EAST BAY
MUNICIPAL UTILITY DISTRICT

AMIT MUTSUDDY
DIRECTOR OF WASTEWATER
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TV Tracking #1180 (Semi-Annual)

1. ☐ RECEIVED IN ENFORCEMENT: 07/31/2025

July 31, 2025

Mr. Jeff Gove
Director of Compliance and Enforcement
Bay Area Air District
375 Beale Street, Suite 600
San Francisco, CA 94105
Attn. Title V Reports
Transmitted by e-mail to compliance@baaqmd.gov

RE: Semiannual Major Facility Review (Title V) Monitoring Report for the East Bay Municipal Utility District (EBMUD) Main Wastewater Treatment Plant (Facility #A0591)

Dear Mr. Gove:

Attached is the semiannual monitoring report for the EBMUD Main Wastewater Treatment Plant (Facility #A0591) as required under Section I.F of the facilities Major Facility Review Permit issued November 7, 2019. The report covers the period from January 1, 2025 to June 30, 2025.

No deviations were identified during the reporting period.

One monthly turbine (S-56) check for NOx, CO, and SO2 was not completed in June 2025 due to the turbine being out of service for maintenance. The monthly test was made up as soon as possible on July 3, 2025, but outside of the 25- to 35-day window after the previous test, as required in permit condition 24050-8 for S-56. Since the turbine was out of service and unavailable to be tested, EBMUD does not consider this a reportable deviation.

One quarterly test on Engine NOx and CO emissions required in Regulation 9-8-503 was not completed in this period due to an engine outage. In the second quarter of 2025, Engine #1 (S-37) was not tested since it was offline from June 4 through the end of the quarter. The outage was unexpected, and the quarterly test could not be made up in the remainder of the quarter. Engine #1 will be tested when it returns to service, which may take several weeks.

A permit renewal application for Title V Permit A0591 was submitted to the Bay Area Air District on April 30, 2024. The permit application is currently listed as Complete – Application

Under Evaluation in the Bay Area Air District My Air Online system. EBMUD is currently operating under the permit issued November 7, 2019, which continues to be in force after its expiration date, November 6, 2024.

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this report are true, accurate and complete.

If you have any questions about this report, please call Chris Dembiczak at (510) 287-0509.

Sincerely,

Amit Mutsuddy, P.E.
Director of Wastewater

AM:CD:sk

Attachment

O:\WTD - Admin\Regulatory Compliance\BAAQMD\Transmittal letter Jan-June 2023.docx

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

for

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

Reporting Period: January 1, 2025 – June 30, 2025

Source	Monitoring Requirement	Limit	Monitoring Results
S-55 Boiler	**Condition 20651**		
	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. See Attachment 1 for boiler and engine data.
	3. Boiler gross heat input	20.41 MMBtu/hr	Condition met. See Attachment 2.
	5a. NOx emission from boiler 5b. CO emission from boiler	30ppm 50ppm	Emission limits met in last performance test (see item 19).
	18. Daily records of hours of operation, fuel consumption		See Attachment 1 for hours and gas consumption.
	19. Annual performance test for emission limits in 5		Condition met. Annual performance test completed on 11/5/2024.
S-37, S-38, S-39 Cogeneration Engines	**Condition 20651** 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	Condition met. Annual source tests completed as noted in item 19.
	13. Thermal throughput per engine	25 MMBtu/hr	Condition met. See Attachment 2 for values.
	14. Combined hours of operation for S-37, S-38, and S-39	25,316 hours in any rolling 365 day period	Condition met. 15,846 hours in last year. See Attachment 2. Jan-Jun 2025: 8,093 hours Jul-Dec 2024: 7,753 hours
	15. Combined diesel consumption for S-37, S-38, and S-39	150,000 gallons in any rolling 365 day period	Condition met. 31,796 gallons in last year. See Attachment 2. Jan-Jun 2025: 13,786 gallons Jul-Dec 2024: 18,010 gallons

Source	Monitoring Requirement	Limit	Monitoring Results
S-37, S-38, S-39 Cogeneration Engines **(continued)**	18. Daily records of hours of operation, fuel consumption 19. Annual performance test for emission limits in 6-11		Condition met. See Attachment 1 for records. Condition met. Annual source tests for Engines 1 and 3 on 8/21/2024 and Engine 2 on 9/20/2024.
S-48 Gasoline Dispensing Facility	**Condition 25723 (now PTO 26550)** The Static Pressure Performance Test (CARB TP 201.3B) shall be successfully conducted at least once in each 12-month period.		Condition met. Completed on 9/23/2024.
	Condition 21663 (now PTO 23006) Annual gasoline throughput (received/delivered to tank)	150,000 gal per year	Condition met. 31,590 gal in last year. See Attachment 4. Jan-June 2025: 15,846 gal July-Dec 2024: 15,744 gal
S-53 Diesel Engine Back-up Generator	**Condition 22830** 1. Hours of operation	30 hours/year reliability-related hours	Condition met. 3.0 reliability-related hours in last 12 months. Refer to Attachment 5.
S-54 Diesel Engine Back-up Generator	**Condition 22850** 1. Hours of operation	50 hours/year reliability-related hours	Condition met. Generator out of service currently, 0 hours. Refer to Attachment 5.

Source	Monitoring Requirement	Limit	Monitoring Results
S-56 Turbine	**Condition 24050**		
	2. Total combined heat input	389,820 MMBtu in any 12-month period	Condition met. 296,259 MMBtu in last 12 months. Refer to Attachment 2. Jan-Jun 2025: 144,304 MMBtu Jul-Dec 2024: 151,955 MMBtu
	3. NOx emission limits	23 ppm (15-min) 34,400 lb (12-mo)	Emission limits met. Refer to Attachments 2 and 6. Annual mass emission: 9,320 lb
	4. CO emission limit and monitoring	100 ppm (15-min) 92,200 lb (12-mo)	Emission limits met. Refer to Attachments 2 and 6. Annual mass emission: 1,505 lb
	5. Daily monitoring of H2S to demonstrate compliance with SO2 limits	Daily monitoring per 40 CFR 60.4370	See Attachment 12 for readings.
	5. SO2 emission limit	150 ppmv	Emission limit met. Refer to Attachments 2 and 6.
	7. Annual turbine source test		Condition met. Last annual test was 12/3/2024.
	8. Monthly NOx and CO test		Intermittent compliance, June 2025 test not completed when turbine was out of service. Monthly test results are in Attachment 6.
S-58 Diesel Engine Back-up Generator	**Condition 22850**		
	1. Hours of operation	50 hours/year reliability-related hours	Condition met. Generator ran 0 hours in last 12 months. Refer to Attachment 5.
S-59 Diesel Engine Back-up Generator	**Condition 22850**		
	1. Hours of operation	50 hours/year reliability-related hours	Condition met. 14.6 reliability-related hours in last 12 months. Refer to Attachment 5.
S-60 Diesel Engine Back-up Generator	**Condition 22850**		
	1. Hours of operation	50 hours/year reliability-related hours	Condition met. 10.2 reliability-related hours in last 12 months. Refer to Attachment 5.

Source	Monitoring Requirement	Limit	Monitoring Results
S-100 Municipal Wastewater Treatment Plant	**Condition 21759** 1. Total wastewater flow	120 MGD monthly dry weather average 325 MGD monthly wet weather average	Condition met. Maximum wet weather monthly flow in period was 88 MGD influent. Maximum dry weather monthly flow was 52 MGD. See Attachment 7.
S-110 Headworks A-462 Carbon Scrubber A-463/A-464 Biotrickling Filters/Carbon Scrubbers	**Condition 17335** 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 inlet and outlet H2S and any noted outages are in Attachment 8. Maintenance records related to outages for the odor control units are in Attachment 9.
S-170 Sludge handling A-7/A-8 Atomized Mist Scrubbers	**Condition 18006** 1. Monitor and record on a daily basis the activated sewage sludge throughput through S-170. 4a/b. Maintenance and inspection records for all outages and malfunctions of A-7 and A-8.		Sludge throughput is recorded in Attachment 10. Maintenance records for the scrubber are in Attachment 9.
S-172 Pre-Digestion Blend Tanks A-9 Iron Oxide A-10 Biofilter A-11 Activated Carbon	**Condition 25919** 1. Throughput of waste shall not exceed 2,100,000 gallons during any day. 4. POC emissions shall not exceed 2.02 lb/calendar day and 20.3 ppm total carbon on a daily basis. 6. Quarterly POC readings at outlet of A11		Condition met. See Attachment 11 for record of daily throughput. See item 6 for test results. Condition met. POC readings in this reporting period were less than 3ppm.

Source	Monitoring Requirement	Limit	Monitoring Results
S-180 Anaerobic Digesters Note: A-194, A-195 are enclosed flares A-190, A-191, A-192, and A-193 are older "candlestick" flares	**Condition 18860** 2. Monthly inspection of digesters and gas management/venting prevention		Inspections conducted by Operations on at least weekly on rounds.
	2./11. Venting of digester gas only allowed under listed exceptions.	0.70 lb/hour from PRV	Condition met.
	3. Sulfur content of digester gas	<200 ppmv annual average	Condition met. Refer to Attachment 12 for the H2S gas sampling records.
	4. Combined digester gas flow rate to combustion sources	<3,400 scfm annual average	Condition met. See Attachment 13 for combined digester gas flow rates.
	6. Gas flow to A-194, A-195	<3,000 cfm, 1-hr average	Condition met. See Attachment 2 for max flow to flares.
	7. Source testing of A-194, A-195 (every 8,760 hours of use or 5 years)		Condition met. Source test last conducted 8/8/2024.
	Emission limits for A-194, A-195 9. NOx limit 10. CO limit 11a. H2S limit	 0.12 lb/MMBtu 0.20 lb/MMBtu 0.032 lb/hour	 Condition met. Source test last conducted 8/8/2024.
	12. Daily sampling and testing of digester gas for H2S		Condition met. Refer to Attachment 12.
	13. Hours of flaring per day		Refer to Attachment 1 for the hours of flaring per day.

Attachment Index:

1 Combustion Source Air Permit Data
2 Combustion Summaries – Boiler, Engines, Turbine, Flares
3 Annual Source Test Results
4 Gasoline Facility Throughput
5 Hours of Operation for Stand-by Emergency Generators
6 Turbine Monthly Test Results
7 Monthly Wastewater Summary
8 IPS Carbon Bed Inlet/Outlet H2S Readings
9 Odor Scrubber Maintenance Records for S-170 and S-110
10 Activated Sludge Throughput for S-170
11 Blend Tank Throughput Records
12 Digester Gas H2S Sampling
13 Combined Digester Gas Combustion Volumes

ATTACHMENT 1

COMBUSTION SOURCE AIR PERMIT DATA

(engines, turbine, boiler, flares)

DAILY REPORTS
JANUARY – JUNE 2025

January - 2025

Daily Data for Air Permit

Elmer E. Ross Power Station

Date	Run Time, Hours				KiloWatt Hours Generated				Fuel Oil Used, gal				Gas, Roots Meter, cu ft			
	Eng 1	Eng 2	Eng 3	Total	Gen. 1	Gen 2	Gen 3	Total	Eng. 1	Eng. 2	Eng. 3	Total	Eng. 1	Eng. 2	Eng. 3	Total
1st	24	16	0	40	45,364	25,159	0	70,522	44	29	0	73	786,447	436,166	0	1,222,613
2nd	24	24	0	48	49,645	49,273	0	98,918	46	37	0	83	832,021	825,786	0	1,657,807
3rd	24	23	0	47	48,718	48,355	0	97,073	43	35	0	78	820,115	814,004	0	1,634,119
4th	21	24	0	45	38,295	46,597	0	84,892	39	18	0	56	654,080	795,878	0	1,449,958
5th	0	24	0	24	0	46,531	0	46,531	0	37	0	37	0	801,729	0	801,729
6th	0	24	0	24	0	51,279	0	51,279	0	34	0	34	0	862,722	0	862,722
7th	13	24	0	37	31,650	51,227	119	82,996	73	28	0	101	519,710	841,174	1,954	1,362,838
8th	3	24	22	49	0	50,968	50,596	101,564	0	43	54	97	0	850,812	844,602	1,695,414
9th	0.1	24	24	48	43	51,249	51,602	102,894	14	31	45	90	714	850,589	856,448	1,707,751
10th	0	24	24	48	0	51,213	51,585	102,798	0	30	37	67	0	853,369	859,568	1,712,937
11th	0	24	24	48	0	51,254	51,566	102,820	0	40	48	87	0	852,157	857,345	1,709,502
12th	0	24	24	48	0	45,787	43,606	89,393	0	28	47	75	0	785,969	748,530	1,534,499
13th	0	24	23	47	387	47,099	47,394	94,881	5	40	48	93	6,679	812,877	817,969	1,637,525
14th	14	24	24	62	30,060	50,697	50,936	131,693	33	31	37	102	506,248	853,801	857,826	2,217,875
15th	0	24	24	48	0	49,322	49,505	98,828	0	42	48	90	0	838,204	841,314	1,679,518
16th	0	24	24	48	0	51,325	51,560	102,885	0	31	44	75	0	858,490	862,420	1,720,910
17th	14	24	23	61	30,326	48,069	47,798	126,193	29	102	64	195	504,234	799,249	794,743	2,098,226
18th	0	23	0	23	0	3,733	0	3,733	0	135	0	135	0	0	0	0
19th	16	9	23	48	34,158	13,892	50,304	98,354	44	21	47	112	582,493	236,899	857,829	1,677,221
20th	24	14	24	62	51,564	33,059	51,557	136,180	47	27	45	119	877,584	562,641	877,464	2,317,689
21st	24	24	24	72	50,564	49,846	50,557	150,968	54	37	50	141	848,505	836,456	848,387	2,533,348
22nd	23	23	24	70	51,550	51,294	51,454	154,298	46	36	44	126	852,583	848,349	850,995	2,551,927
23rd	24	24	24	72	51,514	49,285	51,550	152,349	44	35	38	117	852,369	815,487	852,965	2,520,821
24th	24	24	24	72	50,743	50,832	51,160	152,736	46	56	85	188	856,279	857,781	863,316	2,577,376
25th	24	24	24	72	49,135	48,840	49,069	147,045	45	41	95	181	851,931	846,816	850,786	2,549,533
26th	24	23	24	71	49,625	46,603	49,507	145,735	47	39	40	126	857,784	805,548	855,744	2,519,076
27th	24	19	20	63	48,870	40,267	42,219	131,356	87	43	26	156	842,703	694,355	728,015	2,265,073
28th	24	13	24	61	51,467	23,281	51,385	126,133	48	15	47	110	884,368	400,042	882,959	2,167,369
29th	24	0	24	48	51,581	0	51,482	103,064	44	0	42	86	875,775	0	874,094	1,749,869
30th	24	0	24	48	51,586	0	51,504	103,090	50	0	48	98	882,232	0	880,829	1,763,061
31st	24	0	24	48	47,358	0	47,296	94,654	46	0	39	84	824,928	0	823,848	1,648,776
Totals	440	619	543	1,602	914,204	1,226,336	1,145,312	3,285,852	975	1,121	1,118	3,214	15,519,782	20,637,350	19,389,950	55,547,082
		Sum of Engines	1,602			Sum of Engines	3,285,852			Sum of Engines	3,214			Sum of Engines	55,547,082	

January - 2025

Daily Data for Air Permit

SD1 Flare Burners, Turbine, and Boiler

Date	Flares A-190,191,192,193		Flares A-194,195			Turbine			Boiler		Run Time Check	
	Run Time Hrs	Gas cu ft	Run Time Hrs	Gas cu ft	Peak 1-hr Flow, SCFM	Run Time Hrs	Power KWh	Gas cu ft	Run Time Hrs	Gas cu ft	Engine Hrs	Eng + Boiler Hrs
1st	11	187,600	0	0	0	24	66,618	1,460,750	0	0	40	40
2nd	11	501,413	7	432,590	1,101	24	72,150	1,548,761	0	0	48	48
3rd	15	345,894	0	0	0	24	63,078	1,419,670	0	0	47	47
4th	4	61,682	0	0	0	24	62,087	1,409,619	0	0	45	45
5th	13	180,138	0	0	0	24	69,798	1,509,649	0	0	24	24
6th	5	196,400	20	1,321,885	1,519	24	75,656	1,618,135	12	144,455	24	36
7th	4	160,920	21	1,858,281	2,151	24	70,995	1,540,426	9	104,686	37	46
8th	9	492,832	16	1,577,050	2,130	24	71,136	1,549,814	0	0	49	49
9th	10	625,897	19	1,983,525	2,222	24	72,788	1,532,420	0	0	48	48
10th	16	834,971	11	957,127	1,982	24	72,097	1,537,722	0	0	48	48
11th	10	694,741	14	914,813	1,800	24	72,171	1,551,811	0	0	48	48
12th	6	69,814	2	77,067	771	24	66,224	1,475,469	0	0	48	48
13th	11	317,371	0	0	0	24	62,037	1,441,288	0	0	47	47
14th	16	597,121	3	195,283	1,158	9	23,265	522,971	0	0	62	62
15th	16	521,845	0	0	0	24	69,307	1,542,578	0	0	48	48
16th	12	620,412	15	1,105,075	1,549	24	68,297	1,556,974	0	0	48	48
17th	21	1,107,287	13	887,981	1,897	8	23,390	525,605	0.6	9,460	61	62
18th	14	779,893	24	2,321,365	2,019	0	0	0	23	444,268	23	46
19th	17	492,149	3	116,698	917	0	0	0	24	457,339	48	72
20th	24	1,453,787	2	80,271	618	0	0	0	8	174,681	62	70
21st	0.6	30,840	24	2,019,561	1,869	0	0	0	0	0	72	72
22nd	3	154,000	24	2,441,770	2,420	0	0	0	0	0	70	70
23rd	3	173,452	24	2,060,583	1,940	0	0	0	0	0	72	72
24th	13	673,841	17	1,378,006	1,910	0	0	0	0	0	72	72
25th	18	416,784	0	0	0	0	0	0	0	0	72	72
26th	11	223,700	0.4	24,742	389	0	0	0	1.0	23,512	71	72
27th	18	500,094	1.1	46,149	708	0.9	137	22,617	0	0	63	63
28th	13	251,813	11	859,575	1,960	12	31,634	730,750	0	0	61	61
29th	24	940,293	0.1	1,668	28	24	68,048	1,533,120	0	0	48	48
30th	16	558,720	8	661,095	1,753	24	69,428	1,562,088	0	0	48	48
31st	7	102,216	0	0	0	24	60,416	1,395,416	0	0	48	48
Totals	373	14,267,920	279	23,322,160		461	1,310,757	28,987,653	77	1,358,401	1,602	1,679
				Maximum	2,420						Maximum	72

February - 2025

Daily Data for Air Permit

Elmer E. Ross Power Station

Date	Run Time, Hours				KiloWatt Hours Generated				Fuel Oil Used, gal				Gas, Roots Meter, cu ft			
	Eng 1	Eng 2	Eng 3	Total	Gen. 1	Gen 2	Gen 3	Total	Eng. 1	Eng. 2	Eng. 3	Total	Eng. 1	Eng. 2	Eng. 3	Total
1st	24	0	24	48	47,554	0	47,516	95,070	34	0	38	72	839,359	0	838,688	1,678,047
2nd	24	0	22	46	47,311	0	39,073	86,384	37	0	25	62	841,515	0	694,987	1,536,502
3rd	22	0	13	35	42,666	0	29,416	72,082	35	0	43	78	762,892	0	525,974	1,288,866
4th	24	0	24	48	49,672	0	49,867	99,539	17	0	33	49	844,404	0	847,719	1,692,123
5th	18	0	12	30	34,736	0	17,687	52,423	37	0	38	75	607,882	0	309,524	917,406
6th	24	0	22	46	46,624	0	46,599	93,223	33	0	16	49	824,066	0	823,624	1,647,690
7th	24	0	24	48	51,541	0	51,602	103,143	35	0	35	71	872,794	0	873,827	1,746,621
8th	24	0	24	48	48,384	0	48,385	96,769	34	0	29	62	830,370	0	830,387	1,660,757
9th	24	0	21	45	49,333	0	37,624	86,957	35	0	33	68	851,320	0	649,262	1,500,582
10th	18	0	9	27	34,803	0	22,482	57,285	29	0	20	49	618,247	0	399,374	1,017,621
11th	24	0	24	48	50,128	0	50,172	100,300	36	0	30	66	850,683	0	851,430	1,702,113
12th	24	8	11	43	46,428	20,632	15,493	82,553	35	22	30	87	803,176	356,921	268,019	1,428,116
13th	24	18	6	48	51,532	33,578	17,872	102,982	33	22	8	63	864,189	563,101	299,712	1,727,002
14th	19	6	24	49	34,454	16,949	51,596	102,999	29	13	40	82	578,104	284,387	865,729	1,728,220
15th	0	24	24	48	0	51,226	51,644	102,870	0	24	31	55	0	861,070	868,096	1,729,166
16th	0	24	21	45	0	49,241	39,299	88,540	0	33	32	64	0	841,897	671,914	1,513,811
17th	0	24	20	44	0	49,573	45,813	95,386	0	24	34	58	0	850,720	786,195	1,636,915
18th	5	19	24	48	10,172	38,164	48,650	96,986	16	32	32	80	172,482	647,130	824,937	1,644,549
19th	0	24	24	48	0	51,274	51,572	102,846	0	26	31	57	0	863,458	868,477	1,731,935
20th	0	24	24	48	0	48,159	48,442	96,601	0	25	34	59	0	825,404	830,255	1,655,659
21st	16	24	24	64	37,879	48,076	48,402	134,357	28	26	32	85	651,294	826,622	832,227	2,310,143
22nd	20	24	24	68	34,042	45,843	46,179	126,064	32	31	34	97	603,756	813,054	819,013	2,235,823
23rd	20	24	20	64	44,553	49,314	36,852	130,719	33	24	29	86	786,223	870,239	650,324	2,306,786
24th	24	24	23	71	46,573	46,357	46,608	139,538	34	25	33	91	837,937	834,051	838,566	2,510,554
25th	24	24	24	72	51,111	50,910	50,886	152,907	34	27	33	95	878,393	874,939	874,526	2,627,858
26th	24	24	24	72	51,536	51,305	51,625	154,466	32	23	29	84	869,238	865,341	870,739	2,605,318
27th	24	24	24	72	51,583	51,358	51,569	154,510	34	28	36	99	874,112	870,299	873,875	2,618,286
28th	21	24	24	69	43,689	51,167	51,349	146,205	30	21	26	77	738,180	864,530	867,605	2,470,315
Totals	495	363	584	1,442	1,006,304	753,126	1,194,274	2,953,704	734	425	862	2,021	17,400,616	12,913,163	20,555,005	50,868,784
		Sum of Engines	1,442			Sum of Engines	2,953,704			Sum of Engines	2,021			Sum of Engines	50,868,784	

February - 2025

Daily Data for Air Permit

SD1 Flare Burners, Turbine, and Boiler

Date	Flares A-190,191,192,193		Flares A-194,195			Turbine			Boiler		Run Time Check	
	Run Time Hrs	Gas cu ft	Run Time Hrs	Gas cu ft	Peak 1-hr Flow, SCFM	Run Time Hrs	Power KWh	Gas cu ft	Run Time Hrs	Gas cu ft	Engine Hrs	Eng + Boiler Hrs
1st	15	228,878	0	0	0	24	75,229	1,455,361	0	0	48	48
2nd	13	210,395	0	0	0	24	73,714	1,434,910	0	0	46	46
3rd	10	197,880	4	281,807	1,566	24	70,820	1,411,548	0	0	35	35
4th	3	64,629	16	1,364,363	2,034	24	78,666	1,478,311	0	0	48	48
5th	11	207,842	0	0	0	24	76,582	1,415,960	0	0	30	30
6th	15	489,225	0	0	0	24	75,836	1,458,631	0	0	46	46
7th	9	255,580	16	1,256,644	1,929	24	77,272	1,433,575	0	0	48	48
8th	15	369,524	0	0	0	24	76,572	1,406,132	0	0	48	48
9th	9	135,865	0	0	0	24	76,949	1,446,501	0	0	45	45
10th	11	391,083	3	128,607	752	24	75,755	1,487,185	0	0	27	27
11th	8	313,457	14	1,328,006	2,292	24	82,916	1,515,603	0	0	48	48
12th	9	174,467	0	0	0	24	74,352	1,422,627	0.6	9,726	43	44
13th	16	821,084	15	1,304,127	2,228	24	78,550	1,489,908	0	0	48	48
14th	10	442,076	14	1,512,484	2,009	24	82,570	1,515,551	0	0	49	49
15th	6	275,994	19	1,350,334	1,536	24	82,656	1,509,483	0	0	48	48
16th	11	180,326	7	402,722	1,376	24	80,949	1,470,455	0	0	45	45
17th	13	618,606	13	1,177,459	2,197	24	82,365	1,512,230	0	0	44	44
18th	7	306,988	14	1,279,766	2,030	24	78,590	1,433,114	0	0	48	48
19th	3	24,156	18	1,258,592	1,487	24	81,592	1,476,236	0	0	48	48
20th	12	302,370	3	144,159	888	24	77,488	1,423,877	0	0	48	48
21st	8	299,260	7	410,923	1,243	6	14,874	295,363	0	0	64	64
22nd	9	103,677	0	0	0	0	0	0	0	0	68	68
23rd	13	193,546	0	1,260	21	0	0	0	2	35,676	64	66
24th	11	123,654	0	0	0	0	0	0	0	0	71	71
25th	9	334,799	12	917,351	1,776	0	0	0	0	0	72	72
26th	6	312,245	22	1,805,261	2,217	0	0	0	0	0	72	72
27th	6	408,121	24	2,150,934	1,928	0	0	0	0	0	72	72
28th	4	79,350	20	1,549,851	1,787	0	0	0	0	0	69	69
Totals	270	7,865,077	241	19,624,650		485	1,574,297	29,492,561	2	45,402	1,442	1,444
				Maximum	2,292						Maximum	72

March - 2025

Daily Data for Air Permit

Elmer E. Ross Power Station

Date	Run Time, Hours				KiloWatt Hours Generated				Fuel Oil Used, gal				Gas, Roots Meter, cu ft			
	Eng 1	Eng 2	Eng 3	Total	Gen. 1	Gen 2	Gen 3	Total	Eng. 1	Eng. 2	Eng. 3	Total	Eng. 1	Eng. 2	Eng. 3	Total
1st	9	24	24	57	15,741	46,661	46,800	109,202	23	48	54	125	275,783	817,504	819,939	1,913,226
2nd	15	24	24	63	29,556	47,658	49,001	126,215	54	37	42	132	472,138	761,305	782,759	2,016,202
3rd	17	23	23	63	41,575	48,367	50,117	140,059	53	48	56	156	715,490	832,378	862,495	2,410,363
4th	6	24	24	54	7,412	46,883	47,213	101,508	11	29	40	80	128,630	813,619	819,346	1,761,595
5th	0	24	24	48	0	51,284	51,634	102,918	0	44	50	93	0	865,378	871,284	1,736,662
6th	0	24	24	48	0	50,312	50,710	101,022	0	32	42	74	0	844,207	850,886	1,695,093
7th	0	24	24	48	0	48,759	49,046	97,805	0	40	48	88	0	840,333	845,280	1,685,613
8th	4	24	17	45	8,037	44,102	28,173	80,312	30	37	31	98	141,957	778,970	497,617	1,418,544
9th	0	21	0	21	0	34,603	0	34,603	0	29	0	29	0	621,822	0	621,822
10th	0	20	14	34	0	45,024	31,661	76,685	0	38	51	89	0	814,081	572,464	1,386,545
11th	0	24	24	48	0	49,292	49,488	98,780	0	34	47	81	0	849,239	852,616	1,701,855
12th	0	24	24	48	0	47,854	48,003	95,857	0	34	46	80	0	829,967	832,551	1,662,518
13th	0	24	24	48	0	47,133	47,230	94,363	0	40	48	88	0	820,242	821,930	1,642,172
14th	0	24	24	48	0	47,268	47,474	94,742	0	35	47	83	0	818,099	821,665	1,639,764
15th	0	24	24	48	0	44,061	39,220	83,281	0	33	44	77	0	779,486	693,843	1,473,329
16th	1.0	24	12	37	1,660	48,011	24,254	73,925	21	44	50	114	28,866	834,885	421,764	1,285,515
17th	3	23	17	43	11,307	46,096	34,815	92,218	159	39	29	227	190,475	776,521	586,484	1,553,480
18th	24	24	0	48	49,747	49,609	0	99,356	47	42	0	90	832,531	830,221	0	1,662,752
19th	22	19	8	49	41,542	38,946	21,137	101,625	60	118	44	222	685,546	642,705	348,813	1,677,064
20th	17	24	24	65	40,306	51,273	51,561	143,140	38	33	44	115	670,545	852,996	857,788	2,381,329
21st	4	21	24	49	3,777	42,284	46,509	92,570	9	48	45	101	65,707	735,599	809,099	1,610,405
22nd	0	20	24	44	0	33,544	46,176	79,720	0	27	51	78	0	585,904	806,544	1,392,448
23rd	0	5	24	29	0	2,065	45,924	47,989	0	6	21	28	0	38,297	851,688	889,985
24th	0	17	24	41	0	45,968	48,507	94,475	0	52	48	100	0	814,466	859,453	1,673,919
25th	0	24	24	48	0	50,611	50,895	101,506	0	41	48	89	0	871,136	876,024	1,747,160
26th	0	24	24	48	0	49,634	51,101	100,735	0	35	44	78	0	846,467	871,485	1,717,952
27th	0	24	24	48	0	50,666	50,952	101,618	0	41	49	90	0	855,825	860,656	1,716,481
28th	0	24	24	48	3,128	48,629	48,940	100,697	12	30	40	81	53,569	832,806	838,133	1,724,508
29th	21	24	24	69	43,835	48,392	48,740	140,967	59	40	51	150	762,030	841,249	847,299	2,450,578
30th	13	24	22	59	21,664	48,798	39,375	109,837	31	37	39	107	381,595	859,540	693,561	1,934,696
31st	18	24	20	62	43,558	51,322	49,449	144,329	45	33	45	124	756,911	891,827	859,280	2,508,018
Totals	174	697	637	1,508	362,845	1,405,109	1,294,105	3,062,059	652	1,225	1,291	3,168	6,161,773	24,197,074	22,332,746	52,691,593
		Sum of Engines	1,508			Sum of Engines	3,062,059			Sum of Engines	3,168			Sum of Engines	52,691,593	

March - 2025

Daily Data for Air Permit

SD1 Flare Burners, Turbine, and Boiler

Date	Flares A-190,191,192,193		Flares A-194,195			Turbine			Boiler		Run Time Check	
	Run Time Hrs	Gas cu ft	Run Time Hrs	Gas cu ft	Peak 1-hr Flow, SCFM	Run Time Hrs	Power KWh	Gas cu ft	Run Time Hrs	Gas cu ft	Engine Hrs	Eng + Boiler Hrs
1st	6	192,173	8	587,977	1,644	13	41,539	742,738	0	0	57	57
2nd	8	167,735	4	142,368	639	6	16,366	319,537	0.4	9,931	63	63
3rd	5	189,806	13	1,243,587	1,983	1.5	3,119	67,588	2	34,866	63	65
4th	11	511,620	10	849,816	2,157	20	75,743	1,304,595	0	0	54	54
5th	16	559,229	12	948,704	1,691	24	96,812	1,659,770	0	0	48	48
6th	4	153,031	17	1,677,000	2,438	24	98,014	1,654,393	0	0	48	48
7th	16	479,781	6	433,083	1,491	24	96,785	1,642,477	0	0	48	48
8th	6	83,676	5	208,482	764	20	64,643	1,174,633	0	0	45	45
9th	7	92,875	2	83,785	739	23	81,923	1,475,053	2	34,172	21	23
10th	16	343,747	0.3	8,929	128	24	85,561	1,573,185	1.1	16,771	34	35
11th	13	416,771	3	89,863	545	24	92,602	1,600,461	0	0	48	48
12th	16	398,203	0	0	0	24	89,406	1,582,065	0	0	48	48
13th	16	828,810	0	0	0	24	87,757	1,548,506	0	0	48	48
14th	11	547,588	7	667,185	1,670	24	88,701	1,544,229	0	0	48	48
15th	10	122,572	0	0	0	24	84,652	1,473,267	0	0	48	48
16th	13	291,111	0	0	0	24	93,701	1,622,078	0	0	37	37
17th	19	723,176	6	358,352	1,765	21	79,064	1,387,282	0.4	7,421	43	43
18th	18	779,678	3	228,628	1,465	24	97,893	1,665,064	0	0	48	48
19th	13	628,020	13	856,906	1,934	24	95,442	1,610,251	0	0	49	49
20th	13	643,121	17	1,624,941	2,295	5	19,249	327,906	0	0	65	65
21st	7	215,858	9	698,425	1,797	13	50,333	869,195	0	0	49	49
22nd	12	237,381	0	0	0	24	83,476	1,439,561	0	0	44	44
23rd	5	61,330	0.6	18,574	196	24	70,785	1,369,481	0	0	29	29
24th	16	367,630	0.2	4,305	42	24	92,277	1,654,171	0	0	41	41
25th	11	334,815	13	798,126	1,280	24	93,466	1,647,409	0	0	48	48
26th	7	170,543	16	1,198,700	1,554	24	94,597	1,641,788	0	0	48	48
27th	15	436,554	6	457,347	1,506	24	94,718	1,636,543	0	0	48	48
28th	11	216,825	3	99,002	446	22	88,785	1,494,922	0	0	48	48
29th	3	70,324	1.2	38,387	611	0	0	0	0	0	69	69
30th	0.1	439	0	0	0	0	0	0	6	95,994	59	65
31st	0.1	257	0	0	0	0	0	0	3	64,629	62	65
Totals	326	10,264,679	175	13,322,472		577	2,157,409	37,728,148	14	263,784	1,508	1,522
				Maximum	2,438						Maximum	69

April - 2025

Daily Data for Air Permit

Elmer E. Ross Power Station

Date	Run Time, Hours				KiloWatt Hours Generated				Fuel Oil Used, gal				Gas, Roots Meter, cu ft			
	Eng 1	Eng 2	Eng 3	Total	Gen. 1	Gen 2	Gen 3	Total	Eng. 1	Eng. 2	Eng. 3	Total	Eng. 1	Eng. 2	Eng. 3	Total
1st	16	24	24	64	29,004	51,313	51,610	131,927	22	28	32	82	499,723	884,094	889,211	2,273,028
2nd	0	24	24	48	0	51,176	51,440	102,616	0	23	29	52	0	882,437	886,990	1,769,427
3rd	0	24	24	48	0	50,536	50,787	101,323	0	29	35	64	0	850,971	855,197	1,706,168
4th	0	24	17	41	0	48,256	32,342	80,598	0	25	32	56	0	829,694	556,075	1,385,769
5th	0	19	24	43	0	31,195	43,247	74,442	0	25	36	61	0	555,574	770,217	1,325,791
6th	0	10	24	34	0	23,041	43,958	66,999	0	18	29	47	0	421,198	803,569	1,224,767
7th	1.0	16	24	41	536	30,264	45,419	76,219	10	26	42	78	9,725	549,094	824,059	1,382,878
8th	0	24	24	48	0	48,469	48,709	97,178	0	25	32	56	0	839,684	843,842	1,683,526
9th	12	11	24	47	29,443	18,431	51,552	99,426	44	9	30	84	494,041	309,265	865,021	1,668,327
10th	24	0	24	48	51,413	0	51,360	102,773	33	0	31	64	858,702	0	857,817	1,716,519
11th	20	10	20	50	38,399	23,448	41,269	103,116	33	44	33	110	638,608	389,960	686,338	1,714,906
12th	0	24	24	48	0	46,479	50,083	96,562	0	22	35	57	0	793,223	854,730	1,647,953
13th	0	14	24	38	0	33,477	50,197	83,674	0	27	31	58	0	593,957	890,607	1,484,564
14th	10	24	13	47	27,739	50,799	23,365	101,903	23	23	21	66	467,601	856,327	393,868	1,717,796
15th	24	24	0	48	46,238	48,395	0	94,633	39	22	0	61	777,036	813,284	0	1,590,320
16th	14	24	23	61	26,228	49,794	5,053	81,075	36	35	15	86	443,976	842,891	85,535	1,372,402
17th	0	24	0	24	0	51,303	49,200	100,503	0	23	37	60	0	866,484	830,966	1,697,450
18th	0	24	24	48	0	50,500	50,787	101,287	0	23	31	54	0	861,376	866,271	1,727,647
19th	0.3	17	21	38	16	29,264	35,063	64,343	4	24	32	60	279	510,143	611,233	1,121,655
20th	0	0	6	6	0	0	9,699	9,699	0	0	18	18	0	0	188,994	188,994
21st	0	0	15	15	23,853	0	36,775	60,628	40	0	28	68	424,006	0	653,705	1,077,711
22nd	10	0	24	34	42,072	0	50,721	92,793	44	0	39	83	724,343	0	873,251	1,597,594
23rd	20	0	24	44	50,883	0	50,879	101,762	33	0	31	64	865,909	0	865,841	1,731,750
24th	24	8	24	56	29,997	21,300	51,380	102,677	27	20	30	76	508,655	361,181	871,243	1,741,079
25th	21	24	20	65	8,877	49,971	41,318	100,166	15	23	34	72	152,414	857,981	709,413	1,719,808
26th	0	24	9	33	0	49,552	15,499	65,051	0	26	11	37	0	840,079	262,762	1,102,841
27th	0	7	4	11	0	7,826	7,693	15,519	0	10	54	64	0	139,194	136,828	276,022
28th	7	17	11	35	14,794	39,088	21,691	75,573	35	28	26	88	263,442	696,053	386,259	1,345,754
29th	14	24	0	38	32,136	49,159	0	81,295	38	23	0	61	558,572	854,457	0	1,413,029
30th	16	24	0	40	32,761	49,177	0	81,938	34	49	0	83	559,925	840,494	0	1,400,419
Totals	233	489	519	1,241	484,389	1,002,213	1,061,096	2,547,698	510	627	833	1,970	8,246,957	17,239,095	18,319,842	43,805,894
		Sum of Engines	1,241			Sum of Engines	2,547,698			Sum of Engines	1,970			Sum of Engines	43,805,894	

April - 2025

Daily Data for Air Permit

SD1 Flare Burners, Turbine, and Boiler

Date	Flares A-190,191,192,193		Flares A-194,195			Turbine			Boiler		Run Time Check	
	Run Time Hrs	Gas cu ft	Run Time Hrs	Gas cu ft	Peak 1-hr Flow, SCFM	Run Time Hrs	Power KWh	Gas cu ft	Run Time Hrs	Gas cu ft	Engine Hrs	Eng + Boiler Hrs
1st	15	692,419	0.2	3,015	50	10	37,701	667,807	0	0	64	64
2nd	5	166,684	9	694,026	1,559	24	94,601	1,688,349	0	0	48	48
3rd	4	115,380	10	488,947	1,287	24	94,129	1,642,022	0	0	48	48
4th	15	505,015	0	0	0	24	86,693	1,548,576	0	0	41	41
5th	2	36,997	0	0	0	24	67,441	1,288,097	0	0	43	43
6th	2	57,070	0	0	0	24	80,306	1,487,858	0	0	34	34
7th	0.3	5,298	0.4	12,237	190	24	92,237	1,634,123	0	0	41	41
8th	3	122,029	11	796,068	1,804	24	96,373	1,665,525	0	0	48	48
9th	1.5	27,109	19	1,320,081	1,827	24	95,401	1,639,409	1.4	24,063	47	48
10th	10	728,894	22	1,790,250	2,182	24	95,723	1,639,129	0	0	48	48
11th	12	614,946	19	1,744,443	1,968	24	94,677	1,608,888	0	0	50	50
12th	0	0	16	965,941	1,563	24	96,475	1,664,165	0	0	48	48
13th	4	224,232	17	1,366,994	2,004	24	95,347	1,724,248	0	0	38	38
14th	6	352,640	24	1,588,231	1,771	24	96,762	1,674,274	0	0	47	47
15th	2	24,363	8	181,513	522	24	89,758	1,567,846	0	0	48	48
16th	0.2	2,851	0.1	1,915	32	24	95,961	1,655,576	0	0	61	61
17th	0.1	491	11	514,889	1,001	24	96,699	1,664,075	0	0	24	24
18th	0	0	10	489,731	1,367	24	97,206	1,686,698	0	0	48	48
19th	0	0	0.1	1,795	30	24	94,854	1,659,031	0	0	38	38
20th	0	0	0	0	0	24	96,439	1,699,954	0	0	6	6
21st	0	0	0.6	11,681	120	24	95,572	1,721,300	0	0	15	15
22nd	7	130,249	0.4	9,047	89	24	96,305	1,685,233	0	0	34	34
23rd	1.2	7,111	0	0	0	24	97,056	1,684,705	0	0	44	44
24th	3	45,760	4	215,364	1,232	24	97,516	1,686,918	0	0	56	56
25th	7	190,487	6	458,701	1,664	24	97,458	1,706,338	0	0	65	65
26th	3	77,673	0	0	0	24	97,629	1,692,244	0	0	33	33
27th	0.3	2,035	0	0	0	24	96,447	1,714,642	0	0	11	11
28th	6	147,256	0.3	15,565	221	14	50,012	899,835	0	0	35	35
29th	2	63,216	1.3	84,796	1,125	23	86,925	1,559,795	0	0	38	38
30th	9	201,446	0.1	3,348	56	24	93,616	1,689,533	0	0	40	40
Totals	120	4,541,651	189	12,758,578		694	2,703,319	47,546,193	1.4	24,063	1,241	1,243
				Maximum	2,182						Maximum	65

May - 2025

Daily Data for Air Permit

Elmer E. Ross Power Station

Date	Run Time, Hours				KiloWatt Hours Generated				Fuel Oil Used, gal				Gas, Roots Meter, cu ft			
	Eng 1	Eng 2	Eng 3	Total	Gen. 1	Gen 2	Gen 3	Total	Eng. 1	Eng. 2	Eng. 3	Total	Eng. 1	Eng. 2	Eng. 3	Total
1st	14	24	0	38	24,246	48,830	0	73,076	24	24	0	48	410,450	826,621	0	1,237,071
2nd	12	22	0	34	25,268	42,630	0	67,898	51	30	0	81	431,032	727,200	0	1,158,232
3rd	15	10	0	25	31,180	20,299	0	51,479	33	21	0	54	526,067	342,484	0	868,551
4th	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5th	19	3	0	22	45,375	4,295	0	49,670	59	12	0	71	775,332	73,390	0	848,722
6th	21	10	0	31	39,924	24,080	0	64,004	36	30	0	66	685,538	413,479	0	1,099,017
7th	0	10	1.0	11	0	15,843	1,316	17,159	0	12	29	41	0	279,413	23,209	302,622
8th	6	0	7	13	15,535	0	20,009	35,544	32	0	26	58	281,183	0	362,163	643,346
9th	24	0	24	48	51,595	0	51,642	103,237	39	0	35	74	894,173	0	894,988	1,789,161
10th	20	0	21	41	37,688	0	41,811	79,499	54	0	43	97	642,944	0	713,281	1,356,225
11th	0	0	12	12	0	0	16,017	16,017	0	0	14	14	0	0	301,224	301,224
12th	17	0	9	26	36,546	0	18,027	54,573	44	0	22	66	656,505	0	323,833	980,338
13th	24	0	19	43	50,692	0	43,361	94,053	36	0	49	85	873,504	0	747,179	1,620,683
14th	23	0.2	19	42	44,789	0	30,939	75,728	45	6	30	81	792,197	0	547,228	1,339,425
15th	24	0	22	46	51,566	0	51,438	103,004	37	0	38	74	872,873	0	870,706	1,743,579
16th	24	0	22	46	49,099	0	41,030	90,129	33	0	25	58	844,072	0	705,356	1,549,428
17th	24	0	10	34	37,977	0	18,079	56,056	39	0	37	75	690,162	0	328,552	1,018,714
18th	4	0	0	4	8,109	0	377	8,486	18	0	0	18	146,453	0	6,809	153,262
19th	13	0	18	31	19,549	0	36,766	56,315	41	0	33	75	366,536	0	689,348	1,055,884
20th	0	5	16	21	0	8,946	33,557	42,503	0	16	42	58	0	158,889	596,002	754,891
21st	0	20	24	44	0	47,607	51,055	98,662	0	31	33	64	0	825,720	885,524	1,711,244
22nd	6	19	24	49	16,101	32,532	48,844	97,477	28	23	30	80	279,298	564,321	847,279	1,690,898
23rd	24	0	23	47	48,716	0	42,669	91,385	35	0	30	65	841,895	0	737,393	1,579,288
24th	24	0	11	35	45,715	0	20,282	65,997	43	0	24	67	807,709	0	358,350	1,166,059
25th	11	0	0	11	13,936	0	0	13,936	15	0	0	15	260,537	0	0	260,537
26th	12	0	12	24	29,416	0	23,159	52,575	35	0	37	72	529,951	0	417,226	947,177
27th	24	0	6	30	46,107	0	11,440	57,547	48	0	23	71	812,753	0	201,659	1,014,412
28th	16	9	21	46	27,290	22,713	46,790	96,793	28	31	36	95	463,771	385,989	795,157	1,644,917
29th	0	24	23	47	353	48,864	49,143	98,360	36	24	36	96	6,004	831,154	835,899	1,673,057
30th	0	24	23	47	0	47,657	41,149	88,806	0	14	25	39	0	828,178	715,082	1,543,260
31st	0	24	12	36	0	40,672	18,525	59,197	0	31	36	67	0	745,140	339,391	1,084,531
Totals	401	204	379	984	796,772	404,968	757,425	1,959,165	889	304	733	1,927	13,890,939	7,001,978	13,242,838	34,135,755
		Sum of Engines	984			Sum of Engines	1,959,165			Sum of Engines	1,926			Sum of Engines	34,135,755	

May - 2025

Daily Data for Air Permit

SD1 Flare Burners, Turbine, and Boiler

Date	Flares A-190,191,192,193		Flares A-194,195			Turbine			Boiler		Run Time Check	
	Run Time Hrs	Gas cu ft	Run Time Hrs	Gas cu ft	Peak 1-hr Flow, SCFM	Run Time Hrs	Power KWh	Gas cu ft	Run Time Hrs	Gas cu ft	Engine Hrs	Eng + Boiler Hrs
1st	3	30,518	6	399,255	1,348	18	70,585	1,229,398	0	0	38	38
2nd	2	43,315	0	0	0	24	93,271	1,665,871	0	0	34	34
3rd	0.2	1,665	0	0	0	24	93,190	1,676,345	0	0	25	25
4th	0	0	0	0	0	24	92,064	1,688,160	0	0	0	0
5th	0.9	14,285	0	0	0	24	88,355	1,658,056	0	0	22	22
6th	0.3	2,695	0	0	0	24	93,727	1,697,260	0	0	31	31
7th	0	0	0	0	0	24	85,006	1,546,403	0	0	11	11
8th	0	0	1.3	33,780	284	24	88,309	1,659,706	0	0	13	13
9th	0	0	8	289,474	774	24	92,959	1,676,093	0	0	48	48
10th	5	71,062	8	291,607	784	24	91,643	1,601,631	0	0	41	41
11th	0.1	112	0	0	0	24	88,220	1,600,946	0	0	12	12
12th	0.1	1,100	1.2	47,283	617	24	90,851	1,659,040	0	0	26	26
13th	0.1	1,659	7	202,319	494	24	93,695	1,682,709	0	0	43	43
14th	1.1	11,098	0.03	427	7	24	86,852	1,548,620	0	0	42	42
15th	2	22,917	3	56,751	294	24	92,249	1,627,830	0	0	46	46
16th	0.6	11,730	0	0	0	24	91,496	1,622,744	0	0	46	46
17th	0.1	448	0	0	0	24	84,441	1,543,979	0	0	34	34
18th	2	36,259	0	0	0	24	91,564	1,667,038	0	0	4	4
19th	0.7	8,691	0.02	113	2	24	83,268	1,528,305	0	0	31	31
20th	3	92,849	0.03	38	0	24	91,828	1,645,286	0	0	21	21
21st	8	299,659	0.3	15,084	251	24	93,064	1,656,498	0	0	44	44
22nd	9	360,094	0	0	0	24	92,914	1,633,313	0	0	49	49
23rd	15	415,497	0	0	0	24	92,178	1,612,271	0	0	47	47
24th	0.8	6,625	0	0	0	24	90,067	1,630,834	0	0	35	35
25th	0	0	0	0	0	24	87,661	1,623,123	0	0	11	11
26th	0.3	1,998	0	0	0	24	96,043	1,733,649	0	0	24	24
27th	0.7	9,181	0	0	0	24	92,769	1,602,136	0	0	30	30
28th	16	688,956	3	294,215	1,586	24	95,983	1,669,611	0	0	46	46
29th	18	904,194	0	0	0	24	89,695	1,567,280	0	0	47	47
30th	10	307,002	6	471,115	1,499	24	89,620	1,554,515	0	0	47	47
31st	4	55,947	0.1	1,238	21	24	82,336	1,448,230	0	0	36	36
Totals	103	3,399,556	43	2,102,699		738	2,785,903	49,956,880	0	0	984	984
				Maximum	1,586						Maximum	49

June - 2025

Daily Data for Air Permit

Elmer E. Ross Power Station

Date	Run Time, Hours				KiloWatt Hours Generated				Fuel Oil Used, gal				Gas, Roots Meter, cu ft			
	Eng 1	Eng 2	Eng 3	Total	Gen. 1	Gen 2	Gen 3	Total	Eng. 1	Eng. 2	Eng. 3	Total	Eng. 1	Eng. 2	Eng. 3	Total
1st	0	13	0	13	0	22,374	0	22,374	0	15	0	15	0	414,824	0	414,824
2nd	0	21	16	36	0	38,972	30,337	69,309	0	22	26	48	0	714,422	556,128	1,270,550
3rd	2	24	24	50	1,630	49,805	49,978	101,413	27	29	9	66	27,598	843,275	846,205	1,717,078
4th	0	24	24	48	0	51,091	51,440	102,531	0	21	31	52	0	860,998	866,880	1,727,878
5th	0	24	24	48	0	51,295	51,670	102,965	0	20	23	43	0	858,487	864,763	1,723,250
6th	0	24	24	48	0	51,313	51,662	102,975	0	29	32	61	0	861,009	866,865	1,727,874
7th	0	24	24	48	0	50,181	50,514	100,695	0	22	27	48	0	843,618	849,217	1,692,835
8th	0	24	12	36	0	46,296	22,356	68,652	0	26	23	48	0	805,953	389,189	1,195,142
9th	0	24	24	48	0	50,782	51,076	101,858	0	23	28	52	0	873,719	878,777	1,752,496
10th	0	24	24	48	0	50,977	51,316	102,293	0	20	24	44	0	870,663	876,453	1,747,116
11th	0	24	24	48	0	51,278	51,604	102,882	0	28	32	60	0	857,813	863,266	1,721,079
12th	0	24	24	48	0	51,268	51,623	102,891	0	21	26	47	0	868,251	874,263	1,742,514
13th	0	24	24	48	0	51,259	51,622	102,881	0	26	28	54	0	870,559	876,724	1,747,283
14th	0	16	24	40	0	34,035	47,528	81,563	0	18	27	45	0	585,525	817,653	1,403,178
15th	0	0	17	17	0	0	27,752	27,752	0	0	15	15	0	0	526,268	526,268
16th	0	10	22	32	0	20,294	40,553	60,847	0	20	41	61	0	371,796	742,951	1,114,747
17th	0	13	24	37	0	25,783	48,674	74,457	0	15	25	41	0	454,734	858,462	1,313,196
18th	0	24	24	48	0	47,802	48,019	95,821	0	27	26	54	0	846,928	850,773	1,697,701
19th	0	24	24	48	0	51,239	51,665	102,904	0	22	28	50	0	884,466	891,820	1,776,286
20th	0	24	24	48	0	51,242	51,667	102,909	0	25	25	50	0	879,354	886,647	1,766,001
21st	0	24	24	48	0	51,220	51,616	102,836	0	24	27	51	0	875,018	881,783	1,756,801
22nd	0	24	24	48	0	51,163	51,588	102,751	0	20	22	43	0	888,033	895,410	1,783,443
23rd	0	24	24	48	0	51,288	51,636	102,924	0	28	33	61	0	890,393	896,435	1,786,828
24th	0	23	22	45	0	45,955	46,204	92,159	0	33	33	65	0	786,629	790,892	1,577,521
25th	0	24	24	48	0	51,310	51,591	102,901	0	28	32	60	0	867,653	872,405	1,740,058
26th	0	24	24	48	0	51,312	51,594	102,906	0	21	26	48	0	862,156	866,895	1,729,051
27th	0	24	24	48	0	51,295	51,641	102,936	0	24	27	51	0	863,653	869,478	1,733,131
28th	0	24	24	48	0	51,289	51,606	102,895	0	24	28	52	0	878,352	883,780	1,762,132
29th	0	24	24	48	0	51,291	51,595	102,886	0	21	23	44	0	862,146	867,256	1,729,402
30th	0	24	24	48	0	51,323	51,648	102,971	0	27	31	58	0	879,888	885,460	1,765,348
Totals	2	649	665	1,316	1,630	1,354,732	1,391,775	2,748,137	27	679	781	1,487	27,598	23,220,315	23,893,098	47,141,011
		Sum of Engines	1,316			Sum of Engines	2,748,137			Sum of Engines	1,487			Sum of Engines	47,141,011	

June - 2025

Daily Data for Air Permit

SD1 Flare Burners, Turbine, and Boiler

Date	Flares A-190,191,192,193		Flares A-194,195			Turbine			Boiler		Run Time Check	
	Run Time Hrs	Gas cu ft	Run Time Hrs	Gas cu ft	Peak 1-hr Flow, SCFM	Run Time Hrs	Power KWh	Gas cu ft	Run Time Hrs	Gas cu ft	Engine Hrs	Eng + Boiler Hrs
1st	3	37,183	0	0	0	24	85,326	1,576,193	0	0	13	13
2nd	7	89,399	0	0	0	24	91,352	1,636,200	0	0	36	36
3rd	12	270,294	0	0	0	24	93,899	1,639,412	0	0	50	50
4th	5	290,017	16	1,416,656	2,074	24	95,744	1,621,742	0	0	48	48
5th	0.2	8,783	24	1,776,996	2,091	24	94,606	1,610,447	0	0	48	48
6th	0.2	1,576	24	2,050,934	2,113	24	95,169	1,622,249	0	0	48	48
7th	3	66,499	17	1,145,748	1,588	24	94,990	1,615,605	0	0	48	48
8th	6	111,045	1.0	59,490	568	23	86,810	1,512,714	0	0	36	36
9th	14	195,389	0	0	0	24	94,992	1,661,621	0	0	48	48
10th	8	416,560	12	987,787	1,885	24	95,556	1,660,209	0	0	48	48
11th	7	204,708	17	1,156,806	1,695	24	95,709	1,625,561	0	0	48	48
12th	8	286,303	17	1,289,193	1,791	24	94,966	1,646,250	0	0	48	48
13th	17	560,505	6	264,750	903	24	95,101	1,643,056	0	0	48	48
14th	10	152,215	0	0	0	24	90,698	1,566,320	0	0	40	40
15th	1.4	14,945	0	0	0	24	75,686	1,433,907	0	0	17	17
16th	5	67,274	0	0	0	24	91,863	1,654,284	0	0	32	32
17th	7	167,267	0.7	27,094	428	24	90,116	1,597,554	0	0	37	37
18th	7	290,068	14	1,250,204	2,016	10	35,423	636,527	14	188,012	48	62
19th	0.6	6,042	24	1,702,031	1,896	0	0	0	24	351,718	48	72
20th	3	140,197	24	1,959,750	2,026	0	0	0	24	335,028	48	72
21st	9	181,917	15	985,150	1,421	0	0	0	24	340,244	48	72
22nd	20	459,289	0	0	0	0	0	0	24	340,934	48	72
23rd	15	575,230	9	807,203	1,863	0	0	0	24	360,172	48	72
24th	18	998,730	18	1,330,498	1,619	0	0	0	24	364,821	45	69
25th	16	951,826	24	2,678,265	2,551	0	0	0	24	356,626	48	72
26th	8	496,953	24	2,342,138	2,066	0	0	0	24	306,691	48	72
27th	4	242,097	24	2,301,147	2,052	0	0	0	24	310,104	48	72
28th	20	1,102,827	24	1,463,084	1,811	0	0	0	24	300,908	48	72
29th	5	94,874	18	1,403,031	1,744	0	0	0	24	323,566	48	72
30th	11	529,741	17	1,616,152	2,000	0	0	0	23	311,414	48	71
Totals	248	9,009,753	370	30,014,107		417	1,598,006	27,959,851	301	4,190,238	1,316	1,616
				Maximum	2,551						Maximum	72

Attachment 2 - Combustion Device Summaries **EBMUD Main Wastewater Plant** **January 1 - June 30, 2025**

Turbine Operation			Data Source	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Semi-annual Totals	Limits	
Run Time	Total	hrs	metered	461	485	577	694	738	417	3,373		
Digester Gas	Total	cu ft	metered	28,987,653	29,492,561	37,728,148	47,546,193	49,956,880	27,959,851	221,671,286		
Thermal Throughput[3]	Total	MMBTU		19,119	19,384	24,615	30,713	32,412	18,061	144,304	389,820	MMBTU per 12-Month period
	Total	MMBTU/hr		41.5	39.9	42.7	44.2	43.9	43.3	x		
Nitrogen Oxide[4]	Max	ppm	sampled	10	9	7	6	5	-	x	23	ppm at any time
Carbon Monoxide[4]	Max	ppm	sampled	3	1	7	0	1	-	x	100	
Sulfur Dioxide[4]	Max	ppm	sampled	0	0	0	0	0	-	x	150	
Nitrogen Oxide	Total	lbs	calc'd	Based on last annual source test mass load rate (1.3 lbs/hr) x run time (3,796+3,373hrs)-->						9,320	34,400	lbs per 12-Month period
Carbon Monoxide	Total	lbs	calc'd	Based on last annual source test mass flow rate (0.21 lbs/hr) x run time (3,796+3,373hrs)---->						1,505	92,200	
Engine Operation												
Run Time	Eng #1	hrs	metered	440	495	174	233	401	2	1,745		
	Eng #2	hrs	metered	619	363	697	489	204	649	3,021		
	Eng #3	hrs	metered	543	584	637	519	379	665	3,327		
	Total	hrs	sum	1,602	1,442	1,508	1,241	984	1,316	8,093	25,316	hr/365 days
Diesel Fuel[1]	Eng #1	gal	calc'd	975	734	652	510	889	27	3,787		
	Eng #2	gal	calc'd	1,121	425	1,225	627	304	679	4,381		
	Eng #3	gal	calc'd	1,118	862	1,291	833	733	781	5,618		
	Total	gal	sum	3,214	2,021	3,168	1,970	1,926	1,487	13,786	150,000	gal/365 days
Digester Gas[2]	Eng #1	cu ft	metered	15,519,782	17,400,616	6,161,773	8,246,957	13,890,939	27,598	61,247,665		
	Eng #2	cu ft	metered	20,637,350	12,913,163	24,197,074	17,239,095	7,001,978	23,220,315	105,208,975		
	Eng #3	cu ft	metered	19,389,950	20,555,005	22,332,746	18,319,842	13,242,838	23,893,098	117,733,479		
	Total	cu ft	sum	55,547,082	50,868,784	52,691,593	43,805,894	34,135,755	47,141,011	284,190,119		
Thermal Throughput[3]	Eng #1	MMBTU/hr		23.6	23.3	23.6	23.1	22.8	10.8	x	25	MMBTU/hr
	Eng #2	MMBTU/hr		22.2	23.5	22.9	23.0	22.5	23.3	x	25	MMBTU/hr
	Eng #3	MMBTU/hr		23.8	23.3	23.2	23.0	22.9	23.4	x	25	MMBTU/hr
Natural Gas	Total	cu ft	metered	-	-	-	-	-	-	-		
Boiler Operation												
Run Time	Boiler	hrs	metered	77	2	14	1.4	0	301	395		
Digester Gas	Boiler	cu ft	metered	1,358,401	45,402	263,784	24,063	0	4,190,238	5,881,888		
Thermal Thruput[3]	Boiler	MMBTU/hr		11.6	12.5	12.2	10.9	-	9.0	x	20.41	MMBTU/hr
Flare Operation (A-190,191,192,193)												
Run Time	Flares	hrs	metered	373	270	326	120	103	248	1,440		
Digester Gas	Flares	cu ft	metered	14,267,920	7,865,077	10,264,679	4,541,651	3,399,556	9,009,753	49,348,636		
Thermal Thruput[3]	Flares	MMBTU/hr		25.2	19.1	20.6	24.5	21.4	23.4	x		
Flare Operation (A-194,195)												
Run Time	Flares	hrs	metered	279	241	175	189	43	370	1,296		
Digester Gas	Flares	cu ft	metered	23,322,160	19,624,650	13,322,472	12,758,578	2,102,699	30,014,107	101,144,666		
Thermal Thruput[3]	Flares	MMBTU/hr		55.1	53.6	49.8	43.6	31.4	52.5	x		
Max Total Flow	Flares	scfm	metered	2,420	2,292	2,438	2,182	1,586	2,551	x	3,000	scfm
Digester Gas HHV	12-mo Avg	BTU/scf	sampled	660	657	652	646	649	646	x		

(1) Diesel use per engine (gal) **=** diesel withdrawn from common storage tank daily (gal) **x** ratio of fuel used per engine (single day tank level / sum of all day tanks)

(2) Digester gas usage (cf) = DCS/PI flow data from common engine line meter (scfm) x minutes of gas flow x (engine hours/sum of engine hours)

(3) Thermal Throughput is estimated using the 12-month HHV average and monthly digester gas flow volumes combined with similar diesel fuel data2025 CARB Annual Data, Engines, Flares, Boiler with mmBTU - Rolling Avg

(4) Monthly turbine exhaust check - ppm corrected to 15% O2

ATTACHMENT 3

ANNUAL SOURCE TEST RESULTS

No annual source tests conducted in the monitoring period of January 1, 2025 – June 30, 2025

Attachment 4
Gasoline Facility Throughput (S-48)

MAIN WASTEWATER TREATMENT PLANT
GASOLINE DISPENSING FACILITY
Maintenance Center (3,000 gallon gasoline compartment)
Year: 2025
As of June 30, 2025

MONTH	GALLONS RECEIVED	RECEIVED YR-TO-DATE	GALLONS ISSUED	ISSUED YR-TO-DATE	COMMENTS
JAN	2954	2954	2486	2486	
FEB	2911	5865	2555	5041	
MAR	2505	8370	1824	6865	
APR	2816	11186	2633	9498	
MAY	2360	13546	2508	12006	
JUN	2300	15846	2481	14487	
JUL					
AUG					
SEP					
OCT					
NOV					
DEC					
Total					

2024 MONTH	GALLONS RECEIVED	RECEIVED YR-TO-DATE	GALLONS ISSUED	ISSUED YR-TO-DATE	COMMENTS
JUL	1717	17445	1515	18021	
AUG	3490	20935	2649	20670	
SEP	2412	23347	2583	23253	
OCT	2518	25865	2811	26064	
NOV	2701	28566	2636	28700	
DEC	2906	31472	3494	32194	
Total	15744	31472		32194	

ATTACHMENT 5

Hours of Operation for Standby Emergency Generators

January 1, 2025 – June 30, 2025

Source	Location	Hours Meter Begin	Hours Meter End	Emergency Use Hours	Reliability-related Hours	Limit on reliability-related Hours
S-53	West of Admin Bldg	138.8	139.7	0	0.9	30
S-54	East Bayshore RWP*	37	37	0	0	50
S-58	North of Maintenance	20.9	20.9	0	0	50
S-59	North of PGS	33.9	35.3	0	1.4	50
S-60	Dechlorination	36.5	41.7	0.4	4.8	50

**S-54 is currently out of service and fuel tank is empty*

July 1, 2024 – December 31, 2024

Source	Location	Hours Meter Begin	Hours Meter End	Emergency Use Hours	Reliability-related Hours	Limit on reliability-related Hours
S-53	West of Admin Bldg	136.7	138.8	0	2.1	30
S-54	East Bayshore RWP*	37	37	0	0	50
S-58	North of Maintenance	20.9	20.9	0	0	50
S-59	North of PGS	20.7	33.9	0	13.2	50
S-60	Dechlorination	23.6	36.5	7.5	5.4	50

**S-54 is currently out of service and fuel tank is empty*

July 1, 2024 – June 30, 2025 (last 12 months total)

Source	Location	Hours Meter Begin	Hours Meter End	Emergency Use Hours	Reliability-related Hours	Limit on reliability-related Hours
S-53	West of Admin Bldg	136.7	139.7	0	3.0	30
S-54	East Bayshore RWP*	37	37	0	0	50
S-58	North of Maintenance	20.9	20.9	0	0	50
S-59	North of PGS	20.7	35.3	0	14.6	50
S-60	Dechlorination	23.6	41.7	7.9	10.2	50

**S-54 is currently out of service and fuel tank is empty*

ATTACHMENT 6

TURBINE MONTHLY TEST RESULTS

EBMUD
Turbine Monthly Emissions Check (15 min)

Turbine	Data	Limits
Test Date	1/7/2025	--
Test Start Time	0929	--
Test End Time	0943	--
PGS Turbine, kW	3650	--
PGS Turbine Digester Gas Flow Rate, DSCFM	1080	--
Oxygen, O2 %	16.92	--
NOx, ppm		--
NOx, ppm @ 15% O2	~~3~~ 10	**23**
CO, ppm		--
CO, ppm @ 15% O2	3	**100**
SO2, ppm		--
SO2, ppm @ 15% O2	~~0~~	**150**
Sampler (name)	JORGE	--

Analyzer
Ecom EN3
S/N 5258

Alternate Analyzer Used? Y ☐ N ☒ If yes, record info below.
Make/Model
Serial Number

Abbreviations
kW=kilowatts
DCSM=dry standard cubic feet per minute
PPM=parts per million
NOx=Oxides of nitrogen (NO ppm + NO2 ppm)
CO=Carbon Monoxide

Calculations (done by ecom EN3)
ppm@15% O2 = ppm * 5.9 / (20.9-%O2)

EBMUD
Turbine Monthly Emissions Check (15 min)

Turbine	Data	Limits
Test Date	2/6/25	--
Test Start Time	11:40	--
Test End Time	11:55	--
PGS Turbine, kW	3000	--
PGS Turbine Digester Gas Flow Rate, DSCFM	980	--
Oxygen, O2 %	16.90	--
NOx, ppm		--
NOx, ppm @ 15% O2	9	**23**
CO, ppm		--
CO, ppm @ 15% O2	1	**100**
SO2, ppm		--
SO2, ppm @ 15% O2	0	**150**
Sampler (name)	MITCH	--

Analyzer
Ecom EN3
S/N 5258

Alternate Analyzer Used? Y ☐ N ☒ If yes, record info below.
Make/Model
Serial Number

Abbreviations
kW=kilowatts
DCSM=dry standard cubic feet per minute
PPM=parts per million
NOx=Oxides of nitrogen (NO ppm + NO2 ppm)
CO=Carbon Monoxide

Calculations (done by ecom EN3)
ppm@15% O2 = ppm * 5.9 / (20.9-%O2)

EBMUD
Turbine Monthly Emissions Check (15 min)

Turbine	Data	Limits
Test Date	3/12/25	--
Test Start Time	1425:58	--
Test End Time	1439:59	--
PGS Turbine, kW	3950	--
PGS Turbine Digester Gas Flow Rate, DSCFM	1153	--
Oxygen, O2 %	16.68	--
NOx, ppm		--
NOx, ppm @ 15% O2	7	**23**
CO, ppm		--
CO, ppm @ 15% O2	7	**100**
SO2, ppm		--
SO2, ppm @ 15% O2	~~0~~	**150**
Sampler (name)	BRANDON STEWARD	--

Analyzer
Ecom EN3
S/N 5258

Alternate Analyzer Used? Y ☐ N ☒ If yes, record info below.
Make/Model
Serial Number

Abbreviations
kW=kilowatts
DCSM=dry standard cubic feet per minute
PPM=parts per million
NOx=Oxides of nitrogen (NO ppm + NO2 ppm)
CO=Carbon Monoxide

Calculations (done by ecom EN3)
ppm@15% O2 = ppm * 5.9 / (20.9-%O2)

EBMUD

Turbine Monthly Emissions Check (15 min)

Turbine	Data	Limits
Test Date	4/15/25	--
Test Start Time	13:49:53	--
Test End Time	14:03:54	--
PGS Turbine, kW	4050	--
PGS Turbine Digester Gas Flow Rate, DSCFM	1150	--
Oxygen, O2 %	15.83	--
NOx, ppm		--
NOx, ppm @ 15% O2	6	**23**
CO, ppm		--
CO, ppm @ 15% O2	0	**100**
SO2, ppm		--
SO2, ppm @ 15% O2	0	**150**
Sampler (name)	BRANDON STEWART	--

Analyzer
Ecom EN3
S/N 5258

Alternate Analyzer Used? Y ☐ N ☒ If yes, record info below.
Make/Model
Serial Number

Abbreviations
kW=kilowatts
DCSM=dry standard cubic feet per minute
PPM=parts per million
NOx=Oxides of nitrogen (NO ppm + NO2 ppm)
CO=Carbon Monoxide

Calculations (done by ecom EN3)
ppm@15% O2 = ppm * 5.9 / (20.9-%O2)

EBMUD
Turbine Monthly Emissions Check (15 min)

Turbine	Data	Limits
Test Date	5-20-25	--
Test Start Time	13:38:36	--
Test End Time	13:52:37	--
PGS Turbine, kW	3950	--
PGS Turbine Digester Gas Flow Rate, DSCFM	1160	--
Oxygen, O2 %	16.31	--
NOx, ppm		--
NOx, ppm @ 15% O2	5	**23**
CO, ppm		--
CO, ppm @ 15% O2	1	**100**
SO2, ppm		--
SO2, ppm @ 15% O2	0	**150**
Sampler (name)	ANDRES GONZALEZ	--

Analyzer
Ecom EN3
S/N 5258

Alternate Analyzer Used? Y ☐ N ☒ If yes, record info below.
Make/Model
Serial Number

Abbreviations
kW=kilowatts
DCSM=dry standard cubic feet per minute
PPM=parts per million
NOx=Oxides of nitrogen (NO ppm + NO2 ppm)
CO=Carbon Monoxide

Calculations (done by ecom EN3)
ppm@15% O2 = ppm * 5.9 / (20.9-%O2)

ATTACHMENT 7

MAIN WASTEWATER TREATMENT PLANT FLOWS

East Bay Municipal Utility District
ANNUAL WASTEWATER MONITORING SUMMARY 2025

STATION: WWTP INFLUENT - INF-001
STATION: WWTP EFFLUENT - EFF-001/EFF-001B
FLOWS & CONVENTIONAL POLLUTANTS (R2-2020-0024)

	INF (MGD)				EFF (MGD)			CBOD						TSS					
	Mo. Avg	Max Daily Avg	Min Daily Avg	3-mo Dry Season Avg	Mo. Avg	Max Daily Avg	Min Daily Avg	Inf (INF-001) mg/L Month Avg	Eff mg/L Month Avg	Eff mg/L Max Week Avg	# excs/ # of Analyses Mo. Avg	# excs/ # of Analyses Week Avg	% Removal Month Avg	Inf mg/L Month Avg	Eff mg/L Month Avg	Eff mg/L Max Week Avg	# excs/ # of Analyses Mo. Avg	# excs/ # of Analyses Week Avg	% Removal Month Avg
Limits:				**120**					**25**	**40**			**Min 85**		**30**	**45**			**Min 85**
Jan	55	64	50		51	61	46	311	6	6	0/ 1	0/ 4	98%	386	7	7	0/ 1	0/ 4	98%
Feb	88	181	58		83	183	54	252	9	12	0/ 1	0/ 4	96%	432	13	17	0/ 1	0/ 4	97%
Mar	59	74	46		55	72	55	344	5	7	0/ 1	0/ 5	99%	545	6	10	0/ 1	0/ 5	99%
Apr	52	58	46		49	56	46	377	5	6	0/ 1	0/ 4	99%	561	9	9	0/ 1	0/ 4	99%
May	47	50	43		46	48	42	393	6	7	0/ 1	0/ 5	99%	511	9	10	0/ 1	0/ 5	98%
Jun	45	52	43		44	49	42	342	5	5	0/ 1	0/ 4	99%	568	9	10	0/ 1	0/ 4	99%
Jul																			
Aug																			
Sep																			
Oct																			
Nov																			
Dec																			
Avg	58	80	48		55	78	48	337	6	7			98%	501	9	11			98%
Max	88	181	58		83	183	55	393	9	12			99%	568	13	17			99%
Min	45	50	43		44	48	42	252	5	5			96%	386	6	7			97%
Exc/Analyses											0/ 6	0/ 26	0/12				0/ 6	0/ 26	0/12

Exc / Analyses = number of exceedances / number of analyses

ATTACHMENT 8 -- IPS Scrubber Inlet and Outlet H2S Readings, ppm

(A-462 is Fine Screen Room Scrubber, A-463,A-464 are Course Screen Room/IPS Scrubbers)

	Coarse Scrubber		Fine Scrubber		Coarse Scrubber		Fine Scrubber	
	Inlet Avg	Outlet Avg	Inlet Avg	Outlet Avg	Inlet Max	Outlet Max	Inlet Max	Outlet Max
01-Jan-25	2.8	0.0	0.0	0.0	2.9	0.0	0.0	0.0
02-Jan-25	2.8	0.0	0.0	0.0	4.3	0.0	0.0	0.0
03-Jan-25	2.9	0.0	0.0	0.0	4.5	0.0	0.0	0.0
04-Jan-25	2.8	0.0	0.0	0.0	2.8	0.0	0.0	0.0
05-Jan-25	2.8	0.0	0.0	0.0	4.3	0.0	0.0	0.0
06-Jan-25	2.8	0.0	0.0	0.0	2.8	0.0	0.0	0.0
07-Jan-25	2.9	0.0	0.0	0.0	5.0	0.0	0.0	0.3
08-Jan-25	3.3	0.0	0.0	0.0	8.0	0.0	1.5	0.0
09-Jan-25	3.0	0.0	0.0	0.0	5.9	0.0	0.0	0.0
10-Jan-25	3.3	0.0	0.0	0.0	5.0	0.0	0.0	0.3
11-Jan-25	4.1	0.0	0.0	0.0	8.1	0.0	0.0	0.4
12-Jan-25	3.4	0.0	0.0	0.1	5.2	0.0	0.0	0.4
13-Jan-25	3.0	0.0	0.0	0.0	4.8	0.0	0.0	0.4
14-Jan-25	2.8	0.0	0.0	0.0	4.5	0.0	0.0	0.3
15-Jan-25	2.8	0.0	0.0	0.0	4.5	0.0	0.0	0.3
16-Jan-25	2.8	0.0	0.0	0.0	2.9	0.0	0.0	0.0
17-Jan-25	2.8	0.0	0.0	0.0	2.9	0.0	0.0	0.0
18-Jan-25	3.0	0.0	0.0	0.0	4.8	0.0	0.0	0.0
19-Jan-25	2.8	0.0	0.0	0.0	2.9	0.0	0.0	0.0
20-Jan-25	3.2	0.0	0.0	0.0	4.8	0.0	0.0	0.5
21-Jan-25	3.6	0.0	0.0	0.0	6.4	0.0	0.0	0.0
22-Jan-25	2.9	0.0	0.0	0.0	4.8	0.0	0.0	0.4
23-Jan-25	3.9	0.0	0.0	0.0	9.0	0.0	1.5	0.5
24-Jan-25	3.0	0.0	0.0	0.0	4.6	0.0	0.0	0.4
25-Jan-25	3.2	0.0	0.0	0.1	4.6	0.0	0.0	0.7
26-Jan-25	3.0	0.0	0.0	0.0	15.8	0.0	0.0	0.5
27-Jan-25	3.0	0.0	0.0	0.0	5.1	0.0	0.0	0.3
28-Jan-25	2.9	0.0	0.0	0.0	4.4	0.0	0.0	0.0
29-Jan-25	2.9	0.0	0.0	0.0	2.9	0.0	0.0	0.7
30-Jan-25	2.9	0.0	0.0	0.0	2.9	0.0	0.0	0.3
31-Jan-25	2.9	0.0	0.0	0.0	2.9	0.0	0.0	0.0
Monthly Avg	3.0	0.0	0.0	0.0				
Monthly Max					15.8	0.0	1.5	0.7

	Coarse Scrubber		Fine Scrubber		Coarse Scrubber		Fine Scrubber	
	Inlet Avg	Outlet Avg	Inlet Avg	Outlet Avg	Inlet Max	Outlet Max	Inlet Max	Outlet Max
01-Feb-25	2.8	0.0	0.0	0.0	2.9	0.0	0.0	0.0
02-Feb-25	2.8	0.0	0.0	0.0	2.8	0.0	0.0	0.0
03-Feb-25	2.8	0.0	0.0	0.0	2.8	0.0	0.0	0.0
04-Feb-25	2.9	0.0	0.0	0.0	2.9	0.0	0.0	0.0
05-Feb-25	2.8	0.0	0.0	0.0	2.9	0.0	0.0	0.0
06-Feb-25	2.9	0.0	0.0	0.0	2.9	0.0	0.0	0.0
07-Feb-25	2.8	0.0	0.0	0.0	2.9	0.0	0.0	0.0
08-Feb-25	2.8	0.0	0.0	0.0	2.9	0.0	0.0	0.0
09-Feb-25	2.8	0.0	0.0	0.0	2.9	0.0	0.0	0.0
10-Feb-25	2.8	0.0	0.0	0.0	2.9	0.0	0.0	0.0
11-Feb-25	2.9	0.0	0.0	0.0	2.9	0.0	0.0	0.0
12-Feb-25	2.8	0.0	0.0	0.0	2.9	0.0	0.0	0.0
13-Feb-25	2.9	0.0	0.0	0.0	2.9	0.0	0.0	0.0
14-Feb-25	2.8	0.0	0.0	0.0	2.9	0.0	0.0	0.0
15-Feb-25	2.8	0.0	0.0	0.0	2.9	0.0	0.0	0.0
16-Feb-25	2.8	0.0	0.0	0.0	2.8	0.0	0.0	0.0
17-Feb-25	2.8	0.0	0.0	0.0	2.8	0.0	0.0	0.0
18-Feb-25	2.8	0.0	0.0	0.0	2.8	0.0	0.0	0.0
19-Feb-25	2.8	0.0	0.0	0.0	2.8	0.0	0.0	0.0
20-Feb-25	2.8	0.0	0.0	0.0	2.8	0.0	0.0	0.0
21-Feb-25	2.8	0.0	0.0	0.0	2.8	0.0	0.0	0.0
22-Feb-25	2.8	0.0	0.0	0.0	2.8	0.0	0.0	0.0
23-Feb-25	2.8	0.0	0.0	0.0	2.8	0.0	0.0	0.0
24-Feb-25	2.8	0.0	0.0	0.0	2.8	0.0	0.0	0.0
25-Feb-25	2.8	0.0	0.0	0.0	2.8	0.0	0.0	0.0
26-Feb-25	2.8	0.0	0.0	0.0	2.8	0.0	0.0	0.0
27-Feb-25	2.8	0.0	0.0	0.0	2.8	0.0	0.0	0.0
28-Feb-25	2.8	0.0	0.0	0.0	2.8	0.0	0.0	0.0
Monthly Avg	2.8	0.0	0.0	0.0				
Monthly Max					2.9	0.0	0.0	0.0

ATTACHMENT 8 -- IPS Scrubber Inlet and Outlet H2S Readings, ppm

	Coarse Scrubber		Fine Scrubber		Coarse Scrubber		Fine Scrubber	
	Inlet Avg	Outlet Avg	Inlet Avg	Outlet Avg	Inlet Max	Outlet Max	Inlet Max	Outlet Max
01-Mar-25	2.8	0.0	0.0	0.0	2.9	0.0	0.0	0.0
02-Mar-25	2.8	0.0	0.0	0.0	2.9	0.0	0.0	0.0
03-Mar-25	2.8	0.0	0.0	0.0	2.9	0.0	0.0	0.0
04-Mar-25	2.8	0.0	0.0	0.0	2.9	0.0	0.0	0.0
05-Mar-25	2.8	0.0	0.0	0.0	2.9	0.0	0.0	0.0
06-Mar-25	2.8	0.0	0.0	0.0	2.9	0.0	0.0	0.0
07-Mar-25	2.8	0.0	0.0	0.0	6.8	0.0	0.0	0.0
08-Mar-25	2.8	0.0	0.0	0.0	2.9	0.0	0.0	0.0
09-Mar-25	2.8	0.0	0.0	0.0	2.8	0.0	0.0	0.0
10-Mar-25	2.8	0.0	0.0	0.0	2.8	0.0	0.0	0.0
11-Mar-25	2.9	0.0	0.0	0.0	3.0	0.0	0.0	0.0
12-Mar-25	3.2	0.0	0.0	0.0	3.3	0.0	0.0	0.0
13-Mar-25	1.7	0.0	0.0	0.0	52.3	0.0	0.0	0.0
14-Mar-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15-Mar-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16-Mar-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17-Mar-25	0.1	0.0	0.0	0.0	1.7	0.0	0.0	0.0
18-Mar-25	0.2	0.0	0.0	0.0	1.7	0.0	0.0	0.0
19-Mar-25	0.5	0.0	0.0	0.0	1.7	0.0	0.0	0.0
20-Mar-25	0.6	0.0	0.0	0.0	2.6	0.0	0.0	0.0
21-Mar-25	0.6	0.0	0.0	0.0	2.6	0.0	0.0	0.0
22-Mar-25	1.2	0.0	0.0	0.0	3.8	0.0	0.0	0.0
23-Mar-25	1.4	0.0	0.0	0.0	2.9	0.0	0.0	0.0
24-Mar-25	1.3	0.0	0.0	0.0	2.2	0.0	0.0	0.0
25-Mar-25	1.8	0.0	0.0	0.0	5.6	0.0	0.0	0.0
26-Mar-25	1.9	0.0	0.0	0.0	3.0	0.0	0.0	0.0
27-Mar-25	1.8	0.0	0.0	0.0	3.0	0.0	0.0	0.0
28-Mar-25	1.5	0.0	0.0	0.0	2.3	0.0	0.0	0.0
29-Mar-25	1.5	0.0	0.0	0.0	2.3	0.0	0.0	0.0
30-Mar-25	1.2	0.0	0.0	0.0	1.9	0.0	0.0	0.0
31-Mar-25	1.1	0.0	0.0	0.0	3.0	0.0	0.0	0.0
Monthly Avg	1.7	0.0	0.0	0.0				
Monthly Max					52.3	0.0	0.0	0.0

	Coarse Scrubber		Fine Scrubber		Coarse Scrubber		Fine Scrubber	
	Inlet Avg	Outlet Avg	Inlet Avg	Outlet Avg	Inlet Max	Outlet Max	Inlet Max	Outlet Max
01-Apr-25	1.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0
02-Apr-25	1.2	0.0	0.0	0.0	1.8	0.0	0.0	0.0
03-Apr-25	1.2	0.0	0.0	0.0	2.0	0.0	0.0	0.0
04-Apr-25	1.8	0.0	0.0	0.0	3.0	0.0	0.0	0.0
05-Apr-25	1.7	0.0	0.0	0.0	2.2	0.0	0.0	0.0
06-Apr-25	1.8	0.0	0.0	0.0	2.6	0.0	0.0	0.0
07-Apr-25	2.1	0.0	0.0	0.0	6.6	0.0	0.0	0.0
08-Apr-25	1.8	0.0	0.0	0.0	2.6	0.0	0.0	0.0
09-Apr-25	1.8	0.0	0.0	0.0	2.7	0.0	0.0	0.0
10-Apr-25	2.1	0.0	0.0	0.0	4.1	0.0	0.0	0.0
11-Apr-25	1.9	0.0	0.0	0.0	3.3	0.0	0.0	0.0
12-Apr-25	1.9	0.0	0.0	0.0	2.6	0.0	0.0	0.0
13-Apr-25	2.3	0.0	0.0	0.0	2.9	0.0	0.0	0.0
14-Apr-25	2.2	0.0	0.0	0.0	5.9	0.0	0.0	0.0
15-Apr-25	1.2	0.0	0.0	0.0	3.4	0.0	0.0	0.0
16-Apr-25	1.3	0.0	0.0	0.0	6.0	0.0	0.0	0.0
17-Apr-25	1.3	0.0	0.0	0.0	2.9	0.0	0.0	0.0
18-Apr-25	1.3	0.0	0.0	0.0	2.2	0.0	0.0	0.0
19-Apr-25	1.5	0.0	0.0	0.0	3.4	0.0	0.0	0.0
20-Apr-25	1.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0
21-Apr-25	1.0	0.0	0.0	0.0	3.2	0.0	0.0	0.0
22-Apr-25	1.3	0.0	0.0	0.0	2.5	0.0	0.0	0.0
23-Apr-25	0.8	0.0	0.0	0.0	3.6	0.0	0.0	0.0
24-Apr-25	1.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0
25-Apr-25	0.7	0.0	0.0	0.0	1.7	0.0	0.0	0.0
26-Apr-25	0.9	0.0	0.0	0.0	1.7	0.0	0.0	0.0
27-Apr-25	1.3	0.0	0.0	0.0	2.1	0.0	0.0	0.0
28-Apr-25	1.2	0.0	0.0	0.0	4.4	0.0	0.0	0.3
29-Apr-25	0.9	0.0	0.0	0.0	1.6	0.0	0.0	0.0
30-Apr-25	1.4	0.0	0.0	0.0	3.3	0.0	1.5	0.3
Monthly Avg	1.4	0.0	0.0	0.0				
Monthly Max					6.6	0.0	1.5	0.3

ATTACHMENT 8 -- IPS Scrubber Inlet and Outlet H2S Readings, ppm

	Coarse Scrubber		Fine Scrubber		Coarse Scrubber		Fine Scrubber	
	Inlet Avg	Outlet Avg	Inlet Avg	Outlet Avg	Inlet Max	Outlet Max	Inlet Max	Outlet Max
01-May-25	1.6	0.0	0.0	0.0	2.6	0.0	0.0	0.0
02-May-25	2.2	0.0	0.0	0.0	3.7	0.0	0.0	0.0
03-May-25	1.7	0.0	0.0	0.0	2.7	0.0	1.5	0.7
04-May-25	2.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0
05-May-25	2.5	0.0	0.0	0.0	4.4	0.0	0.0	0.0
06-May-25	2.0	0.0	0.0	0.0	3.4	0.0	0.0	0.0
07-May-25	1.9	0.0	0.0	0.0	3.9	0.0	0.0	0.0
08-May-25	2.5	0.0	0.0	0.0	4.5	0.0	0.0	0.0
09-May-25	2.3	0.0	0.0	0.0	5.4	0.0	0.0	0.0
10-May-25	2.6	0.0	0.0	0.0	4.2	0.0	0.0	0.0
11-May-25	1.8	0.0	0.0	0.0	3.1	0.0	0.0	0.0
12-May-25	1.9	0.0	0.0	0.0	5.7	0.0	0.0	0.0
13-May-25	1.7	0.0	0.0	0.0	2.3	0.0	0.0	0.0
14-May-25	2.3	0.0	0.0	0.0	3.8	0.0	0.0	0.0
15-May-25	3.4	0.0	0.0	0.0	6.8	0.0	0.0	0.0
16-May-25	3.9	0.0	0.0	0.0	5.9	0.0	0.0	0.0
17-May-25	3.9	0.0	0.0	0.0	6.7	0.0	0.0	0.0
18-May-25	4.2	0.0	0.0	0.0	6.4	0.0	0.0	0.0
19-May-25	3.9	0.0	0.0	0.0	7.6	0.0	0.0	0.0
20-May-25	2.6	0.0	0.0	0.0	7.7	0.0	0.0	0.0
21-May-25	0.5	0.0	0.0	0.0	2.9	0.0	0.0	0.0
22-May-25	0.2	0.0	0.0	0.0	4.5	0.0	0.0	0.0
23-May-25	0.4	0.0	0.0	0.0	2.9	0.0	0.0	0.0
24-May-25	0.7	0.0	0.0	0.0	5.6	0.0	0.0	0.0
25-May-25	0.6	0.0	0.0	0.0	4.9	0.0	0.0	0.0
26-May-25	0.2	0.0	0.0	0.0	2.2	0.0	0.0	0.0
27-May-25	2.8	0.0	0.0	0.0	10.2	0.0	0.0	0.0
28-May-25	0.6	0.0	0.0	0.0	4.9	0.0	0.0	0.0
29-May-25	2.2	0.0	0.0	0.0	8.4	0.0	0.0	0.0
30-May-25	2.0	0.0	0.0	0.0	7.3	0.0	0.0	0.0
31-May-25	0.7	0.0	0.0	0.0	3.6	0.0	0.0	0.0
Monthly Avg	2.0	0.0	0.0	0.0				
Monthly Max					10.2	0.0	1.5	0.7

	Coarse Scrubber		Fine Scrubber		Coarse Scrubber		Fine Scrubber	
	Inlet Avg	Outlet Avg	Inlet Avg	Outlet Avg	Inlet Max	Outlet Max	Inlet Max	Outlet Max
01-Jun-25	2.2	0.0	0.0	0.0	5.7	0.0	0.0	0.0
02-Jun-25	1.7	0.0	0.0	0.0	14.0	0.0	0.0	0.0
03-Jun-25	1.2	0.0	0.0	0.0	12.6	0.0	0.0	0.0
04-Jun-25	0.6	0.0	0.0	0.0	6.4	0.0	0.0	0.0
05-Jun-25	1.4	0.0	0.0	0.0	7.6	0.0	0.0	0.0
06-Jun-25	0.3	0.0	0.0	0.0	3.4	0.0	0.0	0.0
07-Jun-25	0.4	0.0	0.0	0.0	4.5	0.0	0.0	0.0
08-Jun-25	1.1	0.0	0.0	0.0	6.4	0.0	0.0	0.0
09-Jun-25	1.1	0.0	0.0	0.0	8.6	0.0	0.0	0.0
10-Jun-25	0.7	0.0	0.0	0.0	4.6	0.0	0.0	0.0
11-Jun-25	6.9	0.0	0.0	0.0	19.4	0.0	0.0	0.0
12-Jun-25	1.2	0.0	0.0	0.0	5.3	0.0	0.0	0.0
13-Jun-25	0.9	0.0	0.0	0.0	7.7	0.0	0.0	0.0
14-Jun-25	1.1	0.0	0.0	0.0	6.7	0.0	0.0	0.0
15-Jun-25	1.7	0.0	0.0	0.0	7.2	0.0	0.0	0.0
16-Jun-25	0.9	0.0	0.0	0.0	8.8	0.0	0.0	0.0
17-Jun-25	1.3	0.0	0.0	0.0	4.9	0.0	0.0	0.0
18-Jun-25	1.7	0.0	0.0	0.0	15.8	0.0	0.0	0.0
19-Jun-25	1.7	0.0	0.0	0.0	11.7	0.0	0.0	0.0
20-Jun-25	0.6	0.0	0.0	0.0	5.2	0.0	0.0	0.0
21-Jun-25	1.0	0.0	0.0	0.0	5.1	0.0	0.0	0.0
22-Jun-25	0.8	0.0	0.0	0.0	3.9	0.0	0.0	0.0
23-Jun-25	0.6	0.0	0.0	0.0	7.7	0.0	0.0	0.0
24-Jun-25	0.1	0.0	0.0	0.0	1.7	0.0	0.0	0.0
25-Jun-25	0.1	0.0	0.0	0.0	4.3	0.0	0.0	0.0
26-Jun-25	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0
27-Jun-25	0.2	0.0	0.0	0.0	3.6	0.0	0.0	0.0
28-Jun-25	0.0	0.0	0.0	0.0	3.1	0.0	0.0	0.0
29-Jun-25	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0
30-Jun-25	0.8	0.0	0.0	0.0	6.1	0.0	0.0	0.0
Monthly Avg	1.1	0.0	0.0	0.0				
Monthly Max					19.4	0.0	0.0	0.0

ATTACHMENT 8 -- IPS Scrubber Inlet and Outlet H2S Readings - Related Outages

Influent Pump Station Odor Scrubber Outage Table

Start	Finish	Duration	Reason
26-Jan-25 14:36	26-Jan-25 15:19	0:43	A463, A464 offline until reset after power glitch
30-Jan-25 09:39	30-Jan-25 11:29	1:50	A463 troubleshooting, swapping between A463 and A464 intermittenly
02-Mar-25 04:32	02-Mar-25 06:17	1:45	A463, A464 offline until reset after power glitch
	Total Down Time	4:18	

Attachment 9

Odor Scrubber Mainteance Records for S-110 (IPS, W-12) and S-170 (Dewatering Building, W-25/W-30)

Area	Wonum	Description	Assetnum	Req Dept	Resp Dept	Status	Type	Reported By	Report Date
W-12 Headworks: IPS, Barscreens (S-110)									
W-12	2025013801	Inlet H2S sensor for BTF Odor Scrubber at IPS has read 2.84 for last month and hasn't dropped at all	W-12-FA-AIT-001	PO	IN	COMP	CM	CAMAN	2/16/2025
W-12	2025013805	Intermediate H2S sensor for BTF Odor Scrubber at IPS is reading negative	W-12-FA-AIT-002	PO	IN	COMP	CM	CAMAN	2/17/2025
W-12	2025036854	ARV on makeup water line allowing foul air to leave BTF. *see long* Please replace or cap ARV for BTF makeup water. I question why an ARV is needed at this location. There are no pumps and the destination for the makeup water is inside the BTF which receives air from supply fans and outlets through the carbon scrubbers.	W-12-FA-BIO-201	PO	MEN	COMP	CM	MEDWARDS	4/5/2025
W-12	2025036925	Odor Scrubber BTF #1 Irrigation Water pH analyzer (see long) Odor Scrubber BTF #1 Irrigation Water pH analyzer (located inside panel) displaying "S1 not communicating" fault. pH reading has been flatlined at 2.15.	W-12-IRR-AIT-128	PO	IN	COMP	CM	MMYEE	4/14/2025
W-12	2025036997	Odor scrubber HMI panel unresponsive to touch commands	W-12-FA-LCP-01	PO	IN	CLOSE	CM	MMYEE	4/20/2025
W-12	2025052495	Please calibrate inlet H2S sensor for BTF odor scrubber at IPS. Reading appears off	W-12-FA-AIT-001	PO	IN	COMP	CM	CAMAN	5/19/2025
W-30 Sludge Handling; Dewatering Building (S-170)									
W-30	2025000059	North odor scrubber hypo leak at pressure gage isolation valve	W-30-TKS-301-00	PO	MEN	COMP	CM	DBECNEL	1/6/2025
W-30	2025023001	East side odor scrubber sump pump float needs replacement, the float switch sometimes doesn't move	W-30-TKS-301-00	PO	ELM	COMP	BD	SZUBRZYC	3/4/2025
W-30	2025023022	Front ramp isn't able to move due to the white PVC odor scrubber pipes are too close and sagging	W-30-GBT-013-00	PO	MEN	COMP	BD	SZUBRZYC	3/5/2025
W-30	2025023088	Change odor scrubber sump pump configuration for portable sump pump discharge line. See attached pic	W-30-TKS-301-00	PO	MEN	COMP	CM	RHELMERS	3/12/2025
W-30	2025023240	North odor scrubber cabinet has leak on pressure gauge North odor scrubber cabinet has leak around pressure gauge. Yellow rag wrapped around it	W-30-TKS-301-00	PO	MEN	COMP	CM	MHARDIN	3/25/2025
W-30	2025023277	B13 foul air manifold (south side) is sagging and held together with duct tape. Please stabilize.	W-30-GBT-013-00	PO	MEN	COMP	CM	RHELMERS	3/27/2025
W-30	2025032083	north odor scrubber panel has a significant hypo leak, tagged and marked north odor scrubber panel has a significant hypo leak at the joint downstream of the psi gauge isolation valve, valve has been isolated	W-30-TKS-301-00	PO	MEN	COMP	CM	DDO	3/31/2025
W-25	2025052360	Odor scubber water mister is not a good design. Can you get rid of the rotameter and hard pipe it?	W-25-DSL-CTF-0C5-01	PO	MEN	COMP	BD	SZUBRZYC	5/1/2025

W-30	2025052537	Small Hypo leak at "T" going to Dewatering odor scrubbers - see long On the East side of the primary effluent Channel there is a section of pipe that feeds the Dewatering odor scrubbers. That pipe has a "T" off of it, to the right of the temporary stairs. The "T" connects to an orange handled shut off valve, that may no longer be needed. the grey "T" has a pin hole leak on the south side that is slowly dripping.	W-30-MISC-000-00	PO	MEN	COMP	BD	DTRAVERS	5/22/2025

ATTACHMENT 10 -- S-170 Waste Activated Sludge Throughput

2025 January - June Gravity Belt Thickener Summary Flow Table

Note: Kgal=1,000 gallons

Daily Flows	January Kgal	February Kgal	March Kgal	April Kgal	May Kgal	June Kgal
1st	1,321	1,609	1,718	814	1,211	1,132
2nd	1,965	1,560	1,360	1,030	1,390	1,156
3rd	1,654	2,015	1,322	1,296	1,323	1,120
4th	985	1,674	1,104	1,134	1,339	1,152
5th	1,014	1,368	1,761	1,073	1,294	1,126
6th	1,355	1,525	1,424	1,111	1,308	1,138
7th	1,380	1,177	1,013	1,160	1,240	1,140
8th	1,254	1,272	1,065	1,083	979	1,178
9th	1,401	1,358	1,017	1,110	774	1,266
10th	1,575	1,770	1,200	1,089	844	1,249
11th	1,584	1,990	1,726	1,111	972	1,213
12th	1,541	1,602	1,789	1,149	879	1,191
13th	1,619	1,380	1,267	1,066	1,027	1,245
14th	1,587	1,138	1,457	1,359	437	1,298
15th	1,582	1,294	1,388	1,102	985	1,344
16th	1,592	1,301	1,149	1,303	1,054	1,353
17th	1,565	1,382	1,166	1,132	1,048	1,463
18th	1,555	1,414	1,040	1,249	1,071	1,573
19th	1,549	1,455	568	1,250	992	1,699
20th	1,563	1,383	1,086	1,387	1,023	1,692
21st	1,578	1,451	676	1,410	1,043	1,744
22nd	1,529	1,477	921	1,552	1,048	1,735
23rd	1,582	1,342	1,032	1,188	1,076	1,727
24th	1,590	1,466	1,483	1,607	1,079	1,768
25th	1,540	1,356	2,146	1,680	1,084	1,792
26th	1,506	1,612	1,676	1,566	1,079	2,274
27th	1,601	1,722	1,035	1,528	1,110	1,696
28th	1,604	1,806	1,714	1,622	1,135	1,742
29th	1,991		1,409	1,497	1,141	1,739
30th	2,015		948	1,197	1,144	1,791
31st	1,688		913		1,129	
Monthly Total	47,865	41,896	39,568	37,854	33,256	43,734
Semi-Annual Total	244,174					

Gravity Belt Thickener and Dewatering Centrifuge Odor Scrubber Outage Table

Start	Finish	Duration	Reason
24-Jan-25 12:25	24-Jan-25 13:20	0:55	Compressor down for oil change, then electrical
28-Mar-25 08:00	28-Mar-25 10:00	2:00	Hypo leak repair at pressure gauge
	Total Down Time, DWB	2:55	
06-Jan-25 09:15	06-Jan-25 09:50	0:35	Hypo leak repair
08-Feb-25 13:00	08-Feb-25 13:30	0:30	Hypo leak repair

ATTACHMENT 11

2025 January - June Blend Tank Summary Flow Table

(Sum of 1st Stage Digester feed substituted due to questionable Blend meter)

Daily Flows	January Kgal	February Kgal	March Kgal	April Kgal	May Kgal	June Kgal
1st	650	849	751	795	678	562
2nd	751	662	532	926	707	657
3rd	769	746	754	701	655	663
4th	603	905	759	933	567	820
5th	586	611	917	654	676	776
6th	853	696	784	693	738	716
7th	804	771	766	694	551	609
8th	883	564	636	692	713	566
9th	851	525	513	776	740	648
10th	779	671	758	814	576	699
11th	692	964	901	758	598	792
12th	546	915	908	644	674	786
13th	684	805	825	638	736	685
14th	776	687	863	1,010	642	567
15th	756	655	771	890	734	493
16th	795	525	565	927	729	702
17th	806	633	736	889	622	812
18th	629	714	717	847	529	827
19th	570	745	706	584	662	711
20th	778	713	881	626	634	713
21st	788	771	542	631	773	547
22nd	853	600	702	767	753	421
23rd	907	541	597	769	737	598
24th	936	700	913	783	609	693
25th	759	721	1,110	837	512	771
26th	709	1,045	981	626	569	620
27th	704	1,025	799	561	664	653
28th	734	906	909	651	804	675
29th	885		751	729	750	373
30th	873		582	673	730	628
31st	821		760		631	
Monthly Total	23,529	20,663	23,691	22,517	20,695	19,784
Semi-Annual Total	130,879					

ATTACHMENT 12 - DIGESTER GAS SAMPLING DATA

EBMUD Biogas H2S
January - June 2025

2025	Cogen Feed H2S (ppm)	365 Day Avg H2S (ppm)
1/1/2025	85	117
1/2/2025	193	117
1/3/2025	132	117
1/4/2025	108	117
1/5/2025	118	117
1/6/2025	142	117
1/7/2025	367	117
1/8/2025	277	118
1/9/2025	121	118
1/10/2025	130	118
1/11/2025	195	118
1/12/2025	124	119
1/13/2025	193	119
1/14/2025	168	119
1/15/2025	162	119
1/16/2025	194	119
1/17/2025	182	120
1/18/2025	122	120
1/19/2025	113	120
1/20/2025	246	120
1/21/2025	248	121
1/22/2025	192	121
1/23/2025	152	121
1/24/2025	161	122
1/25/2025	73	122
1/26/2025	159	122
1/27/2025	233	122
1/28/2025	160	122
1/29/2025	215	123
1/30/2025	184	123
1/31/2025	155	123
2/1/2025	189	123
2/2/2025	116	124
2/3/2025	88	124
2/4/2025	169	124
2/5/2025	123	124
2/6/2025	117	124
2/7/2025	107	124
2/8/2025	58	124
2/9/2025	151	124
2/10/2025	138	124
2/11/2025	240	124
2/12/2025	143	124
2/13/2025	167	124
2/14/2025	176	125
2/15/2025	172	125
2/16/2025	108	124
2/17/2025	149	124
2/18/2025	146	124
2/19/2025	133	124
2/20/2025	154	125
2/21/2025	123	125
2/22/2025	150	124
2/23/2025	146	124
2/24/2025	130	124
2/25/2025	220	124
2/26/2025	115	124
2/27/2025	183	124
2/28/2025	136	124

Media replacment on 3/29 or 3/30?
resulting in minimal detect

2025	Cogen Feed H2S (ppm)	365 Day Avg H2S (ppm)
3/1/2025	152	124
3/2/2025	193	124
3/3/2025	133	124
3/4/2025	162	124
3/5/2025	121	124
3/6/2025	141	124
3/7/2025	146	124
3/8/2025	135	124
3/9/2025	169	124
3/10/2025	176	124
3/11/2025	160	124
3/12/2025	130	124
3/13/2025	157	124
3/14/2025	232	124
3/15/2025	152	124
3/16/2025	164	124
3/17/2025	183	124
3/18/2025	164	124
3/19/2025	157	124
3/20/2025	173	124
3/21/2025	106	123
3/22/2025	159	124
3/23/2025	120	123
3/24/2025	111	123
3/25/2025	152	123
3/26/2025	147	124
3/27/2025	141	124
3/28/2025	96	124
3/29/2025	96	124
3/30/2025	80	123
3/31/2025	80	123
4/1/2025	86	123
4/2/2025	86	122
4/3/2025	92	122
4/4/2025	75	122
4/5/2025	113	122
4/6/2025	146	122
4/7/2025	120	122
4/8/2025	124	122
4/9/2025	106	121
4/10/2025	112	121
4/11/2025	109	121
4/12/2025	99	121
4/13/2025	111	121
4/14/2025	159	121
4/15/2025	128	121
4/16/2025	189	121
4/17/2025	185	121
4/18/2025	126	121
4/19/2025	170	121
4/20/2025	100	121
4/21/2025	195	121
4/22/2025	134	121
4/23/2025	110	120
4/24/2025	141	120
4/25/2025	133	120
4/26/2025	171	120
4/27/2025	133	120
4/28/2025	103	120
4/29/2025	124	120
4/30/2025	115	120

2025	Cogen Feed H2S (ppm)	365 Day Avg H2S (ppm)
5/1/2025	196	120
5/2/2025	253	120
5/3/2025	127	120
5/4/2025	134	120
5/5/2025	94	120
5/6/2025	142	119
5/7/2025	141	119
5/8/2025	95	119
5/9/2025	104	119
5/10/2025	164	119
5/11/2025	118	119
5/12/2025	156	119
5/13/2025	124	119
5/14/2025	136	119
5/15/2025	151	119
5/16/2025	164	119
5/17/2025	191	120
5/18/2025	166	120
5/19/2025	160	120
5/20/2025	242	120
5/21/2025	211	120
5/22/2025	145	120
5/23/2025	166	120
5/24/2025	191	120
5/25/2025	220	121
5/26/2025	462	122
5/27/2025	112	122
5/28/2025	147	122
5/29/2025	172	122
5/30/2025	230	122
5/31/2025	156	122
6/1/2025	140	122
6/2/2025	133	122
6/3/2025	187	122
6/4/2025	135	123
6/5/2025	198	123
6/6/2025	125	123
6/7/2025	135	123
6/8/2025	176	123
6/9/2025	250	124
6/10/2025	231	124
6/11/2025	168	124
6/12/2025	145	124
6/13/2025	167	125
6/14/2025	171	125
6/15/2025	200	125
6/16/2025	220	126
6/17/2025	241	126
6/18/2025	239	126
6/19/2025	75	126
6/20/2025	105	127
6/21/2025	117	126
6/22/2025	160	127
6/23/2025	189	127
6/24/2025	152	127
6/25/2025	95	127
6/26/2025	63	127
6/27/2025	121	127
6/28/2025	188	128
6/29/2025	184	128
6/30/2025	167	128

Rolling 365-Day limit: 200 ppm

ATTACHMENT 13 - TOTAL DIGESTER GAS COMBUSTION

EBMUD Biogas to Combustion Devices
January - June 2025

2025	Total Combustion, SCFM		
	Daily Max	Daily Avg	365-Day Avg
1/1/2025	2,915	1,994	2,340
1/2/2025	4,188	2,876	2,343
1/3/2025	3,086	2,361	2,344
1/4/2025	2,788	2,029	2,342
1/5/2025	2,406	1,730	2,341
1/6/2025	3,713	2,878	2,343
1/7/2025	6,376	3,492	2,349
1/8/2025	4,602	3,692	2,354
1/9/2025	5,096	4,063	2,359
1/10/2025	4,841	3,503	2,361
1/11/2025	4,475	3,383	2,363
1/12/2025	3,157	2,192	2,364
1/13/2025	3,366	2,358	2,364
1/14/2025	3,364	2,454	2,367
1/15/2025	3,410	2,600	2,369
1/16/2025	4,241	3,475	2,371
1/17/2025	4,476	3,214	2,370
1/18/2025	3,353	2,463	2,370
1/19/2025	2,719	1,905	2,369
1/20/2025	3,597	2,796	2,371
1/21/2025	3,844	3,184	2,376
1/22/2025	4,467	3,575	2,380
1/23/2025	4,289	3,303	2,381
1/24/2025	4,884	3,216	2,383
1/25/2025	2,777	2,060	2,383
1/26/2025	3,646	1,939	2,381
1/27/2025	3,205	1,969	2,380
1/28/2025	4,764	2,785	2,383
1/29/2025	4,495	2,934	2,387
1/30/2025	4,290	3,157	2,390
1/31/2025	2,906	2,185	2,389
2/1/2025	2,911	2,335	2,388
2/2/2025	2,873	2,210	2,388
2/3/2025	4,082	2,208	2,389
2/4/2025	4,543	3,195	2,394
2/5/2025	2,609	1,765	2,394
2/6/2025	3,320	2,497	2,396
2/7/2025	4,327	3,259	2,398
2/8/2025	3,006	2,386	2,397
2/9/2025	2,908	2,141	2,397
2/10/2025	4,482	2,100	2,398
2/11/2025	5,228	3,376	2,403
2/12/2025	3,216	2,108	2,404
2/13/2025	5,155	3,711	2,408
2/14/2025	4,903	3,610	2,410
2/15/2025	4,023	3,379	2,411
2/16/2025	3,890	2,478	2,411
2/17/2025	5,435	3,435	2,414
2/18/2025	5,415	3,240	2,419
2/19/2025	4,091	3,120	2,422
2/20/2025	3,572	2,449	2,422
2/21/2025	4,158	2,303	2,421
2/22/2025	2,269	1,625	2,419
2/23/2025	2,504	1,762	2,416
2/24/2025	2,341	1,829	2,416
2/25/2025	3,776	2,695	2,420
2/26/2025	4,396	3,281	2,423
2/27/2025	4,945	3,596	2,426
2/28/2025	3,721	2,848	2,425

3,400 Annual Average Limit

2025	Total Combustion, SCFM		
	Daily Max	Daily Avg	365-Day Avg
3/1/2025	3,951	2,387	2,423
3/2/2025	4,218	1,845	2,422
3/3/2025	4,278	2,741	2,424
3/4/2025	4,890	3,076	2,428
3/5/2025	5,246	3,406	2,433
3/6/2025	4,901	3,598	2,438
3/7/2025	4,503	2,946	2,440
3/8/2025	3,640	2,004	2,439
3/9/2025	0	1,673	2,437
3/10/2025	4,494	2,312	2,438
3/11/2025	3,313	2,645	2,441
3/12/2025	3,327	2,530	2,443
3/13/2025	3,977	2,792	2,443
3/14/2025	4,863	3,056	2,444
3/15/2025	2,844	2,131	2,443
3/16/2025	3,383	2,221	2,442
3/17/2025	4,615	2,799	2,445
3/18/2025	4,247	3,011	2,449
3/19/2025	5,097	3,315	2,452
3/20/2025	5,642	3,458	2,456
3/21/2025	5,067	2,357	2,456
3/22/2025	2,985	2,132	2,456
3/23/2025	3,008	1,625	2,455
3/24/2025	3,161	2,569	2,456
3/25/2025	3,956	3,145	2,460
3/26/2025	4,440	3,285	2,464
3/27/2025	4,045	2,950	2,464
3/28/2025	4,031	2,455	2,463
3/29/2025	2,731	1,777	2,462
3/30/2025	1,895	1,411	2,459
3/31/2025	1,898	1,787	2,458
4/1/2025	3,314	2,526	2,460
4/2/2025	4,206	2,999	2,464
4/3/2025	3,955	2,745	2,464
4/4/2025	3,529	2,388	2,463
4/5/2025	3,053	1,841	2,462
4/6/2025	2,923	1,923	2,461
4/7/2025	4,079	2,107	2,462
4/8/2025	4,927	2,964	2,466
4/9/2025	4,918	3,250	2,470
4/10/2025	6,318	4,081	2,476
4/11/2025	5,741	3,948	2,479
4/12/2025	4,107	2,972	2,481
4/13/2025	5,424	3,333	2,485
4/14/2025	4,763	3,704	2,491
4/15/2025	3,014	2,336	2,494
4/16/2025	4,026	2,106	2,494
4/17/2025	3,487	2,693	2,496
4/18/2025	4,128	2,712	2,496
4/19/2025	2,907	1,933	2,495
4/20/2025	1,755	1,312	2,492
4/21/2025	2,548	1,952	2,492
4/22/2025	3,147	2,377	2,494
4/23/2025	2,618	2,377	2,494
4/24/2025	4,431	2,562	2,495
4/25/2025	5,233	2,830	2,495
4/26/2025	3,060	1,995	2,492
4/27/2025	1,852	1,385	2,488
4/28/2025	3,426	1,673	2,488
4/29/2025	3,824	2,167	2,489
4/30/2025	3,764	2,288	2,489

2025	Total Combustion, SCFM		
	Daily Max	Daily Avg	365-Day Avg
5/1/2025	3,457	2,012	2,487
5/2/2025	2,917	1,992	2,486
5/3/2025	2,378	1,769	2,484
5/4/2025	1,192	1,172	2,481
5/5/2025	2,369	1,751	2,481
5/6/2025	2,423	1,944	2,482
5/7/2025	1,793	1,285	2,479
5/8/2025	2,520	1,623	2,478
5/9/2025	3,329	2,607	2,479
5/10/2025	3,314	2,306	2,479
5/11/2025	1,728	1,322	2,476
5/12/2025	2,767	1,867	2,476
5/13/2025	3,491	2,436	2,478
5/14/2025	2,372	2,013	2,478
5/15/2025	3,287	2,397	2,479
5/16/2025	2,959	2,211	2,477
5/17/2025	2,388	1,780	2,476
5/18/2025	1,737	1,289	2,472
5/19/2025	2,337	1,801	2,472
5/20/2025	2,531	1,733	2,473
5/21/2025	3,485	2,558	2,474
5/22/2025	3,496	2,558	2,474
5/23/2025	3,179	2,505	2,474
5/24/2025	2,442	1,947	2,471
5/25/2025	1,692	1,308	2,467
5/26/2025	2,519	1,863	2,467
5/27/2025	2,851	1,823	2,468
5/28/2025	4,901	2,985	2,472
5/29/2025	3,561	2,879	2,475
5/30/2025	4,167	2,692	2,476
5/31/2025	3,006	1,799	2,473
6/1/2025	1,996	1,409	2,470
6/2/2025	2,809	2,081	2,470
6/3/2025	3,086	2,519	2,472
6/4/2025	4,836	3,512	2,476
6/5/2025	4,851	3,556	2,480
6/6/2025	4,683	3,753	2,483
6/7/2025	4,364	3,140	2,484
6/8/2025	4,164	1,999	2,483
6/9/2025	2,895	2,507	2,485
6/10/2025	4,441	3,341	2,490
6/11/2025	4,201	3,270	2,493
6/12/2025	4,338	3,448	2,495
6/13/2025	3,650	2,928	2,497
6/14/2025	2,961	2,168	2,497
6/15/2025	1,833	1,372	2,495
6/16/2025	2,915	1,970	2,495
6/17/2025	3,376	2,156	2,496
6/18/2025	4,385	2,822	2,499
6/19/2025	3,496	2,665	2,500
6/20/2025	4,284	2,918	2,502
6/21/2025	3,038	2,267	2,499
6/22/2025	2,185	1,794	2,497
6/23/2025	3,571	2,452	2,498
6/24/2025	4,293	2,967	2,503
6/25/2025	5,243	3,978	2,508
6/26/2025	4,518	3,386	2,511
6/27/2025	3,965	3,186	2,512
6/28/2025	3,961	3,215	2,514
6/29/2025	3,281	2,467	2,514
6/30/2025	4,089	2,933	2,519