

Application Type Amendment, Major
 Facility Type Industrial
 Major / Minor Major

**NPDES PERMIT FACT SHEET
 INDIVIDUAL INDUSTRIAL WASTE (IW)
 AND IW STORMWATER**

Application No. PA0012637 A-1
 APS ID 1029488
 Authorization ID 1337964

Applicant and Facility Information

Applicant Name	<u>Monroe Energy, LLC</u>	Facility Name	<u>Trainer Refinery</u>
Applicant Address	<u>Trainer Refinery, 4101 Post Road Trainer, PA 19061-5052</u>	Facility Address	<u>Trainer Refinery, 4101 Post Road Trainer, PA 19061</u>
Applicant Contact	<u>Matthew Torell</u>	Facility Contact	<u>Matthew Torell</u>
Applicant Phone	<u>(610) 364-8399</u>	Facility Phone	<u>(610) 364-8399</u>
Client ID	<u>296139</u>	Site ID	<u>270501</u>
SIC Code	<u>2911</u>	Municipality	<u>Trainer Borough</u>
SIC Description	<u>Manufacturing - Petroleum Refining</u>	County	<u>Delaware</u>
Date Application Received	<u>December 21, 2020</u>	EPA Waived?	<u>No</u>
Date Application Accepted	<u></u>	If No, Reason	<u>Major Facility</u>
Purpose of Application	<u>Modify the schedule to design and construct 2 cooling towers.</u>		

Summary of Review

The applicant requests amendment of an NPDES permit to discharge treated process wastewater, noncontact cooling water and stormwater from Trainer Refinery facility. The amendment application requests for a change to the existing permit by modifying the schedule to design and construct two cooling towers (CT) at the facility.

The Trainer Refinery has a cooling water intake structure (CWIS) subject to Clean Water Act Section 316 (b) requirements. Section 316 (b) requires that the location, design, construction and capacity of cooling water intake structures reflect the best technology available (BTA) for minimizing adverse environmental impact.

The current permit which was issued on November 13, 2018 contains a schedule for the construction and installation of a closed cycle recirculating system as part of its requirement to implement BTA to minimize adverse impacts from impingement and entrainment. The system consists of three cooling towers; Area 3 Cooling Tower, FCC Cooling Tower and Alky Cooling Tower. The facility installed tie-ins and started up the Area 3 Cooling Tower during the time of facility's last full outage in 2018. This reduced the facility's use of once-through cooling water by 58%. Implementation of the second and third cooling towers will further reduce river water usage, for a total expected reduction of 94% from pre-cooling tower flows.

In 2020, safety precautions necessary due to COVID-19, such as restrictions of the amount of personnel on-site, have had a severe impact on the facility's ability to perform the detailed engineering and design necessary for cooling tower construction. In addition, due to the unprecedented effects the pandemic has on businesses and even more so on the transportation sector, Monroe implemented a series of financial precautions to protect the company's financial sustainability resulting in substantial restrictions to the capital budgets for years 2020 and 2021. These challenges, coupled with a modification of the facility's schedule for planned outages (from every 4 years to every 5 years), pushes the startup timing of the FCC Cooling Tower back slightly from the date currently listed in the permit of June 30, 2023 to the end of November 2023. This subsequently impacts the implementation schedule associated with the Alky Cooling Tower.

Approve	Deny	Signatures	Date
X		<i>Sara Abraham</i> Sara Reji Abraham, E.I.T. / Project Manager	February 4, 2021
X		<i>Pravin Patel</i> Pravin C. Patel, P.E. / Environmental Engineer Manager	02/08/2021

Summary of Review

Implementation of the Alky Cooling Tower will be aligned with the subsequent facility outage. For safety reasons, much of the physical work necessary to begin running the processes using cooling towers rather than once-through river water must be done during a full facility outage. Physical tie-ins must be made to the piping that circulates cooling water, and completion of these tie-ins must be made while the units are down, or additional significant risks must be managed. With respect to the Alky Cooling Tower, it is critical that the unit be de-inventoried and neutralized to remove all traces of hydrogen fluoride (HF) in order to prevent potential exposure to personnel during installation of cooling tower tie-ins. The facility uses HF as a catalyst in the alkylation process. This project will be completed by the end of 2028.

The below is the proposed schedule for completion of construction and installation of the closed cycle recirculating system:

Define Scope and Submit progress report (FCC CT)	December 31, 2021
Complete detailed design (FCC CT)	December 31, 2022
Complete pre turnaround construction (FCC CT)	August 31, 2023
Complete construction tie-ins and start-up (FCC CT)	November 30, 2023
Develop conceptual design and submit progress report on P&ID at 50% engineering (Alky CT)	August 31, 2024 (if permit is extended)
Complete design at 75% engineering (Alky CT)	August 31, 2025
Complete the detailed design and submit Report (Alky CT)	February 15, 2026
Start field construction for civil/structural (Alky CT)	August 31, 2026
Submit progress report on construction of cooling tower (Alky CT)	August 31, 2027
Complete pre turnaround construction (Alky CT)	August 31, 2028
Complete construction tie-ins and start-up (Alky CT)	December 1, 2028
Complete construction and start-up of all cooling towers	December 31, 2028

An underlying assumption in the proposed schedule is a return to normal or close to normal levels of demand for fuels early in 2021.

The discharge is in compliance with the requirements in the current permit most of the time.

According to the request of the applicant the proposed schedule is incorporated into Part C of the permit.

Since the Area 3 Cooling tower has been completed and the Noncontact Cooling Water has been eliminated from Outfall 002, the Phase I effluent limitation requirements are eliminated from the permit. Also, for Monitoring Point 201, the interim requirements for Aluminum, Total and Selenium, Total are eliminated as currently the permit is in its final term.

Nothing else is changed in the permit.

Act 14 Notifications:

- Trainer Borough - December 14, 2020
- Marcus Hook Borough - November 2, 2020
- Delaware county - November 2, 2020

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania*

Summary of Review

Bulletin at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Compliance History

DMR Data for Outfall 001 (from December 1, 2019 to November 30, 2020)

Parameter	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19
Chronic WET - Ceriodaphnia Survival (TUc) Daily Maximum												1.0
Chronic WET - Ceriodaphnia Reproduction (TUc) Daily Maximum												1.0
Chronic WET - Pimephales Survival (TUc) Daily Maximum												1.0
Chronic WET - Pimephales Growth (TUc) Daily Maximum												1.0

DMR Data for Outfall 002 (from December 1, 2019 to November 30, 2020)

Parameter	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19
TSS (mg/L) Intake Average Monthly	47	38	20	44	24	11	27	156	38.2	46.6	13.5	23.6
TSS (mg/L) Intake Daily Maximum	120	140	87	92	91	22	74	680	140.0	190.0	28.0	86.0
Total Dissolved Solids (mg/L) Intake Average Monthly	201	391	254	149	178	170	129	171	195.0	178.8	160.0	172.2
Total Dissolved Solids (mg/L) Intake Daily Maximum	230	510	470	180	190	200	160	200	300.0	200.0	180.0	190.0

**NPDES Permit Fact Sheet
Trainer Refinery**

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Total Aluminum (mg/L) Intake Average Quarterly			1.10			0.70			0.31			1.38
Total Aluminum (mg/L) Intake Daily Maximum			2.31			1.46			0.38			2.39
Total Cadmium (mg/L) Intake Average Quarterly			< 0.001			< 0.001			< 0.001			< 0.0006
Total Cadmium (mg/L) Intake Daily Maximum			< 0.001			< 0.001			< 0.001			0.0007
Total Copper (mg/L) Intake Average Quarterly			< 0.01			< 0.01			< 0.01			< 0.01
Total Copper (mg/L) Intake Daily Maximum			< 0.01			< 0.01			< 0.01			0.02
Total Silver (mg/L) Intake Average Quarterly			< 0.002			< 0.002			< 0.002			< 0.002
Total Silver (mg/L) Intake Daily Maximum			< 0.002			< 0.002			< 0.002			< 0.002

DMR Data for Outfall 005 (from December 1, 2019 to November 30, 2020)

Parameter	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19
pH (S.U.) Daily Maximum						7.50						7.54
COD (mg/L) Daily Maximum						28						49
TSS (mg/L) Daily Maximum						48						28
Nitrate-Nitrite (mg/L) Daily Maximum						1.05						2.2
Total Phosphorus (mg/L) Daily Maximum						< 0.10						0.52
Total Aluminum (mg/L) Daily Maximum						1.32						0.905

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Total Iron (mg/L) Daily Maximum						3.1						1.6
Total Lead (mg/L) Daily Maximum						0.012						0.0062
Total Zinc (mg/L) Daily Maximum						0.098						0.0743

DMR Data for Outfall 006 (from December 1, 2019 to November 30, 2020)

Parameter	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19
pH (S.U.) Daily Maximum						7.37						7.67
COD (mg/L) Daily Maximum						32						18
TSS (mg/L) Daily Maximum						61						28
Nitrate-Nitrite (mg/L) Daily Maximum						0.83						0.84
Total Phosphorus (mg/L) Daily Maximum						< 0.10						0.075
Total Aluminum (mg/L) Daily Maximum						0.528						1.23
Total Iron (mg/L) Daily Maximum						2.6						2.0
Total Lead (mg/L) Daily Maximum						0.013						0.0094
Total Zinc (mg/L) Daily Maximum						0.041						0.0323
PCBs (Wet Weather) (pg/L) Daily Maximum												987

DMR Data for Outfall 007 (from December 1, 2019 to November 30, 2020)

Parameter	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19
pH (S.U.) Daily Maximum						7.59						7.31
COD (mg/L) Daily Maximum						70						53
TSS (mg/L) Daily Maximum						240						240

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Nitrate-Nitrite (mg/L) Daily Maximum						0.73						1.16
Total Phosphorus (mg/L) Daily Maximum						0.64						0.56
Total Aluminum (mg/L) Daily Maximum						1.75						5.86
Total Copper (mg/L) Daily Maximum						0.021						0.0204
Total Iron (mg/L) Daily Maximum						7.2						10
Total Lead (mg/L) Daily Maximum						0.022						0.0181
Total Zinc (mg/L) Daily Maximum						0.137						0.0995
PCBs (Wet Weather) (pg/L) Daily Maximum												10000

DMR Data for Outfall 008 (from December 1, 2019 to November 30, 2020)

Parameter	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19
pH (S.U.) Daily Maximum						7.80						7.77
COD (mg/L) Daily Maximum						40						39
TSS (mg/L) Daily Maximum						180						240
Nitrate-Nitrite (mg/L) Daily Maximum						1.29						1.13
Total Phosphorus (mg/L) Daily Maximum						0.30						0.51
Total Aluminum (mg/L) Daily Maximum						2.360						12.2
Total Iron (mg/L) Daily Maximum						3.2						10
Total Lead (mg/L) Daily Maximum						0.0562						0.0618
Total Zinc (mg/L) Daily Maximum						0.572						0.559

**NPDES Permit Fact Sheet
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PCBs (Wet Weather) (pg/L) Daily Maximum													1640
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DMR Data for Outfall 012 (from December 1, 2019 to November 30, 2020)

Parameter	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19
pH (S.U.) Daily Maximum						8.00						8.35
COD (mg/L) Daily Maximum						70						28
TSS (mg/L) Daily Maximum						170						280
Nitrate-Nitrite (mg/L) Daily Maximum						1.64						0.45
Total Phosphorus (mg/L) Daily Maximum						0.86						0.25
Total Aluminum (mg/L) Daily Maximum						1.99						2.81
Total Copper (mg/L) Daily Maximum						< 0.010						0.0129
Total Iron (mg/L) Daily Maximum						5.6						4.8
Total Lead (mg/L) Daily Maximum						0.017						0.037
Total Zinc (mg/L) Daily Maximum						0.032						0.0433

DMR Data for Outfall 013 (from December 1, 2019 to November 30, 2020)

Parameter	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19
pH (S.U.) Daily Maximum						8.09						8.45
COD (mg/L) Daily Maximum						70						200
TSS (mg/L) Daily Maximum						200						560
Nitrate-Nitrite (mg/L) Daily Maximum						< 0.10						1.13

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Total Phosphorus (mg/L) Daily Maximum						0.28						0.91
Total Aluminum (mg/L) Daily Maximum						1.47						13.6
Total Copper (mg/L) Daily Maximum						0.017						0.0537
Total Iron (mg/L) Daily Maximum						3.8						19
Total Lead (mg/L) Daily Maximum						0.0181						0.0665
Total Zinc (mg/L) Daily Maximum						0.076						0.197

DMR Data for Outfall 015 (from December 1, 2019 to November 30, 2020)

Parameter	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19
pH (S.U.) Daily Maximum						7.53						8.32
COD (mg/L) Daily Maximum						32						32
TSS (mg/L) Daily Maximum						100						78
Nitrate-Nitrite (mg/L) Daily Maximum						< 0.10						0.43
Total Phosphorus (mg/L) Daily Maximum						0.13						0.17
Total Aluminum (mg/L) Daily Maximum						0.899						3.38
Total Iron (mg/L) Daily Maximum						2.3						5.8
Total Lead (mg/L) Daily Maximum						0.005						0.0059
Total Zinc (mg/L) Daily Maximum						0.039						0.043

DMR Data for Outfall 101 (from December 1, 2019 to November 30, 2020)

Parameter	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19
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**NPDES Permit Fact Sheet
Trainer Refinery**

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Flow (MGD) Average Monthly	36.863	38.547	41.715	45.997	45.794	37.704	34.067	33.345	34.182	34.018	33.508	35.413
Flow (MGD) Daily Maximum	39.087	39.975	45.817	51.199	50.582	41.207	36.235	36.027	35.493	35.950	35.847	37.292
pH (S.U.) Instantaneous Minimum	7.3	7.2	7.1	7.4	7.1	7.3	7.5	7.0	7.3	7.4	7.3	7.1
pH (S.U.) Instantaneous Maximum	7.4	7.6	8.6	8.1	7.6	7.7	8.0	7.5	7.6	8.2	7.9	7.5
TRC (mg/L) Average Monthly	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG
TRC (mg/L) Instantaneous Maximum	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG
Temperature (°F) Instantaneous Maximum	89	97	103	108	108	105	94	84	82	79	78	81
Heat Rejection Rate (MBTUs/day) Daily Maximum	8038	8168	7828	8211	8054	7472	7218	7038	8617	8389	8614	8966
TSS (lbs/day) Effluent Net Average Monthly	1077.2	0.0	335	1702	1455	382	104	82	56	324	1372	412
TSS (lbs/day) Effluent Net Daily Maximum	3006.0	0.0	1673	6809	5650	1367	414	409	278	1297	4106	1179
TSS (mg/L) Average Monthly	32.0	19.5	6.9	12.8	13.6	7.8	10.0	6.7	8.2	9.4	14.8	16.0
TSS (mg/L) Effluent Net Average Monthly	3.5	0.0	1.0	4.5	4.0	1.3	0.4	0.3	0.2	1.1	5.0	1.4
TSS (mg/L) Intake Average Monthly	47	38	20	44	24	11	27	156	38	47	14	24.0
TSS (mg/L) Daily Maximum	49.0	22.0	14.0	28.0	28.0	8.5	13.0	13.0	18.0	14.0	34.0	24.0
TSS (mg/L) Effluent Net Daily Maximum	10.0	0.0	5.0	18.0	16.0	4.5	1.5	1.5	1.0	4.5	15.0	4.0
TSS (mg/L) Intake Daily Maximum	120	140	87	92	91	22	74	680	140	190	28	86.0

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Total Dissolved Solids (mg/L) Average Monthly	208	428	256	143	182	165	143	170	192	165	160	176
Total Dissolved Solids (mg/L) Effluent Net Average Monthly	10.0	17.5	6.0	0.0	10.0	0.0	17.5	2.0	2.0	2.5	2.5	4.0
Total Dissolved Solids (mg/L) Intake Average Monthly	201	391	254	149	178	170	129	171	195	179	160	172
Total Dissolved Solids (mg/L) Daily Maximum	240	560	450	170	210	180	160	190	240	180	170	200
Total Dissolved Solids (mg/L) Effluent Net Daily Maximum	30.0	50.0	30.0	0.0	20.0	0.0	40.0	10.0	10.0	10.0	10.0	10.0
Total Dissolved Solids (mg/L) Intake Daily Maximum	230	510	470	180	190	200	160	200	300	200	180	190
Oil and Grease (lbs/day) Average Monthly	< 891	< 802	< 770	< 1439	< 710	< 817	< 1500	< 772	< 939	< 795	< 1197	< 2477
Oil and Grease (mg/L) Average Monthly	< 5.0	< 5.0	< 4.5	< 6.2	< 3.7	< 5.2	< 8.0	< 5.6	< 5.8	< 5.9	< 6.7	< 9.5
Oil and Grease (mg/L) Instantaneous Maximum	< 5.0	< 5.0	< 5.0	19.3	< 5.0	< 6.1	32.8	< 5.9	< 6.5	< 6.3	15.4	28.2
Total Aluminum (mg/L) Average Quarterly			0.80			0.22			0.90			2.75
Total Aluminum (mg/L) Effluent Net Average Quarterly			0.422			0.000			0.670			0.00
Total Aluminum (mg/L) Intake Average Quarterly			1.10			0.70			0.31			1.38
Total Aluminum (mg/L) Daily Maximum			0.80			0.22			0.90			4.69

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Total Aluminum (mg/L) Effluent Net Daily Maximum			0.422			0.000			0.670			0.00
Total Aluminum (mg/L) Intake Daily Maximum			2.31			1.46			0.38			2.39
Total Cadmium (mg/L) Average Quarterly			< 0.0005			< 0.0005			< 0.0005			< 0.0007
Total Cadmium (mg/L) Effluent Net Average Quarterly			0.000			0.000			0.000			< 0.0001
Total Cadmium (mg/L) Intake Average Quarterly			< 0.001			< 0.001			< 0.001			< 0.0006
Total Cadmium (mg/L) Daily Maximum			< 0.0005			< 0.0005			< 0.0005			0.0008
Total Cadmium (mg/L) Effluent Net Daily Maximum			0.000			0.000			0.000			< 0.0001
Total Cadmium (mg/L) Intake Daily Maximum			< 0.001			< 0.001			< 0.001			0.0007
Total Copper (mg/L) Average Quarterly			< 0.01			< 0.01			< 0.01			< 0.01
Total Copper (mg/L) Effluent Net Average Quarterly			0.000			0.000			0.000			0.00
Total Copper (mg/L) Intake Average Quarterly			< 0.01			< 0.01			< 0.01			< 0.01
Total Copper (mg/L) Daily Maximum			< 0.01			< 0.01			< 0.01			< 0.01
Total Copper (mg/L) Effluent Net Daily Maximum			0.000			0.000			0.000			0.00
Total Copper (mg/L) Intake Daily Maximum			< 0.01			< 0.01			< 0.01			0.02
Total Iron (mg/L) Average Quarterly			1.20			0.42			1.70			1.19
Total Iron (mg/L) Effluent Net Average Quarterly			0.62			0.000			1.18			0.00

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Total Iron (mg/L) Intake Average Quarterly			1.59			1.04			0.62			1.46
Total Iron (mg/L) Daily Maximum			1.20			0.42			1.70			1.40
Total Iron (mg/L) Effluent Net Daily Maximum			0.62			0.000			1.18			0.00
Total Iron (mg/L) Intake Daily Maximum			3.40			1.90			0.73			3.00
Total Lead (mg/L) Average Quarterly			0.002			0.001			0.003			0.003
Total Lead (mg/L) Effluent Net Average Quarterly			0.001			0.000			0.002			0.000
Total Lead (mg/L) Intake Average Quarterly			0.003			0.002			0.001			0.003
Total Lead (mg/L) Daily Maximum			0.002			0.001			0.003			0.003
Total Lead (mg/L) Effluent Net Daily Maximum			0.001			0.000			0.002			0.000
Total Lead (mg/L) Intake Daily Maximum			0.007			0.002			0.001			0.006
TOC (mg/L) Effluent Net Instantaneous Maximum	0.3	0.4	0.4	0.0	0.3	0.4	0.3	0.000	0.0	0.5	0.4	1.0
TOC (mg/L) Instantaneous Maximum	4.4	3.4	5.1	4.4	3.8	3.5	4.0	4.2	3.2	4.3	3.9	4.8
TOC (mg/L) Intake Instantaneous Maximum	4.7	3.9	5.0	4.8	3.7	3.4	4.5	4.3	3.5	4.3	4.1	4.9

DMR Data for Outfall 201 (from December 1, 2019 to November 30, 2020)

Parameter	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19
Flow (MGD) Average Monthly	2.537	2.468	2.532	2.713	2.657	2.706	2.485	2.620	3.143	3.023	3.295	3.343

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Flow (MGD) Daily Maximum	3.239	3.033	3.159	3.719	3.215	3.404	3.067	3.208	4.121	4.211	3.957	3.821
pH (S.U.) Instantaneous Minimum	7.1	6.8	7.0	6.9	6.8	6.3	6.7	7.1	6.4	7.0	6.7	6.4
pH (S.U.) Instantaneous Maximum	7.8	7.7	8.1	7.9	7.5	7.4	8.2	7.8	7.7	8.4	7.5	7.7
DO (mg/L) Instantaneous Minimum	6.0	7.4	6.9	6.0	6.2	5.7	7.9	7.0	8.0	7.9	7.1	6.2
TRC (mg/L) Average Monthly	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG
TRC (mg/L) Instantaneous Maximum	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG
BOD5 (lbs/day) Average Monthly	< 48	< 107	< 52	< 56	< 199	< 154	< 51	< 43	< 37	< 81	< 175	< 94
BOD5 (lbs/day) Daily Maximum	82	353	85	103	1392	648	78	47	63	127	516	174
BOD5 (mg/L) Average Monthly	< 2.3	< 4.8	< 2.5	< 2.3	< 8.8	< 6.8	< 2.4	< 2.0	< 1.9	< 3.2	< 6.3	< 3.5
BOD5 (mg/L) Daily Maximum	3.8	16.0	4.1	4.0	62.0	31.0	3.7	2.0	5.8	5.0	18.0	5.7
CBOD20 (lbs/day) Average Monthly	212	167	248	555	846	838	287	211	273	440	699	239
COD (lbs/day) Average Monthly	970	1085	832	1002	1201	1768	1616	581	743	1213	1321	845
COD (lbs/day) Daily Maximum	1392	1412	980	1310	3816	5679	3887	1027	1090	2191	2466	1231
COD (mg/L) Average Monthly	45.6	50.7	39.3	40.5	54.7	71.5	77.6	26.7	32.5	49.9	49.9	32.5
COD (mg/L) Daily Maximum	55.0	64.0	48.0	51.0	170.0	200.0	190.0	45.0	61.0	110.0	86.0	49.0
TSS (lbs/day) Average Monthly	245	< 169	< 60	< 97	< 219	< 83	< 466	< 138	< 124	386	337	187
TSS (lbs/day) Daily Maximum	540	403	97	231	578	185	1529	226	278	1185	612	354
TSS (mg/L) Average Monthly	12.0	< 7.8	< 2.8	< 3.9	< 9.7	< 3.4	< 22.2	< 6.4	< 6.2	14.6	12.7	7.4
TSS (mg/L) Daily Maximum	25.0	18.0	4.5	9.0	26.0	6.5	70.0	10.0	17.0	45.0	22.0	14.0

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Total Dissolved Solids (lbs/day) Effluent Net Average Monthly	12686	15798	15244	15861	16337	18359	16059	13955	18191	21532	19539	19672
Total Dissolved Solids (lbs/day) Effluent Net Daily Maximum	15299	19244	17413	24109	23295	28666	23018	21389	22758	26383	34924	26807
Total Dissolved Solids (mg/L) Average Monthly	621	759	736	346	726	772	772	643	741	852	732	725
Total Dissolved Solids (mg/L) Effluent Net Average Monthly	609.6	737.3	721.3	639.1	725.5	772.3	772.2	642.7	741.5	852.4	732.2	725.0
Total Dissolved Solids (mg/L) Intake Average Monthly	201	391	254	149	178	170	129	171	195	179	160	172
Total Dissolved Solids (mg/L) Daily Maximum	700	900	860	940	953	1195	1195	947	1182	973	1194	987
Total Dissolved Solids (mg/L) Effluent Net Daily Maximum	688.2	872.5	847.9	933.1	952.7	1195.1	1195.0	947.5	1181.5	973.0	1194.1	987.4
Total Dissolved Solids (mg/L) Intake Daily Maximum	230	510	470	180	190	200	160	200	300	200	180	190
Oil and Grease (lbs/day) Average Monthly	< 119.0	< 110.3	< 98.8	< 123.0	< 83.8	< 103.2	< 319.4	< 193	< 130	< 180	< 201	< 158
Oil and Grease (lbs/day) Daily Maximum	216	123	113	151	117	120	1728	588	170	421	407	169
Oil and Grease (mg/L) Average Monthly	< 5.6	< 5.1	< 4.7	< 5.1	< 3.7	< 4.9	< 14.6	< 9.1	< 5.6	< 6.9	< 7.5	< 5.6
Oil and Grease (mg/L) Daily Maximum	8.0	5.7	5.0	5.9	5.1	6.3	75.5	30.0	6.3	17.0	16.0	6.0
Total Nitrogen (mg/L) Average Monthly	8.4	16.3	14.1	9.0	12.3	20.8	17.7	13.2	14	17.6	27.2	24.3
Total Nitrogen (mg/L) Daily Maximum	8.4	17.9	14.1	9.0	12.3	20.8	17.7	13.2	14	17.6	27.2	24.3

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Ammonia (lbs/day) Average Monthly	14	83	19	23	10	57	7	3	5.0	7	9	8
Ammonia (lbs/day) Daily Maximum	45	487	84	92	34	182	23	4	8.0	16	20	16
Ammonia (mg/L) Average Monthly	0.6	3.5	0.9	0.9	0.5	2.3	< 0.3	< 0.2	0.2	0.3	0.4	0.3
Ammonia (mg/L) Daily Maximum	1.9	21.0	3.6	3.9	1.4	6.4	1.1	0.2	0.5	0.5	0.8	0.6
Total Phosphorus (lbs/day) Average Monthly	13	12	14	18	15	17	17	24	19	33	26	27
Total Phosphorus (lbs/day) Daily Maximum	22	17	15	21	24	21	25	29	44	42	45	35
Total Phosphorus (mg/L) Average Monthly	0.6	0.6	0.7	0.7	0.7	0.8	< 0.9	1.1	1.0	1.3	1.0	1.0
Total Phosphorus (mg/L) Daily Maximum	1.2	0.8	0.8	0.9	1.1	0.9	1.3	1.3	1.8	1.7	1.6	1.4
Total Aluminum (lbs/day) Average Monthly	12.1	4.457	7.625									
Total Aluminum (lbs/day) Daily Maximum	12.1	4.457	7.626									
Total Aluminum (mg/L) Average Monthly	0.51	0.50	0.38	0.28	0.86	0.49	1.27	0.89	1.26	1.06	0.85	0.59
Total Aluminum (mg/L) Daily Maximum	0.51	0.76	0.38	0.28	0.86	0.49	1.27	0.89	1.26	1.06	0.85	0.59
Total Antimony (mg/L) Average Monthly	0.007	0.005	0.005	0.006	0.004	0.004	0.007	0.006	0.009	0.013	0.011	0.021
Total Antimony (mg/L) Daily Maximum	0.007	0.006	0.005	0.006	0.004	0.004	0.007	0.006	0.009	0.013	0.011	0.021
Hexavalent Chromium (lbs/day) Average Monthly	< 0.0004	< 0.0004	< 0.0226	< 0.0005	< 0.01	< 0.01	< 0.01	< 0.1	< 0.1	< 0.2	< 0.3	< 0.3
Hexavalent Chromium (lbs/day) Daily Maximum	< 0.0005	< 0.0005	< 0.2002	< 0.0005	< 0.01	< 0.01	< 0.01	< 0.2	< 0.3	< 0.3	< 0.3	< 0.3
Hexavalent Chromium (mg/L) Average Monthly	< 0.00002	< 0.00002	< 0.00113	< 0.00002	< 0.0002	< 0.0003	< 0.0003	< 0.004	< 0.01	< 0.01	< 0.01	< 0.01

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Trainer Refinery**

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Hexavalent Chromium (mg/L) Daily Maximum	< 0.00002	< 0.00002	< 0.010	< 0.00002	< 0.0003	< 0.003	< 0.0003	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Total Chromium (lbs/day) Average Monthly	0.02	0.04	0.03	0.05	< 0.05	< 0.05	< 0.03	0.02	0.03	0.05	0.04	0.04
Total Chromium (lbs/day) Daily Maximum	0.03	0.12	0.05	0.12	0.07	0.14	0.05	0.03	0.06	0.11	0.11	0.08
Total Chromium (mg/L) Average Monthly	0.0012	0.0017	0.0016	0.0018	< 0.0021	< 0.0022	< 0.0016	0.008	0.0011	0.0021	0.0014	0.0016
Total Chromium (mg/L) Daily Maximum	0.002	0.006	0.002	0.004	0.003	0.005	0.002	0.001	0.002	0.004	0.004	0.006
Free Cyanide (mg/L) Average Monthly	< 0.002	< 0.006	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Free Cyanide (mg/L) Daily Maximum	< 0.002	0.01	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Total Selenium (lbs/day) Average Monthly	0.30	0.385	0.358									
Total Selenium (lbs/day) Daily Maximum	0.30	0.385	0.358									
Total Selenium (mg/L) Average Monthly	0.01	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.06	0.02	0.05
Total Selenium (mg/L) Daily Maximum	0.01	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.06	0.02	0.05
Total Sulfide (lbs/day) Average Monthly	< 4.2	< 4.3	< 4.3	< 4.9	< 4.0	< 4.7	< 4.2	< 4.3	< 4.4	< 5.1	< 5.3	< 5.4
Total Sulfide (lbs/day) Daily Maximum	< 5.4	< 5.1	< 5.2	< 5.6	< 5.0	< 5.7	< 4.9	< 4.7	< 6.7	< 6.3	< 5.8	< 6.3
Total Sulfide (mg/L) Average Monthly	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Total Sulfide (mg/L) Daily Maximum	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Total Phenolics (lbs/day) Average Monthly	< 1.05	< 1.07	< 1.06	< 1.23	< 1.01	< 1.18	< 1.05	< 1.08	< 0.96	< 1.22	< 1.32	< 1.26
Total Phenolics (lbs/day) Daily Maximum	< 1.34	1.26	< 1.29	< 1.23	< 1.01	< 1.18	< 1.05	< 1.08	< 0.96	< 1.22	< 1.32	< 1.26
Total Phenolics (mg/L) Average Monthly	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.04	< 0.05	< 0.05	< 0.05

**NPDES Permit Fact Sheet
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Total Phenolics (mg/L) Daily Maximum	< 0.05	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
PCBs (Dry Weather) (pg/L) Daily Maximum												309

Compliance History

Effluent Violations for Outfall 101, from: January 1, 2020 To: November 30, 2020

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
Oil and Grease	05/31/20	IMAX	32.8	mg/L	30	mg/L

Effluent Violations for Outfall 201, from: January 1, 2020 To: November 30, 2020

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
TSS	05/31/20	Daily Max	70.0	mg/L	60.0	mg/L
Oil and Grease	05/31/20	Daily Max	1728	lbs/day	876	lbs/day
Oil and Grease	05/31/20	Daily Max	75.5	mg/L	30.0	mg/L

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the “NPDES Permit Writer’s Manual” (362-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Chronic WET - Ceriodaphnia Survival (TUc)	XXX	XXX	XXX	XXX	Report	XXX	See Permit**	24-Hr Composite
Chronic WET - Ceriodaphnia Reproduction (TUc)	XXX	XXX	XXX	XXX	Report	XXX	See Permit**	24-Hr Composite
Chronic WET - Pimephales Survival (TUc)	XXX	XXX	XXX	XXX	Report	XXX	See Permit**	24-Hr Composite
Chronic WET - Pimephales Growth (TUc)	XXX	XXX	XXX	XXX	Report	XXX	See Permit**	24-Hr Composite

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the “NPDES Permit Writer’s Manual” (362-0400-001), SOPs and/or BPJ.

Outfall 002, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Quarterly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Recorded
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/week	Grab
TRC	XXX	XXX	XXX	0.02 Avg Mo	XXX	0.05	1/week	Grab
Temperature (°F)	XXX	XXX	XXX	XXX	XXX	110	Continuous	Recorded
TSS	XXX	XXX	XXX	Report Avg Mo	Report	XXX	1/week	24-Hr Composite
TSS Effluent Net	XXX	XXX	XXX	30.0 Avg Mo	60.0	75	1/week	Calculation
TSS Intake	XXX	XXX	XXX	Report Avg Mo	Report	XXX	1/week	24-Hr Composite
Total Dissolved Solids Effluent Net	XXX	XXX	XXX	Report Avg Mo	Report	XXX	1/week	Calculation
Total Dissolved Solids Intake	XXX	XXX	XXX	Report Avg Mo	Report	XXX	1/week	24-Hr Composite
Total Dissolved Solids	XXX	XXX	XXX	Report Avg Mo	Report	XXX	1/week	24-Hr Composite
Oil and Grease	XXX	XXX	XXX	15 Avg Mo	XXX	30	1/week	3 Grabs/24 Hours
Total Aluminum Intake	XXX	XXX	XXX	Report	Report	XXX	1/quarter	24-Hr Composite
Total Aluminum	XXX	XXX	XXX	Report	Report	XXX	1/quarter	24-Hr Composite
Total Aluminum Effluent Net	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Calculation

Outfall 002, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Quarterly	Daily Maximum	Instant. Maximum		
Total Cadmium Intake	XXX	XXX	XXX	Report	Report	XXX	1/quarter	24-Hr Composite
Total Cadmium Effluent Net	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Calculation
Total Cadmium	XXX	XXX	XXX	Report	Report	XXX	1/quarter	24-Hr Composite
Total Copper Intake	XXX	XXX	XXX	Report	Report	XXX	1/quarter	24-Hr Composite
Total Copper Effluent Net	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Calculation
Total Copper	XXX	XXX	XXX	Report	Report	XXX	1/quarter	24-Hr Composite
Total Silver Effluent Net	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Calculation
Total Silver	XXX	XXX	XXX	Report	Report	XXX	1/quarter	24-Hr Composite
Total Silver Intake	XXX	XXX	XXX	Report	Report	XXX	1/quarter	24-Hr Composite

Proposed Effluent Limitations and Monitoring Requirements

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Outfall 005, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
COD	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Nitrate-Nitrite	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Aluminum	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Lead	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Zinc	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the “NPDES Permit Writer’s Manual” (362-0400-001), SOPs and/or BPJ.

Outfall 006, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
COD	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Nitrate-Nitrite	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Aluminum	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Lead	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Zinc	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
PCBs (Wet Weather) (pg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/year	24-Hr Composite

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the “NPDES Permit Writer’s Manual” (362-0400-001), SOPs and/or BPJ.

Outfall 007, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
COD	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Nitrate-Nitrite	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Aluminum	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Copper	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Lead	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Zinc	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
PCBs (Wet Weather) (pg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/year	24-Hr Composite

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the “NPDES Permit Writer’s Manual” (362-0400-001), SOPs and/or BPJ.

Outfall 008, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
COD	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Nitrate-Nitrite	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Aluminum	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Lead	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Zinc	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
PCBs (Wet Weather) (pg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/year	24-Hr Composite

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the “NPDES Permit Writer’s Manual” (362-0400-001), SOPs and/or BPJ.

Outfall 012, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
COD	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Nitrate-Nitrite	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Aluminum	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Copper	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Lead	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Zinc	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the “NPDES Permit Writer’s Manual” (362-0400-001), SOPs and/or BPJ.

Outfall 013, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
COD	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Nitrate-Nitrite	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Aluminum	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Copper	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Lead	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Zinc	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the “NPDES Permit Writer’s Manual” (362-0400-001), SOPs and/or BPJ.

Outfall 015, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
COD	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Nitrate-Nitrite	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Aluminum	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Lead	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Zinc	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the “NPDES Permit Writer’s Manual” (362-0400-001), SOPs and/or BPJ.

Outfall 101, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Quarterly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	Continuous	Recorded
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/week	Grab
TRC	XXX	XXX	XXX	0.16 Avg Mo	XXX	0.5	1/week	Grab
Temperature (°F)	XXX	XXX	XXX	XXX	XXX	110	Continuous	Recorded
Heat Rejection Rate (MBTUs/day)	XXX	67470	XXX	XXX	XXX	XXX	1/day	Calculation
TSS	XXX	XXX	XXX	Report Avg Mo	Report	XXX	1/week	24-Hr Composite
TSS Effluent Net	16460	32920	XXX	30.0 Avg Mo	60.0	75	1/week	Calculation
TSS Intake	XXX	XXX	XXX	Report Avg Mo	Report	XXX	1/week	24-Hr Composite
Total Dissolved Solids Effluent Net	XXX	XXX	XXX	Report Avg Mo	Report	XXX	1/week	Calculation
Total Dissolved Solids Intake	XXX	XXX	XXX	Report Avg Mo	Report	XXX	1/week	24-Hr Composite
Total Dissolved Solids	XXX	XXX	XXX	Report Avg Mo	Report	XXX	1/week	24-Hr Composite
Oil and Grease	8230	XXX	XXX	15 Avg Mo	XXX	30	1/week	3 Grabs/24 Hours
Total Aluminum Effluent Net	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Calculation
Total Aluminum Intake	XXX	XXX	XXX	Report	Report	XXX	1/quarter	24-Hr Composite

Outfall 101 , Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Quarterly	Daily Maximum	Instant. Maximum		
Total Aluminum	XXX	XXX	XXX	Report	Report	XXX	1/quarter	24-Hr Composite
Total Cadmium Effluent Net	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Calculation
Total Cadmium	XXX	XXX	XXX	Report	Report	XXX	1/quarter	24-Hr Composite
Total Cadmium Intake	XXX	XXX	XXX	Report	Report	XXX	1/quarter	24-Hr Composite
Total Copper Effluent Net	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Calculation
Total Copper Intake	XXX	XXX	XXX	Report	Report	XXX	1/quarter	24-Hr Composite
Total Copper	XXX	XXX	XXX	Report	Report	XXX	1/quarter	24-Hr Composite
Total Iron	XXX	XXX	XXX	Report	Report	XXX	1/quarter	24-Hr Composite
Total Iron Effluent Net	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Calculation
Total Iron Intake	XXX	XXX	XXX	Report	Report	XXX	1/quarter	24-Hr Composite
Total Lead Intake	XXX	XXX	XXX	Report	Report	XXX	1/quarter	24-Hr Composite
Total Lead	XXX	XXX	XXX	Report	Report	XXX	1/quarter	24-Hr Composite
Total Lead Effluent Net	XXX	XXX	XXX	Report	Report	XXX	1/quarter	Calculation
TOC Intake	XXX	XXX	XXX	XXX	XXX	Report	1/week	Grab
TOC Effluent Net	XXX	XXX	XXX	XXX	XXX	5.0	1/week	Calculation
TOC	XXX	XXX	XXX	XXX	XXX	Report	1/week	Grab

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the “NPDES Permit Writer’s Manual” (362-0400-001), SOPs and/or BPJ.

Outfall 201, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	Continuous	Recorded
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	4.0 Inst Min	XXX	XXX	XXX	1/week	Grab
TRC	XXX	XXX	XXX	0.16	XXX	0.50	1/week	Grab
BOD5	1000	2000	XXX	34.0	68.0	85	2/week	24-Hr Composite
CBOD20	1500	XXX	XXX	XXX	XXX	XXX	2/month	24-Hr Composite
COD	17608	33130	XXX	603.0	1135.0	1508	2/week	24-Hr Composite
TSS	875	1750	XXX	30.0	60.0	75	2/week	24-Hr Composite
Total Dissolved Solids	XXX	XXX	XXX	Report	Report	XXX	2/week	24-Hr Composite
Total Dissolved Solids Intake	XXX	XXX	XXX	Report	Report	XXX	2/week	24-Hr Composite
Total Dissolved Solids Effluent Net	29190	58380	XXX	1000.0	2000.0	2500	2/week	Calculation
Oil and Grease	438	876	XXX	15.0	30.0	30	2/week	Grab
Total Nitrogen	XXX	XXX	XXX	Report	Report	XXX	1/month	24-Hr Composite
Ammonia	1020	2040	XXX	35.0	70.0	87	2/week	24-Hr Composite

Outfall 201 , Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Phosphorus	58	83	XXX	2.0	4.0	5	2/month	24-Hr Composite
Total Aluminum	Report	135	XXX	Report	4.64	4.64	1/month	24-Hr Composite
Total Antimony	XXX	XXX	XXX	Report	Report	XXX	1/month	24-Hr Composite
Hexavalent Chromium	1.1	2.4	XXX	0.04	0.08	0.1	2/week	24-Hr Composite
Total Chromium	13	37	XXX	0.45	1.27	1.27	2/week	24-Hr Composite
Free Cyanide	XXX	XXX	XXX	Report	Report	XXX	1/month	24-Hr Composite
Total Selenium	0.88	1.75	XXX	0.03	0.06	0.08	1/month	24-Hr Composite
Total Sulfide	13	30	XXX	0.45	1.03	1.13	2/week	24-Hr Composite
Total Phenolics	11	34	XXX	0.38	1.16	1.16	2/week	24-Hr Composite
PCBs (Dry Weather) (pg/L)	XXX	XXX	XXX	XXX	Report	XXX	1/year	24-Hr Composite