Major Facility Review (Title V) Semi-Annual Monitoring Report

for

East Bay Municipal Utility District Main Wastewater Treatment Plant Facility #A0591

Reporting Period: July - December 2012

Source	Monitoring Requirement	Limit	Monitoring Results
S-55	Condition 20651	24,000	- Sayari Carrier B. 1702 et al carrier a
Boiler	2. Shall not operate S-55 boiler when more than two of the three cogen engines S-37, S-38, or S-39 are operating		Condition met. Refer to Attachment 1 – Engine and Boiler Air Permit Data.
	3. Shall not exceed 20.41 million BTU/hr		Condition met. Boiler operated from 9.4-12.8 BTU/hr in period. See Attachment 3.
:	5a. NOx emission from boiler 5b. CO emission from boiler	30ppm 50ppm	See 19 for test results if annual tests run in monitoring period
	18. Daily records of hours of operation, fuel consumption		Refer to Attachment 1 Engine and Boiler Air Permit Data.
	19. Annual performance test for emission limits in 5		Source test conducted 11/27/12 and limits met. Refer to Attachment 2 – Boiler Source Test Results.
S-37, S-38, S-39 Cogeneration	Condition 20651	,	· · · · · · · · · · · · · · · · · · ·
Engines	Emission limits – 6. NOx emissions from S-38 7. POC emissions from S-38 8. CO emissions from S-38 9. Filterable particulate emissions from S-38 10. NOx emissions from S-37 & S-39 11. CO emissions from S-37 & S-39	1.25 g/hp-hr 0.6 g/hp-hr 3.0 g/hp-hr 0.085 g/hp-hr 70 ppmvd 2000 ppmvd	For items 6-11 see 19 for test results if annual tests run in monitoring period
	13. Thermal throughput per engine	25 MMBtu/hr	Limit exceeded in October 2012 on Engines 2 and 3. Refer to Attachment 3 for details.
	14. Combined hours of operation for S-37, S-38, and S-39	25,316 hours in any rolling 365 day period	Condition met. Refer to Attachment 1 – Engine and Boiler Air Permit Data.
·	15. Combined diesel consumption for S-37, S-38, and S-39	150,000 gallons in any rolling 365 day period	Condition met. Refer to Attachment 1 – Engine and Boiler Air Permit Data.
	18. Daily records of hours of operation, fuel consumption		Refer to Attachment 1 — Engine and Boiler Air Permit Data.
	19. Annual performance test for emission limits in 6-11		Performance tests conducted in May 2012. All results met limits. Results submitted with Jan-June 2012 report.

Source :	Monitoring Requirement	Limit X	Monitoring Results
S-48	Condition 25107		
Gasoline Dispensing Facility	The Static Pressure Performance Test (Leak Test) ST-38 shall be successfully conducted at least once in each twelve consecutive month period.		Completed on 9/18/12. Refer to Attachment 4 for test results.
	Condition 21663		
	Annual gasoline throughput	334,000 gal per year	Condition met. Refer to Attachment 5 for gasoline throughput table.
S-49	Condition 19058 (BAAQMD permit)		
Diesel Engine Back-up Generator	4. Diesel fuel – sulfur content	<0.5% by weight	See Attachment 6 for sulfur content on diesel deliveries in period — but the generator was not used in this time period.
	5. Hours of operation	·	Generator not used July-Dec 2012. Refer to Attachment 7.
S-50	Condition 22830		
Diesel Engine Back-up Generator	1. Hours of operation	30 hours/year reliability-related hours	Generator reliability-related hours are less than permit limit. Refer to Attachment 7.
S-51	Condition 22850		
Diesel Engine Back-up Generator	1. Hours of operation	50 hours/year reliability-related hours	Generator reliability-related hours are less than permit limit. Refer to Attachment 7.
S-52	Condition 22820		
Diesel Engine Back-up Generator	1. Hours of operation.	20 hours/year reliability-related hours	Generator reliability-related hours are less than permit limit. Refer to Attachment 7.
	Condition 19184 (BAAQMD permit)		
	2. Diesel fuel – sulfur content	<0.005% by weight	
S-53	Condition 22830		
Diesel Engine Back-up Generator	1. Hours of operation	30 hours/year reliability-related hours	Generator reliability-related hours are less than permit limit. Refer to Attachment 7.
S-54	Condition 22850		
Diesel Engine Back-up Generator	1. Hours of operation	50 hours/year reliability-related hours	Generator reliability-related hours are less than permit limit. Refer to Attachment 7.

Source	Monitoring Requirement	Limit	Monitoring Results
S-56	Condition 24050		
Turbine	2. Total combined heat input	389,820 MMBtu in any 12-month period	Condition met. See Attachment 3 for July-Dec summary.
	3. NOx emission limit 4. CO emission limit 5. SO2 emission limit	23 ppm (15-min) 100 ppm (15-min) 150 ppmv	Last source test results in compliance with these limits. Refer to Attachment 8 for January 9, 2013 results.
	7. Annual turbine source test		December test missed and made up January 9, 2013.
	8. Monthly NOx and CO test		Test completed during months when turbine was in use. Refer to Attachment 8 for monthly test results. Note that turbine was down for repairs during three testing months.
S-100	Condition 21759		
Municipal Wastewater Treatment Plant	1. Total wastewater flow	120 MGD monthly dry weather average 325 MGD monthly wet weather average	Condition met. See Attachment 9 showing flow rates below these levels in period.
S-110	Condition 17335		
Headworks A-461 & A-462 Carbon Bed Scrubbers	3. Inlet and outlet H2S concentrations of carbon beds, as well as any other appropriate operating parameters shall be continuously monitored and reviewed on a daily basis to determine when carbon adsorption bed breakthrough is imminent or has been reached.		Monitoring results for the carbon beds are in Attachment 10. Maintenance records on the carbon beds are in Attachment 11.
S-170	Condition 18006		
Sludge handling	1. Monitor and record on a daily basis the activated sewage sludge throughput through S-170.		Activated sludge throughput data are in Attachment 12. Maintenance records are in Attachment 11.

Source	Monitoring Requirement	Limit	Monitoring Results
S-180 Anaerobic	Condition 18860		
Digesters	2. Monthly inspection of digesters	·	Inspections conducted by Operations. Gas releases noted in reporting period are listed on cover letter for July-Dec 2012.
	3. Sulfur content of digester gas	< 340 ppmv	Condition met.
	4. Weekly sampling and testing of digester gas for H2S		Digester gas sampling results from July-Dec 2012 are in Attachment 13.
	5. Hours of flaring per day		Recorded in Attachment 14 Flare Use Air Permit Data.

Attachment Index:

- 1 Engine and Boiler Air Permit Data
- 2 Boiler Source Test Results
- 3 Cogeneration Engines and Turbine Power/Equipment Summary
- 4 The Static Pressure Performance Test (Leak Test) ST-38 Results
- 5 Gasoline Facility Throughput
- 6 Diesel Deliveries with Sulfur Content Certifications
- 7 Hours of Operation for Stand-by Emergency Generators
- 8 Turbine Source Test and Monthly Test Results
- 9 Monthly/Annual Wastewater Summary 2012
- 10 IPS Carbon Bed Inlet/Outlet H2S Readings
- 11 Odor Scrubber Maintenance Records for S-170 and S-110
- 12 Activated Sludge Throughput for S-170
- 13 Digester Gas H2S Sampling
- 14 Flare Use Air Permit Data