

ECOSERVICES

ECO SERVICES OPERATIONS CORP.
MARTINEZ PLANT
100 MOCOCO ROAD
MARTINEZ, CA 94553-1340
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BAY AREA AIR QUALITY
MANAGEMENT DISTRICT

January 24, 2020

Director of Compliance and Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105
Attn: Title V Reports

Subject: Title V Monitoring Report
July 1 through December 31, 2019
Eco Services Martinez Facility
Plant #B1661

Dear Director of Compliance and Enforcement:

Enclosed is the Eco Services' Title V Monitoring Report for the period between July 1 and December 31 of 2019.

I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed 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.

If you have any questions regarding the information contained in this report, please feel free to contact Anthony Koo of my staff at (925) 313-8221.

Sincerely,



Wahyet Li
Plant Manager

Attachments

Title V Semi-Annual Monitoring Verification Report
Eco Services Operations Corp.
100 Mococo Road, Martinez, CA 94553
Site #: B1661
Period: 07/01/2019 to 12/31/2019

Table VII-A
S-1 Sulfuric Acid Plant

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance Y/N
SO2	BAAQMD 9-1-301	Y		Ground level concentrations of SO2 shall not exceed: 0.5 ppm for 3 consecutive minutes AND 0.25 ppm averaged over 60 consecutive minutes AND 0.05 ppm averaged over 24 hours		N	None	Y
SO2	BAAQMD 9-1-309	Y		Gaseous emissions from any source at an H2SO4 plant shall not exceed 300 ppm SO2 @ 12% oxygen	BAAQMD 9-1-502	C	CEM	Y* (Please see footnote below)
SO2	Consent Decree Paragraphs 7.p, 7.x, 11b	Y		2.2 lbs per ton averaged over 365-day period and 3.0 lbs per ton averaged over 3-hour period	Consent Decree paragraph 13	C	CEM	Y
H2SO4	BAAQMD 12-6-301	N		Gaseous emissions from an H2SO4 production unit shall not exceed 0.15 g/kg (0.3 lb/ton) of acid produced	BAAQMD Regulation 12-6-501	P/D	Daily Production Records	Y
H2SO4	BAAQMD 12-6-301	N		Gaseous emissions from an H2SO4 production unit shall not exceed 0.15 g/kg (0.3 lb/ton) of acid produced	BAAQMD Condition #17734, parts 17 and 24	P/D	pH monitoring	Y
H2SO4	BAAQMD 12-6-301	N		Gaseous emissions from an H2SO4 production unit shall not exceed 0.15 g/kg (0.3 lb/ton) of acid produced	BAAQMD Condition #17734, part 22	P/A	Method 8 of Appendix A to 40 CFR 60 and Daily Production Records	Y
H2SO4	40 CFR 60.31d	Y		0.25 grams sulfuric acid mist per kilogram of sulfuric acid produced, the production being expressed as 100% sulfuric acid	BAAQMD Condition #17734, part 22	P/Annual	Source Test	Y
H2SO4	40 CFR 60.83(a)(1)	Y		0.15 lbs per ton of 100% sulfuric acid produced	BAAQMD Condition #17734, part 23	P/Annual	Method 8 of Appendix A to 40 CFR 60 or such method that is approved by EPA	Y
Opacity	40 CFR 60.83(a)(2)	Y		Less than 10% opacity	40 CFR 60.11	P/E	Method 9 of Appendix A to 40 CFR 60	Y
SO3 and H2SO4 Emission Limit	BAAQMD 6-1-320	N		0.04 grain/dscf	BAAQMD Condition #17734, part 22	P/Annual	Source Test	Y
SO3 and H2SO4 Emission Limit	BAAQMD 6-1-320	N		0.04 grain/dscf	BAAQMD Condition #17734, parts 17 and 24	P/D	pH monitoring	Y
Opacity	BAAQMD 6-1-301	N		Ringelmann No. 1 for < 3 min/hr	BAAQMD Condition #17734, parts 17 and 24	P/D	pH monitoring	Y
FP	BAAQMD 6-1-310	N		0.15 grain/dscf	BAAQMD Condition #17734, parts 17 and 22	P/D	Source Test	Y
FP	BAAQMD 6-1-310	N		0.15 grain/dscf	BAAQMD Condition #17734, parts 17 and 24	P/D	pH monitoring	Y

FP	BAAQMD 6-1-311	N		4.10P ^{0.67} lb/hr but not to exceed 40 lb/hr, where P is process weight, ton/hr	BAAQMD Condition #17734, part 22	P/Annual	Source Test/Monthly records	Y
FP	BAAQMD 6-1-311	N		4.10P ^{0.67} lb/hr but not to exceed 40 lb/hr, where P is process weight, ton/hr	BAAQMD Condition #17734, parts 17 and 24	P/D	pH monitoring	Y
Through-put	BAAQMD Condition #17734, Part 4	Y		1834 tons sulfuric acid per day	BAAQMD Condition #17734, Part 15	P/M	records	Y
Through-put	BAAQMD Condition #17734, Part 9	Y		629,062 tons sulfuric acid per year	BAAQMD Condition #17734, Part 15	P/M	records	Y
Scrubber Liquid pH	BAAQMD Condition #17734, Part 17b	Y		pH between 3.5 and 14	BAAQMD Condition #17734, Part 33	P/D	Scrubber liquid sampling and pH testing	Y

* Facility reported an indicated excess SO2 emission from S-1 that lasted <5 minutes on 11/11/2019 due to a breakdown of the instrument air supply line to the abatement tower. No NOV has been issued.

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**Table VII-B
S-2 Auxiliary Boiler**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance Y/N
NOx	BAAQMD 9-7-301.1	N		Emissions shall not exceed 30 ppmv @ 3% O2	BAAQMD Condition #17734, part 22	P/Every 5 years	Source Test	Y
NOx	SIP 9-7-301.1	Y		Emissions shall not exceed 30 ppmv @ 3% O3		N		Y
CO	BAAQMD 9-7-301.4	N		Emissions shall not exceed 400 ppmv, dry @ 3% O2	BAAQMD Condition #17734, part 22	P/Every 5 years	Source Test	Y
CO	SIP 9-7-301.2	Y		Emissions shall not exceed 400 ppmv @ 3% O2		N		Y
SO2	BAAQMD 9-1-301	Y		Ground level concentrations shall not exceed: 0.5 ppm for 3 consecutive minutes AND 0.25 ppm averaged over 60 consecutive minutes AND 0.05 ppm averaged over 24 hours		N		Y
SO2	BAAQMD 9-1-302	Y		300 ppm (dry)		N		Y
Opacity	BAAQMD 6-1-301	Y		Ringelmann No. 1 for < 3 min/hr		N		Y
FP	BAAQMD 6-1-310.3	Y		0.15 grain/dscf @ 6% O2		N		Y
Fuel Usage	BAAQMD Condition #17734, Part 2	Y		978,200,000 standard cubic feet per year at S-2 and S-3	BAAQMD #17734, Part 14	P/M	Fuel Meter	Y
Fuel Usage	BAAQMD Condition #17734, Part 3	Y		2,700,000 standard cubic feet per day at S-2 and S-3	BAAQMD #17734, Part 14	P/M	Fuel Meter	Y

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**Table VII-C
S-3 Natural Gas Preheater Furnace**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance Y/N
Opacity	BAAQMD 6-1-301	N		Ringelmann No. 1 for < 3 min/hr		N		Y
FP	BAAQMD 6-1-310	N		0.15 grains/dscf		N		Y
SO2	BAAQMD 9-1-301	Y		Ground level concentrations shall not exceed: 0.5 ppm for 3 consecutive minutes AND 0.25 ppm averaged over 60 consecutive minutes AND 0.05 ppm averaged over 24 hours		N		Y
SO2	BAAQMD 9-1-302	Y		300 ppm (dry)		N		Y
Fuel Usage	BAAQMD Condition #17734, Part 2			978,200,000 standard cubic feet per year at S-2 and S-3		N		Y
Fuel Usage	BAAQMD Condition #17734, Part 3			2,700,000 standard cubic feet per day at S-2 and S-3		N		Y

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**Table VII-D
S-16 Sulfur Storage Tank, T-2
S-17 Sulfur Storage Tank, T-14
S-18 Sulfur Storage Tank, T-12
S-50 Sulfur Storage Tank, T-16**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance Y/N
Through-put Limits	BAAQMD Condition #17734, Part 5	Y		888 long tons of sulfur per day at S-16, S-17, S-18, and S-50	BAAQMD Condition #17734, part 15	P/M	monthly records	Y
Through-put Limits	BAAQMD Condition #17734, Part 10	Y		324,000 long tons of sulfur per year at S-16, S-17, S-18, and S-50	BAAQMD Condition #17734, part 15	P/M	monthly records	Y

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**Table VII-E
S-19, Alky Tank**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance Y/N
Through-put Limits	BAAQMD Condition #17734, Part 6	Y		960 tons of alkylation acid per day	BAAQMD Condition #17734, Part 15	P/M	monthly records	Y
Through-put Limits	BAAQMD Condition #17734, Part 11	Y		267,351 tons of alkylation acid per year	BAAQMD Condition #17734, Part 15	P/M	monthly records	Y

**Table VII-F
S-20, Alky Tank**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance Y/N
Through-put Limits	BAAQMD Condition #17734, Part 7	Y		960 tons of alkylation acid per day	BAAQMD Condition #17734, part 15	P/M	monthly records	Y
Through-put Limits	BAAQMD Condition #17734, Part 12	Y		267,351 tons of alkylation acid per year	BAAQMD Condition #17734, part 15	P/M	monthly records	Y

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Table VII-G
S-30 Gasoline Dispensing Facility

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance Y/N
VOC	None	N		None	BAAQMD Regulation 8-7-503	P/A	Records	Y
Through-put Limit	BAAQMD Condition #7523, Part 1	Y		400,000 gallons in any year	BAAQMD Condition #17817, Part 1	Y	Monthly Records	Y

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Table VII-H
 S-51 Oleum Storage Tank, T-19

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance Y/N
Oleum	BAAQMD 12-10-401	N		0.01 grams per cubic meter at fence line or 2 ppm as H ₂ SO ₄ over any 10 consecutive minutes		N		N/A Not Operated
Through-put Limits	BAAQMD Condition #13337, part 1	Y		73,000 tons of oleum sulfuric acid material per year	BAAQMD Condition #13337, part 11	P/M	Monthly records	N/A Not Operated
Through-put Limits	BAAQMD Condition #13337, part 13	Y		300 tons of oleum sulfuric acid material per day	BAAQMD Condition #13337, part 11	P/M	Monthly records	N/A Not Operated
Opacity	BAAQMD 6-1-301	N		Ringelmann No. 1 for no more than 3 minutes in any hour	BAAQMD Condition #13337, part 18	P/Q	visible emissions check	N/A Not Operated
Opacity	BAAQMD Condition #13337, part 3			Ringelmann 0.5 or result in fallout to cause a public nuisance	BAAQMD Condition #13337, part 18	P/Q	visible emissions check	N/A Not Operated
SO ₂	BAAQMD 9-1-301	Y		Ground level concentrations of SO ₂ shall not exceed: 0.5 ppm for 3 consecutive minutes AND 0.25 ppm averaged over 60 consecutive minutes AND 0.05 ppm averaged over 24 hours		N		N/A Not Operated
SO ₂	BAAQMD 9-1-302	Y		300 ppm (dry)	BAAQMD Condition 13337, Part 16	P/Annual	Source Test	N/A Not Operated
SO ₂	BAAQMD Condition #13337, Part 7A	Y		0.416 lb/hr SO ₂ in any hour nor 0.416 lb SO ₂ per 60 min avg.	BAAQMD Condition 13337, Part 16	P/Annual	Source Test and Monthly records	N/A Not Operated
SO ₃	BAAQMD Condition #13337, Part 7B	Y		0.5 lb/hr SO ₃ in any hour nor 0.5 lb SO ₃ per 60 min avg.	BAAQMD Condition 13337, Part 16	P/Annual	Source Test and Monthly records	N/A Not Operated
H ₂ SO ₄	BAAQMD Condition #13337, Part 7C	Y		0.558 lb/hr sulfuric acid in any hour nor 0.558 lb sulfuric acid per 60 min avg.	BAAQMD Condition 13337, Part 16	P/Annual	Source Test and Monthly records	N/A Not Operated

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Table VII-I
S-52 Oleum Truck Loading

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance Y/N
Oleum	BAAQMD 12-10-401	N		0.01 grams per cubic meter at fenceline or 2 ppm as H2SO4 over any 10 consecutive minutes		N		N/A Not Operated
Through-put Limits	BAAQMD Condition #13337, part 2	Y		73,000 tons of oleum sulfuric acid material per year	BAAQMD Condition #13337, part 12	P/M	Monthly records	N/A Not Operated
Through-put Limits	BAAQMD Condition #13337, part 14	Y		300 tons of oleum sulfuric acid material per days	BAAQMD Condition #13337, part 12	P/M	Monthly records	N/A Not Operated
Opacity	BAAQMD 6-1-301	N		Ringelmann No. 1 for < 3 min/hr	BAAQMD Condition #13337, part 18	P/Q	visible emissions check	N/A Not Operated
Opacity	BAAQMD Condition #13337, part 3			Ringelmann 0.5 or result in fallout to cause a public nuisance	BAAQMD Condition #13337, part 18	P/Q	visible emissions check	N/A Not Operated
SO2	BAAQMD 9-1-301	Y		Ground level concentrations of SO2 shall not exceed: 0.5 ppm for 3 consecutive minutes AND 0.25 ppm averaged over 60 consecutive minutes AND 0.05 ppm averaged over 24 hours		N		N/A Not Operated
SO2	BAAQMD 9-1-302	Y		300 ppm (dry)	BAAQMD Condition 13337, Part 16	P/Annual	Source Test	N/A Not Operated
SO2	BAAQMD Condition #13337, Part 8A	Y		4.0 lb/hr SO2 nor 2 lbs SO2 per 30 min avg.	BAAQMD Condition 13337, Part 16	P/Annual	Source Test and Monthly records	N/A Not Operated
SO3	BAAQMD Condition #13337, Part 8B	Y		0.5 lb/hr SO3 nor 0.5 lbs SO3 per 60 min avg.	BAAQMD Condition 13337, Part 16	P/Annual	Source Test and Monthly records	N/A Not Operated
H2SO4	BAAQMD Condition #13337, Part 8C	Y		0.746 lb/hr sulfuric acid nor 0.746 lb sulfuric acid per 60 min avg.	BAAQMD Condition 13337, Part 16	P/Annual	Source Test and Monthly records	N/A Not Operated

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**Table VII-J
S-54 Lube Spent Acid Storage Tank, T-360**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance Y/N
Through-put Limits	BAAQMD Condition #17906, part 1	Y		100,000 tons of lube spent acid per year	BAAQMD Condition #17906, part 8	P/M	Monthly records	N/A Not Operated
Through-put Limits	BAAQMD Condition #17906, part 3	Y		400,000 tons of spent alky sulfuric acid per year	BAAQMD Condition #17906, part 8	P/M	Monthly records	N/A Not Operated
Through-put Limits	BAAQMD Condition #17906, part 13	Y		504 tons of lube spent acid per calendar day	BAAQMD Condition #17906, part 8	P/M	Monthly records	N/A Not Operated

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**Table VII-K
S-55 Lube Spent Acid Truck Receiving Facility**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance Y/N
Total Carbon	BAAQMD 8-2-301	Y		15 pounds/day or 300 ppm, dry basis		N		N/A Not Operated
Through-put Limits	BAAQMD Condition #17906, part 2	Y		100,000 tons of lube spent acid per year	BAAQMD Condition #17906, part 9	P/M	Monthly records	N/A Not Operated
Through-put Limits	BAAQMD Condition #17906, part 14	Y		504 tons of lube spent acid per calendar day	BAAQMD Condition #17906, part 9	P/M	Monthly records	N/A Not Operated

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**Table VII-L
S-56 Standby Diesel Fire Pump Engine**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance Y/N
Opacity	BAAQMD 6-1-303.1	N		Ringelmann No. 2 for no more than 3 minutes in any hour		N		Y
Opacity	SIP Regulation 6-303.1	Y		Ringelmann No. 2 for 3 minutes in any hour		N		Y
FP	BAAQMD 6-1-310	N		0.15 grain/dscf		N		Y
FP	SIP Regulation 6-310	Y		0.15 grain/dscf		N		Y
SO2	BAAQMD 9-1-301	Y		Property Line Ground Level Limits: ≤0.5 ppm for 3 minutes and ≤0.25 ppm for 60 minutes and ≤0.05 ppm for 24 hours	None	N		Y
SO2	BAAQMD 9-1-304	Y		Fuel Sulfur Limit 0.5%	None	P/E	Vendor Certification	Y
Reliability Related Hours	BAAQMD 9-8-330	N	1/1/2012	100 hours until 1/1/12 50 hours after 1/1/12	9-8-502	P/E	Totalizing meter record keeping	Y
Reliability Related Hours	BAAQMD Condition #22850, Part 1	N		50 hours per calendar year	BAAQMD Condition #22850, Part 3, 4	P/E	Totalizing meter record keeping	Y

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**Table VII-M
S-57 Sulfuric Acid Cleaning Operation**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance Y/N
VOC	BAAQMD 8-5-331.1	Y		Tank Cleaning Agent limit: Initial boiling point >302 degree F, true vapor pressure <0.5 psia, or VOC content <50 g/l	BAAQMD Condition #24537, Part 9	P/E	Record keeping	N/A Not Operated
SO2	BAAQMD 9-1-302	Y		300 ppm (dry)		N		N/A Not Operated
Hours	BAAQMD Condition #24537, Part 1	Y		1,320 hours per consecutive 12-month period	BAAQMD Condition #24537, Part 9	P/E	Record keeping	N/A Not Operated
Scrubbing solution flow rate	BAAQMD Condition #24537, Part 4	Y		≥ 80 gallons per minute to Venturi scrubber when in operation	BAAQMD Condition #24537, Part 9	P/E	Record keeping	N/A Not Operated
Scrubbing solution flow rate	BAAQMD Condition #24537, Part 6	Y		≥120 gallons per minute to packed column scrubber when in operation	BAAQMD Condition #24537, Part 9	P/E	Record keeping	N/A Not Operated
pH	BAAQMD Condition #24537, Part 8	Y		pH of scrubber solution ≥ 8	BAAQMD Condition #24537, Part 9	P/E	Record keeping	N/A Not Operated