations is stabilized by using pH 4.00, 7.00, & 10.00

Date	Time	
10-1-24	7:11am	20.0
10-2-24	7:40am	20.0
10-3-24	7:54am	20.0
10-4-24	8:00am	20.0
10-8-24	7:17am	20.0
10-9-24	8:19am	20.0
10-10-24	9:30am	20.0
10-11-24	8:51am	20.0
10-14-24	8:46am	20.0
10-15-24	9:22am	20.0
10-16-24	7:52am	20.0
10-17-24	9:00am	20.0

Month October Year 2024

Laboratory
Refrigerator Incubator Calibration Log

The incubator must maintain a temp of 20.0 degrees C

Date	Time	Inside Temp.	Outside Temp.
10-1-24	7:12am	20°	20.0°
10-2-24	7:41am	20°	19.9°
10-3-24	7:55am	20°	20.0°
10-4-24	8:41am	20°	20.1°
10-8-24	7:25am	20°	20.0°
10-9-24	8:20am	20°	20.0°
10-10-24	8:49am	20°	20.0°
10-11-24	8:32am	20°	20.0°
10-14-24	8:06am	20°	20.0°
10-15-24	8:12am	20°	20.0°
10-16-24	7:53am	20°	20.0°
10-17-24	8:22am	20°	20.0°
10-18-24	7:32am	20°	20.0°

2024/10/21

Month: October Year: 2024

Laboratory
Drying Oven Calibration Log

the drying oven must maintain a temp of 103-105 degrees C

Date	Time	Temperature
10-1-24	7:13 am	103° Inside 103°
10-2-24	7:41 am	101° Inside 101°
10-3-24	7:56 am	102° Inside 102°
10-8-24	7:54 am	103° Inside 103°
10-9-24	8:01 am	101° Inside 101°
10-10-24	8:48 am	103° Inside 103°
10-11-24	8:21 am	103° Inside 103°
10-14-24	8:05 am	101° Inside 101°
10-15-24	8:12 am	102° Inside 102°
10-16-24	7:53 am	102° Inside 102°
10-17-24	8:31 am	101° Inside 101°
10-18-24	7:32 am	101° Inside 101°
10-21-24	8:33 am	103° Inside 103°

2024/10/21

Month: October Year: 2024

Laboratory
Water Bath Calibration Log

Date	Time	Temperature	
10-1-24	7:13am	35	Lil
10-2-24	7:41am	35	Lil
10-3-24	7:56am	35	Lil
10-8-24	7:29am	35	Lil
10-9-24	7:31am	35	Lil
10-10-24	7:49am	35	Lil
10-11-24	7:22am	35	Lil
10-14-24	7:05am	34.7	Lil
10-15-24	7:32am	35	Lil
10-16-24	7:32am	35	Lil
10-17-24	7:32am	35	Lil
10-18-24	7:32am	35	Lil
10-21-24	8:32am	35	Lil

2024/10/21

Exhibit 3
Laboratory Log Sheets and Logbook

October 2024
Laboratory Log (Saturday & Sunday)

Date: 11-18-24 Time: 7:05
FLOW: 131-274733
Effluent/Final
Ph: 7.60 Temp: 22.2
D.O. 30-Min Settability
EAB: 2.42 TEMP: 22.6 EAB: 9.30
WAB: 2.6 TEMP: 24.6 WAB: 9.50

Date: 11-20-24 Time: 6:35
FLOW: 111-234035
Effluent/Final
Ph: 7.30 Temp: 23.1
D.O. 30-Min Settability
EAB: 5.17 TEMP: 26.0 EAB: 9.50
WAB: 0.9 TEMP: 20.2 WAB: 9.30

2024/10/21

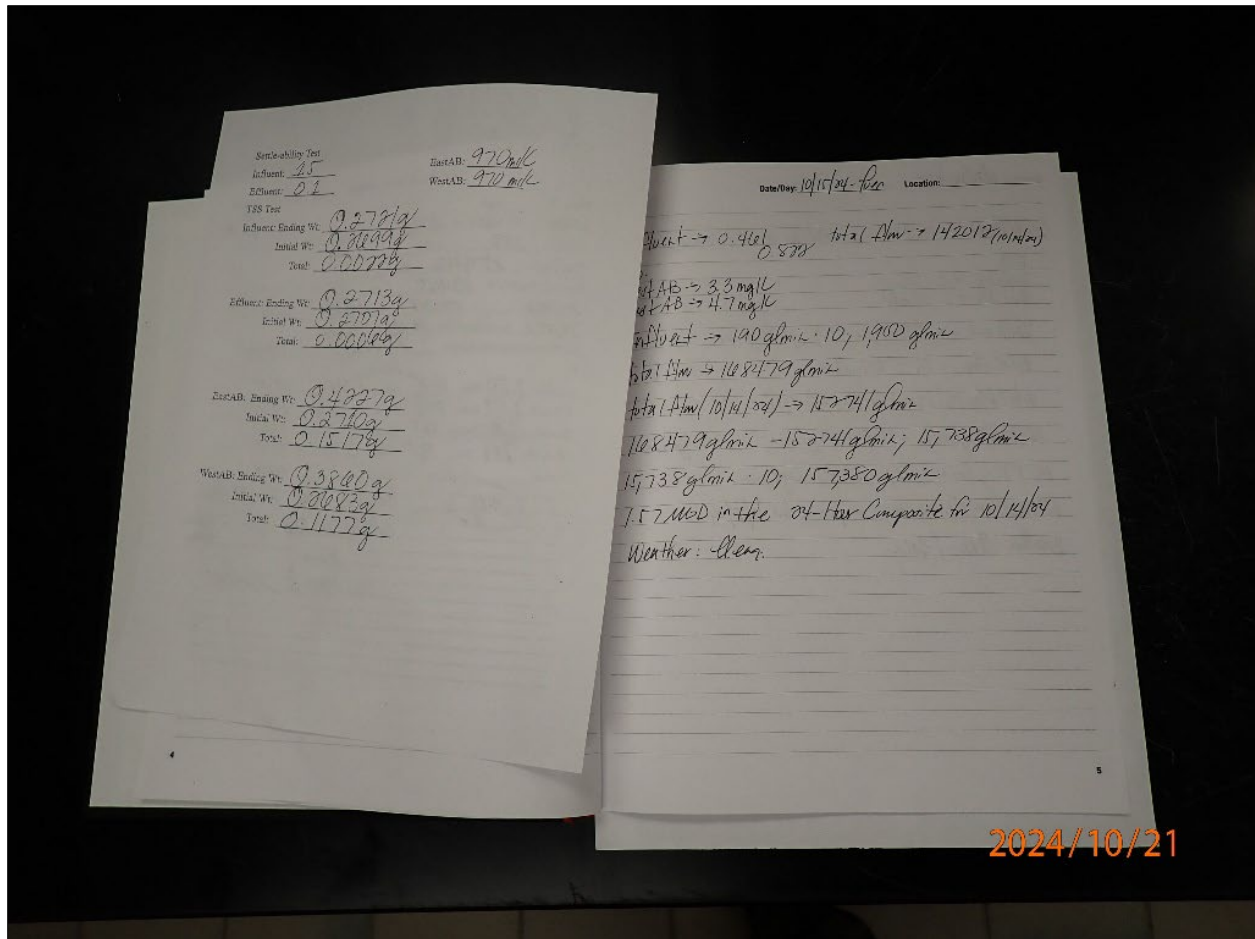
Date/Day	Location
3/8/24 Fri	
D.O. West AB → 1.6 mg/L East AB → 1.0 mg/L Influent → 99 g/min · 10; 990 g/min total flow → 75030 g/min total flow (3/7/24) → 737975 g/min 75030 g/min - 737975 g/min; 12,331 g/min 12,331 g/min · 10; 123310 g/min 1.23 MGD in the 24-Hour Composite for 3/7/24 Weather: Clear.	
3-9-24 Sat D.O. West AB → 0.7 mg/L 24 mg/L East AB → 0.4 mg/L 3.3 mg/L total flow → 716009 g/min total flow (3/8/24) → 75030 g/min 10,703 g/min · 10; 107030 g/min 1.07 MGD in the 24-Hour Composite for 3/8/24	
3-10-24 Sun D.O. West AB → 0.7 mg/L East AB → 0.1 mg/L total flow → 774558 - 716109 g/min; 13,5243 g/min 1.35 MGD in the 24-Hour Composite for 3/9/24	
3/11/24 Mon	
D.O. West AB → 0.8 mg/L East AB → 0.8 mg/L Influent → 149 g/min · 10; 1490 g/min total flow → 790055 g/min total flow (3/10/24) → 774558 g/min 790055 g/min - 774558 g/min; 15,503 g/min 15,503 g/min · 10; 155,030 g/min 1.55 MGD in the 24-Hour Composite for 3/10/24 Weather: Partly Cloudy. Notes: UV cleaning.	

Having submitted acceptance taken and passed.
Wastewater Treatment
Tong Cox, Chief of Facility

2024/10/21

Inspection Date: October 21, 2024

[illegible]



2024/10/21

Exhibit 4
Waypoint Analytical Chain of Custody



Waypoint
ANALYTICAL

2790 Whitten Road, Memphis, TN 38133
 Main 901.213.2400 • Fax 901.213.2440
 www.waypointanalytical.com

Kit ID:	255627	CHAIN-OF-CUSTODY	
Initiated By:	Randy Thomas		
Initiated Date:	11/21/2023		
Project Comment			

Company Name	Company Number	Client Project Manager/Contact	Purchase Order Number
Clarksdale Public Utilities	16757	C. Boschert	240033
Site Name	Project Number	☐ RUSH – Additional charges apply ☐ Special Detection Limits(s) Date Results Needed	Method of Shipment ☐ Fed Ex ☐ UPS ☐ USPS ☐ Courier ☐ Client Drop Off Other
POTW Weekly Samples			
LIMS Project ID	Project Manager Phone #	Project Manager Email	Site/Facility ID #
Clarksdale Public Utilities - Weekly		cboschert@cdpu.net	

Date	Time	Sample ID	Matrix	Grab/Comp	# of Cont	Container Type	Preservation	Analyses
10/20/2024	0730-0550	Influent - 10/20	AQU	C	1	Plastic - Pint	NONE	BOD
10/20/2024	0730-0550	Influent - 10/20	AQU	C	1	Plastic - Pint	H2SO4 - Sulfuric Acid	NH3
10/20/2024	0730-0542	Effluent - 10/20	AQU	C	1	Plastic - Pint	NONE	BOD
10/20/2024	0730-0542	Effluent - 10/20	AQU	C	1	Plastic - Pint	H2SO4 - Sulfuric Acid	NH3

EFF BOD MDL = 2mg/L

For Laboratory Use Only			Sampled by (Name - Print)		Client Remarks/Comments				
Ice	Custody Seals	Lab Comments	Latrice Sykes Relinquished by: (SIGNATURE) Relinquished by: (SIGNATURE) Relinquished by: (SIGNATURE)		Date	Time	Received by: (SIGNATURE)	Date	Time
Y/N	Y/N				10/21/24	1050	Felank	10/21/24	1050
Blank/Cooler Temp									

1/1

2024/10/21

Latrice N Sykes

qualifications, knowledge and experience, and having appropriate examination is hereby granted this

Inspection Certification Class II

Exhibit 5

Sludge Disposal Documentation

Record of Loads of Sludge Hauled from WWTP to Tunica Landfill
 For the years of 2017-2022 (Dates are SUBJECT to be added through the year)

<i>Year</i>	<i>Month</i>	<i>Day</i>	<i>Loads</i>	<i>Total</i>
2017	June	16	2	
	September	19	3	
	November	17	4	9
2018	May	4	1	
	May	18	2	
	June	13	1	
	July	6	4	
	July	12	1	
	July	31	1	
	August	15	3	
	August	16	1	
	October	30	1	15
	June	20	3	
2019	July	9	2	
	July	29	1	
	August	22	3	
	August	30	1	
	September	17	2	
	October	4	1	13
	May	5	2	
2020	May	15	4	
	June	15	3	
	June	16	1	
	July	16	4	
	August	11	5	
	September	17	2	
	October	7	2	
	November	9	3	26
	April	21	1	
	May	27	2	
2021	July	9	1	
	August	5	1	
	September	14	3	
	October	15	3	11
2022	March	29	3	3

Each Non-Hazardous Manifest Sheet is Sign and Dated by Each Truck Driver and Plant Manager
 Bernice Jones.

ERG

October 21, 2024 1:09 PM

Record of Loads of Sludge Hauled from WWT to Tannin Landfill
For the years of 2022-Present (Dates are SUBJECT to be added through the year)
WM Profile #400170345

Year	Month	Day	Loads	Total
2022	June	17	2	
	July	26	2	
	September	2	3	
	October	6	2	
2023	April	5	3	8
	May	26	3	
	July	28	2	
	September	12	4	
	October	16	1	
2024	October	17	1	
	June	3	4	14
	June	4	3	
	August	26	3	
	August	27	1	11

Each Non-Hazardous Manifest Sheet is Sign and Dated by Each Truck Driver and Plant Manager
Bernice Jones, Lab Technician, La'Trice Sykes signed and dated in 2024.

ERG

October 21, 2024 1:09 PM

Exhibit 6
Composite Sampler Temperature Readings and Cleaning Records

Influent and Effluent Refrigerated Automatic Sampler Cleaning Checklist

[illegible]**ERG**

October 21, 2024 1:08 PM

Month: October Year: 2024

Laboratory

*Daily temp readings for the Influent and Effluent Automatic Sampler, must maintain a temperature between 4-8 degrees C. SN: Automatic Refrigerated Sampler Installed & Calibrated: (Sept. 14, 2021) x La'Trice Sykes

Location/Comments	Date	Time	Temperature
Influent:	10-1-24	0735	5 th L.P.
Effluent:	10-1-24	0720	4 th L.P.
Influent:	10-2-24	7:40am	4 th L.P.
Effluent:	10-2-24	7:30am	4 th L.P.
Influent:	10-3-24	7:05am	4 th L.P.
Effluent:	10-3-24	7:10am	4 th L.P.
Influent:	10-8-24	8:00am	5 th L.P.
Effluent:	10-8-24	8:00am	4 th L.P.
Influent:	10-9-24	7:00am	4 th L.P.
Effluent:	10-9-24	7:00am	4 th L.P.
Influent:	10-10-24	7:30am	4 th L.P.
Effluent:	10-10-24	7:20am	4 th L.P.
Influent:	10-11-24	7:57am	4 th L.P.
Effluent:	10-11-24	7:00am	4 th L.P.

ERG
October 21, 2024 1:08 PM



State of Mississippi



WATER POLLUTION CONTROL PERMIT

Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System

THIS CERTIFIES

Clarksdale POTW

1905 Sunflower Avenue Extended

Clarksdale, MS

Coahoma County

has been granted permission to discharge wastewater in accordance with the effluent limitations, monitoring requirements and other conditions set forth in this permit. This permit is issued in accordance with the provisions of the Mississippi Water Pollution Control Law (Section 49-17-1 et seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder, and under authority granted pursuant to Section 402(b) of the Federal Water Pollution Control Act.

Mississippi Environmental Quality Permit Board

A handwritten signature in blue ink that reads "Krystal Rudolph".

Mississippi Department of Environmental Quality

Issued/Modified: May 22, 2023

Expires: April 30, 2028

Permit No. MS0020311

Agency Interest # 13065

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Other Relevant Documents:

Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System

Clarksdale POTW

Subject Item Inventory

Permit Number:MS0020311

Activity ID No.: PER20220001

Subject Item Inventory:

ID	Designation	Description
AI13065	MS0020311	
RPNT1	MS0020311-001	Outfall 001 (Domestic/ Municipal Wastewater)

Receiving Stream Relationships:

Subject Item	Relationship	Receiving Stream
AI 13065	Discharges Into	Clarksdale POTW MS0020311
RPNT1 Outfall 001 (Domestic/ Municipal Wastewater)	Discharges Into	Big Sunflower River

KEY

ACT = Activity

AREA = Area

CONT = Control Device

IA = Insignificant Activity

MAFO = Animal Feeding Operation

RPNT = Release Point

WDPT = Withdrawal Point

AI = Agency Interest

CAFO = Concentrated Animal Feeding Operation

EQPT = Equipment

IMPD = Impoundment

PCS = PCS

TRMT = Treatment

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Subject Item: Outfall 001 (Domestic/ Municipal Wastewater)

RPNT0000000001: MS0020311-001

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
<i>Ammonia Nitrogen, Total (as N) Effluent</i>	208 Monthly Average	313 Maximum Weekly Average	pounds per day	*****	5 Monthly Average	7.5 Maximum Weekly Average	mg/L	5 Times per Week	24-hr Composite	Jan-Dec
<i>Ammonia Nitrogen, Total (as N) Influent</i>	Report Monthly Average	Report Maximum Weekly Average	pounds per day	*****	Report Monthly Average	Report Maximum Weekly Average	mg/L	5 Times per Week	24-hr Composite	Jan-Dec
<i>Copper (Total Recoverable) Effluent</i>	*****	*****	*****	*****	0.097 Monthly Average	0.170 Maximum Weekly Average	mg/L	Monthly	24-hr Composite	Jan-Dec
<i>E coli Effluent</i>	*****	*****	*****	*****	126 Monthly Average	410 Maximum Weekly Average	# of colonies/100 ml	5 Times per Week	Grab Sampling	Jan-Dec
<i>Flow Effluent</i>	5.0 Monthly Average	Report Maximum Weekly Average	Million Gallons per Day	*****	*****	*****	*****	Daily	Continuous Recorder	Jan-Dec
<i>Nitrogen (Total) Effluent</i>	567.5 Maximum Monthly Average	851.3 Maximum Weekly Average	pounds per day	*****	Report Monthly Average	Report Maximum Weekly Average	mg/L	Monthly	24-hr Composite	Jan-Dec
<i>Nitrogen (Total) Influent</i>	Report Monthly Average	Report Maximum Weekly Average	pounds per day	*****	Report Maximum Monthly Average	Report Maximum Weekly Average	mg/L	Monthly	24-hr Composite	Jan-Dec
<i>Oxygen Demand, biochemical, 5-day (20 degrees C) Effluent</i>	1248 Monthly Average	1877 Maximum Weekly Average	pounds per day	*****	30 Monthly Average	45 Maximum Weekly Average	mg/L	5 Times per Week	24-hr Composite	Nov-Apr

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Subject Item: Outfall 001 (Domestic/ Municipal Wastewater)

RPNT0000000001: MS0020311-001

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
<i>Oxygen Demand, biochemical, 5-day (20 degrees C) Effluent</i>	1043 Monthly Average	1564 Maximum Weekly Average	pounds per day	*****	25 Monthly Average	37.5 Maximum Weekly Average	mg/L	5 Times per Week	24-hr Composite	May-Oct
<i>Oxygen Demand, biochemical, 5-day (20 degrees C) Influent</i>	Report Monthly Average	Report Maximum Weekly Average	pounds per day	*****	Report Monthly Average	Report Maximum Weekly Average	mg/L	5 Times per Week	24-hr Composite	Jan-Dec
<i>Oxygen Demand, biochemical, 5-day (20 degrees C) Percent Removal</i>	*****	*****	*****	85 Minimum	*****	*****	%	Monthly	Calculations	Jan-Dec
<i>Oxygen, dissolved Effluent</i>	*****	*****	*****	6.0 Minimum	*****	*****	mg/L	5 Times per Week	Grab Sampling	Jan-Dec
<i>Oxygen, dissolved In Aeration Unit</i>	*****	*****	*****	Report Minimum	*****	Report Maximum	mg/L	Daily	Grab Sampling	Jan-Dec
<i>pH Effluent</i>	*****	*****	*****	6.0 Minimum	*****	9.0 Maximum	SU	Daily	Grab Sampling	Jan-Dec
<i>Phosphorus (Total) Effluent</i>	242 Monthly Average	363 Maximum Weekly Average	pounds per day	*****	Report Monthly Average	Report Maximum Weekly Average	mg/L	Monthly	24-hr Composite	Jan-Dec
<i>Phosphorus (Total) Influent</i>	Report Monthly Average	Report Maximum Weekly Average	pounds per day	*****	Report Maximum Monthly Average	Report Maximum Weekly Average	mg/L	Monthly	24-hr Composite	Jan-Dec

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Subject Item: Outfall 001 (Domestic/ Municipal Wastewater)

RPNT0000000001: MS0020311-001

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
<i>Sludge Settleability 30 Minute In Aeration Unit</i>	*****	*****	*****	Report Minimum	*****	Report Maximum	ml/L	Daily	Measurement	Jan-Dec
<i>Solids (Total Suspended) Effluent</i>	1248 Monthly Average	1877 Maximum Weekly Average	pounds per day	*****	30 Monthly Average	45 Maximum Weekly Average	mg/L	5 Times per Week	24-hr Composite	Jan-Dec
<i>Solids (Total Suspended) Influent</i>	Report Monthly Average	Report Maximum Weekly Average	pounds per day	*****	Report Monthly Average	Report Maximum Weekly Average	mg/L	5 Times per Week	24-hr Composite	Jan-Dec
<i>Solids (Total Suspended) Percent Removal</i>	*****	*****	*****	85 Minimum	*****	*****	%	Monthly	Calculations	Jan-Dec

Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System

Clarksdale POTW
Facility Requirements
Permit Number:MS0020311
Activity ID No.: PER20220001

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AI0000013065 (MS0020311):

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		There shall be no discharge of floating solids or visible foam in other than trace amounts. [11 Miss. Admin. Code Pt. 6, R. 2.2.A(2).]
L-2		The effluent shall not cause an accumulation of solids or sewage sludges in the receiving stream. [11 Miss. Admin. Code Pt. 6, R. 2.2.A(2).]
L-3		The discharges shall not cause the occurrence of a visible sheen on the surface of the receiving waters. [11 Miss. Admin. Code Pt. 6, R. 2.2.A(2).]
L-4		Samples taken in compliance with the monitoring requirements specified in this permit shall be taken at the nearest accessible point after final treatment but prior to mixing with the receiving stream or as otherwise specified in this permit. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(28).]

Record-Keeping Requirements:

Condition No.	Condition
R-1	Recording of Results For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall maintain records of all information obtained from such monitoring including: (1) The exact place, date, and time of sampling; (2) The dates the analyses were performed; (3) The person(s) who performed the analyses; (4) The analytical techniques, procedures or methods used; and (5) The results of all required analyses. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(29)(a).]

Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System

Clarksdale POTW
Facility Requirements
Permit Number:MS0020311
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AI0000013065 (continued):

Submittal/Action Requirements:

Condition No.	Condition
S-1	The Permittee Shall Submit a report: Due within one year after permit effective date. The Permittee shall submit the results of the reconfirmation of the hardness and Total Recoverable Copper chemical translator study. The permit shall reconfirm limitations upon review of the results of the confirmation data. [11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 1.]
S-2	Sludge Management Requirements. (1) General Compliance: The permittee shall comply with all existing Federal and State laws and regulations that apply to its sewage sludge use and disposal practice(s), with the Mississippi Nonhazardous Waste Management Regulations and with the CWA Section 405(d) technical standards when promulgated. (2) Reopener: If an applicable "acceptable management practice" or numerical limitation for pollutants in sewage sludge promulgated under Section 405(d)(2) of the Clean Water Act, as amended by the Water Quality Act of 1987, is more stringent than the sludge pollutant limit or acceptable management practice in this permit, or controls a pollutant to conform to the requirements promulgated under Section 405(d)(2). The permittee shall comply with the limitations by no later than the compliance deadline specified in the applicable regulations as required by Section 405(d)(2)(D) of the Clean Water Act. (3) Notice of Change in Sludge Disposal Practice: The permittee shall give prior notice to the Director of any change(s) planned in the permittee's sludge use or disposal practice. (4) Cause for Modification: 40 CFR 122.62(a)(1) provides that the following is a cause for modification but not revocation and reissuance of permits except when the permittee requests or agrees. (5) Alterations: There are material and substantial changes or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit. [11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 1.]

Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System

Clarksdale POTW
Facility Requirements
Permit Number:MS0020311
Activity ID No.: PER20220001

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AI0000013065 (continued):

Submittal/Action Requirements:

Condition No.	Condition
S-3	Pretreatment Requirements. (1) This permit shall be modified, or alternately revoked and reissued by a date to be determined to incorporate and approved municipal pretreatment program as required under Section 402(b)(8) of the Federal Water Pollution Control Act and implementing regulations or by the requirements of the approved State pretreatment program, as appropriate. (2) Effluent limitations from this discharge are listed in the Effluent Limitations section of this permit. If it becomes apparent that other pollutants attributable to inputs from major contributing industries using the municipal system are also present in the permittee's discharge, this permit may be revised to specify effluent limitations for any or all of such other pollutants in accordance with best practicable technology or water quality standards. (3) Under no circumstances shall the permittee allow introduction of the following wastes or pollutants into the waste treatment system. (a) Pollutants which create a fire or explosion hazard in the treatment works; (b) Pollutants which will cause corrosive structural damage to treatment works; but in no case discharges with a pH designed lower than 5.0, unless the works are specifically designed to accomodate such discharges; (c) Solids or viscous substances in amounts which cause obstructions to the flow in sewer or interference with the proper operation of the treatment works; (d) Wastewaters at a flow rate and/or pollutant discharge rate which is excessive over relatively short time periods so as to cause a loss of treatment efficiency; (e) Heat in amounts which will inhibit biological activity in the treatment works resulting in interference, but in no case heat in such quantities that the temperature of the influent exceeds 40 degrees Celsius (104 degrees Fahrenheit), unless approval for alternate limits has been granted by the Permit Board. [11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 1.]
S-4	Reporting Monitoring results obtained during the previous reporting period shall be summarized and reported on a Discharge Monitoring Report (DMR). DMR data must be submitted electronically using the MDEQ NetDMR system NO LATER THAT THE 28TH DAY OF THE MONTH FOLLOWING THE COMPLETED REPORTING PERIOD. DMRs and all other reports required herein, shall be signed in accordance with 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(15)(c)(1). of the Mississippi Wastewater Regulations. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(15)c(1)., 40 CFR 122.21(1)(4)(i)]

Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System

Clarksdale POTW
Facility Requirements
Permit Number:MS0020311
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AI0000013065 (continued):

Submittal/Action Requirements:

Condition No.	Condition
S-5	Noncompliance Notification - Twenty-Four Hour Reporting (1) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and/or prevent recurrence of the noncompliance. (2) The following shall be included as information which must be reported within 24 hours under this paragraph. (i) Any unanticipated bypass which exceeds any effluent limitation in the permit. (ii) Any upset which exceeds any effluent limitation in the permit. (iii) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Permit Board in the permit to be reported within 24 hours. (iv) The Executive Director may waive the written report on a case-by-case basis for reports under paragraph (1) of this section if the oral report has been received within 24 hours. All reports required by this condition which are submitted after December 20, 2020, shall be submitted by the permittee electronically as instructed by MDEQ. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(29)(e)., 40 CFR 122.41.(1)(6)]
S-6	Noncompliance Notification - Other Noncompliance The permittee shall report all instances of noncompliance not reported under the twenty-four hour reporting requirements, at the time monitoring reports are submitted or within 30 days from the end of the month in which the noncompliance occurs. The reports shall contain the same information as is required under the twenty-four hour reporting requirements contained in this permit. All reports required by this condition which are submitted after December 20, 2025, shall be submitted by the permittee electronically as instructed by MDEQ. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(29)(f)., 40 CFR 122.41.(1)(7)]

Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System

Clarksdale POTW
Facility Requirements
Permit Number:MS0020311
Activity ID No.: PER20220001

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AI0000013065 (continued):

Submittal/Action Requirements:

Condition No.	Condition
S-7	Noncompliance Notification - Other Information Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Permit Board, it shall promptly submit such facts or information. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(29)(g).]
S-8	Bypassing -Notice Anticipated bypass- If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass. Unanticipated bypass- The permittee shall submit notice of an unanticipated bypass as required by the twenty-four hour reporting requirements set forth in this permit. All reports required by this condition which are submitted after December 20, 2025, shall be submitted by the permittee electronically as instructed by MDEQ. [40 CFR 122.41(m)(3)(i, ii)]
S-9	Expiration of Permit At least 180 days prior to the expiration date of this permit pursuant to the State law and regulation, the permittee who wishes to continue to operate under this permit shall submit an application to the Permit Board for reissuance. The Permit Board may grant permission to submit an application later than this, but no later than the expiration date of the permit. [11 Miss. Admin. Code Pt. 6, R. 1.1.5.B(1).]

Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System

Clarksdale POTW
Facility Requirements
Permit Number:MS0020311
Activity ID No.: PER20220001

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AI0000013065 (continued):

Narrative Requirements:

Definitions:

Condition No.	Condition
T-1	Definitions: General The permittee shall refer to 11 Miss. Admin. Code Pt. 6, R. 1.1.1.A for definitions of any permit term not specified in this permit. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A.]
T-2	Definitions: Monthly Average "Monthly Average" means the average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during the month. The monthly average for E coli bacteria is the geometric mean of "daily discharges" measured during the calendar month. In computing the geometric mean for E coli bacteria, the value one (1) shall be substituted for sample results of zero. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A(44).]
T-3	Definitions: Daily Discharge "Daily discharge" means the "discharge of a pollutant" measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurements, the "daily average" is calculated as the average measurement of the discharge of the pollutant over the day. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A(15).]
T-4	Definitions: Daily Maximum "Daily maximum" means the highest "daily discharge" over a calendar month. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A(16).]
T-5	Definitions: Maximum Weekly Average Maximum Weekly Average means the highest "weekly average" over a monitoring period. [40 CFR 122]
T-6	Definitions: Toxic Pollutants "Toxic pollutants" means any pollutant listed as toxic under Section 307(a)(1) or, in the case of "sludge use or disposal practices", any pollutant identified in regulations implementing Section 405(d) of the Clean Water Act. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A(71).]

Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System

Clarksdale POTW
Facility Requirements
Permit Number:MS0020311
Activity ID No.: PER20220001

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AI0000013065 (continued):

Narrative Requirements:

Definitions:

Condition No.	Condition
T-7	Definitions: Hazardous Substances "Hazardous substances" are defined in 40 CFR 116.4. [40 CFR 116.4]
T-8	Definitions: Weekly Average "Weekly average" means the average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week. The weekly average for E coli bacteria is the geometric mean of all "daily discharges" measured in a calendar week. In computing the geometric mean for E coli bacteria, one (1) shall be substituted for sample results of zero. For self-monitoring purposes, the value to be reported is the single highest weekly average computed during a calendar month. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A(86).]
T-9	Definitions: Quarterly Average "Quarterly Average" means the average of "daily discharges" over a three month period, calculated as the sum of all "daily discharges" measured during the quarter divided by the number of "daily discharges" measured during the quarter. The quarterly average for E coli bacteria is the geometric mean of "daily discharges" measured during the quarter. In computing the geometric mean for E coli bacteria, the value one (1) shall be substituted for sample results of zero. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A(61).]
T-10	Definitions: Quarterly Maximum "Quarterly Maximum" means the highest "daily discharge" measured over a three-month period. [11 Miss. Admin. Code Pt. 6, R.1.1.1.A(62).]
T-11	Definitions: Maximum Monthly Average Maximum Monthly Average means the highest "monthly average" over a monitoring period. [40 CFR 122]

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AI0000013065 (continued):

Narrative Requirements:

Definitions:

Condition No.	Condition
T-12	Definitions: Yearly Average "Yearly Average" means the average of "daily discharges" over a calendar year, calculated as the sum of all "daily discharges" measured during the calendar year divided by the number of "daily discharges" measured during the calendar year. The yearly average for E coli bacteria is the geometric mean of "daily discharges" during the calendar year. In computing the geometric mean for E coli bacteria, the value one (1) shall be substituted for sample results of zero. [11 Miss. Admin. Code Pt. 6, R.1.1.1.A(87).]
T-13	Definitions: Yearly Maximum "Yearly Maximum" means the highest "daily discharge" measured over a calendar year. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A(88).]
T-14	Definitions:"Submitted" means the document is postmarked on or before the applicable deadline, except as otherwise specified. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A(67).]
Condition No.	Condition
T-15	The permittee shall achieve compliance with the effluent limitations specified for discharge in accordance with the following schedule: Upon Permit Issuance. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(9).]
T-16	No later than 10 days following the date of compliance specified by this permit, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(10).]

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AI0000013065 (continued):

Narrative Requirements:

Condition No.	Condition
T-17	Change in Discharge All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit. Any anticipated facility expansions or treatment modifications which result in new, different, or increased discharges of pollutants must be reported by submission of a new NPDES application. If such changes will not violate the effluent limitations to the Mississippi Environmental Quality Permit Board, the permit may be modified to specify and limit any pollutants not previously limited. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A.]
T-18	Adverse Impacts The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of the permit that has a reasonable likelihood of adversely affecting human health or the environment. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(19).]
T-19	The permittee shall provide written notification to the Mississippi Commission on Environmental Quality no later than thirty (30) days after the loss of the permittee's certified operator. [11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 1.]
T-20	Representative Sampling Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored wastewater. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(28)(e).]
T-21	Reporting If the results for a given sample analysis are such that any parameter (other than E coli) is not detected at or above the minimum level for the test method used, a value of zero will be used for that sample in calculating an arithmetic mean value for the parameter. If the resulting calculated arithmetic mean value for that reporting period is zero, the permittee shall report "NODI = B" on the DMR. For E coli, a value of 1.0 shall be used in calculating the geometric mean. If the resulting E coli mean value is 1.0, the permittee shall report "NODI = B" on the DMR. For each quantitative sample value that is not detectable, the test method used and the minimum level for that method for that parameter shall be attached to and submitted with the DMR. The permittee shall then be considered in compliance with the appropriate effluent limitation and/or reporting requirement. [11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 2.]

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AI0000013065 (continued):

Narrative Requirements:

Condition No.	Condition
T-22	Reporting If the permittee monitors any pollutant as prescribed in the permit more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Permit Board. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(15)(c)(2).]
T-23	Reporting Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Permit Board in the permit. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(15)(c)(3).]
T-24	Test Procedures Test procedures for the analysis of pollutants shall include those set forth in 40 CFR 136 or alternative procedures approved and/or promulgated by EPA. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(30).]
T-25	Records Retention All records and results of monitoring activities required by this permit, including calibration and maintenance records, shall be retained by the permittee for a minimum of three (3) years, unless otherwise required or extended by the Permit Board, copies of which shall be furnished to the Department upon request. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(29)(a).]
T-26	Falsifying Reports Any permittee who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required by the Permit Board to be maintained as a condition in a permit, or who alters or falsifies the results obtained by such devices or methods and/or any written report required by or in response to a permit condition, shall be deemed to have violated a permit condition and shall be subject to the penalties provided for a violation of a permit condition pursuant to Section 49-17-43 of the Code. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(29)(d).]

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AI0000013065 (continued):

Narrative Requirements:

Condition No.	Condition
T-27	Duty to Comply The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(2).]
T-28	Proper Operation, Maintenance and Replacement The permittee shall at all times properly operate, maintain, and when necessary, promptly replace all facilities and systems of collection, treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes adequate laboratory controls and appropriate quality assurance procedures. Proper replacement includes maintaining an adequate inventory of replacement equipment and parts for prompt replacement when necessary to maintain continuous collection and treatment of wastewater. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(18).]
T-29	Duty to Mitigate The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of the permit that has a reasonable likelihood of adversely affecting human health or the environment. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(19).]
T-30	Bypassing The permittee shall comply with the terms and conditions regarding bypass found in 40 CFR 122.41(m). [40 CFR 122.41(m)]
T-31	Bypassing - Definitions "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. [40 CFR 122.41(m)]

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Condition No.	Condition
T-32	Bypassing - Bypass not exceeding limitations The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the notice and prohibition provisions of the bypass requirements in this permit. [40 CFR 122.41(m)]
T-33	Bypassing- Prohibition of Bypass (1) Bypass is prohibited, and the Commission may take enforcement action against a permittee unless: (i) Bypass was unavoidable to prevent loss of life, personal injury, or sever property damage. (ii) There was no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and (iii) The permittee submitted notices as required under the Twenty-Four Hour reporting requirements set forth in this permit. (2) The Commission may approve an anticipated bypass, after considering its adverse affects, if the Commission determines that it will meet the three conditions listed above in paragraph (1) of this permit condition. [40 CFR 122.41(m)]
T-34	Upsets The permittee shall meet the conditions of 40 CFR 122.41(n) regarding "Upsets" and as in the upset requirements of this permit. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(27).]
T-35	Upsets- Definition "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(27).]

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AI0000013065 (continued):

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Condition No.	Condition
T-36	Upsets - Effect of an Upset An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the "conditions necessary for demonstration of upset" requirements of this permit are met. Any determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, shall not constitute final administrative action subject to judicial review. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(27).]
T-37	Upsets - Conditions necessary for demonstration of upset A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that: (1) An upset occurred and that the permittee can identify the cause(s) of the upset; (2) The permitted facility was at the time being properly operated; (3) The permittee submitted notice of the upset as required in 40 CFR 122.41(L)(6)(ii)(B)(24-hour notice of noncompliance); and (4) The permittee complied with any remedial measures required under 40 CFR 122.41(d) (Duty to Mitigate). [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(27).]
T-38	Upsets - Burden of proof In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(27).]
T-39	Removed Substances Solids, sludges, filter backwash, or other residuals removed in the course of treatment or control of wastewater shall be disposed of in a manner such as to prevent such materials from entering State waters and in a manner consistent with the Mississippi Solid Waste Disposal Act, the Federal Resource Conservation and Recovery Act, and the Mississippi Water Pollution Control Act. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(21).]

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AI0000013065 (continued):

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Condition No.	Condition
T-40	Power Failures If electric power is required, in order to maintain compliance with the conditions and prohibitions of the permit, the permittee shall either: (1) Provide an alternative power source to operate the wastewater control facilities; or, if such alternative power source is not in existence, and no date for its implementation appears in the permit, (2) Halt, reduce, or otherwise control production and/or all wastewater flows upon reduction, loss, or failure of the primary source of power to the wastewater control facilities. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(22).]
T-41	Inspection and Entry The permittee shall allow any authorized Commission representative to enter the permittee's premises at any reasonable time, to have access to and copy any applicable records, to inspect process facilities, treatment works, monitoring methods or equipment or to take samples, as authorized by Section 49-17-21 of the Code. In the event of investigation during an emergency response action, a reasonable time shall be any time of the day or night. Follow-up investigations subsequent to the conclusion of the emergency event shall be conducted at reasonable times. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(17).]
T-42	Transfer of Ownership or Control This permit is not transferable to any person without proper modification of this permit following procedures found in [11 Miss. Admin. Code Pt. 6, R. 1.1.5.C.]
T-43	Signatory Requirements All applications, reports, or information submitted to the Permit Board shall be signed and certified. [11 Miss. Admin. Code Pt. 6, R. 1.1.2.C.]

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Narrative Requirements:

Condition No.	Condition
T-44	Signatory Requirements - Application Signatures All permit applications shall be signed as follows: (1) For a corporation: by a responsible corporate officer. For the purpose of this Section, a responsible corporate officer means: (i) a president, secretary, treasurer or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy - or decision-making function for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or (3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. [11 Miss. Admin. Code Pt. 6, R. 1.1.2.C.]
T-45	Signatory Requirements -Reports and Other Information All reports required by the permit and other information requested by the Permit Board shall be signed by a person described by the application signature requirements in this permit or by a duly authorized representative of that person. A person is a duly authorized representative only if: (1) The authorization is made in writing by a person described by the application signature requirements; (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and (3) The written authorization is submitted to the Permit Board. [11 Miss. Admin. Code Pt. 6, R. 1.1.2.C.]

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AI0000013065 (continued):

Narrative Requirements:

Condition No.	Condition
T-46	Signatory Requirements - Changes to Authorization If an authorization under the signatory requirements of this permit is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the signatory requirements of this permit must be submitted to the Permit Board prior to or together with any reports, information, or applications. [11 Miss. Admin. Code Pt. 6, R. 1.1.2.C.]
T-47	Signatory Requirements - Certification Any person signing a document under the signatory requirements stated in this permit shall make the following certification: "I certify under penalty of law that this document and all attachments were prepared under the direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." [11 Miss. Admin. Code Pt. 6, R. 1.1.2.C.]
T-48	Availability of Records Except for information deemed to be confidential under the Mississippi Code Ann. 49-17-39 and 40 CFR 123.41, file information relating to this permit shall be made available for public inspection and copying during normal business hours at the office of the Department of Environmental Quality in Jackson, Mississippi. Written request must be provided in accordance with policies developed by the Commission and must state, specifically, records proposed for review, date proposed for review and copying requirements. [11 Miss. Admin. Code Pt. 6, R. 1.1.3.E.]
T-49	Duty to Provide Information The permittee shall furnish to the Permit Board within a reasonable time any relevant information which the Permit Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. The permittee shall also furnish to the Permit Board upon request, copies of records required to be kept by the permit. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(16).]

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AI0000013065 (continued):

Narrative Requirements:

Condition No.	Condition
T-50	Toxic Pollutants The permittee shall comply with any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) established under Section 307(a) of the Federal Water Pollution Control Act. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(26).]
T-51	Toxic Pollutants Notification Requirements The permittee shall comply with the applicable provisions of 40 CFR 122.42. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(26).]
T-52	Civil and Criminal Liability (1) Any person who violates a term, condition or schedule of compliance contained within this permit or the Mississippi Water Pollution Control Law is subject to the actions defined by law. (2) Except as provided in permit conditions on "Bypassing" and "Upsets", nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. (3) It shall not be the defense of the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(24).]
T-53	Oil and Hazardous Substance Liability Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under Section 311 of the Federal Water Pollution Control Act and applicable provisions under Mississippi Law pertaining to transportation, storage, treatment, or spillage of oil or hazardous substances. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(23).]
T-54	Property Rights The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations. [11 Miss. Admin. Code Pt. 6, R. 1.1.5. E.]

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AI0000013065 (continued):

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Condition No.	Condition
T-55	Severability The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(25).]
T-56	Protection of Confidential Information (1) Pursuant to Miss. Code Ann. ' 49-17-39 and 40 CFR 123.41, the Permit Board shall make available to the public all information contained on any form and all public comments on such information. Effluent data and information concerning air or water quality shall also be made available to the public. Information that is determined by the Commission to be trade secrets shall not be disclosed to the public without prior consent of the source of such information. When a claim of confidentiality is made by a person in accordance with the provisions of Miss. Code Ann. ' 49-17-39, a recommendation on the questions of confidentiality shall be made by the Commission and forwarded to the Regional Administrator (or his/her designee) of EPA for his concurrence in such determination of confidentiality. [11 Miss. Admin. Code Pt. 6, R. 1.1.3.F.]
T-57	Protection of Confidential Information- continued (2) A copy of a State, UIC, or NPDES permit application, public notice, fact sheet, draft permit and other forms relating thereto, including written public comment and other reports, files and information relating to the application not classified as confidential information by the Commission pursuant to part (1) of this requirement, shall be available for public inspection and copying during normal business hours at the office of the Department in Jackson, Mississippi. [11 Miss. Admin. Code Pt. 6, R. 1.1.3.F.]
T-58	Protection of Confidential Information- continued (3) Upon determination by the Commission that information submitted by a permit applicant is entitled to protection against disclosure as trade secrets, the information shall be so labeled and otherwise handled as confidential. Copies of the information and a notice of the Commission's action shall be forwarded to the Regional Administrator (or his/her designee). In making its determination of entitlement to protection as a trade secret, the Commission shall follow the procedure set forth in Miss. Code Ann. ' 49-17-39. In the event the Commission denies the claim of confidentiality, the applicant shall have, upon notification thereof, the right to appeal the Commission's determination in the same manner provided for other orders of the Commission. No disclosure, except to EPA, shall be allowed until any appeal from the determination of the Commission is completed. [11 Miss. Admin. Code Pt. 6, R. 1.1.3.F.]

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AI0000013065 (continued):

Narrative Requirements:

Condition No.	Condition
T-59	Spill Prevention and Best Management Plans Any permittee which has above ground bulk storage capacity, of more than 1320 gallons or any single container with a capacity greater than 660 gallons, of materials and/or liquids (including but not limited to, all raw, finished and/or waste material) with chronic or acute potential for pollution impact on waters of the State and not subject to Mississippi Hazardous Waste Management Regulations or 40 CFR 112 (Oil Pollution Prevention) regulations shall provide secondary containment as found in 40 CFR 112 or equivalent protective measures such as trenches or waterways which would conduct any tank releases to a permitted treatment system or sufficient equalization or treatment capacity needed to prevent chronic/acute pollution impact. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(12)(a).]
T-60	Reopener Clause This permit shall be modified, or alternately, revoked and reissued, to comply with any applicable effluent standard, limitation or storm water regulation issued or approved under Section 301(b)(2)(C), and (D), 304(b)(2), 307(a)(2) and 402(p) of the Federal Water Pollution Control Act if the effluent standard, limitation or regulation so issued or approved: 1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or 2. Controls any pollutant not limited in the permit. 3. This permit shall be modified to reflect any additional or otherwise more stringent limitations and additional monitoring as determined to be necessary by the results of a Completed TMDL. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.F(1).]
T-61	Closure Requirements Should the permittee decide to permanently close and abandon the premises upon which it operates, it shall provide a Closure Plan to the Permit Board no later than 90 days prior to doing so. This Closure Plan shall address how and when all manufactured products, by-products, raw materials, stored chemicals, and solid and liquid waste and residues will be removed from the premises or permanently disposed of on site such that no potential environmental hazard to the waters of the State will be presented. Closure plan(s) submitted to and approved by Mississippi Department of Environmental Quality for compliance with other environmental regulations will satisfy the closure requirements for those items specifically addressed in the closure plan(s) as long as the closure does not present a potential for environmental hazard to waters of the State. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(11).]

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AI0000013065 (continued):

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Condition No.	Condition
T-62	Permit Actions The permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a modification of planned changes or anticipated noncompliance, does not stay any permit condition. [11 Miss. Admin. Code Pt. 6, R. 1.1.5.C(5).]

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RPNT0000000001 (MS0020311-001) Outfall 001 (Domestic/ Municipal Wastewater):

Submittal/Action Requirements:

Condition	Condition
S-1	The Permittee shall submit analytical results on a monthly Discharge Monitoring Report (DMR): Due monthly, by the 28th of the subsequent month. [11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 1. IV.A(15)c]

GENERAL INFORMATION

Clarksdale POTW
1905 Sunflower Avenue Extended
Clarksdale, MS
Coahoma County

Alternate/Historic Identifiers

ID	Alternate/Historic Name	User Group	Start Date	End Date
13065	City of Clarksdale	Official Site Name	6/16/1998	12/29/2006
23489	Clarksdale Public Utilities, Project SS-M(14)-035-05 WD-M(14)-036-05	Official Site Name	1/19/2006	11/22/2017
MS0020311	Clarksdale POTW	Water - NPDES	6/16/1998	6/8/2003
MS0020311	Clarksdale POTW	Water - NPDES	6/26/2003	5/31/2008
23489_	Clarksdale Public Utilities, Project SS-M(14)-035-05 WD-M(14)-036-05	Official Site Name	1/19/2006	1/20/2006
MSR103996	Clarksdale Public Utilities, Project SS-M(14)-035 WD-M(14)-036-05	GP-Construction	1/30/2006	5/31/2010
MS0020311	Clarksdale POTW	Water - NPDES	6/20/2008	5/31/2013
MS0020311	Clarksdale POTW	Water - NPDES	6/14/2013	4/4/2018
	Branch	Branches Group - Municipal	7/18/2017	
13065	Clarksdale Public Utilities	Official Site Name	11/22/2017	
MS0020311	Clarksdale POTW	Water - NPDES	4/4/2018	3/31/2023

Basin: Yazoo River Basin

Location Description:



**U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ENFORCEMENT AND COMPLIANCE ASSURANCE DIVISION
CLEAN WATER ACT COMPLIANCE INSPECTION REPORT**

for

Name of Facility: Clarksdale POTW

Facility Address: 1905 Sunflower Avenue Extended, Clarksdale, MS 38614

Mailing Address: PO Box 70, Clarksdale, MS 38614

Report Prepared by: 12/12/2024 By: Mike Beck
Date *Signature*
Eastern Research Group, Inc

Digitally signed
by Mike Beck
Date: 2024.12.12
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Report Final as of: 12/14/2024 By: _____
Date *Signature*
EPA

General Information

Type of Inspection:	Wastewater Treatment Facility CEI
Owner:	Clarksdale Public Utilities (CPU)
Operator:	CPU and Mitchell Technical Services (MTS; contractor)
Permittee:	CPU
NPDES Permit No:	MS0020311
NPDES Permit Issued Date:	May 22, 2023
NPDES Permit Expiration Date:	April 30, 2028
Receiving Waters:	Big Sunflower River
Outfall 001:	Latitude: 34.184249 Longitude: - 90.572951

On-Site Facility Inspection Overview

On October 21, 2024, representatives from the U.S. Environmental Protection Agency Region IV's (EPA's) contract inspector, Eastern Research Group (ERG), James Phillips and Mike Beck, conducted a compliance evaluation inspection of the Clarksdale Publicly Owned Treatment Works (POTW). Clarksdale Public Utilities (CPU) is identified as the permittee and owns and operates the POTW.

Approximate Entry Time: 0900 (CDT)

Approximate Exit Time: 1430 (CDT)

Inspection Date: October 21, 2024

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Appendix A: Photograph Log

Appendix B: Exhibit Log

- Exhibit 1 – EPA ECHO DMR Data for Outfall 001 (January 2023 to August 2024)
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- Exhibit 3 – Laboratory Log Sheets and Logbook
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Appendix C: NPDES Permit No. MS0020311

I. INTRODUCTION

On October 21, 2024, representatives from the U.S. Environmental Protection Agency Region IV's (EPA's) contract inspector, Eastern Research Group (ERG), James Phillips and Mike Beck (hereinafter, the inspectors), conducted a compliance evaluation inspection of the Clarksdale POTW. CPU is identified as the permittee and owns and operates the POTW with the assistance of Mitchell Technical Services (MTS).

The primary purpose of the inspection was to review the wastewater treatment processes and evaluate operations at the facility, to review the accuracy and reliability of the permittee's self-monitoring and reporting program, and to obtain information that will assist EPA in assessing the permittee's compliance with the requirements of National Pollutant Discharge Elimination System (NPDES) Permit No. MS0020311, which became effective on May 22, 2023, and expires on April 30, 2028. The permit authorizes the discharge of treated domestic wastewater from the Clarksdale POTW via Outfall 001 to the Big Sunflower River. The Clarksdale POTW has a permitted design flow of 5.0 MGD and services a population of approximately 8,000 people. The weather at the time of the inspection was hot, humid, and sunny.

II. INSPECTION PROCESS

Inspection Opening Conference

The inspectors arrived at the Clarksdale POTW at 0900 on October 21, 2024, for the inspection. James Phillips and Mike Beck of ERG displayed their Clean Water Act inspector credentials to Mike Vonallmen at the outset of the inspection and explained the purpose of the inspection was to observe compliance with the NPDES permit. A copy of the permit is provided in [Appendix C](#). Table 1 presents the individuals that participated in the inspection including staff from Mitchell Technical Services (MTS), a contractor for CPU, hereinafter the "facility representatives."

Table 1. Inspection Attendee List

Name	Affiliation	Email
EPA Inspector		
James Phillips	ERG	James.phillips@erg.com
Mike Beck	ERG	Mike.beck@erg.com
Facility Representative		
Mike Vonallmen	CPU	mvonallmen@cdpu.net
Willard Davis	CPU	wdavis@cdpu.net
Lance Syken	CPU	lsyken@cdpu.net
Kellery Wright	MTS	Wrightkellery@yahoo.com
Demeatrilles Coffey Sr.	MTS	demeatrillescoffey@yahoo.com
David Karr	MTS	Davidkarr0906@gmail.com

Inspection Date: October 21, 2024

During the opening conference, the inspectors were provided with an overview of the treatment processes, staffing, operational procedures, and reporting procedures at the POTW by the facility representatives. The facility has four full-time personnel that are onsite at the POTW from 0700 to 1600, Monday to Friday. Staff are on-call during weekends and other times as needed. The facility has two certified wastewater operators on staff and one certified laboratory personnel. MTS is currently hired to provide technical assistance and additional operator support, providing at least one certified operator onsite during normal operating hours (0700 to 1600, Monday to Friday).

The facility does not have a centralized Supervisory Control and Data Acquisition (SCADA) system; however, the facility does have local control systems for the influent pump station and UV system. Additionally, the facility is equipped with a Mission Communications alert system that monitors the different treatment processes and sends alert messages to the operators' personal cell phones.

Facility Site Walk

As part of the inspection process, the inspectors observed the treatment train and site conditions of the Clarksdale POTW. Satellite imagery of the facility with callouts for the wastewater treatment processes is shown below in Figure 1. The POTW is a conventional activated sludge plant with the following wastewater treatment processes:

- Influent grinder pumps and bar screen
- Fine screen
- Grit removal
- Primary clarifiers
- Aeration basins
- Secondary clarifiers
- Ultraviolet (UV) disinfection
- Anaerobic digesters
- Sludge drying beds
- Trickling filter (out of service)
- Bio-cells (out of service)



Figure 1. Satellite imagery of the Clarksdale POTW with the treatment processes and buildings outlined in red.

Influent wastewater is pumped to the POTW via the influent pump station and wet well (refer to [Appendix A, Photographs 1-3](#)). The wastewater is approximately 98% residential, according to the facility representatives. The influent pump station is equipped with three grinder pumps and one bar screen to remove large solids such as wipes or rags from the influent wastewater. The wet well is equipped with a float gauge that monitors the water level. The facility representatives stated they clean the wet well approximately once a week. The inspectors observed that there was not any safety railing around the wet well to prevent falls. The pumps and float gauge are on a local control system that automatically determines the number of pumps to turn on or off depending on the influent wastewater flow and the water level in the wet well (refer to [Appendix A, Photograph 3](#)). According to the facility representatives, two influent pumps are used with the third pump available as a backup during normal operations; only one pump is used during low flow operations; and all three pumps are used for high flow operations. The operators monitor the pumps daily and remove any rags/debris as needed.

Outside the influent pump station control room, the inspectors observed one drum of oil without secondary containment (refer to [Appendix A, Photograph 4](#)). Located next to the influent pump station, the inspectors observed the facility's septic hauling discharge manhole (refer to [Appendix A, Photograph 5](#)). The facility representatives stated that the septic hauling manhole is only used to dispose of wastewater vacuumed from the lift stations throughout the collection system approximately twice a year. The facility does not currently accept waste from commercial septic haulers.

Following the influent pump station, the wastewater goes through a fine screening process (refer to [Appendix A, Photographs 6-8](#)). Any solids removed by the screen are transferred to a dumpster located below the fine screen (refer to [Appendix A, Photograph 9](#)). The facility uses an auto sampler to take compliance samples of the influent wastewater immediately after the screening process (refer to [Appendix A, Photographs 10-11](#)). The wastewater is then conveyed to a grit removal system where additional solids are removed (refer to [Appendix A, Photograph 12](#)). The solids from the grit removal system are also transferred to the dumpster located below the fine screen (refer to [Appendix A, Photograph 13](#)). The facility representatives stated that they can bypass the fine screen and grit removal system in case either unit is offline for maintenance.

After the influent screening, wastewater is split evenly between the two primary clarifiers which operate in parallel (refer to [Appendix A, Photographs 14-15](#)). The inspectors observed air bubbling up on the surface of the clarifiers (refer to [Appendix A, Photograph 16](#)). Wastewater exits the primary clarifiers by flowing over a weir around the top edge (refer to [Appendix A, Photograph 17](#)). The facility representatives stated that the sludge depth in the primary clarifiers is kept between 3 to 5 feet and that they waste sludge from the clarifiers approximately once per week.

The facility representatives stated that they are not able to waste sludge from the primary clarifiers more frequently due to sludge buildup in the drying beds. The facility representatives said that the drying beds do not contain enough surface area to dry the amounts of sludge produced at the facility, mostly due to the rainy climate which prolongs the drying time required for the sludge. At the time of inspection, the facility representatives stated the sludge buildup in the drying beds requires the facility to hold excessive amounts of solids in the clarifiers and aeration basins, leading to higher amounts of total suspended solids (TSS) and biochemical oxygen demand (BOD) in the POTW's final effluent. The facility representatives intend to hire contractors to temporarily remove the sludge from the drying beds in November 2024. The facility also plans to replace the drying beds with a new sludge dewatering system, such as belt filter presses during the next plant upgrade.

After primary clarification, the wastewater from both clarifiers recombines and is split evenly between the two aeration basins via a splitter box (refer to [Appendix A, Photographs 18-20](#)). The facility representatives stated that the mixed liquor suspended solids (MLSS) concentration in the aeration basins is approximately 4,000 mg/L. The facility representatives said that this high concentration is due to storing excess sludge in the aeration basins because of sludge drying limitations. The facility representatives stated that they also have issues keeping the food to microorganism (F:M) ratio correct due to maintaining the excess sludge in the aeration basins. According to the facility's operational logs, the dissolved oxygen (DO) concentration in the aeration basins can vary drastically day to day, from 0.2 to 4.3 mg/L. The facility representatives stated the aeration basins are equipped with fine bubble diffusers; however, they have not been operating correctly and instead produce coarse bubbles. The aeration basins currently operate with just one blower that supplies air to both aeration basins (refer to [Appendix A, Photographs 21-22](#)). The other blower was out of operation and in need of repair at the time of the inspection. The facility representatives stated the repairs could be done locally if needed. In the third space, the facility representatives stated they plan to install a new blower but were uncertain at the time it would be operational (refer to [Appendix A, Photograph 22](#)).

The inspectors observed the location and access ladder for the aeration basin pumps dry well (refer to [Appendix A, Photograph 23](#)). The facility representatives stated they access the pumps approximately two or three times a year and do not follow any confined space entry procedures. The facility hires contractors that occasionally perform repairs and other maintenance on the pumps. The facility representatives stated these contractors follow confined space entry procedures. The inspectors did not observe any confined space warning signs for the aeration basin pumps dry well.

The effluent from the aeration basins is then recombined and is split evenly between the two secondary clarifiers via a splitter box (refer to [Appendix A, Photographs 24-29](#)). Scum is removed from the surface of the clarifiers through a skimmer arm. The facility representatives stated that the sludge depth in the secondary clarifiers is kept between 3 to 5 feet and that they waste sludge from the secondary clarifiers approximately once per week. Wastewater exits the clarifiers by flowing over a weir around the top edge of the secondary clarifiers (refer to [Appendix A, Photographs 25-26](#)). The inspectors observed large amounts of suspended solids in the wastewater flowing over the weir, exiting the secondary clarifiers. The inspectors also observed excessive solids accumulation on the surface of both secondary clarifiers.

After secondary clarification, the wastewater goes to UV disinfection utilizing two Trojan UV 3000 Plus UV trains that typically operate in parallel (refer to [Appendix A, Photographs 30-31](#)). The UV system has a total of 72 UV bulbs and is equipped with a local control screen; however, the local screen was inoperable at the time of the inspection (refer to [Appendix A, Photograph 32](#)). The facility representatives stated that the local control screen has been out of operation and in need of repair for the past few months, but they have been unable to receive any timely support from Trojan. While the local screen is inoperable, it will still send any alerts/alarms to the operators via the facility's Mission Communications alert system. Additionally, the inspectors observed that the UV transmittance meter was out of service at the time of the inspection (refer to [Appendix A, Photograph 33](#)). The facility representatives stated the UV transmittance meter has been inoperable for the past three years. The inspectors observed biological growth on some of the UV bulbs (refer to [Appendix A, Photograph 34](#)). The facility representatives stated that the UV bulbs are equipped with automatic wipers and the operators also manually clean the UV bulbs every 12 to 16 months. The inspectors also observed suspended solids in the wastewater at the UV contact chamber (refer to [Appendix A, Photograph 35](#)). The facility representatives stated they have had issues with *E. coli* exceedances for the treated effluent due to solids carryover from the secondary process by holding excessive solids in the aeration basins and clarifiers.

After UV disinfection, treated effluent flows through a baffle and then over a weir into a concrete ditch that ultimately discharges through Outfall 001 to the Sunflower River (refer to [Appendix A, Photographs 36-38](#)). At the time of the inspection, the inspectors observed foam in the treated effluent prior to flowing through the baffle (refer to [Appendix A, Photograph 36](#)). The inspectors also observed suspended solids in the effluent as it flowed over the final weir (refer to [Appendix A, Photograph 37](#)). The facility uses an auto sampler to take compliance samples for the treated effluent immediately after the weir (refer to [Appendix A, Photograph 39](#)). The facility also monitors the treated effluent flow rate at Outfall 001 through a Pulsar flowmeter (refer to

Appendix A, Photograph 40). The effluent flowmeter read 1.22 MGD at the time of the inspection.

The inspectors observed the facility's trickling filter and two bio-cells, both of which were out of service at the time of the inspection (refer to Appendix A, Photographs 41-42). The facility representatives stated the bio-cells were taken offline approximately three years ago due to a contract engineer's study that found the bio-cells were redundant and did not provide any further treatment to the effluent. The facility representatives stated the trickling filter has been out of service for more than 10 years.

Waste sludge from the primary and secondary clarifiers is sent to the facility's two anaerobic digesters (refer to Appendix A, Photographs 43-46). The facility representatives stated that only one anaerobic digester is currently in operation due to the other digester experiencing excessive sludge buildup and compaction. The inspectors observed a gas line and flare for off-gas from the anaerobic digesters, though the facility representatives stated the flare was out of service (refer to Appendix A, Photograph 47). The facility representatives did not know how long the flare has been out of service and whether the facility notified MDEQ that the flare was out of service. It is also unknown whether MDEQ requires the flare to limit biogas emissions from the anaerobic digesters or if there are concerns about explosive gas buildup from open air venting.

After anaerobic digestion, the waste sludge is then sent to the sludge drying beds (refer to Appendix A, Photographs 48-49). The inspectors observed that the drying beds were nearly at capacity. The sludge appeared dry and solid. The facility disposes of dried sludge at Tunica Landfill approximately every three to six months in the fall/winter and every one to two months in the spring/summer, according to the facility's sludge disposal documentation. The facility representatives stated they pump the sludge from the anaerobic digesters to the drying beds approximately once a week, though during the rainy season they may only be able to pump the sludge once every two to three months. Prior to pumping the sludge to the drying beds, the facility adds polymer and water to the sludge to avoid any backups in the piping to the drying beds. The water and polymer are stored in two tanks and a large drum, respectively, in a covered storage building next to the sludge drying beds (refer to Appendix A, Photographs 50-51). The facility representatives stated that the water is clean drinking water from CPU. To avoid any bacterial growth in the water tanks, the facility discharges the water from the storage tanks daily to a small stormwater ditch located next to the storage building (refer to Appendix A, Photograph 52).

Initially, facility representatives stated that the facility had a centralized SCADA system that monitored the whole plant but that it could only be accessed from the CPU headquarters and power generation facility at 240 Hick St, Clarksdale, MS 38614; the operators could not access the centralized SCADA system. The inspectors visited the CPU headquarters to observe the centralized SCADA system; however, CPU personnel onsite stated that the SCADA system has been out of service for the past two years and that they cannot view or control any treatment processes for the POTW. Instead, the CPU headquarters receives alerts/alarms from the treatment processes at the POTW from Mission Communications via email. These emails are immediately read and forwarded to the POTW operators.

The facility's backup power is also managed by CPU. While the POTW does not have any backup generators onsite, CPU is able to reroute power to the entire treatment plant using auxiliary power systems located at the CPU headquarters.

The inspectors observed the facility's onsite laboratory. The facility runs analyses for *E. coli*, TSS, DO, and pH, in addition to operational parameters such as MLSS, sludge volume index (SVI), and sludge settleability. The facility sends samples for biochemical oxygen demand (BOD), ammonia, total nitrogen, and total phosphorous to Waypoint Analytical for analysis.

Records Review

At approximately 1300 on October 21, 2024, the inspectors conducted a records review to evaluate the permittee's compliance with the permit. The inspectors reviewed the following files onsite:

- DMRs and associated laboratory data for January 2023 to September 2024 (refer to [Appendix B, Exhibit 1](#))
- Lab equipment calibration logbooks for 2023 and 2024 (refer to [Appendix B, Exhibit 2](#))
- Laboratory log sheets and operator logbook for 2024 (refer to [Appendix B, Exhibit 3](#))
- Lab bench sheets for September 2024 to October 2024
- Current operator certifications
- Analytical laboratory chains of custody and results from 2023-2024 (refer to [Appendix B, Exhibit 4](#))
- Sludge removal documentation 2023-2024 (refer to [Appendix B, Exhibit 5](#))
- Composite sampler temperature readings and cleaning records 2024 (refer to [Appendix B, Exhibit 6](#))
- Mission Communications emails September-October 2024

The facility did not have an operations and maintenance (O&M) manual, written or documented standard operating procedures (SOP), emergency response plan (ERP), sampling plan, preventative maintenance program, asset management plan, or formal work order program for review at the time of the inspection.

Summary of Observations

The following section summarizes the inspectors' observations relative to the permit requirements, including the status of certain treatment units, O&M practices, and the permittee's effluent limit exceedances.

Effluent Exceedances

Pages 1-3 of the Permit define effluent limitations and other monitoring requirements for discharges from Outfall 001 for the Clarksdale POTW.

Observation 1. According to EPA’s ECHO, between January 1, 2023, and August 31, 2024, the Clarksdale POTW experienced 28 effluent limit exceedances from Outfall 001. Refer to [Appendix B, Exhibit 1](#) and Table 2. The facility representatives stated that the exceedances for TSS, E. coli, and BOD were all likely due to the sludge buildup in the secondary clarifiers and aeration basins. They also stated that some of the DO exceedances might have been due to accidentally taking DO from composite samples instead of grab samples. The facility representatives were unaware of any causes for the mercury exceedances.

Table 2. Effluent Limit Exceedances at Outfall 001 for the Clarksdale POTW from January 2023 to August 2024

Monitoring Period End Date	Parameter Name	Limit Type	DMR Value	Permit Limit	Units
1/31/2023	Mercury, total recoverable	MX WK AV	0.026	0.01	mg/L
1/31/2023	Mercury, total recoverable	MO AVG	0.026	0.000059	mg/L
10/31/2023	Oxygen, dissolved (DO)	MINIMUM	1	6	mg/L
11/30/2023	Oxygen, dissolved (DO)	MINIMUM	0.2	6	mg/L
11/30/2023	E. coli	MO AVG	439	126	#/100mL
11/30/2023	E. coli	MX WK AV	439	410	#/100mL
12/31/2023	Oxygen, dissolved (DO)	MINIMUM	0.1	6	mg/L
12/31/2023	E. coli	MO AVG	10021	126	#/100mL
12/31/2023	E. coli	MX WK AV	5904	410	#/100mL
12/31/2023	Solids, suspended percent removal	MINIMUM	77	85	%
1/31/2024	Oxygen, dissolved (DO)	MINIMUM	4.5	6	mg/L
1/31/2024	BOD, 5-day, percent removal	MINIMUM	71	85	%
1/31/2024	Solids, suspended percent removal	MINIMUM	78	85	%
2/29/2024	Oxygen, dissolved (DO)	MINIMUM	0.4	6	mg/L
2/29/2024	Solids, suspended percent removal	MINIMUM	84	85	%
3/31/2024	Oxygen, dissolved (DO)	MINIMUM	5.4	6	mg/L
3/31/2024	E. coli	MO AVG	380	126	#/100mL
3/31/2024	E. coli	MX WK AV	785	410	#/100mL
3/31/2024	BOD, 5-day, percent removal	MINIMUM	84	85	%
3/31/2024	Solids, suspended percent removal	MINIMUM	80	85	%
4/30/2024	E. coli	MO AVG	768	126	#/100mL
4/30/2024	E. coli	MX WK AV	7101	410	#/100mL
4/30/2024	Solids, suspended percent removal	MINIMUM	81	85	%
5/31/2024	E. coli	MX WK AV	1481	410	#/100mL
5/31/2024	Solids, suspended percent removal	MINIMUM	82	85	%
7/31/2024	Oxygen, dissolved (DO)	MINIMUM	0.2	6	mg/L
7/31/2024	pH	MINIMUM	5.1	6	SU
7/31/2024	Solids, suspended percent removal	MINIMUM	84	85	%

Proper Operation and Maintenance

Permit Condition T-28, Proper Operation, Maintenance and Replacement, states, “The permittee shall at all times properly operate, maintain, and when necessary, promptly replace all facilities and systems of collection, treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes adequate laboratory controls and appropriate quality assurance procedures. Proper replacement includes maintaining an adequate inventory of replacement equipment and parts for prompt replacement when necessary to maintain continuous collection and treatment of wastewater. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.”

- Observation 2.** The facility lacks an operational centralized SCADA system. The inspectors observed local control systems for the influent grinder pumps and UV disinfection system; however, these local systems do not communicate with nor can be accessed with a larger, centralized SCADA interface (refer to [Appendix A, Photographs 3 and 32](#)). Additionally, the screen for the UV system was out of service at the time of the inspection (refer to [Appendix A, Photograph 32](#)). The facility does receive digital alerts/alarms from Mission Communications, but this system does not allow the operators to see the current operational status.
- Observation 3.** The facility does not have a formal or written O&M manual, SOPs, ERP, sampling plan, preventative maintenance program, asset management plan, or formal work order program. The facility representatives stated that they do check the status of the treatment units and perform operational duties daily; however, these activities are not formally tracked or written down in a SOP. The operators also collect daily samples and record results for DO, pH, sludge settleability, and *E. coli*; however, the facility does not have a written sampling plan. The facility representatives stated that maintenance throughout the facility is mostly performed as needed rather than conducting any preventative maintenance.
- Observation 4.** The operators do not keep a centralized logbook to record and share observations, maintenance, or other items that occurred throughout the day. Instead, any observations or work performed by the operators are recorded in separate individual notebooks.
- Observation 5.** The inspectors observed that there was not any safety railing within the influent wet well (refer to [Appendix A, Photograph 1](#)). The facility representatives stated they clean the wet well approximately once a week and that the absence of any railing poses a safety hazard while cleaning.
- Observation 6.** The inspectors observed a 55-gallon drum of oil without secondary containment near the influent pump building (refer to [Appendix A, Photograph 4](#)).

- Observation 7.** One of the two blowers for the aeration basins was out of service during the inspection (refer to [Appendix A, Photograph 22](#)). The facility representatives stated that they did not have a spare blower on-hand in case the remaining functional blower failed. The inspectors observed an empty space for a third blower. The facility representatives stated they plan to add a third blower for redundancy during the next upgrade cycle.
- Observation 8.** The inspectors observed that there was no confined space signage or warnings on the aeration basin pumps dry well access manhole (refer to [Appendix A, Photograph 29](#)). Additionally, the facility representatives stated they do not follow any confined space entry procedures when accessing the aeration basin pumps approximately two or three times per year.
- Observation 9.** The inspectors observed solids on the surface of the secondary clarifiers and suspended solids in the effluent from the secondary clarifiers (refer to [Appendix A, Photographs 24-26](#)). The facility representatives stated this was from retaining sludge in the clarifiers for longer than desired ultimately due to the limited capacity of the sludge drying beds. The facility representatives also stated that the sludge depth in the primary and secondary clarifiers is kept between 3 to 5 feet. This is higher than the industry best practice of 1 to 2 feet.
- Observation 10.** The inspectors observed biological growth on some of the UV bulbs (refer to [Appendix A, Photograph 34](#)). The facility representatives stated that the UV bulbs are equipped with automatic wipers and the operators also manually clean the UV bulbs every 12 to 16 months.
- Observation 11.** The inspectors observed that the UV transmittance meter was out of service at the time of the inspection. The facility representatives stated it has been inoperable for the past three years (refer to [Appendix A, Photograph 33](#)).
- Observation 12.** The inspectors observed that the flare for off-gas from the anaerobic digesters was out of service at the time of the inspection (refer to [Appendix A, Photograph 47](#)). The facility representatives did not know how long the flare has been out of service and whether the facility notified MDEQ that the flare was out of service. It is also unknown whether MDEQ requires the flare to limit biogas emissions from the anaerobic digesters or if there are concerns about explosive gas buildup from open air venting.
- Permit Condition L-1**, states, “There shall be no discharge of floating solids or visible foam in other than trace amounts.”
- Observation 13.** The inspectors observed suspended solids in the treated effluent at Outfall 001 and foam accumulating on the top of the treated effluent prior to flowing through the baffle (refer to [Appendix A, Photograph 37](#)).

Closing Conference

On October 21, 2024, the inspectors met with the facility representatives for a closing conference and shared preliminary observations. The inspectors reiterated that all preliminary observations discussed were not compliance determinations. Any and all preliminary observations shared were subject to further investigation by the inspectors upon the additional review of records and documentation. Additional observations may be contained in this inspection report that were not identified at the time of the closing conference after the additional review of materials following the inspection.

The inspection concluded on October 21, 2024, at approximately 1430.