State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code:	**4959**	NAICS Code:	**562910**	SPDES Number:	**NY 0267724**
Discharge Class (CL):	**03**			DEC Number:	**2-6101-00107-00026**
Toxic Class (TX):	**T**			Effective Date (EDP):	**DRAFT**
Major-Sub Drainage Basin:	**17 - 02**			Expiration Date (ExDP):	**DRAFT**
Water Index Number:	**LI-4 and tribs.**	Item No.:	**890 - 54**	Modification Dates (EDPM):	
Compact Area:	**IEC**				

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. '1251 et.seq.)

PERMITTEE NAME AND ADDRESS					
Name:	**ExxonMobil Oil Corporation**	Attention:	**Michael Burghardt**		
Street:	**38 Varick Street**				
City:	**Brooklyn**	State:	**NY**	Zip Code:	**11222**
Email:	**Michael.j.burghardt@exxonmobil.com**	Phone:			

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL																
Name:	**ExxonMobil Greenpoint Petroleum Remediation Project**															
Address / Location:	**38 Varick Street**											County:	**Kings**			
City:	**Brooklyn**						State:	**NY**				Zip Code:	**11222**			
Facility Location:		Latitude:	**40**	°	**43**	’	**37**	” N	& Longitude:	**73**	°	**56**	’	**08**	” W	
Primary Outfall No.:	**002**	Latitude:	**40**	°	**43**	’	**41**	” N	& Longitude:	**73**	°	**55**	’	**56**	” W	
Wastewater Description:	**ExxonMobil Remediation Wastewater**	Receiving Water:	**Newtown Creek**				NAICS:	**562910**	Class:	**SD**		Standard:	**-**			

in accordance with: effluent limitations; monitoring and reporting requirements; other provisions and conditions set forth in this permit; and 6 NYCRR Part 750-1 and 750-2.

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal not less than 180 days prior to the expiration date shown above.

DISTRIBUTION:
BWP Permit Coordinator (permit.coordinator@dec.ny.gov)
BWP Permit Writer
RWE
RPA
EPA Region II (Region2_NPDES@epa.gov)

Permit Administrator:	Stephen A. Watts III
Address:	47-40 21st Street, Long island City, NY 11101
Signature	Date

Contents

DEFINITIONS

TERM	DEFINITION
7-Day Geo Mean	The highest allowable geometric mean of daily discharges over a calendar week.
7-Day Average	The average of all daily discharges for each 7-days in the monitoring period. The sample measurement is the highest of the 7-day averages calculated for the monitoring period.
12-Month Rolling Average (12 MRA)	The current monthly value of a parameter, plus the sum of the monthly values over the previous 11 months for that parameter, divided by the number of months for which samples were collected in the 12-month period.
30-Day Geometric Mean	The highest allowable geometric mean of daily discharges over a calendar month, calculated as the antilog of: the sum of the log of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
Action Level	Action level means a monitoring requirement characterized by a numerical value that, when exceeded, triggers additional permittee actions and department review to determine if numerical effluent limitations should be imposed.
Compliance Level / Minimum Level	A compliance level is an effluent limitation. A compliance level is given when the water quality evaluation specifies a Water Quality Based Effluent Limit (WQBEL) below the Minimum Level. The compliance level shall be set at the Minimum Level (ML) for the most sensitive analytical method as given in 40 CFR Part 136, or otherwise accepted by the DEC.
Daily Discharge	The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants expressed in units of mass, the 'daily discharge' is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the 'daily discharge' is calculated as the average measurement of the pollutant over the day.
Daily Maximum	The highest allowable Daily Discharge.
Daily Minimum	The lowest allowable Daily Discharge.
Effective Date of Permit (EDP or EDPM)	The date this permit is in effect.
Effluent Limitations	Effluent limitation means any restriction on quantities, quality, rates and concentrations of chemical, physical, biological, and other constituents of effluents that are discharged into waters of the state.
Expiration Date of Permit (ExDP)	The date this permit is no longer in effect.
Instantaneous Maximum	The maximum level that may not be exceeded at any instant in time.
Instantaneous Minimum	The minimum level that must be maintained at all instants in time.
Monthly Average	The highest allowable average of daily discharges over a calendar month, calculated as the sum of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
Outfall	The terminus of a sewer system, or the point of emergence of any waterborne sewage, industrial waste or other wastes or the effluent therefrom, into the waters of the State.
Range	The minimum and maximum instantaneous measurements for the reporting period must remain between the two values shown.
Receiving Water	The classified waters of the state to which the listed outfall discharges.
Sample Frequency / Sample Type / Units	See DEC's "DMR Manual for Completing the Discharge Monitoring Report for the SPDES" for information on sample frequency, type and units.

PERMIT LIMITS, LEVELS AND MONITORING – During Construction

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
01A	ExxonMobil Remediation Wastewater Treatment System Effluent Prior to Combination with Stormwater	Newtown Creek	EDP	Construction completion + 60 days

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
								Location		
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Flow	Monthly Average	Monitor	MGD			Continuous	Recorder		X	
	Daily Maximum	0.86							X	
pH	Daily Minimum	6.5	SU			2/month	Grab		X	
	Daily Maximum	8.5							X	
Oil & Grease	Monthly Average	Monitor	mg/L			2/month	Grab		X	
	Daily Maximum	15							X	
Total Suspended Solids (TSS)	Monthly Average	20	mg/L			2/month	Grab		X	
	Daily Maximum	40							X	
Settleable Solids	Monthly Average	Monitor	mL/L			2/month	Grab		X	
	Daily Maximum	0.1							X	
1,1-Dichloroethane	Monthly Average	Monitor	µg/L			2/month	Grab		X	
	Daily Maximum	10							X	
1,2-Dichloroethane	Monthly Average	Monitor	µg/L			2/month	Grab		X	
	Daily Maximum	10							X	
2-Butanone (MEK)	Monthly Average	Monitor	µg/L			2/month	Grab		X	
	Daily Maximum	Monitor							X	
Acetone	Monthly Average	Monitor	µg/L			2/month	Grab		X	
	Daily Maximum	Monitor							X	
Benzene	Monthly Average	Monitor	µg/L			2/month	Grab		X	
	Daily Maximum	10							X	
Total Copper	Monthly Average	Monitor	µg/L			2/month	Grab		X	
	Daily Maximum	95							X	
Ethylbenzene	Monthly Average	Monitor	µg/L			2/month	Grab		X	
	Daily Maximum	5							X	
Total Phenols	Monthly Average	Monitor	µg/L			2/month	Grab		X	
	Daily Maximum	Monitor							X	
Tetrachloroethylene	Monthly Average	Monitor	µg/L			2/month	Grab		X	
	Daily Maximum	10							X	
Toluene	Monthly Average	Monitor	µg/L			2/month	Grab		X	
	Daily Max	5							X	

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
Trichloroethylene	Monthly Average	Monitor	µg/L			2/month	Grab		X	
	Daily Maximum	10							X	
Vinyl Chloride	Monthly Average	Monitor	µg/L			2/month	Grab		X	
	Daily Maximum	10							X	
Total Xylenes	Monthly Average	Monitor	µg/L			2/month	Grab		X	
	Daily Maximum	10							X	
ACTION LEVEL PARAMETERS	Type	Action Level	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Methyl Tert Butyl Ether (MTBE)	Daily Maximum	50	µg/L			2/month	Grab		X	
Naphthalene	Daily Maximum	20	µg/L			2/month	Grab		X	

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
001	On-Site Stormwater and On-Site Wastewater Treatment System Effluent	Newtown Creek	EDP	Construction completion + 60 days

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
Flow	Monthly Average	Monitor	MGD			Continuous	Recorder		X	
	Daily Maximum	Monitor							X	
pH	Daily Minimum	6.5	SU			2/month	Grab		X	
	Daily Maximum	8.5							X	
Oil & Grease	Monthly Average	Monitor	mg/L			2/month	Grab		X	
	Daily Maximum	15							X	
Total Suspended Solids (TSS)	Monthly Average	20	mg/L			2/month	Grab		X	
	Daily Maximum	40							X	
Turbidity (Discharge Pipe)	Daily Maximum	Monitor	NTU			2/month	Grab		X	1
Turbidity (Receiving Water Background)	Daily Maximum	Monitor	NTU			2/month	Grab		X	1

WHOLE EFFLUENT TOXICITY (WET) TESTING		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
WET - Acute Invertebrate	See footnote			1.8	TUa	Quarterly	See footnote		X	2
WET - Acute Vertebrate	See footnote			1.8	TUa	Quarterly	See footnote		X	2

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING

002	Off-Site Wastewater Treatment System Effluent	Newtown Creek	EDP	Construction completion + 60 days

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
								Location		
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Flow	Monthly Average	Monitor	MGD			Continuous	Recorder		X	
	Daily Maximum	0.62							X	
pH	Daily Minimum	6.5	SU			2/month	Grab		X	
	Daily Maximum	8.5							X	
Oil & Grease	Monthly Average	Monitor	mg/L			2/month	Grab		X	
	Daily Maximum	15							X	
Total Suspended Solids (TSS)	Monthly Average	20	mg/L			2/month	Grab		X	
	Daily Maximum	40							X	
Turbidity (Discharge Pipe)	Daily Maximum	Monitor	NTU			Quarterly	Grab		X	1
Turbidity (Receiving Water Background)	Daily Maximum	Monitor	NTU			Quarterly	Grab		X	1
Settleable Solids	Monthly Average	Monitor	mL/L			2/month	Grab		X	
	Daily Maximum	0.1							X	
1,1-Dichloroethane	Monthly Average	Monitor	µg/L			2/month	Grab		X	
	Daily Maximum	10							X	
1,2-Dichloroethane	Monthly Average	Monitor	µg/L			2/month	Grab		X	
	Daily Maximum	10							X	
Benzene	Monthly Average	Monitor	µg/L			2/month	Grab		X	
	Daily Maximum	40							X	
Total Copper	Monthly Average	Monitor	µg/L			2/month	Grab		X	
	Daily Maximum	95							X	
Ethylbenzene	Monthly Average	Monitor	µg/L			2/month	Grab		X	
	Daily Maximum	5							X	
Total Phenols	Monthly Average	Monitor	µg/L			2/month	Grab		X	
	Daily Maximum	Monitor							X	
Tetrachloroethylene	Monthly Average	Monitor	µg/L			2/month	Grab		X	
	Daily Maximum	10							X	
Toluene	Monthly Average	Monitor	µg/L			2/month	Grab		X	
	Daily Max	10							X	
Trichloroethylene	Monthly Average	Monitor	µg/L			2/month	Grab		X	
	Daily Maximum	20							X	
Vinyl Chloride	Monthly Average	Monitor	µg/L			2/month	Grab		X	

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
	Daily Maximum	10							X	
Total Xylenes	Monthly Average	Monitor	µg/L			2/month	Grab		X	
	Daily Maximum	20							X	

ACTION LEVEL PARAMETERS	Type	Action Level	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Methyl Tert Butyl Ether (MTBE)	Daily Maximum	90	µg/L			2/month	Grab		X	
Naphthalene	Daily Maximum	40	µg/L			2/month	Grab		X	

WHOLE EFFLUENT TOXICITY (WET) TESTING		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
WET - Acute Invertebrate	See footnote			1.8	TUa	Quarterly	See footnote		X	2
WET - Acute Vertebrate	See footnote			1.8	TUa	Quarterly	See footnote		X	2

FOOTNOTES:

1. The facility is to sample in the outfall pipe (or from sampling ports on the effluent piping within each treatment building) and the background of the receiving waters. If the turbidity level from the outfall pipe discharge is greater than that of the background level of the receiving waters, the facility operator must make a determination if the discharge from the facility is in compliance with the narrative water quality standard (NYCRR Title 6, Chapter X, Part 703.2) for turbidity of "No increase that will cause a substantial visible contrast to natural conditions". This determination must be documented through photographic evidence. NTU means Nephelometric Turbidity Units.

2. Whole Effluent Toxicity (WET) Testing:
   Testing Requirements – WET testing shall consist of **Acute only.** WET testing shall be performed in accordance with 40 CFR Part 136 and TOGS 1.3.2 unless prior written approval has bee obtained from the Department. The test species shall be *Mysidopsis bahia* (mysid shrimp - invertebrate) and *Cyprinodon variegatus* (sheepshead minnow - vertebrate). Artificial salt water should be used for dilution. The appropriate dilution series bracketing the IWC and including one exposure group of 100% effluent should be used to generate a definitive test endpoint, otherwise an immediate rerun of the test is required. WET testing shall be coordinated with the monitoring of chemical and physical parameters limited by this permit so that the resulting analyses are also representative of the sample used for WET testing. The ratio of critical receiving water flow to discharge flow (i.e. dilution ratio) is 5:1 for acute. Discharges which are disinfected using chlorine should be dechlorinated prior to WET testing or samples shall be taken immediately prior to the chlorination system.

   Monitoring Period - WET testing shall be performed at the specified sample frequency during calendar years ending **in 5 and 0.**

   Reporting - Toxicity Units shall be calculated and reported on the DMR as follows: TUa = (100)/(48 hr LC50) or (100)/(48 hr EC50) (note that Acute data is generated by both Acute and Chronic testing) and TUc = (100)/(NOEC) when Chronic testing has been performed or TUc = (TUa) x (10) when only Acute testing has been performed and is used to predict Chronic test results, where the 48 hr LC50 or 48 hr EC50 and NOEC are expressed in % effluent. This must be done for both species and using the Most Sensitive Endpoint (MSE) or the lowest NOEC and corresponding highest TUc. Report a TUa of 0.3 if there is no statistically significant toxicity in 100% effluent as compared to control.

   The complete test report including all corresponding results, statistical analyses, reference toxicity data, daily average flow at the time of sampling and other appropriate supporting documentation, shall be submitted within 60 days following the end of each test period to the Toxicity Testing Unit, Bureau of Watershed Assessment and Management, 625 Broadway, Fourth Floor, Albany, NY 12233-3502. A summary page of the test results for the invertebrate and vertebrate species indicating TUa, 48 hr LC50 or 48 hr EC50 for Acute tests and/or TUc, NOEC, IC25, and most sensitive endpoints for Chronic tests, should also be included at the beginning of the test report.

WET Testing Action Level Exceedances - If an action level is exceeded then the Department may require the permittee to conduct additional WET testing including Acute and/or Chronic tests. Additionally, the permittee may be required to perform a Toxicity Reduction Evaluation (TRE) in accordance with Department guidance. If such additional testing or performance of a TRE is necessary, the permittee shall be notified in writing by the Regional Water Engineer. The written notification shall include the reason(s) why such testing or a TRE is required.

NOTE:
Treatment of periodic maintenance/wash waters, monitoring well purge water, excavation dewatering fluids, secondary containment drainage, and bottom water from recovered product storage tanks associated with the remediation system may be treated at the appropriate wastewater treatment systems, limits must be maintained, and the resultant discharge must not cause or contribute to a violation of New York State Water Quality Standards.

PERMIT LIMITS, LEVELS AND MONITORING – Post Construction

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
002	ExxonMobil Remediation Wastewater	Newtown Creek	Construction completion + 60 days	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
Flow	Monthly Average	Monitor	MGD			Continuous	Recorder		X	
	Daily Maximum	1.3							X	
pH	Daily Minimum	6.5	SU			1/week	Grab		X	
	Daily Maximum	8.5							X	
Oil & Grease	Monthly Average	Monitor	mg/L			1/week	Grab		X	
	Daily Maximum	15							X	
Total Suspended Solids (TSS)	Monthly Average	20	mg/L			1/week	Grab		X	
	Daily Maximum	40							X	
Settleable Solids	Monthly Average	Monitor	mL/L			1/week	Grab		X	
	Daily Maximum	0.1							X	
1,1-Dichloroethane	Monthly Average	Monitor	µg/L			1/week	Grab		X	
	Daily Maximum	10							X	
1,2-Dichloroethane	Monthly Average	Monitor	µg/L			1/week	Grab		X	
	Daily Maximum	10							X	
Benzene	Monthly Average	Monitor	µg/L			1/week	Grab		X	
	Daily Maximum	5							X	
Total Copper	Monthly Average	Monitor	µg/L			1/week	Grab		X	
	Daily Maximum	25							X	
Ethylbenzene	Monthly Average	Monitor	µg/L			1/week	Grab		X	
	Daily Maximum	5							X	
Total Phenols	Monthly Average	Monitor	µg/L			1/week	Grab		X	1
	Daily Maximum	Monitor							X	1
Tetrachloroethylene	Monthly Average	5	µg/L			1/week	Grab		X	
	Daily Maximum	10							X	
Toluene	Monthly Average	Monitor	µg/L			1/week	Grab		X	
	Daily Max	5							X	
Trichloroethylene	Monthly Average	Monitor	µg/L			1/week	Grab		X	
	Daily Maximum	10							X	
Vinyl Chloride	Monthly Average	Monitor	µg/L			1/week	Grab		X	
	Daily Maximum	10							X	

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
Xylene, Ortho-	Monthly Average	Monitor	µg/L			1/week	Grab		X	
	Daily Maximum	5							X	
Xylenes, Meta- & Para-	Monthly Average	Monitor	µg/L			1/week	Grab		X	
	Daily Maximum	10							X	
ACTION LEVEL PARAMETERS	Type	Action Level	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Methyl Tert Butyl Ether (MTBE)	Daily Maximum	50	µg/L			1/week	Grab		X	3
Naphthalene	Daily Maximum	40	µg/L			1/week	Grab		X	3

WHOLE EFFLUENT TOXICITY (WET) TESTING		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
WET - Acute Invertebrate	See footnote			1.5	TUa	Quarterly	See footnote		X	2,3,4
WET - Acute Vertebrate	See footnote			1.5	TUa	Quarterly	See footnote		X	2,3,4
WET - Chronic Invertebrate	See footnote			5.0	TUc	Quarterly	See footnote		X	2,3,4
WET - Chronic Vertebrate	See footnote			5.0	TUc	Quarterly	See footnote		X	2,3,4

FOOTNOTES:

1. Total phenols shall be determined by colorimetric or spectrophotometric analysis using the most sufficiently sensitive method approved under 40 CFR Part 136 for total recoverable phenols.

2. Quarterly samples shall be collected in calendar quarters (Q1 – January 1st to March 31st; Q2 – April 1st to June 30th; Q3 – July 1st to September 30th; Q4 – October 1st to December 31st).

3. Action Levels: If the action level is exceeded, the additional monitoring requirement is triggered, and the permittee shall undertake a short-term, high intensity, monitoring program. Samples identical to those required for routine monitoring purposes shall be taken on each of at least three consecutive days and analyzed. Results shall be expressed in concentration. If levels higher than the action levels are confirmed, the permittee shall evaluate the treatment system operation and identify and employ actions to reduce concentrations present in the discharge. The permit may also be reopened by the DEC for consideration of revised action levels or effluent limits. Action level monitoring results and the effectiveness of the actions taken shall be summarized and submitted with the monthly DMR data.

4. **Whole Effluent Toxicity (WET) Testing:**
   Testing Requirements – Chronic WET testing is required, but report both the acute and chronic results. Testing shall be performed in accordance with 40 CFR Part 136 and TOGS 1.3.2 unless prior written approval has been obtained from the DEC. The test species shall be Mysidopsis bahia (mysid shrimp - invertebrate) and Cyprinodon variegatus (sheepshead minnow - vertebrate). Artificial salt water should be used for dilution. All tests conducted should be static-renewal (two 24-hr composite samples with one renewal for Acute tests and three 24-hr composite samples with two renewals for Chronic tests). The appropriate dilution series should be used to generate a definitive test endpoint, otherwise an immediate rerun of the test may be required. WET testing shall be coordinated with the monitoring of chemical and physical parameters limited by this permit so that the resulting analyses are also representative of the sample used for WET testing. The ratio of critical receiving water flow to discharge flow (i.e. dilution ratio) is 5:1 for acute, and 5:1 for chronic.

   Monitoring Period - WET testing shall be performed quarterly (calendar quarters) during calendar years ending in **0 and 5.**

Reporting - Toxicity Units shall be calculated and reported on the DMR as follows: TUa = (100)/(48-hr LC50) [note that Acute data is generated by both Acute and Chronic testing] and TUc = (100)/(7-day NOEC) or (100)/(7-day IC25) when Chronic testing has been performed or TUc = (TUa) x (10) when only Acute testing has been performed and is used to predict Chronic test results, where the 48-hr LC50, 7-day NOEC and/or IC25 are all expressed in % effluent. This must be done, including the Chronic prediction from the Acute data, for both species unless otherwise directed. For Chronic results, report the most sensitive endpoint (i.e. survival, growth and/or reproduction) corresponding to the lowest 7-day NOEC or IC25 and resulting highest TUc. For Acute results, report a TUa of 0.3 if there is no statistically significant mortality in 100% effluent as compared to the control. Report a TUa of 1.0 if there is statistically significant mortality in 100% effluent as compared to the control, but insufficient mortality to generate a 48-hr LC50. Also, in the absence of a 48-hr LC50, use 1.0 TUa for the Chronic prediction from the Acute data, and report a TUc of 10.0.

The complete test report including all bench sheets, statistical analyses, reference toxicity data, daily average flow at the time of sampling and other appropriate supporting documentation, shall be submitted within 60 days following the end of each test period with your WET DMR and to the WET@dec.ny.gov email address. A summary page of the test results for the invertebrate and vertebrate species indicating TUa, 48-hr LC50 for Acute tests and/or TUc, NOEC, IC25, and most sensitive endpoints for Chronic tests, should also be included at the beginning of the test report.

WET Testing Action Level Exceedances - If an action level is exceeded then the DEC may require the permittee to conduct additional WET testing including Acute and/or Chronic tests. Additionally, the permittee may be required to perform a Toxicity Identification/Reduction Evaluation (TI/RE) in accordance with DEC guidance. Enforceable WET limits may also apply. The permittee shall be notified in writing by their Regional DEC office of additional requirements. The written notification shall include the reason(s) why such testing, TI/RE and/or limits are required.

NOTE:
Treatment of periodic maintenance/wash waters, monitoring well purge water, excavation dewatering fluids, secondary containment drainage, and bottom water from recovered product storage tanks associated with the remediation system may be treated at the appropriate wastewater treatment systems, limits must be maintained, and the resultant discharge must not cause or contribute to a violation of New York State Water Quality Standards.

STORMWATER POLLUTION PREVENTION REQUIREMENTS

NO EXPOSURE CERTIFICATION

The permittee submitted a Conditional Exclusion for No Exposure Form on December 11, 2023, certifying that all industrial activities and materials are completely sheltered from exposure to rain, snow, snowmelt, and stormwater runoff except as allowed under 40 CFR 122.26(g)(2). The permittee must maintain a condition of no exposure for the exclusion to remain applicable. If conditions change resulting in the exposure of materials and activities to stormwater, the permittee must notify the Regional Water Engineer. The permittee must recertify a condition of no exposure every five years by completing the "No Exposure Certification Form" found on the DEC website.

BEST MANAGEMENT PRACTICES (BMPs) FOR INDUSTRIAL FACILITIES

Note that for some facilities, especially those with few employees or limited industrial activities, some of the below BMPs may not be applicable. It is acceptable in these cases to indicate "Not Applicable" for the portion(s) of the BMP Plan that do not apply to your facility, along with an explanation.

1. **General** - The permittee shall develop, maintain, and implement a Best Management Practices (BMP) plan to prevent releases of significant amounts of pollutants to the waters of the State through plant site runoff; spillage and leaks; sludge or waste disposal; and stormwater discharges including, but not limited to, drainage from raw material storage. The BMP plan shall be documented in narrative form and shall include the 13 minimum BMPs and any necessary plot plans, drawings, or maps. Other documents already prepared for the facility such as a Safety Manual or a Spill Prevention, Control and Countermeasure (SPCC) plan may be used as part of the plan and may be incorporated by reference. A copy of the current BMP plan shall be submitted to the DEC as required in item (2.) below and a copy must be maintained at the facility and shall be available to authorized DEC representatives upon request.

2. **Compliance Deadlines** – The initial BMP plan was received by the Department on 10/1/2008. The BMP plan **shall be reviewed annually** and shall be modified whenever (a) changes at the facility materially increase the potential for releases of pollutants; (b) actual releases indicate the plan is inadequate, or (c) a letter from the DEC identifies inadequacies in the plan. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. Subsequent modifications to or renewal of this permit does not reset or revise these deadlines unless a new deadline is set explicitly by such permit modification or renewal.

3. **Facility Review** - The permittee shall review all facility components or systems (including but not limited to material storage areas; in-plant transfer, process, and material handling areas; loading and unloading operations; storm water, erosion, and sediment control measures; process emergency control systems; and sludge and waste disposal areas) where materials or pollutants are used, manufactured, stored or handled to evaluate the potential for the release of pollutants to the waters of the State. In performing such an evaluation, the permittee shall consider such factors as the probability of equipment failure or improper operation, cross-contamination of storm water by process materials, settlement of facility air emissions, the effects of natural phenomena such as freezing temperatures and precipitation, fires, and the facility's history of spills and leaks. The relative toxicity of the pollutant shall be considered in determining the significance of potential releases. The review shall address all substances present at the facility that are identified in the SPDES application Form NY-2C (available at https://www.dec.ny.gov/docs/permits_ej_operations_pdf/form2c.pdf) or that are required to be monitored for by the SPDES permit.

4. **13 Minimum BMPs:** Whenever the potential for a release of pollutants to State waters is determined to be present, the permittee shall identify BMPs that have been established to prevent or minimize such potential releases. Where BMPs are inadequate or absent, appropriate BMPs shall be established. In selecting appropriate BMPs, the permittee shall consider good industry practices and, where appropriate, structural measures such as secondary containment and erosion/sediment control devices and practices. USEPA guidance for development of stormwater elements of the BMP is available in *Developing Your Stormwater Pollution Prevention Plan A Guide for Industrial Operators*, February 2009, EPA 833-B-09-002. As a minimum, the plan shall include the following BMPs:

1. BMP Pollution Prevention Team
2. Reporting of BMP Incidents
3. Risk Identification & Assessment
4. Employee Training
5. Inspections and Records
6. Security
7. Preventive Maintenance
8. Good Housekeeping
9. Materials/Waste Handling, Storage, & Compatibility
10. Spill Prevention & Response
11. Erosion & Sediment Control
12. Management of Runoff
13. Street Sweeping

BMPs FOR INDUSTRIAL FACILITIES (continued)

5. **Stormwater Pollution Prevention Plans (SWPPPs) Required for Discharges of Stormwater from Construction Activity to Surface Waters -** A SWPPP shall be developed prior to commencing any construction activity that will result in soil disturbance of one or more acres of uncontaminated area[1]. (Note: the disturbance threshold is 5000 SF in the New York City East of Hudson Watershed). The SWPPP shall conform to the current version of the SPDES General Permit for Stormwater Discharges from Construction Activity (CGP), including the *New York Standards and Specifications for Erosion and Sediment Control* and *New York State Stormwater Management Design Manual.* The permittee shall submit a copy of the SWPPP and any amendments thereto to the local governing body and any other authorized agency having jurisdiction or regulatory control over the construction activity **at least 30 days prior to soil disturbance**. The SWPPP shall be maintained on-site and submitted to the Department only upon request. When a SWPPP is required, a properly completed *Notice of Intent* (NOI) form shall be submitted (available at www.dec.ny.gov/chemical/43133.html) prior to soil disturbance. Note that submission of the NOI is required for informational purposes; the permittee is not eligible for and will not obtain coverage under any SPDES general permit for stormwater discharges. SWPPPs must be developed for subsequent site disturbances in accordance with the above requirements. The permittee is responsible for ensuring that the provisions of each SWPPP are properly implemented.

6. **Required Sampling For "Hot Spot" Identification** - Development of the BMP plan shall include sampling of waste stream segments for the purpose of pollutant "hot spot" identification. The economic achievability of effluent limits will not be considered until plant site "hot spot" sources have been identified, contained, removed or minimized through the imposition of site specific BMPs or application of internal facility treatment technology. For the purposes of this permit condition a "hot spot" is a segment of an industrial facility (including but not limited to soil, equipment, material storage areas, sewer lines etc.) which contributes elevated levels of problem pollutants to the wastewater or stormwater collection system of that facility. For the purposes of this definition, problem pollutants are substances for which treatment to meet a water quality or technology requirement may, considering the results of waste stream segment sampling, be deemed unreasonable. For the purposes of this definition, an elevated level is a concentration or mass loading of the pollutant in question which is sufficiently higher than the concentration of that same pollutant at the compliance monitoring location so as to allow for an economically justifiable removal, isolation, or B.A.T. treatment of wastewaters emanating from the segment.

[1] Uncontaminated area means soils which are free of contamination by any toxic or non-conventional pollutants identified in the tables of SPDES Application Form NY-2C. Disturbance of any size contaminated area(s) and the resulting discharge of contaminated stormwater is not authorized by this permit unless the discharge is under State or Federal oversight as part of a remedial program or after review by the Regional Water Engineer; nor is such discharge authorized by any SPDES general permit for stormwater discharges.

MERCURY MINIMIZATION PROGRAM (MMP) - Type IV

On December 11, 2023, the permittee submitted a Conditional Exclusion Certification, certifying that the facility does not have any of the mercury sources listed in Part III.A.3. of DOW 1.3.10.

1. General - The permittee must develop, implement, and maintain a mercury minimization program (MMP), containing the elements set forth below.
2. MMP Elements - The MMP must be a written document and must include any necessary drawings or maps of the facility and/or collection system. Other related documents already prepared for the facility may be used as part of the MMP and may be incorporated by reference. At a minimum, the MMP must include the following elements[2] as described in detail below:

    a. Conditional Exclusion Certification - A certification (Appendix D of *DOW 1.3.10*), signed in accordance with 750-1.8 Signature of SPDES forms, must be submitted once every five (5) years for Outfall 002 to the Regional Water Engineer and to the Bureau of Water Permits certifying that Outfall 002 for the facility is neither a mercury source nor receives flows from a mercury source. Criteria to determine if a facility has a mercury source are as follows:

    - The facility is or receives discharge from 1) individually permitted combined sewer overflow (CSOs)[3] communities and/or 2) Type II sanitary sewer overflow (SSO)[4] facilities;
    - One or more effluent samples which exceed 12 ng/L, including samples taken as a result of the SPDES application process;
    - Internal or tributary waste stream samples exceed the GLCA effluent limitation **AND** the final effluent samples are less than the GLCA due primarily to dilution by uncontaminated or less contaminated waste streams. Both components of this criterion may include samples taken as a result of the SPDES application process;
    - A permit application or other information indicates that mercury is handled on site and could be discharged through outfalls;
    - Outfalls which contain legacy mercury contamination;
    - The facility's collection system receives discharges from a dental and/or categorical industrial user (CIU)[5] that may discharge mercury;
    - The facility accepts hauled wastes; or,
    - The facility is defined as a categorical industry that may discharge mercury. This may also include dentists, universities, hospitals, or laboratories which have their own SPDES permit.

    b. Control Strategy - The control strategy must contain the following minimum elements:

    i. Equipment and Materials – Equipment and materials (e.g., thermometers, thermostats) used by the permittee, which may contain mercury, must be evaluated by the permittee. As equipment and materials containing mercury are updated/replaced, the permittee must use mercury-free alternatives, if possible.

    ii. Bulk Chemical Evaluation – For chemicals, used at a rate which exceeds 1,000 gallons/year or 10,000 pounds/year, the permittee must obtain a manufacturer's certificate of analysis, a chemical analysis performed by a certified laboratory, and/or a notarized affidavit which describes the substances' mercury concentration and the detection limit achieved. If possible, the permittee must only use bulk chemicals utilized in the wastewater treatment process which contain <10 ppb mercury.

[2] Neither monitoring nor outreach is required for facilities meeting the criteria for MMP Type IV, but monitoring and/or outreach can be included in the permittee's control strategy.
[3] CSO permits are included under the 05 and 07 permit classifications.
[4] These are overflow retention facilities (ORFs) and are included under the 05 and 07 permit classifications.
[5] CIUs include those listed under Federal Regulation in 40 CFR Part 400.

MERCURY MINIMIZATION PROGRAM (MMP) – Type IV (Continued)

c. **Status Report** - An **annual** status report must be developed and maintained on site, in accordance with the Schedule of Additional Submittals, summarizing:

   i. Review of criteria to determine if the facility has a potential mercury source;
      a. If the permittee no longer meets the criteria for MMP Type IV, the permittee must notify the DEC for a permittee-initiated permit modification;
   ii. All actions undertaken, pursuant to the control strategy, during the previous year; and
   iii. Actions planned, pursuant to the control strategy, for the upcoming year.

   The permittee must maintain a file with all MMP documentation. The file must be available for review by DEC representatives and copies must be provided upon request in accordance with 6 NYCRR 750-2.1(i) and 750-2.5(c)(4).

3. MMP Modification - The MMP must be modified whenever:
   a. Changes at the facility, or within the collection system, increase the potential for mercury discharges;
   b. A letter from the DEC identifies inadequacies in the MMP.

   The DEC may use information in the annual status reports, in accordance with 2.c of this MMP, to determine if the permit limitations and MMP Type is appropriate for the facility.

DEFINITIONS:

Potential mercury source – a source identified by the permittee that may reasonably be expected to have total mercury contained in the discharge. Some potential mercury sources include switches, fluorescent lightbulbs, cleaners, degreasers, thermometers, batteries, hauled wastes, universities, hospitals, laboratories, landfills, Brownfield sites, or raw material storage.

DISCHARGE NOTIFICATION REQUIREMENTS

(a) The permittee shall install and maintain identification signs at all outfalls to surface waters listed in this permit, unless the Permittee has obtained a waiver in accordance with the Discharge Notification Act (DNA). Such signs shall be installed before initiation of any new discharge location.

(b) Subsequent modifications to or renewal of this permit does not reset or revise the deadline set forth in (a) above, unless a new deadline is set explicitly by such permit modification or renewal.

(c) The Discharge Notification Requirements described herein do not apply to outfalls from which the discharge is composed exclusively of storm water, or discharges to ground water.

(d) The sign(s) shall be conspicuous, legible and in as close proximity to the point of discharge as is reasonably possible while ensuring the maximum visibility from the surface water and shore. The signs shall be installed in such a manner to pose minimal hazard to navigation, bathing or other water related activities. If the public has access to the water from the land in the vicinity of the outfall, an identical sign shall be posted to be visible from the direction approaching the surface water.

The signs shall have **minimum** dimensions of eighteen inches by twenty-four inches (18" x 24") and shall have white letters on a green background and contain the following information:

N.Y.S. PERMITTED DISCHARGE POINT

SPDES PERMIT No.: NY_____

OUTFALL No. :____

For information about this permitted discharge contact:

Permittee Name: _____

Permittee Contact: _____

Permittee Phone: ( ) - ### - ####

OR:

NYSDEC Division of Water Regional Office Address:

NYSDEC Division of Water Regional Phone: ( ) - ### -####

(e) Upon request, the permittee shall make available electronic or hard copies of the sampling data to the public. In accordance with the RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS page of your permit, each DMR shall be maintained (either electronically or as a hard copy) on record for a period of five years.

(f) The permittee shall periodically inspect the outfall identification sign(s) in order to ensure they are maintained, are still visible, and contain information that is current and factually correct. Signs that are damaged or incorrect shall be replaced within 3 months of inspection.

SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule:

Outfall(s)	Compliance Action	Compliance Date[6]
	INTERIM PROGRESS REPORT[7] The permittee shall provide a status update on the *Preliminary Engineering Report*.	EDP + 9 Months
	PRELIMINARY ENGINEERING REPORT The permittee shall submit an approvable[8] Preliminary Engineering Report (PER) that meets the requirements of the EFC/DEC Engineering Report Outline (https://www.dec.ny.gov/permits/6054.html). The report shall describe treatment alternatives or other control mechanisms (i.e., pretreatment program / Sewer Use Law) that may be used to comply with the final effluent limitations.	EDP + 12 Months
	INTERIM PROGRESS REPORT The permittee shall provide a status update for the *Design Documents*.	EDP + 21 Months
	DESIGN DOCUMENTS The permittee shall submit approvable[2] Design Documents including a Basis of Design Report (BODR), Plans, Specifications, and Construction Schedule for the selected alternative that will ensure compliance with final effluent limitations.	EDP + 24 Months
	INTERIM PROGRESS REPORT The permittee shall provide a status update for *Complete Construction*.	EDP + 33 Months EDP + 42 Months EDP + 51 Months
	COMPLETE CONSTRUCTION The permittee shall provide a Construction Completion Certification[9] to the Department that the disposal system has been fully completed in accordance with the approved Design Documents.	EDP + 54 Months
	COMMENCE OPERATION Following receipt of DEC acceptance of the Construction Completion Certification, the permittee shall comply with the final effluent limitation(s) described in this permit.	Upon Department Acceptance
Unless noted otherwise, the above actions are one-time requirements.		

b) The permittee shall submit a Report of Non-compliance Event form with each of the above schedule dates no later than 14 days following each elapsed date, unless conditions require more immediate notice as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2. All notifications shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of non-compliance shall include the following information:

1. A short description of the non-compliance;
2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirements without further delay and to limit environmental impact associated with the non-compliance;
3. Any details which tend to explain or mitigate an instance of non-compliance; and
4. An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next scheduled requirement on time.

c) The permittee shall submit copies of any document required by the above schedule of compliance to the DEC Regional Water Engineer and to the Bureau of Water Permits.

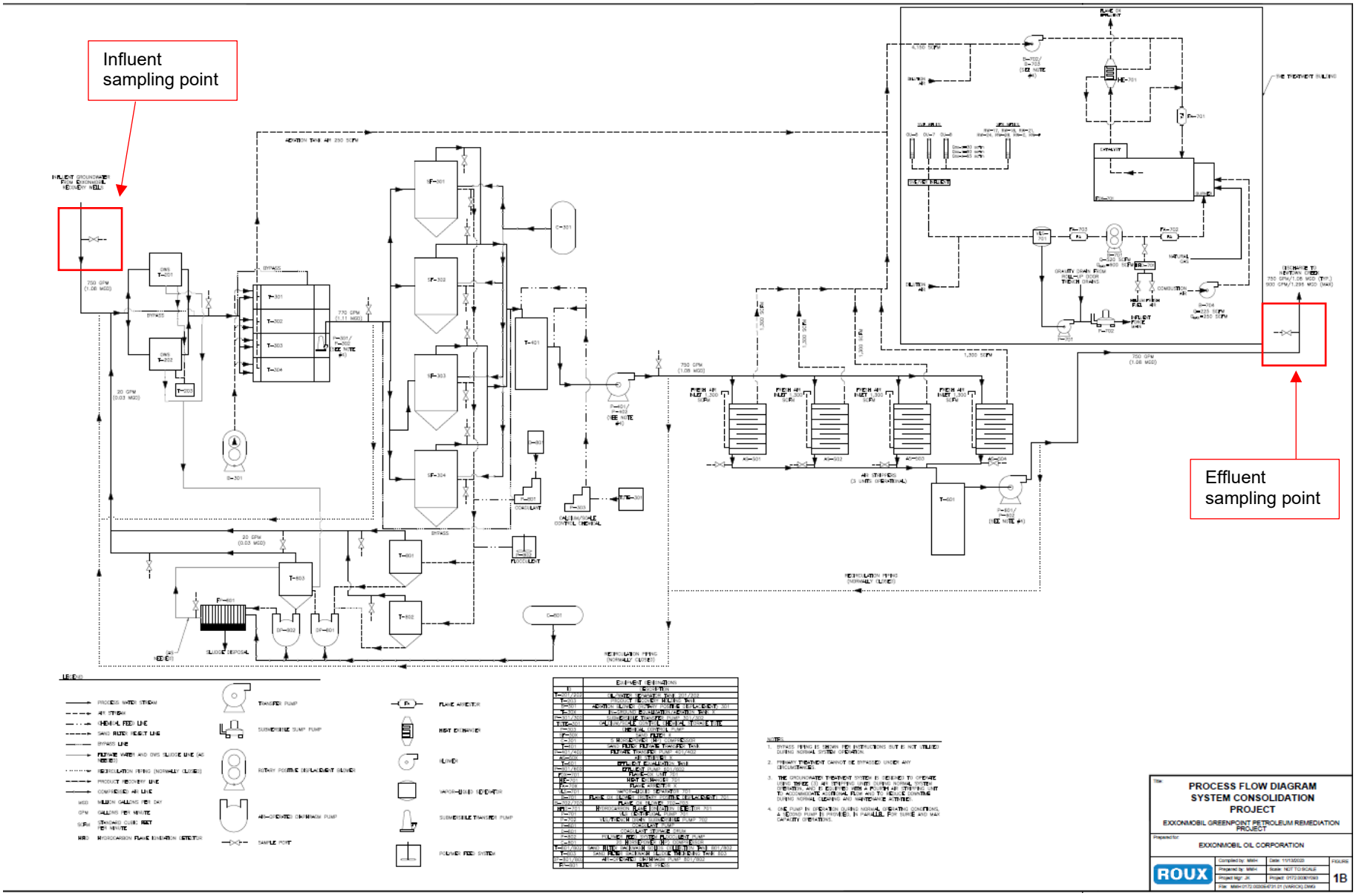
[6] 6 NYCRR 750-1.14 (a)
[7] 6 NYCRR 750-1.14 (b)
[8] 6 NYCRR 750 1.2 (a)(8)
[9] 6 NYCRR 750-2.10 (c)

MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the locations(s) specified below:

Influent: Prior to oil/water separator

Effluent: After the effluent pump



GENERAL REQUIREMENTS

A. The regulations in 6 NYCRR Part 750 are hereby incorporated by reference and the conditions are enforceable requirements under this permit. The permittee shall comply with all requirements set forth in this permit and with all the applicable requirements of 6 NYCRR Part 750 incorporated into this permit by reference, including but not limited to the regulations in paragraphs B through H as follows:

B. General Conditions

1.	Duty to comply	6 NYCRR 750-2.1(e) & 2.4
2.	Duty to reapply	6 NYCRR 750-1.16(a)
3.	Need to halt or reduce activity not a defense	6 NYCRR 750-2.1(g)
4.	Duty to mitigate	6 NYCRR 750-2.7(f)
5.	Permit actions	6 NYCRR 750-1.1(c), 1.18, 1.20 & 2.1(h)
6.	Property rights	6 NYCRR 750-2.2(b)
7.	Duty to provide information	6 NYCRR 750-2.1(i)
8.	Inspection and entry	6 NYCRR 750-2.1(a) & 2.3

C. Operation and Maintenance

1.	Proper Operation & Maintenance	6 NYCRR 750-2.8
2.	Bypass	6 NYCRR 750-1.2(a)(17), 2.8(b) & 2.7
3.	Upset	6 NYCRR 750-1.2(a)(94) & 2.8(c)

D. Monitoring and Records

1.	Monitoring and records	6 NYCRR 750-2.5(a)(2), 2.5(a)(6), 2.5(c)(1), 2.5(c)(2), & 2.5(d)
2.	Signatory requirements	6 NYCRR 750-1.8 & 2.5(b)

E. Reporting Requirements

1.	Reporting requirements for non-POTWs	6 NYCRR 750-2.5, 2.6, 2.7, &1.17
2.	Anticipated noncompliance	6 NYCRR 750-2.7(a)
3.	Transfers	6 NYCRR 750-1.17
4.	Monitoring reports	6 NYCRR 750-2.5(e)
5.	Compliance schedules	6 NYCRR 750-1.14(d)
6.	24-hour reporting	6 NYCRR 750-2.7(c) & (d)
7.	Other noncompliance	6 NYCRR 750-2.7(e)
8.	Other information	6 NYCRR 750-2.1(f)

F. Sludge Management

The permittee shall comply with all applicable requirements of 6 NYCRR Part 360.

G. SPDES Permit Program Fee

The permittee shall pay to the DEC an annual SPDES permit program fee within 30 days of the date of the first invoice, unless otherwise directed by the DEC, and shall comply with all applicable requirements of ECL 72-0602 and 6 NYCRR Parts 480, 481 and 485. Note that if there is inconsistency between the fees specified in ECL 72-0602 and 6 NYCRR Part 485, the ECL 72-0602 fees govern.

H. Water Treatment Chemicals (WTCs)

New or increased use and discharge of a WTC requires prior DEC review and authorization. At a minimum, the permittee must notify the DEC in writing of its intent to change WTC use by submitting a completed *WTC Notification Form* for each proposed WTC. The DEC will review that submittal and determine if a SPDES permit modification is necessary or whether WTC review and authorization may proceed outside of the formal permit administrative process. The majority of WTC authorizations do not require SPDES permit modification. In any event, use and discharge of a WTC shall not proceed without prior authorization from the DEC. Examples of WTCs include biocides, coagulants, conditioners, corrosion inhibitors, defoamers, deposit control agents, flocculants, scale inhibitors, sequestrants, and settling aids.

1. WTC use shall not exceed the rate explicitly authorized by this permit or otherwise authorized by the DEC.
2. The permittee shall maintain a logbook of all WTC use, noting for each WTC the date, time, exact location, and amount of each dosage, and, the name of the individual applying or measuring the chemical. The logbook must also document that adequate process controls are in place to ensure excessive levels of WTCs are not used.
3. The permittee shall submit a completed WTC Annual Report Form each year that they use and discharge WTCs. This form shall be submitted in electronic format and attached to either the December DMR or the annual monitoring report required below. The *WTC Notification Form and WTC Annual Report Form* are available from the DEC's website at: http://www.dec.ny.gov/permits/93245.html

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

A. The monitoring information required by this permit shall be retained for a period of at least five years from the date of the sampling for subsequent inspection by the Department or its designated agent.

B. Discharge Monitoring Reports (DMRs): Completed DMR forms shall be submitted for each **one** month reporting period in accordance with the DMR Manual available on DEC's website.

DMRs must be submitted electronically using the electronic reporting tool (NetDMR) specified by DEC. Instructions on the use of NetDMR can be found at https://www.dec.ny.gov/chemical/103774.html. **Hardcopy paper DMRs will only be accepted if a waiver from the electronic submittal requirements has been granted by DEC to the facility.**

The first monitoring period begins on the effective date of this permit, and, unless otherwise required, the reports are due no later than the 28th day of the month following the end of each monitoring period.

C. Additional information required to be submitted by this permit shall be summarized and reported to the Regional Water Engineer and Bureau of Water Permits at the following addresses:

Department of Environmental Conservation
Division of Water, Bureau of Water Permits
625 Broadway, Albany, New York 12233-3505 Phone: (518) 402-8111

Department of Environmental Conservation
Regional Water Engineer, Region 2
One Hunters Point Plaza, Long Island City, New York, 11101-5407 Phone: (718) 482-4933

D. Schedule of Additional Submittals:

The permittee shall submit the following information to the Regional Water Engineer and to the Bureau of Water Permits, unless otherwise instructed:

Outfall(s)	SCHEDULE OF ADDITIONAL SUBMITTALS - Required Action	Due Date
002	EMERGING CONTAMINANT SHORT-TERM MONITORING The permittee shall collect grab samples of both the influent and effluent from the facility's treatment system(s) associated with the identified outfall for Per-and Polyfluoroalkyl Substances (PFAS) utilizing EPA draft analytical method 1633 and 1,4-Dioxane (1,4-D) utilizing EPA Method 8270D SIM or 8270E SIM. The samples must represent normal discharge conditions and treatment operations and shall be obtained on a monthly basis for at least 3 consecutive months. The results shall be reported through the "Emerging Contaminants Survey for Industrial Facilities" found at: https://www.dec.ny.gov/chemical/127939.html.	Construction Completion + 6 months
	The permittee shall initiate track down of potential sources by completing the "Emerging Contaminants Investigation Checklist for Industrial Facilities" available at the above link. The DEC may periodically request updates or additional monitoring to check progress on track down investigations. Elements of the checklist may be used as permit conditions in future permit modifications.	Within 90 days of DEC written notification

Outfall(s)	SCHEDULE OF ADDITIONAL SUBMITTALS - Required Action	Due Date
002	BMP PLAN The permittee shall annually review the completed BMP plan, submitted to this DEC on 10/1/2008, on an annual basis. The BMP plan shall be modified whenever: (a) changes at the facility materially increase the potential for releases of pollutants, (b) actual releases indicate the plan is inadequate, or (c) a letter from the DEC identifies inadequacies in the plan. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. All BMP plan revisions must be submitted to the Regional Water Engineer within 30 days.	Annually with the January DMR (February 28th)
002	WHOLE EFFLUENT TOXICITY (WET) TESTING WET testing shall be performed as required in the footnote of the permit limits table. The toxicity test report including all information requested of this permit shall be attached to your WET DMRs and sent to the WET@dec.ny.gov email address.	Within 60 days following the end of each monitoring period
002	WATER TREATMENT CHEMICAL (WTC) ANNUAL REPORT FORM The permittee shall submit a completed WTC Annual Report Form each year that Water Treatment Chemicals are used. The form shall be attached to the December DMR.	Annually on January 28th
002	MERCURY MINIMIZATION PLAN The permittee must complete and maintain onsite an annual mercury minimization status report in accordance with the requirements of this permit.	***Maintained Onsite*** EDP + 12 months, annually thereafter
002	MERCURY - CONDITIONAL EXCLUSION CERTIFICATION Permittee must submit a mercury conditional exclusion certification every five years in order to maintain MMP Type IV status.	12/11/2028 and every 5 years thereafter
002	STORMWATER NO EXPOSURE CERTIFICATION Permittee must recertify every five years a condition of no exposure to stormwater in order to continue to qualify for the no exposure exclusion. The No Exposure Certification Form can be found on the DEC website.	12/11/2028 and every 5 years thereafter

Unless noted otherwise, the above actions are one-time requirements.

E. Monitoring and analysis shall be conducted using sufficiently sensitive test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

F. More frequent monitoring of the discharge(s), monitoring point(s), or waters of the State than required by the permit, where analysis is performed by a certified laboratory or where such analysis is not required to be performed by a certified laboratory, shall be included in the calculations and recording of the data on the corresponding DMRs.

G. Calculations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

H. Unless otherwise specified, all information recorded on the DMRs shall be based upon measurements and sampling carried out during the most recently completed reporting period.

I. Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section 502 of the Public Health Law shall be conducted by a laboratory which

has been issued a certificate of approval. Inquiries regarding laboratory certification should be directed to the New York State Department of Health, Environmental Laboratory Accreditation Program.

SPDES Permit Fact Sheet ExxonMobil Oil Corporation ExxonMobil Greenpoint Petroleum Remediation Project (EMGPRP) NY0267724

Contents

Summary of Permit Changes

A State Pollutant Discharge Elimination System (SPDES) permittee-initiated permit modification has been drafted for the ExxonMobil Greenpoint Petroleum Remediation Project (EMGPRP). The changes to the permit are summarized below:

- Updated permit format, definitions, and general conditions
- Updated permittee contact information
- Updated the Permits Limits, Levels and Monitoring tables for Outfalls 001, 01A, and 002 to reflect effluent limits during construction
- Added a new Permits Limits, Levels and Monitoring table for Outfall 002 with effluent limits effective post construction
    - Changed daily maximum limit for flow from 0.62 MGD to 1.3 MGD
    - Removed effluent and ambient turbidity monitoring
    - Changed daily maximum limit for benzene from 40 µg/L to 5 µg/L
    - Changed daily maximum limit for total copper from 95 µg/L to 25 µg/L
    - Changed daily maximum action level for methyl tert butyl ether (MTBE) from 90 µg/L to 50 µg/L
    - Changed daily maximum limit for toluene from 10 µg/L to 5 µg/L
    - Changed daily maximum limit for trichloroethylene from 20 µg/L to 10 µg/L
    - Changed monthly average limit for tetrachloroethylene from monitor only to 5 µg/L
    - Removed limits for total xylenes
    - Added monthly average limit of monitor only and daily maximum limit of 5 µg/L for ortho-xylene
    - Added monthly average limit of monitor only and daily maximum limit of 10 µg/L for meta- & para-xylenes
    - Reduced WET action level from 1.8 TUa to 1.5 TUa for acute
    - Added WET action level of 5.0 TUc for chronic
- Removed Outfall 01A
- Removed Outfall 001
- Added Stormwater Pollution Prevention Requirements
- Updated Best Management Practices (BMPs) for Industrial Facilities section
- Added Mercury Minimization Plant (MMP) Type IV requirements
- Updated Discharge Notification Requirements section
- Added Schedule of Compliance
- Updated Monitoring Locations diagram and process flow diagram
- Added Schedule of Additional Submittals that includes requirement for emerging contaminant monitoring

This fact sheet summarizes the information used to determine the effluent limitations (limits) and other conditions contained in the permit. General background information including the regulatory basis for the effluent limitations and other conditions are in the Appendix linked throughout this fact sheet.

Administrative History

4/1/2015 The last full technical review was performed and the SPDES permit became effective with a new five-year term and expiration date of 3/31/2020. The 2015 permit has formed the basis of this permit.

3/31/2020 The current permit was allowed to stay in effect pursuant to SAPA[1].

12/11/2023 The ExxonMobil Oil Corporation submitted a request to modify the permit to consolidate the two groundwater treatment facilities into one, new groundwater treatment facility in which the combined flow from all existing recovery wells will be sent for processing with final discharge to Outfall 002.

1/26/2024 The Department sent a Notice of Incomplete Application (NOIA) requesting additional and/or clarifying information from the previous application submittal.

2/16/2024 The ExxonMobil Oil Corporation submitted additional information in response to the NOIA.

The Notice of Complete Application, published in the Environmental Notice Bulletin and newspapers, contains information on the public notice process.

Facility Information

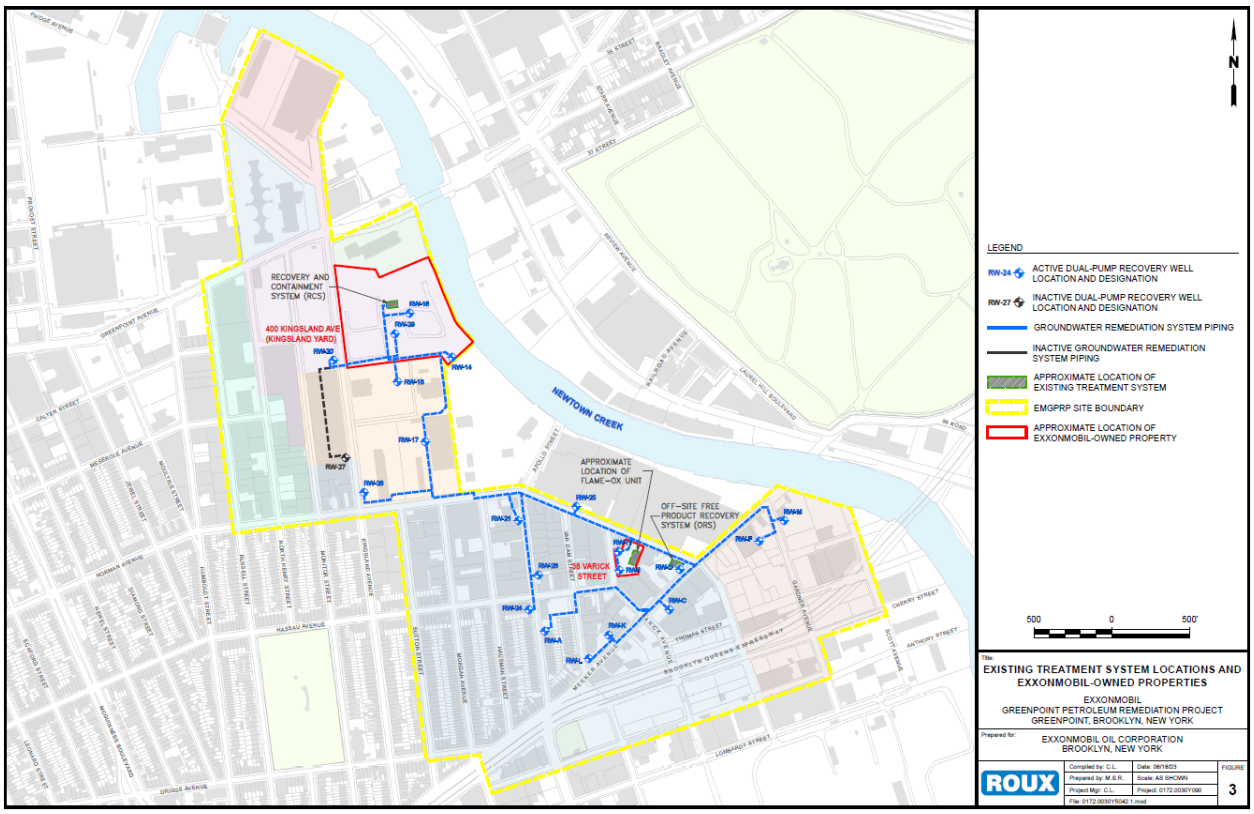
This is an industrial facility under SIC code 4959. Effluent consists of groundwater that is extracted from recovery wells and remediated as part of the ongoing EMGPRP free-product recovery efforts. The new treatment system will be constructed to continue to provide remedial treatment and will include the following treatment units:

- Oil/water separation
- Aeration to oxidize dissolved metals.
- Influent flow equalization and primary settling
- Sand filtration to remove oxidized metals and total suspended solids.
- Backwash treatment to settle and remove solids from the filtration step.
- Scale/deposit control via chemical injection
- Air stripping for primary volatile organic compound (VOC)/semi-volatile organic compound (SVOC) removal
- Effluent flow equalization
- Process air treatment by catalytic oxidation via the existing Flame-Ox unit and/or vapor phase activated carbon; and
- Auxiliary tanks to store and process site remediation water.

Sludge is dewatered via filter press and is disposed of offsite. The outfall is constructed of a 6" diameter PVC pipe and runs beneath Meeker Avenue before discharging into Newtown Creek. The pipe penetrates an existing granite bulkhead before elbowing 90 degrees downward into Stone Gabion Baskets (to minimize turbidity) approximately 10' above the creek bed.

[1] State Administrative Procedures Act Section 401(2) and 6 NYCRR 621.11(*l*)

Site Overview



Enforcement History

Compliance and enforcement information can be found on the EPA's Enforcement and Compliance History Online (ECHO) website.

Existing Effluent Quality

The Pollutant Summary Table presents the existing effluent quality and effluent limitations. The existing effluent quality was determined from Discharge Monitoring Reports and the application submitted by the permittee for the period 2/1/2019 to 1/31/2024. Appendix Link

Interstate Water Pollution Control Agencies

Outfall 002 is located within the Interstate Environmental Commission (IEC) compact area. All applicable IEC requirements are incorporated into the permit through New York State's SPDES program. Appendix Link

Receiving Water Information

The facility discharges via the following outfalls:

Outfall No.	SIC Code	Wastewater Type	Receiving Water
001	4959	On-site stormwater and on-site wastewater treatment system effluent	Newtown Creek, Class SD – to be removed from permit
01A		ExxonMobil remediation wastewater treatment system effluent prior to combination with stormwater	
002		Off-site wastewater treatment system effluent	Newtown Creek, Class SD

Reach Description: Newtown Creek (LI-4) is a tributary of the East River. The segment of the Newtown Creek at the point of discharge is classified as SD (6NYCRR 890.6 – Table I - Item 54).

See the Outfall and Receiving Water Summary Table and Appendix for additional information.

Impaired Waterbody Information

The Newtown Creek segment (PWL No. 1702-0002) was first listed on the 2016 New York State Section 303(d) List of Impaired/TMDL Waters as impaired due to oxygen demand, fecal coliform, and garbage & refuse from CSOs and Urban/Storms. The segment continues to be listed as of the 2018 NYS Section 303(d) List. A TMDL has not been developed to address the impairment. Additionally, the pollutants for which the Newtown Creek is considered impaired for do not have the potential to be discharged from the ExxonMobil facility. Therefore, there are no applicable wasteload allocations (WLAs) for this facility.

Critical Receiving Water Data & Mixing Zone

The facility discharges to Newtown Creek, which is a tidal waterbody and therefore an acute, chronic, and HEW dilution ratio of 5:1 is applicable.

Outfall No.	Acute Dilution Ratio A(A)	Chronic Dilution Ratio A(C)	Human, Aesthetic, Wildlife Dilution Ratio (HEW)	Basis
002	5:1	5:1	5:1	TOGS 1.3.1 (for ponded or tidal waterbodies)

Critical receiving water data are listed in the Pollutant Summary Table at the end of this fact sheet. Appendix Link

Permit Requirements

The technology based effluent limitations (TBELs), water quality-based effluent limitations (WQBELs), Existing Effluent Quality and a discussion of the selected effluent limitation for each pollutant present in the discharge are provided in the Pollutant Summary Table.

Whole Effluent Toxicity (WET) Testing

An evaluation of the discharge indicates the potential for toxicity based on the following criteria (Appendix Link):

- Treatment plants which equal or exceed a discharge of 1MGD. (#7)

Consistent with TOGS 1.3.2, a reasonable potential analysis was performed using the existing WET data for this facility (see data below). It was determined that while the analysis indicated no potential for toxicity in the effluent, WET testing is required based on the criteria listed above and WET action levels are being updated in the permit. Given the dilution available and location outside of the Great Lakes basin, the permit requires chronic only WET testing. Samples will be collected quarterly every five years. WET testing action levels of 1.5 TUa and 5.0 TUc have been included in the permit for each species. The acute action level for each species represent the acute dilution ratio times a factor of 0.3. The chronic action levels represent the chronic dilution ratio.

Table 1: 2020 WET results for ExxonMobil Greenpoint Remediation Project, Outfall 001

Test Date	[1]MSS 48H LC50 (%Effluent)	[2]MSS TUa	[3]TUa Action Level	[4]MSS Survival 100% Effluent	[5]Acute Test Result	[6]MSS RPD TUa	[7]Acute WET Limit Required	[8]Predicted MSS TUc	[9]TUc Action Level	[10]Chronic Test Result	[11]MSS RPD TUc	[12]Chronic WET Limit Required
03/20	> 100% (FI)	< 0.3 (FI)	1.5	100% (FI)	Pass	< 0.8	No	<10.0 (FI)	5.0	Pass	< 26.0	***No
06/20	> 100% (FI)	< 0.3 (FI)	1.5	100% (FI)	Pass	< 0.8	No	<10.0 (FI)	5.0	Pass	< 26.0	***No
09/20	> 100% (FI)	< 0.3 (FI)	1.5	100% (FI)	Pass	< 0.8	No	<10.0 (FI)	5.0	Pass	< 26.0	***No
11/20	> 100% (FI)	< 0.3 (FI)	1.5	95% (I)	Pass	< 0.8	No	<10.0 (FI)	5.0	Pass	< 26.0	***No

Table 2: 2020 WET results for ExxonMobil Greenpoint Remediation Project, Outfall 002

Test Date	[1]MSS 48H LC50 (%Effluent)	[2]MSS TUa	[3]TUa Action Level	[4]MSS Survival 100% Effluent	[5]Acute Test Result	[6]MSS RPD TUa	[7]Acute WET Limit Required	[8]Predicted MSS TUc	[9]TUc Action Level	[10]Chronic Test Result	[11]MSS RPD TUc	[12]Chronic WET Limit Required
03/20	> 100% (FI)	< 0.3 (FI)	1.5	100% (FI)	Pass	< 0.8	No	<10.0 (FI)	5.0	Pass	< 26.0	***No
06/20	> 100% (FI)	< 0.3 (FI)	1.5	95% (FI)	Pass	< 0.8	No	<10.0 (FI)	5.0	Pass	< 26.0	***No
09/20	> 100% (FI)	< 0.3 (FI)	1.5	100% (FI)	Pass	< 0.8	No	<10.0 (FI)	5.0	Pass	< 26.0	***No
11/20	> 100% (FI)	< 0.3 (FI)	1.5	95% (I)	Pass	< 0.8	No	<10.0 (FI)	5.0	Pass	< 26.0	***No

[1]Most Sensitive Species 48-hour Lethal Concentration: (F=Fish; I=Invertebrate) is the concentration or percentage of effluent that is lethal to 50% of the exposed organisms over a 48-hour period, and often indicates one species is more sensitive than the other during effluent testing.

[2]Most Sensitive Species Toxic Units Acute: is calculated as (100 / MSS 48H LC50). However, because ≤ 0.3 TUa is defined as the acceptable amount of Acute toxicity at the edge of the Acute mixing zone, and mathematically 100 / 100 = 1.0 (i.e. a "failing result"), non-toxic Acute test results are indicated as < 0.3.

[3]Toxic Unit Acute Action Level/Limit: is calculated as [Acute Dilution Factor x 0.3 TUa] representing the maximum allowable effluent TUa at the edge of the Acute mixing zone ensuring Acute protection of the receiving water. When the Acute Dilution Factor is <3.3, the default Acute Action Level of 0.3 TUa is used representing the maximum allowable effluent TUa at the end of pipe.

[4]Most Sensitive Species Survival in 100% Effluent: is the lowest percentage of surviving organisms in 100% effluent, providing additional evidence of unacceptable Acute toxicity when the necessary 50% or greater mortality required to generate an LC50 has not been attained. *Denotes statistically significant mortality as compared to the control.

[5]Acute Test Result: MSS TUa ≤ TUa Action Level/Limit for passing effluent test result and MSS TUa > TUa Action Level/Limit for a failing effluent test result. If unacceptable mortality (i.e. statistically significant as compared to the control), this may also be considered a failing test result.

[6]Most Sensitive Species Reasonable Potential Determination Toxic Units Acute: is calculated as (MSS TUa x 2.6), the Reasonable Potential Multiplier when four quarterly tests have been completed, taking into account the statistical potential for effluent variability to occur causing an exceedance of the toxicity-based Action Level.

[7]Acute Whole Effluent Toxicity Limit Required: MSS RPD TUa ≤ TUa Action Level, then no toxicity-based Limit is required, and the Action Level remains in place. If MSS RPD TUa > TUa Action Level, then a toxicity-based Limit is required, and the Action Level becomes the Limit. **In low dilution situations, the application of the RPD to the Acute results often mathematically suggests the need for Acute WET Limits even when there is no toxicity evident in 100% effluent (a non-detect). Therefore, this data cannot be used to implement a WET Limit.

[8]Predicted Most Sensitive Species Toxic Units Chronic: is calculated as (MSS TUa x 10) the default Acute:Chronic ratio used to predict Chronic toxicity from Acute test results in the absence of Chronic testing. When MSS TUa is < 0.3, < 1.0 should be used for the calculation since this is defined as the acceptable amount of Chronic toxicity at the edge of the Chronic mixing zone. In Class A/SA, B/SB, C/SC, and I waters, we must ultimately protect for Chronic toxicity.

[9]Toxic Unit Chronic Action Level/Limit: is calculated as [Chronic Dilution Factor x 1.0 TUc] representing the maximum allowable effluent TUc at the edge of the Chronic mixing zone ensuring Chronic protection of the receiving water.

[10]Chronic Test Result: MSS TUc ≤ TUc Action Level/Limit for passing effluent test result and MSS TUc > TUc Action Level/Limit for a failing effluent test result.

[11]Most Sensitive Species Reasonable Potential Determination Toxic Units Chronic: is calculated as (MSS TUc x 2.6), the Reasonable Potential Multiplier when four quarterly tests have been completed, taking into account the statistical potential for effluent variability to occur causing an exceedance of the toxicity-based Action Level.

[12]Chronic Whole Effluent Toxicity Limit Required: MSS RPD TUc ≤ TUc Action Level, then no toxicity-based Limit is required, and the Action Level remains in place. If MSS RPD TUc > TUc Action Level, then a toxicity-based Limit is required, and the Action Level becomes the Limit. ***In low dilution situations, the combined application of the default ACR and RPD to the Acute results often mathematically suggests the need for Chronic WET limits even when there is no toxicity evident in 100% effluent (a non-detect). Therefore, this data cannot be used to implement a WET Limit.

Although TOGS 1.3.2 requires only acute WET testing for discharges to class SD waterbodies, chronic WET testing will be added to the permit to align with other remediation projects that have permitted WET programs. Chronic WET testing will better capture the overall characteristics and potential toxic effects the effluent may have on the receiving waterbody than acute WET testing only.

Anti-backsliding

The limitations contained in the permit are at least as stringent as the previous permit limits and there are no instances of backsliding. Appendix Link

Antidegradation

The permit contains effluent limitations which ensure that the best usages of the receiving waters will be maintained. The Notice of Complete Application published in the Environmental Notice Bulletin contains information on the State Environmental Quality Review (SEQR)[2] determination. Appendix Link

Discharge Notification Act Requirements

In accordance with the Discharge Notification Act (ECL 17-0815-a), the permittee is required to post a sign at each point of wastewater discharge to surface waters, unless a waiver is obtained. This requirement is being continued from the previous permit.

Additionally, the permit contains a requirement to make the DMR sampling data available to the public upon request. This requirement is being continued from the previous permit.

Best Management Practices (BMPs) for Industrial Facilities

In accordance with 6 NYCRR 750-1.14(f) and 40 CFR 122.44(k), the permittee is required to continue implementation of a BMP plan that prevents, or minimizes the potential for, the release of toxic or hazardous pollutants to state waters. The BMP plan requires annual review by the permittee.

Stormwater Pollution Prevention Requirements

On 12/11/2023, the permittee submitted a Conditional Exclusion for No Exposure Form, certifying that all industrial activities and materials are completely sheltered from exposure. This condition must be maintained for the exclusion to remain applicable. The schedule of submittals also includes a due date for re-certification every five years as required by 40 CFR 122.26(g)(iii). This requirement is new.

[2] As prescribed by 6 NYCRR Part 617

Mercury[3]

The multiple discharge variance (MDV) for mercury provides the framework for DEC to require mercury monitoring and mercury minimization programs (MMPs), through SPDES permitting. Appendix Link

This facility is not located within the Great Lakes Basin and does not have a mercury source. On 12/11/2023, the permittee submitted a Conditional Exclusion Certification, certifying that the facility does not have any of the mercury sources listed in Part III.A.3. of DOW 1.3.10 and the effluent measured <12 ng/L. Therefore, consistent with DOW 1.3.10, the permit includes requirements for the implementation of MMP Type IV and does not include mercury effluent limitations. The Schedule of Additional Submittals includes a mercury minimization plan annual status report (maintained onsite), and re-certification of the exclusion every five years. As part of the re-certification, the effluent must be sampled and continue to measure <12 ng/L. This requirement is new.

Schedule of Compliance

A Schedule of Compliance is being included[4] for the following items (Appendix Link):

- Interim progress reports to provide updates on:
  - The Preliminary Engineering Report,
  - Design documents, and
  - Construction completion
- Submittal of Preliminary Engineering Report
- Submittal of approvable design documents, including a Basis of Design Report, Plans, Specifications, and Construction Schedule.
- Complete construction
- Commence operation

Emerging Contaminant Monitoring

Emerging Contaminants, such as Perfluorooctanoic acid (PFOA), Perfluorooctanesulfonic acid (PFOS), and 1,4-Dioxane (1,4-D), have been used in a wide variety of consumer and industrial product as well as in manufacturing processes for decades. These contaminants do not break down easily, therefore their presence in wastewater can remain a concern for years following their discontinued use. As the science surrounding these contaminants is still evolving, additional monitoring is needed to better understand potential sources and background levels. For more information on emerging contaminants, please see the DEC Division of Water web page: https://www.dec.ny.gov/chemical/127939.html.

Pursuant to 6 NYCRR Part 750-1.13(b), the permit includes a short-term monitoring program listed in the Schedule of Additional Submittals to evaluate the influent and effluent discharge levels of Per-and Polyfluoroalkyl Substances (PFAS) and 1,4-Dioxane. This monitoring program is consistent with guidance released in EPA guidance memos dated April 28, 2022, and December 5, 2022.

The DEC will review the monitoring results and pursuant to 6 NYCRR 750-2.1(i) may notify the permittee of the need for further monitoring to identify potential sources as specified in the Emerging Contaminants Investigation Checklist for Industrial Facilities to determine whether

[3] In accordance with DOW 1.3.10 Mercury – SPDES Permitting & Multiple Discharge Variance (MDV), December 30, 2020.
[4] Pursuant to 6 NYCRR 750-1.14

cause exists to modify the permit to incorporate a pollutant minimization program per 6 NYCRR 750-1.14(f).

The DEC will consider this information and progress made to track down and reduce or eliminate the source of the identified pollutants in determining if a permit modification is needed.

Schedule of Additional Submittals

A schedule of additional submittals has been included for the following (Appendix Link):

- Emerging Contaminant Short-Term Monitoring
- Annual BMP Plan
- Whole Effluent Toxicity (WET) Testing
- Water Treatment Chemical (WTC) Annual Report Form
- Mercury Minimization Plan (maintained onsite)
- Mercury Conditional Exclusion Certification
- Stormwater No Exposure Certification

Permittee: ExxonMobil Oil Corporation
Facility: ExxonMobil Greenpoint Petroleum Remediation Project (EMGPRP)
SPDES Number: NY0267724
USEPA Major/Class 03 Industrial

Date: October 30, 2024 v.1.25

Permit Writer: Kirsten Jedd-Barry
Water Quality Reviewer: Kirsten Jedd-Barry
Full Technical Review

OUTFALL AND RECEIVING WATER SUMMARY TABLE

Outfall	Latitude	Longitude	Receiving Water Name	Water Class	Water Index No. / Priority Waterbody Listing (PWL) No.	Major / Sub Basin	Hardness (mg/l)	1Q10 (MGD)	7Q10 (MGD)	30Q10 (MGD)	Critical Effluent Flow (MGD)	Dilution Ratio		
												A(A)	A(C)	HEW
001	40° 43' 54.6" N	73° 56' 24.8" W	Outfalls removed from permit.											
01A	40° 43' 53.3" N	73° 56' 28.1" W												
002	40° 43' 41.4" N	73° 55' 56.6" W	Newtown Creek	SD	LI-4 / 1702-0002	17 / 02	100	-	-	-	1.3	5:1	5:1	5:1

POLLUTANT SUMMARY TABLE

Outfall 001

Outfall #	001	**Description of Wastewater:** On-Site Stormwater and On-Site Wastewater Treatment System Effluent													
		Type of Treatment: Oil/Water separator, flow equalization and aeration, sand filtration, air strippers, bag filters													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[5]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: Existing discharge data from February 2019 to January 2024 was obtained from Discharge Monitoring Reports provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent. The technology based effluent limitations (TBELs) were developed from TOGS 1.2.1 Att.C, for category I (air stripping) treatment systems.															
Flow Rate	MGD	Monthly Avg	Monitor	0.63 Actual Average	60 / 0	Monitor	-	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	Discontinued
		Daily Max	Monitor	0.72 Actual Max	60 / 0	Monitor	-								
	Due to consolidation and upgrade of the treatment system, Outfall 001 is no longer needed and will be removed from the permit. Therefore, the existing effluent limits for flow monitoring at Outfall 001 will be discontinued.														
pH	SU	Minimum	6.5	7.3 Actual Min	60 / 0	6.0	40 CFR 133.102	-	-	6.5 – 8.5	Range	-	703.3	-	Discontinued
		Maximum	8.5	8.5 Actual Max	60 / 0	9.0	40 CFR 133.102								
	Due to consolidation and upgrade of the treatment system, Outfall 001 is no longer needed and will be removed from the permit. Therefore, the existing effluent limits for pH at Outfall 001 will be discontinued.														

[5] Existing Effluent Quality: Unless otherwise stated, Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall #	001	**Description of Wastewater:** On-Site Stormwater and On-Site Wastewater Treatment System Effluent **Type of Treatment:** Oil/Water separator, flow equalization and aeration, sand filtration, air strippers, bag filters

Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality[5]	Existing Discharge Data: # of Data Points Detects / Non-Detects	TBELs: Limit	TBELs: Basis	Water Quality Data & WQBELs: Ambient Bkgd. Conc.	Water Quality Data & WQBELs: Projected Instream Conc.	Water Quality Data & WQBELs: WQ Std. or GV	Water Quality Data & WQBELs: WQ Type	Water Quality Data & WQBELs: Calc. WQBEL	Water Quality Data & WQBELs: Basis for WQBEL	ML	Basis for Permit Requirement
Oil & Grease	mg/L	Monthly Avg	Monitor	2.6	22 / 38	-	-	-	Narrative: No residue attributable to sewage, industrial wastes or other wastes, nor visible oil film no globules of grease.				703.2	-	Discontinued
		Daily Max	15	3.6	33 / 27	15	TOGS 1.2.1								
	Due to consolidation and upgrade of the treatment system, Outfall 001 is no longer needed and will be removed from the permit. Therefore, the existing effluent limits for oil and grease at Outfall 001 will be discontinued.														
Total Suspended Solids (TSS)	mg/L	Monthly Avg	20	3.4	38 / 22	30	40 CFR 133.102	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	Discontinued
		7 Day Avg	40	8.8	47 / 13	45	40 CFR 133.102								
	Due to consolidation and upgrade of the treatment system, Outfall 001 is no longer needed and will be removed from the permit. Therefore, the existing effluent limits for TSS at Outfall 001 will be discontinued.														
Turbidity (Discharge Pipe)	NTU	Monthly Avg	Monitor	12	60 / 0	-	-	-	Narrative: No increase that will cause a substantial visible contrast to natural conditions.				703.2	-	Discontinued
		Daily Max	Monitor	26	60 / 0	-	-								
	Due to consolidation and upgrade of the treatment system, Outfall 001 is no longer needed and will be removed from the permit. Therefore, the existing effluent limits for turbidity monitoring at Outfall 001 will be discontinued.														
Turbidity (Receiving Water Background)	NTU	Monthly Avg	Monitor	14	59 / 1	-	-	-	Narrative: No increase that will cause a substantial visible contrast to natural conditions.				703.2	-	Discontinued
		Daily Max	Monitor	39	60 / 0	-	-								
	Due to consolidation and upgrade of the treatment system, Outfall 001 is no longer needed and will be removed from the permit. Therefore, the existing receiving water turbidity monitoring at Outfall 001 will be discontinued.														

Outfall 01A

Outfall #	01A	**Description of Wastewater:** ExxonMobil Remediation Wastewater Treatment System Effluent Prior to Combination with Stormwater **Type of Treatment:** Oil/Water separator, flow equalization and aeration, sand filtration, air strippers, bag filters													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[6]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: Existing discharge data from February 2019 to January 2024 was obtained from Discharge Monitoring Reports provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent. The technology based effluent limitations (TBELs) were developed from TOGS 1.2.1 Att.C, for category I (air stripping) treatment systems.															
Flow Rate	MGD	Monthly Avg	Monitor	0.52 Actual Average	60 / 0	-	-	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	Discontinued
		Daily Max	0.86	0.63 Actual Max	60 / 0	-	-								
	Due to consolidation and upgrade of the treatment system, Outfall 01A is no longer needed and will be removed from the permit. Therefore, the existing effluent limits for flow monitoring at Outfall 01A will be discontinued.														
pH	SU	Minimum	6.5	7.1 Actual Min	60 / 0	6.0	40 CFR 133.102	-	-	6.5 – 8.5	Range	-	703.3	-	Discontinued
		Maximum	8.5	8.5 Actual Max	60 / 0	9.0									
	Due to consolidation and upgrade of the treatment system, Outfall 01A is no longer needed and will be removed from the permit. Therefore, the existing effluent limits for pH at Outfall 01A will be discontinued.														
Oil & Grease	mg/L	Monthly Avg	Monitor	2.5	20 / 40	-	-	-	Narrative: No residue attributable to sewage, industrial wastes or other wastes, nor visible oil film no globules of grease.				703.2	-	Discontinued
		Daily Max	15	3.4	36 / 24	15	TOGS 1.2.1								
	Due to consolidation and upgrade of the treatment system, Outfall 01A is no longer needed and will be removed from the permit. Therefore, the existing effluent limits for oil and grease at Outfall 01A will be discontinued.														
Total Suspended Solids (TSS)	mg/L	Monthly Avg	20	3.3	40 / 20	30	40 CFR 133.102	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	Discontinued
		7 Day Avg	40	7.0	50 / 10	45	40 CFR 133.102								
	Due to consolidation and upgrade of the treatment system, Outfall 01A is no longer needed and will be removed from the permit. Therefore, the existing effluent limits for TSS at Outfall 01A will be discontinued.														
Settleable Solids	mL/L	Monthly Avg	Monitor	< 0.1	0 / 60	-	-	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	Discontinued
		Daily Max	0.1	< 0.1	0 / 60	0.1	TOGS 1.2.1								

[6] Existing Effluent Quality: Unless otherwise stated, Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall #	01A	**Description of Wastewater:** ExxonMobil Remediation Wastewater Treatment System Effluent Prior to Combination with Stormwater **Type of Treatment:** Oil/Water separator, flow equalization and aeration, sand filtration, air strippers, bag filters													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality[6]	Existing Discharge Data: # of Data Points Detects / Non-Detects	TBELs: Limit	TBELs: Basis	Water Quality Data & WQBELs: Ambient Bkgd. Conc.	Water Quality Data & WQBELs: Projected Instream Conc.	Water Quality Data & WQBELs: WQ Std. or GV	Water Quality Data & WQBELs: WQ Type	Water Quality Data & WQBELs: Calc. WQBEL	Water Quality Data & WQBELs: Basis for WQBEL	ML	Basis for Permit Requirement
	Due to consolidation and upgrade of the treatment system, Outfall 01A is no longer needed and will be removed from the permit. Therefore, the existing effluent limits for settleable solids at Outfall 01A will be discontinued.														
1,1-Dichloroethane	µg/L	Monthly Avg	Monitor	< 0.2	0 / 60	-	-	-	-	-	-	-	-	-	Discontinued
		Daily Max	10	0.2	1 / 59	10	TOGS 1.2.1								
	Due to consolidation and upgrade of the treatment system, Outfall 01A is no longer needed and will be removed from the permit. Therefore, the existing effluent limits for 1,1-dichloroethane at Outfall 01A will be discontinued.														
1,2-Dichloroethane	µg/L	Monthly Avg	Monitor	0.34	16 / 44	-	-	-	-	-	-	-	-	-	Discontinued
		Daily Max	10	0.45	18 / 42	10	TOGS 1.2.1								
	Due to consolidation and upgrade of the treatment system, Outfall 01A is no longer needed and will be removed from the permit. Therefore, the existing effluent limits for 1,2-dichloroethane at Outfall 01A will be discontinued.														
Benzene	µg/L	Monthly Avg	Monitor	0.26	2 / 58	-	-	-	-	10	H(FC)	-	703.5	-	Discontinued
		Daily Max	10	0.48	2 / 58	5	TOGS 1.2.1								
	Due to consolidation and upgrade of the treatment system, Outfall 01A is no longer needed and will be removed from the permit. Therefore, the existing effluent limits for benzene at Outfall 01A will be discontinued.														
Copper, Total	µg/L	Monthly Avg	Monitor	1.2	2 / 58	-	-	-	-	4.8	A(A)	-	703.5	-	Discontinued
		Daily Max	95	80	5 / 55	-	-								
	Due to consolidation and upgrade of the treatment system, Outfall 01A is no longer needed and will be removed from the permit. Therefore, the existing effluent limits for total copper at Outfall 01A will be discontinued.														
Ethylbenzene	µg/L	Monthly Avg	Monitor	0.6	1 / 59	-	-	-	-	41	A(A)	-	703.5	-	Discontinued
		Daily Max	5	1.1	1 / 59	5	TOGS 1.2.1								
	Due to consolidation and upgrade of the treatment system, Outfall 01A is no longer needed and will be removed from the permit. Therefore, the existing effluent limits for ethylbenzene at Outfall 01A will be discontinued.														
Methyl Tert Butyl Ether (MTBE) *Action Level*	µg/L	Daily Max	50	2.5	58 / 0	50	TOGS 1.2.1	-	-	-	-	-	-	-	Discontinued
	Due to consolidation and upgrade of the treatment system, Outfall 01A is no longer needed and will be removed from the permit. Therefore, the existing effluent limits for MTBE at Outfall 01A will be discontinued.														
	µg/L	Daily Max	20	4.9	3 / 55	-	-	-	-	140	A(A)	-	703.5	-	Discontinued

Outfall #	01A	**Description of Wastewater:** ExxonMobil Remediation Wastewater Treatment System Effluent Prior to Combination with Stormwater
		Type of Treatment: Oil/Water separator, flow equalization and aeration, sand filtration, air strippers, bag filters

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[6]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Naphthalene *Action Level*	Due to consolidation and upgrade of the treatment system, Outfall 01A is no longer needed and will be removed from the permit. Therefore, the existing effluent limits for naphthalene at Outfall 01A will be discontinued.														
Phenols, Total	µg/L	Monthly Avg	Monitor	27	6 / 54	-	-	-	-	-	-	-	-	-	Discontinued
		Daily Max	Monitor	42	12 / 48	-	-								
	Due to consolidation and upgrade of the treatment system, Outfall 01A is no longer needed and will be removed from the permit. Therefore, the existing effluent monitoring for total phenols at Outfall 01A will be discontinued.														
Acetone	µg/L	Monthly Avg	Monitor	3.4	13 / 47	-	-	-	-	-	-	-	-	-	Discontinued
		Daily Max	Monitor	10	33 / 27	-	-								
	Due to consolidation and upgrade of the treatment system, Outfall 01A is no longer needed and will be removed from the permit. Therefore, the existing effluent monitoring for acetone at Outfall 01A will be discontinued.														
Tetrachloroethylene	µg/L	Monthly Avg	Monitor	1.3	50 / 10	-	-	-	-	1	H(FC)	-	703.5	-	Discontinued
		Daily Max	10	2.8	54 / 6	10	TOGS 1.2.1								
	Due to consolidation and upgrade of the treatment system, Outfall 01A is no longer needed and will be removed from the permit. Therefore, the existing effluent limits for tetrachloroethylene at Outfall 01A will be discontinued.														
Toluene	µg/L	Monthly Avg	Monitor	82	2 / 58	-	-	-	-	6,000	H(FC)	-	703.5	-	Discontinued
		Daily Max	5	20	4 / 56	5	TOGS 1.2.1								
	Due to consolidation and upgrade of the treatment system, Outfall 01A is no longer needed and will be removed from the permit. Therefore, the existing effluent limits for toluene at Outfall 01A will be discontinued.														
Trichloroethylene	µg/L	Monthly Avg	Monitor	0.32	13 / 47	-	-	-	-	40	H(FC)	-	703.5	-	Discontinued
		Daily Max	10	0.85	25 / 35	10	TOGS 1.2.1								
	Due to consolidation and upgrade of the treatment system, Outfall 01A is no longer needed and will be removed from the permit. Therefore, the existing effluent limits for trichloroethylene at Outfall 01A will be discontinued.														
Vinyl Chloride	µg/L	Monthly Avg	Monitor	< 0.9	0 / 60	-	-	-	-	-	-	-	-	-	Discontinued
		Daily Max	10	< 1.5	0 / 60	10	TOGS 1.2.1								
	Due to consolidation and upgrade of the treatment system, Outfall 01A is no longer needed and will be removed from the permit. Therefore, the existing effluent limits for vinyl chloride at Outfall 01A will be discontinued.														

Outfall #	01A	**Description of Wastewater:** ExxonMobil Remediation Wastewater Treatment System Effluent Prior to Combination with Stormwater														
		Type of Treatment: Oil/Water separator, flow equalization and aeration, sand filtration, air strippers, bag filters														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement	
			Permit Limit	Existing Effluent Quality[6]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL			
Xylenes, Total	µg/L	Monthly Avg	Monitor	3.2	1 / 59	-	-	-	-	-	-	-	-	-	Discontinued	
		Daily Max	10	6.2	1 / 59	15	TOGS 1.2.1									
	Due to consolidation and upgrade of the treatment system, Outfall 01A is no longer needed and will be removed from the permit. Therefore, the existing effluent limits for total xylenes at Outfall 01A will be discontinued.															
2-Butanone (MEK)	µg/L	Monthly Avg	Monitor	4.6	4 / 56	-	-	-	-	-	-	-	-	-	Discontinued	
		Daily Max	Monitor	10	5 / 55	-	-									
	Due to consolidation and upgrade of the treatment system, Outfall 01A is no longer needed and will be removed from the permit. Therefore, the existing effluent monitoring for MEK at Outfall 01A will be discontinued.															

Outfall 002

Outfall #	002	**Description of Wastewater:** ExxonMobil Remediation Wastewater Treatment System Effluent														
		Type of Treatment: Oil/water separator, aeration, sand filtration, air strippers														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement	
			Permit Limit	Existing Effluent Quality[7]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL			
General Notes: Existing discharge data from February 2019 to January 2024 was obtained from Discharge Monitoring Reports provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent. The technology based effluent limitations (TBELs) were developed from TOGS 1.2.1 Att.C, for category I (air stripping) treatment systems.																
Flow Rate	MGD	Monthly Avg	Monitor	0.45 Actual Average	60 / 0	**Monitor**	750-1.13	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	TBEL	
		Daily Max	0.62	0.56 Actual Max	60 / 0	**1.3**	Design Flow									
	The flow limit is set at the design flow of the wastewater treatment facility.															

[7] Existing Effluent Quality: Unless otherwise stated, Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall #	002	**Description of Wastewater:** ExxonMobil Remediation Wastewater Treatment System Effluent
		Type of Treatment: Oil/water separator, aeration, sand filtration, air strippers

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[7]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
pH	SU	Minimum	6.5	7.1 Actual Min	60 / 0	6.0	40 CFR 133.102	-	-	6.5 – 8.5	Range	**6.5 - 8.5**	703.3	-	Antibacksliding
		Maximum	8.5	8.5 Actual Max	60 / 0	9.0									
	Consistent with TOGS 1.2.1, TBELs reflect the available treatment technology listed in Attachment C. Given the available dilution, an effluent limitation equal to the TBEL is protective of the WQS. However, due to antibacksliding regulations, the existing ranged limit of 6.5-8.5 will remain.														
Oil & Grease	mg/L	Monthly Avg	Monitor	2.7	10 / 50	**Monitor**	750-1.13 Monitor	-	Narrative: No residue attributable to sewage, industrial wastes or other wastes, nor visible oil film nor globules of grease.				704.2	-	TBEL
		Daily Max	15	3.7	27 / 33	**15**	TOGS 1.2.1								
	Consistent with TOGS 1.2.1 Attachment C, the TBEL is reflective of the treatment technology and is protective of the WQS.														
Total Suspended Solids (TSS)	mg/L	Monthly Avg	20	3.7	36 / 24	**20**	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	TBEL
		7 Day Avg	40	9.8	47 / 13	**40**	TOGS 1.2.1								
	Consistent with TOGS 1.2.1, TBELs reflect the available treatment technology listed in Attachment C. Given the available dilution, an effluent limitation equal to the TBEL, and consistent with TOGS 1.2.1, is protective of water quality standards.														
Settleable Solids	mL/L	Monthly Avg	Monitor	< 0.1	0 / 60	**Monitor**	750-1.13 Monitor	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	TBEL
		Daily Max	0.1	< 0.1	0 / 60	**0.1**	TOGS 1.2.1								
	Consistent with TOGS 1.2.1 Attachment C, the TBEL is reflective of the treatment technology and is protective of the WQS.														
Turbidity (Discharge Pipe)	NTU	Daily Max	Monitor	17	20 / 0	-	-	-	Narrative: No increase that will cause a substantial visible contrast to natural conditions.				703.2	-	Discontinued
	The permit contains TBELs for TSS and settleable solids, which are more protective of receiving water quality. Therefore, turbidity monitoring is redundant and will be removed from the permit.														
Turbidity (Receiving Water Background)	NTU	Daily Max	Monitor	33	20 / 0	-	-	-	Narrative: No increase that will cause a substantial visible contrast to natural conditions.				703.2	-	Discontinued
	The permit contains TBELs for TSS and settleable solids, which are more protective of receiving water quality. Therefore, turbidity monitoring is redundant and will be removed from the permit.														
1,1-Dichloroethane	µg/L	Monthly Avg	Monitor	1.3	1 / 59	**Monitor**	750-1.13 Monitor	-	-	-	-	-	-	-	TBEL
		Daily Max	10	1.4	1 / 59	**10**	TOGS 1.2.1								

Outfall #	002	**Description of Wastewater:** ExxonMobil Remediation Wastewater Treatment System Effluent **Type of Treatment:** Oil/water separator, aeration, sand filtration, air strippers

Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality[7]	Existing Discharge Data: # of Data Points Detects / Non-Detects	TBELs: Limit	TBELs: Basis	Water Quality Data & WQBELs: Ambient Bkgd. Conc.	Water Quality Data & WQBELs: Projected Instream Conc.	Water Quality Data & WQBELs: WQ Std. or GV	Water Quality Data & WQBELs: WQ Type	Water Quality Data & WQBELs: Calc. WQBEL	Water Quality Data & WQBELs: Basis for WQBEL	ML	Basis for Permit Requirement
	A numeric water quality standard for 1,1-dichloroethane does not exist for Class SD waterbodies. Therefore, no WQBEL is specified. Consistent with TOGS 1.2.1 Attachment C, the TBEL is reflective of the treatment technology. The existing effluent limit is equal to the TBEL and will remain.														
1,2-Dichloroethane	µg/L	Monthly Avg	Monitor	1.5	53 / 7	**Monitor**	750-1.13 Monitor	-	-	-	-	-	-	-	TBEL
		Daily Max	10	1.9	56 / 4	**10**	TOGS 1.2.1								
	A numeric water quality standard for 1,2-dichloroethane does not exist for Class SD waterbodies. Therefore, no WQBEL is specified. Consistent with TOGS 1.2.1 Attachment C, the TBEL is reflective of the treatment technology. The existing effluent limit is equal to the TBEL and will remain.														
Benzene	µg/L	Monthly Avg	Monitor	1.3	18 / 42	**Monitor**	750-1.13 Monitor	-	-	10	H(FC)	50	703.5	-	TBEL
		Daily Max	40	4.2	18 / 42	**5**	TOGS 1.2.1								
	Consistent with TOGS 1.2.1 Attachment C, the TBEL is reflective of the treatment technology and is protective of the WQS. The WQBEL was calculated from the HEW water quality standard, dilution ratio, and an assumed negligible upstream ambient concentration. The existing permit limit is greater than the TBEL and is being decreased to equal the TBEL to protect water quality.														
Copper, Total	µg/L	Monthly Avg	Monitor	< 12	0 / 60	-	TOGS 1.2.1	-	-	4.8	A(A)	**25**	703.5	-	WQBEL
		Daily Max	95	1.4	3 / 57	-	TOGS 1.2.1								
	The WQBEL was calculated from the acute water quality standard, dilution ratio, and an assumed negligible upstream ambient concentration. A metals translator of 1.042 was applied to convert between the total and dissolved form in accordance with the EPA Document 823-B-96-007. The existing permit limit is greater than the calculated WQBEL and is being decreased to equal the WQBEL to protect water quality.														
Ethylbenzene	µg/L	Monthly Avg	Monitor	0.14	1 / 59	**Monitor**	750-1.13 Monitor	-	-	41	A(A)	205	703.5	-	TBEL
		Daily Max	5	0.16	1 / 59	**5**	TOGS 1.2.1								
	Consistent with TOGS 1.2.1 Attachment C, the TBEL is reflective of the treatment technology and is protective of the WQS. The WQBEL was calculated from the acute water quality standard, dilution ratio, and an assumed negligible upstream ambient concentration. The existing permit limit is equal to the TBEL, is protective of water quality, and will remain.														
Methyl Tert Butyl Ether (MTBE) *Action Level*	µg/L	Daily Max	90	15	60 / 0	**50**	TOGS 1.2.1	-	-	-	-	-	-	-	Action Level
	A numeric water quality standard for MTBE does not exist for Class SD waterbodies. Therefore, no WQBEL is specified. Consistent with TOGS 1.2.1 Attachment C, the TBEL is reflective of the treatment technology. The existing permit action level is greater than the TBEL and is being decreased to equal the TBEL to protect water quality.														
Naphthalene *Action Level*	µg/L	Daily Max	**40**	0.52	1 / 59	-	-	-	-	140	A(A)	700	703.5	-	Action Level
	The WQBEL was calculated from the acute water quality standard, dilution ratio, and an assumed negligible upstream ambient concentration. The existing permit action level is less than the calculated WQBEL, is protective of water quality, and will remain.														
Phenols, Total	µg/L	Monthly Avg	Monitor	1,660	10 / 50	**Monitor**	750-1.13 Monitor	-	-	-	-	-	-	-	Monitor

Outfall #	002	**Description of Wastewater:** ExxonMobil Remediation Wastewater Treatment System Effluent
		Type of Treatment: Oil/water separator, aeration, sand filtration, air strippers

Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality[7]	Existing Discharge Data: # of Data Points Detects / Non-Detects	TBELs: Limit	TBELs: Basis	Water Quality Data & WQBELs: Ambient Bkgd. Conc.	Water Quality Data & WQBELs: Projected Instream Conc.	Water Quality Data & WQBELs: WQ Std. or GV	Water Quality Data & WQBELs: WQ Type	Water Quality Data & WQBELs: Calc. WQBEL	Water Quality Data & WQBELs: Basis for WQBEL	ML	Basis for Permit Requirement
		Daily Max	Monitor	727	15 / 45	**Monitor**	750-1.13 Monitor								
	Total phenols will continue to be monitored for informational purposes.														
Toluene	µg/L	Monthly Avg	Monitor	0.21	7 / 53	**Monitor**	750-1.13 Monitor	-	-	6,000	H(FC)	30,000	703.5	-	TBEL
		Daily Max	10	0.69	9 / 51	**5**	TOGS 1.2.1								
	Consistent with TOGS 1.2.1 Attachment C, the TBEL is reflective of the treatment technology and is protective of the WQS. The WQBEL was calculated from the HEW water quality standard, dilution ratio, and an assumed negligible upstream ambient concentration. The existing permit limit is greater than the TBEL and is being decreased to equal the TBEL to protect water quality.														
Trichloroethylene	µg/L	Monthly Avg	Monitor	1.9	55 / 5	**Monitor**	750-1.13 Monitor	-	-	40	H(FC)	200	703.5	-	TBEL
		Daily Max	20	4.3	56 / 4	**10**	TOGS 1.2.1								
	Consistent with TOGS 1.2.1 Attachment C, the TBEL is reflective of the treatment technology and is protective of the WQS. The WQBEL was calculated from the HEW water quality standard, dilution ratio, and an assumed negligible upstream ambient concentration. The existing permit limit is greater than the TBEL and is being decreased to equal the TBEL to protect water quality.														
Vinyl Chloride	µg/L	Monthly Avg	Monitor	< 1.5	0 / 60	**Monitor**	750-1.13 Monitor	-	-	-	-	-	-	-	TBEL
		Daily Max	10	< 1.5	0 / 60	**10**	TOGS 1.2.1								
	A numeric water quality standard for vinyl chloride does not exist for Class SD waterbodies. Therefore, no WQBEL is specified. Consistent with TOGS 1.2.1 Attachment C, the TBEL is reflective of the treatment technology. The existing effluent limit is equal to the TBEL and will remain.														
Tetrachloroethylene	µg/L	Monthly Avg	Monitor	2.2	57 / 3	Monitor	750-1.13 Monitor	-	-	1	H(FC)	**5.0**	703.5	-	WQBEL/TBEL
		Daily Max	10	5.2	57 / 3	**10**	TOGS 1.2.1			-	-	-			
	Consistent with TOGS 1.2.1 Attachment C, the TBEL is reflective of the treatment technology. The WQBEL was calculated from the HEW water quality standard, dilution ratio, and an assumed negligible upstream ambient concentration. The monthly average monitor only limit will be changed to equal the WQBEL to protect the WQS. The existing daily max permit limit is equal to the TBEL and will remain.														
Xylenes, Total	µg/L	Monthly Avg	Monitor	0.54	3 / 57	Monitor	750-1.13 Monitor	-	-	170	A(A)	850	703.5	-	Discontinued
		Daily Max	20	0.77	5 / 55	15	TOGS 1.2.1								
	The existing total xylenes effluent limit will be replaced with more stringent effluent limits for ortho-, meta-, and para-xylenes, which will be more protective of water quality.														
Xylene, Ortho-	µg/L	Monthly Avg	-	-	-	**Monitor**	750-1.13 Monitor	-	-	-	-	-	-	-	TBEL

Outfall #	002	**Description of Wastewater:** ExxonMobil Remediation Wastewater Treatment System Effluent
		Type of Treatment: Oil/water separator, aeration, sand filtration, air strippers

Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality[7]	Existing Discharge Data: # of Data Points Detects / Non-Detects	TBELs: Limit	TBELs: Basis	Water Quality Data & WQBELs: Ambient Bkgd. Conc.	Water Quality Data & WQBELs: Projected Instream Conc.	Water Quality Data & WQBELs: WQ Std. or GV	Water Quality Data & WQBELs: WQ Type	Water Quality Data & WQBELs: Calc. WQBEL	Water Quality Data & WQBELs: Basis for WQBEL	ML	Basis for Permit Requirement
		Daily Max	-	-	-	**5**	TOGS 1.2.1								
	A numeric water quality standard for ortho-xylene does not exist for Class SD waterbodies. Therefore, no WQBEL is specified. Consistent with TOGS 1.2.1 Attachment C, the TBEL is reflective of the treatment technology. Therefore, an effluent limit equal to the TBEL will be added to the permit. The Department acknowledges the difficulty in analyzing the meta- & para-xylene isomers separately. Therefore, the permit will contain an effluent limit for ortho-xylene separately, and a combined effluent limit for meta- & para-xylenes.														
Xylenes, Meta- & Para-	µg/L	Monthly Avg	-	-	-	**Monitor**	750-1.13 Monitor	-	-	-	-	-	-	-	TBEL
		Daily Max	-	-	-	**10**	TOGS 1.2.1								
	A numeric water quality standard for meta- & para-xylenes does not exist for Class SD waterbodies. Therefore, no WQBEL is specified. Consistent with TOGS 1.2.1 Attachment C, the TBEL is reflective of the treatment technology. Therefore, an effluent limit equal to the TBEL will be added to the permit. The Department acknowledges the difficulty in analyzing the meta- & para-xylene isomers separately. Therefore, the permit will contain an effluent limit for ortho-xylene separately, and a combined effluent limit for meta- & para-xylenes.														
Additional Pollutants Detected															
Perfluorooctane Sulfonic Acid (PFOS)	µg/L	Daily Max	-	0.01 NY-2C	9 / 0	-	-	-	0.004	190	A(A)	No Reasonable Potential	TOGS 1.1.1	-	No Limitation
	The projected instream concentration was calculated using the maximum reported effluent concentration of 0.01 µg/L, a multiplier of 1.8, the acute dilution ratio, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified.														
Perfluorooctanoic Acid (PFOA)	µg/L	Daily Max	-	0.13 NY-2C	9 / 0	-	-	-	-	-	-	-	-	-	No Limitation
	A numeric water quality standard for PFOA does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														
1,4-Dioxane	µg/L	Daily Max	-	0.77 NY-2C	9 / 0	-	-	-	0.28	63,000	A(A)	No Reasonable Potential	TOGS 1.1.1	-	No Limitation
	The projected instream concentration was calculated using the maximum reported effluent concentration of 0.77 µg/L, a multiplier of 1.8, the acute dilution ratio, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified.														
1,1,2-Trichloroethane	µg/L	Daily Max	-	0.43 NY-2C	1 / 7	10	TOGS 1.2.1	-	0.16	40	H(FC)	No Reasonable Potential	703.5	-	No Limitation

Outfall #	002	**Description of Wastewater:** ExxonMobil Remediation Wastewater Treatment System Effluent
		Type of Treatment: Oil/water separator, aeration, sand filtration, air strippers

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[7]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
	Consistent with TOGS 1.2.1 Attachment C, the TBEL is reflective of the treatment technology. The projected instream concentration was calculated using the maximum reported effluent concentration of 0.43 µg/L, a multiplier of 1.9, the HEW dilution ratio, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified.														
1,2-Dichloroethene	µg/L	Daily Max	-	1.2 NY-2C	6 / 2	10	TOGS 1.2.1	-	-	-	-	-	-	-	No Limitation
	Consistent with TOGS 1.2.1 Attachment C, the TBEL is reflective of the treatment technology. Existing effluent quality is less than the TBEL, therefore a limit equal to the TBEL is not necessary for this parameter. Additionally, a numeric water quality standard for 1,2-dichloroethene does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														
2-Hexanone	µg/L	Daily Max	-	1.3 NY-2C	1 / 7	-	-	-	-	-	-	-	-	-	No Limitation
	A numeric water quality standard for 2-hexanone does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														
2-Propanol	µg/L	Daily Max	-	31 NY-2C	2 / 6	-	-	-	-	-	-	-	-	-	No Limitation
	A numeric water quality standard for 2-propanol does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														
cis-1,2-Dichloroethene	µg/L	Daily Max	-	1.2 NY-2C	7 / 1	10	TOGS 1.2.1	-	-	-	-	-	-	-	No Limitation
	Consistent with TOGS 1.2.1 Attachment C, the TBEL is reflective of the treatment technology. A numeric water quality standard for cis-1,2-dichloroethene does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														
n-Heptane	µg/L	Daily Max	-	0.5 NY-2C	1 / 7	-	-	-	-	-	-	-	-	-	No Limitation
	A numeric water quality standard for n-heptane does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														
t-Amyl Methyl Ether	µg/L	Daily Max	-	0.21 NY-2C	1 / 5	-	-	-	-	-	-	-	-	-	No Limitation
	A numeric water quality standard for t-amyl methyl ether does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														
t-Butyl alcohol	µg/L	Daily Max	-	28 NY-2C	4 / 4	-	-	-	-	-	-	-	-	-	No Limitation
	A numeric water quality standard for t-butyl alcohol does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														
Tetrahydrofuran	µg/L	Daily Max	-	1.3 NY-2C	1 / 7	-	-	-	-	-	-	-	-	-	No Limitation
	A numeric water quality standard tetrahydrofuran for does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														
Acetone	µg/L	Daily Max	-	1.4 NY-2C	3 / 5	-	-	-	-	-	-	-	-	-	No Limitation
	A numeric water quality standard for acetone does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														

Outfall #	002	**Description of Wastewater:** ExxonMobil Remediation Wastewater Treatment System Effluent
		Type of Treatment: Oil/water separator, aeration, sand filtration, air strippers

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[7]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Diethyl Phthalate	µg/L	Daily Max	-	0.56 NY-2C	1 / 7	-	-	-	-	-	-	-	-	-	No Limitation
	A numeric water quality standard for diethyl phthalate does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														
n-Decane	µg/L	Daily Max	-	1.5 NY-2C	1 / 7	-	-	-	-	-	-	-	-	-	No Limitation
	A numeric water quality standard for n-decane does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														
Pyrene	µg/L	Daily Max	-	0.65 NY-2C	2 / 6	-	-	-	-	-	-	-	-	-	No Limitation
	A numeric water quality standard for pyrene does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														
Chloride	mg/L	Daily Max	-	1,100 NY-2C	8 / 0	-	-	-	-	-	-	-	-	-	No Limitation
	A numeric water quality standard for chloride does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														
Sulfate	mg/L	Daily Max	-	190 NY-2C	8 / 0	-	-	-	-	-	-	-	-	-	No Limitation
	A numeric water quality standard for sulfate does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														
Aluminum	µg/L	Daily Max	-	16 NY-2C	3 / 5	-	-	-	-	-	-	-	-	-	No Limitation
	A numeric water quality standard for aluminum does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														
Arsenic	µg/L	Daily Max	-	1.9 NY-2C	8 / 0	-	-	-	0.72	120	A(A)	No Reasonable Potential	703.5	-	No Limitation
	The projected instream concentration was calculated using the maximum reported effluent concentration of 1.9 µg/L, a multiplier of 1.9, the acute dilution ratio, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A metals translator of 1.000 was applied to convert between the total and dissolved form in accordance with the EPA Document 823-B-96-007. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified.														
Barium	µg/L	Daily Max	-	320 NY-2C	8 / 0	-	-	-	-	-	-	-	-	-	No Limitation
	A numeric water quality standard for barium does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														
Calcium	mg/L	Daily Max	-	160 NY-2C	8 / 0	-	-	-	-	-	-	-	-	-	No Limitation
	A numeric water quality standard for calcium does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														
Cobalt	µg/L	Daily Max	-	1.8 NY-2C	8 / 0	-	-	-	-	-	-	-	-	-	No Limitation

Outfall #	002	**Description of Wastewater:** ExxonMobil Remediation Wastewater Treatment System Effluent
		Type of Treatment: Oil/water separator, aeration, sand filtration, air strippers

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[7]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
	A numeric water quality standard for cobalt does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														
Iron	mg/L	Daily Max	-	1.3 NY-2C	8 / 0	-	-	-	-	-	-	-	-	-	No Limitation
	A numeric water quality standard for iron does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														
Lead	µg/L	Daily Max	-	0.32 NY-2C	1 / 7	-	-	-	0.1	204	A(A)	No Reasonable Potential	-	-	No Limitation
	The projected instream concentration was calculated using the maximum reported effluent concentration of 0.32 µg/L, a multiplier of 1.9, the acute dilution ratio, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A metals translator of 1.264 was applied to convert between the total and dissolved form in accordance with the EPA Document 823-B-96-007. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified.														
Magnesium	mg/L	Daily Max	-	92 NY-2C	8 / 0	-	-	-	-	-	-	-	-	-	No Limitation
	A numeric water quality standard for magnesium does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														
Manganese	mg/L	Daily Max	-	2.8 NY-2C	8 / 0	-	-	-	-	-	-	-	-	-	No Limitation
	A numeric water quality standard for manganese does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														
Nickel	µg/L	Daily Max	-	4 NY-2C	7 / 1	-	-	-	1.52	74	A(A)	No Reasonable Potential	703.5	-	No Limitation
	The projected instream concentration was calculated using the maximum reported effluent concentration of 4 µg/L, a multiplier of 1.9, the acute dilution ratio, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A metals translator of 1.002 was applied to convert between the total and dissolved form in accordance with the EPA Document 823-B-96-007. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified.														
Potassium	mg/L	Daily Max	-	21 NY-2C	8 / 0	-	-	-	-	-	-	-	-	-	No Limitation
	A numeric water quality standard for potassium does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														
Selenium	µg/L	Daily Max	-	1.7 NY-2C	3 / 5	-	-	-	-	-	-	-	-	-	No Limitation
	A numeric water quality standard for selenium does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														
Sodium	mg/L	Daily Max	-	600 NY-2C	8 / 0	-	-	-	-	-	-	-	-	-	No Limitation
	A numeric water quality standard for sodium does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														

Outfall #	002	**Description of Wastewater:** ExxonMobil Remediation Wastewater Treatment System Effluent
		Type of Treatment: Oil/water separator, aeration, sand filtration, air strippers

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[7]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Vanadium	µg/L	Daily Max	-	0.5 NY-2C	1 / 7	-	-	-	-	-	-	-	-	-	No Limitation
	A numeric water quality standard for vanadium does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														
Zinc	µg/L	Daily Max	-	15 NY-2C	4 / 4	-	-	-	5.57	95	A(A)	No Reasonable Potential	703.5	-	No Limitation
	The projected instream concentration was calculated using the maximum reported effluent concentration of 15 µg/L, a multiplier of 1.9, the acute dilution ratio, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A metals translator of 1.022 was applied to convert between the total and dissolved form in accordance with the EPA Document 823-B-96-007. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified.														
Total Dissolved Solids (TDS)	mg/L	Daily Max	-	3,300 NY-2C	8 / 0	-	-	-	-	-	-	-	-	-	No Limitation
	A numeric water quality standard for TDS does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														
Methane	µg/L	Daily Max	-	20 NY-2C	3 / 5	-	-	-	-	-	-	-	-	-	No Limitation
	A numeric water quality standard for methane does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														
TKN	mg/L	Daily Max	-	1.9 NY-2C	8 / 0	-	-	-	-	-	-	-	-	-	No Limitation
	A numeric water quality standard for TKN does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														
Nitrate (as N)	mg/L	Daily Max	-	1.3 NY-2C	8 / 0	-	-	-	-	-	-	-	-	-	No Limitation
	A numeric water quality standard for nitrate does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														
Nitrite (as N)	mg/L	Daily Max	-	0.82 NY-2C	2 / 0	-	-	-	-	-	-	-	-	-	No Limitation
	A numeric water quality standard for nitrite does not exist for Class SD waterbodies. Therefore, no limitation or monitoring is specified.														

Appendix: Regulatory and Technical Basis of Permit Authorizations

The Appendix is meant to supplement the fact sheet for multiple types of SPDES permits. Portions of this Appendix may not be applicable to this specific permit.

Regulatory References

The provisions of the permit are based largely upon 40 CFR 122 subpart C and 6 NYCRR Part 750 and include monitoring, recording, reporting, and compliance requirements, as well as general conditions applicable to all SPDES permits. Below are the most common citations for the requirements included in SPDES permits:

- Clean Water Act (CWA) 33 section USC 1251 to 1387
- Environmental Conservation Law (ECL) Articles 17 and 70
- Federal Regulations
  - 40 CFR, Chapter I, subchapters D, N, and O
- State environmental regulations
  - 6 NYCRR Part 621
  - 6 NYCRR Part 750
  - 6 NYCRR Parts 700 - 704 – Best use and other requirements applicable to water classes
  - 6 NYCRR Parts 800 – 941 - Classification of individual surface waters
- NYSDEC water program policy, referred to as Technical and Operational Guidance Series (TOGS)
- USEPA Office of Water Technical Support Document for Water Quality-based Toxics Control, March 1991, Appendix E

The following is a quick guide to the references used within the fact sheet:

SPDES Permit Requirements	Regulatory Reference
Anti-backsliding	6 NYCRR 750-1.10(c)
Best Management Practices (BMPS) for CSOs	6 NYCRR 750-2.8(a)(2)
Environmental Benefits Permit Strategy (EBPS)	6 NYCRR 750-1.18, NYS ECL 17-0817(4), TOGS 1.2.2 (revised January 25,2012)
Exceptions for Type I SSO Outfalls (bypass)	6 NYCRR 750-2.8(b)(2), 40 CFR 122.41
Mercury Multiple Discharge Variance	Division of Water Program Policy 1.3.10 (DOW 1.3.10)
Mixing Zone and Critical Water Information	TOGS 1.3.1 & Amendments
PCB Minimization Program	40 CFR Part 132 Appendix F Procedure 8, 6 NYCRR 750-1.13(a) and 750-1.14(f), and TOGS 1.2.1
Pollutant Minimization Program (PMP)	6 NYCRR 750-1.13(a), 750-1.14(f), TOGS 1.2.1
Schedules of Compliance	6 NYCRR 750-1.14
Sewage Pollution Right to Know (SPRTK)	NYS ECL 17-0826-a, 6 NYCRR 750-2.7
State Administrative Procedure Act (SAPA)	State Administrative Procedure Act Section 401(2), 6 NYCRR 621.11(l)
State Environmental Quality Review (SEQR)	6 NYCRR Part 617
USEPA Effluent Limitation Guidelines (ELGs)	40 CFR Parts 405-471
USEPA National CSO Policy	33 USC Section 1342(q)
Whole Effluent Toxicity (WET) Testing	TOGS 1.3.2
General Provisions of a SPDES Permit Department Request for Additional Information	NYCRR 750-2.1(i)

Outfall and Receiving Water Information

Impaired Waters

The NYS 303(d) List of Impaired/TMDL Waters identifies waters where specific best usages are not fully supported. The state must consider the development of a Total Maximum Daily Load (TMDL) or other strategy to reduce the input of the specific pollutant(s) that restrict waterbody uses, in order to restore and protect such uses. SPDES permits must include effluent limitations necessary to implement a waste load allocation (WLA) of an EPA-approved TMDL (6 NYCRR 750-1.11(a)(5)(ii)), if applicable. In accordance with 6 NYCRR 750-1.13(a), permittees discharging to waters which are on the list but do not yet have a TMDL developed may be required to perform additional monitoring for the parameters causing the impairment. Accurate monitoring data is needed

to determine the existing capabilities of the wastewater treatment plants and to assure that WLAs are allocated equitably.

Interstate Water Pollution Control Agencies

Some POTWs may be subject to regulations of interstate basin/compact agencies including: Interstate Sanitation Commission (ISC), International Joint Commission (IJC), Delaware River Basin Commission (DRBC), Ohio River Valley Water Sanitation Commission (ORSANCO), and the Susquehanna River Basin Commission (SRBC). Generally, basin commission requirements focus principally on water quality and not treatment technology. However, interstate/compact agency regulations for the ISC, IJC, DRBC and NYC Watershed contain explicit effluent limits which must be addressed during permit drafting. 6 NYCRR 750-2.1(d) requires SPDES permits for discharges that originate within the jurisdiction of an interstate water pollution control agency, to include any applicable effluent standards or water quality standards (WQS) promulgated by that interstate agency.

Existing Effluent Quality

The existing effluent quality is determined from a statistical evaluation of effluent data in accordance with TOGS 1.2.1 and the USEPA Office of Water, Technical Support Document for Water Quality-based Toxics Control, March 1991, Appendix E (TSD). The existing effluent quality is equal to the 95th (monthly average) and 99th (daily maximum) percentiles of the lognormal distribution of existing effluent data. When there are greater than three non-detects, a delta-lognormal distribution is assumed, and delta-lognormal calculations are used to determine the monthly average and daily maximum pollutant concentrations. Statistical calculations are not performed for parameters where there are less than ten data points. If additional data is needed, a monitoring requirement may be specified either through routine monitoring or a short-term high intensity monitoring program. The Pollutant Summary Table identifies the number of sample data points available.

Permit Requirements

Basis for Effluent Limitations

Sections 101, 301, 304, 308, 401, 402, and 405 of the CWA and Titles 5, 7, and 8 of Article 17 ECL, as well as their implementing federal and state regulations, and related guidance, provide the basis for the effluent limitations and other conditions in the permit.

When conducting a full technical review of an existing permit, the previous effluent limitations form the basis for the next permit. Existing effluent quality is evaluated against the existing effluent limitations to determine if these should be continued, revised, or deleted. Generally, existing limitations are continued unless there are changed conditions at the facility, the facility demonstrates an ability to meet more stringent limitations, or in response to updated regulatory requirements. Pollutant monitoring data is also reviewed to determine the presence of additional contaminants that should be included in the permit based on a reasonable potential analysis to cause or contribute to a water quality standards violation.

Anti-backsliding

Anti-backsliding requirements are specified in the CWA sections 402(o) and 303(d)(4), ECL 17-0809, and regulations at 40 CFR 122.44(*l*) and 6 NYCRR 750-1.10(c) and (d). Generally, the relaxation of effluent limitations in permits is prohibited unless one of the specified exceptions applies, which will be cited on a case-by-case basis in this fact sheet. Consistent with current case law[8] and USEPA interpretation[9] anti-backsliding requirements do not apply should a revision to the final effluent limitation take effect before the scheduled date of compliance for that final effluent limitation.

[8] American Iron and Steel Institute v. Environmental Protection Agency, 115 F.3d 979, 993 n.6 (D.C. Cir. 1997)
[9] U.S. EPA, Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; 65 Fed. Reg. 31682, 31704 (May 18, 2000); Proposed Water Quality Guidance for the Great Lakes System, 58 Fed. Reg. 20802, 20837 & 20981 (April 16, 1993)

Antidegradation Policy

New York State implements the antidegradation portion of the CWA based upon two documents: (1) Organization and Delegation Memorandum #85-40, "Water Quality Antidegradation Policy" (September 9, 1985); and, (2) TOGS 1.3.9, "Implementation of the NYSDEC Antidegradation Policy – Great Lakes Basin (Supplement to Antidegradation Policy dated September 9, 1985) (undated)." The permit for the facility contains effluent limitations which ensure that the existing best usage of the receiving waters will be maintained. To further support the antidegradation policy, SPDES applications have been reviewed in accordance with the State Environmental Quality Review Act (SEQR) as prescribed by 6 NYCRR Part 617.

Effluent Limitations

In developing a permit, the Department determines the technology-based effluent limitations (TBELs) and then evaluates the water quality expected to result from technology controls to determine if any exceedances of water quality criteria in the receiving water might result. If there is a reasonable potential for exceedances of water quality criteria to occur, water quality-based effluent limitations (WQBELs) are developed. A WQBEL is designed to ensure that the water quality standards of receiving waters are met. In general, the CWA requires that the effluent limitations for a particular pollutant are the more stringent of either the TBEL or WQBEL.

Technology-based Effluent Limitations (TBELs) for Industrial Facilities

A TBEL requires a minimum level of treatment for industrial point sources based on currently available treatment technologies or Best Management Practices (BMPs). CWA sections 301(b) and 402, ECL sections 17-0509, 17-0809 and 17-0811, and 6 NYCRR 750-1.11 require technology-based controls on effluents. TBELs are set based upon an evaluation of New Source Performance Standards (NSPS), Best Available Technology Economically Achievable (BAT), Best Conventional Pollutant Control Technology (BCT), Best Practicable Technology Currently Available (BPT), and Best Professional Judgment (BPJ).

USEPA Effluent Limitation Guidelines (ELGs) Applicable to Facility

In many cases, BPT, BCT, BAT and NSPS limitations are based on effluent guidelines developed by USEPA for specific industries, as promulgated under 40 CFR Parts 405-471. Applicable guidelines, pollutants regulated by these guidelines, and the effluent limitation derivation for facilities subject to these guidelines is in the USEPA Effluent Limitation Guideline Calculations Table.

Best Professional Judgement (BPJ)

For substances that are not explicitly limited by regulations, the permit writer is authorized to use BPJ in developing TBELs. Consistent with section 402(a)(1) of the CWA, and NYS ECL section 17-0811, the DEC is authorized to issue a permit containing "any further limitations necessary to ensure compliance with water quality standards adopted pursuant to state law". BPJ limitations may be set on a case-by-case basis using any reasonable method that takes into consideration the criteria set forth in 40 CFR 125.3. Applicable state regulations include 6 NYCRR 750-1.11. The BPJ limitation considers the existing technology present at the facility, the statistically calculated existing effluent quality for that parameter, and any unique or site-specific factors relating to the facility. Technology limitations generally achievable for various treatment technologies are included in TOGS 1.2.1, Attachment C. These limitations may be used for the listed parameters when the technology employed at the facility is listed.

Water Quality-Based Effluent Limitations (WQBELs)

In addition to the TBELs, permits must include additional or more stringent effluent limitations and conditions, including those necessary to protect water quality. CWA sections 101 and 301(b)(1)(C), 40 CFR 122.44(d)(1), and 6 NYCRR Parts 750-1.11 require that permits include limitations for all pollutants or parameters which are or may be discharged at a level which may cause or contribute to an exceedance of any State water quality standard adopted pursuant to NYS ECL 17-0301. Additionally, 6 NYCRR Part 701.1 prohibits the discharge of pollutants that will cause impairment of the best usages of the receiving water as specified by the water classifications at the location of discharge and at other locations that may be affected by such discharge. Water quality standards can be found under 6 NYCRR Parts 700-704.

The limitations must be stringent enough to ensure that water quality standards are met at the point of discharge and in downstream waters and must be consistent with any applicable WLA which may be in effect through a TMDL for the receiving water. These and other requirements are summarized in TOGS 1.1.1, 1.3.1, 1.3.2, 1.3.5 and 1.3.6. The DEC considers a mixing zone analysis, critical flows, and reasonable potential analysis when developing a WQBEL.

Mixing Zone Analyses

In accordance with TOGS 1.3.1., the DEC may perform additional analysis of the mixing condition between the effluent and the receiving waterbody. Mixing zone analyses using plume dispersion modeling are conducted in accordance with the following:
"EPA Technical Support Document for Water Quality-Based Toxics Control" (March 1991); EPA Region VIII's "Mixing Zones and Dilution Policy" (December 1994); NYSDEC TOGS 1.3.1, "Total Maximum Daily Loads and Water Quality-Based Effluent Limitations" (July 1996); "CORMIX v11.0" (2019).

Critical Flows

In accordance with TOGS 1.2.1 and 1.3.1, WQBELs are developed using dilution ratios that relate the critical low flow condition of the receiving waterbody to the critical effluent flow. The critical low flow condition used in the dilution ratio will be different depending on whether the limitations are for aquatic or human health protection. For chronic aquatic protection, the critical low flow condition of the waterbody is typically represented by the 7Q10 flow and is calculated as the lowest average flow over a 7-day consecutive period within 10 years. For acute aquatic protection, the critical low flow condition is typically represented by the 1Q10 and is calculated as the lowest 1-day flow within 10 years. However, NYSDEC considers using 50% of the 7Q10 to be equivalent to the 1Q10 flow. For the protection of human health, the critical low flow condition is typically represented by the 30Q10 flow and is calculated as the lowest average flow over a 30-day consecutive period within 10 years. However, NYSDEC considers using 1.2 x 7Q10 to be equivalent to the 30Q10. The 7Q10 or 30Q10 flow is used with the critical effluent flow to calculate the dilution ratio. The critical effluent flow can be the maximum daily flow reported on the permit application, the maximum of the monthly average flows from discharge monitoring reports for the past three years, or the facility design flow. When more than one applicable standard exists for aquatic or human health protection for a specific pollutant, a reasonable potential analysis is conducted for each applicable standard and corresponding critical flow to ensure effluent limitations are sufficiently stringent to ensure all applicable water quality standards are met as required by 40 CFR 122.44(d)(1)(i). For brevity, the pollutant summary table reports the results of the most conservative scenario.

Reasonable Potential Analysis (RPA)

The Reasonable Potential Analysis (RPA) is a statistical estimation process, outlined in the 1991 USEPA Technical Support Document for Water Quality-based Toxics Control (TSD), Appendix E. This process uses existing effluent quality data and statistical variation methodology to project the maximum amounts of pollutants that could be discharged by the facility. This projected instream concentration (PIC) is calculated using the appropriate ratio and compared to the water quality standard (WQS). When the RPA process determines the WQS may be exceeded, a WQBEL is required. The procedure for developing WQBELs includes the following steps:

1) identify the pollutants present in the discharge(s) based upon existing data, sampling data collected by the permittee as part of the permit application or a short-term high intensity monitoring program, or data gathered by the DEC;

2) identify water quality criteria applicable to these pollutants;

3) determine if WQBELs are necessary (i.e. reasonable potential analysis (RPA)). The RPA will utilize the procedure outlined in Chapter 3.3.2 of EPA's Technical Support Document (TSD). As

outlined in the TSD, for parameters with limited effluent data the RPA may include multipliers to account for effluent variability; and,

4) calculate WQBELs (if necessary). Factors considered in calculating WQBELs include available dilution of effluent in the receiving water, receiving water chemistry, and other pollutant sources.

The DEC uses modeling tools to estimate the expected concentrations of the pollutant in the receiving water and develop WQBELs. These tools were developed in part using the methodology referenced above. If the estimated concentration of the pollutant in the receiving water is expected to exceed the ambient water quality standard or guidance value (i.e. numeric interpretation of a narrative water quality standard), then there is a reasonable potential that the discharge may cause or contribute to an exceedance of any State water quality standard adopted pursuant to NYS ECL 17-0301. If a TMDL is in place, the facility's WLA for that pollutant is applied as the WQBEL.

For carbonaceous and nitrogenous oxygen demanding pollutants, the DEC uses a model which incorporates the Streeter-Phelps equation. The equation relates the decomposition of inorganic and organic materials along with oxygen reaeration rates to compute the downstream dissolved oxygen concentration for comparison to water quality standards.

The Division of Water has been using the TMDL approach in permit limit development for the control of toxic substances. Since the early 1980's, the loading capacity for specific pollutants has been determined for each drainage basin. Water quality-limiting segments and pollutants have been identified, TMDLs, wasteload allocations and load allocations have been developed, and permits with water quality-based effluent limits have been issued. In accordance with TOGS 1.3.1, the Division of Water implements a Toxics Reduction Strategy which is committed to the application of the TMDL process using numeric, pollutant-specific water quality standards through the Watershed Approach. The Watershed Approach accounts for the cumulative effect of multiple discharges of conservative toxic pollutants to ensure water quality standards are met in downstream segments.

Whole Effluent Toxicity (WET) Testing:

WET tests use small vertebrate and invertebrate species to measure the aggregate toxicity of an effluent. There are two different durations of toxicity tests: acute and chronic. Acute toxicity tests measure survival over a 96-hour test exposure period. Chronic toxicity tests measure reductions in survival, growth, and reproduction over a 7-day exposure. TOGS 1.3.1 includes guidance for determining when aquatic toxicity testing should be included in SPDES permits. The authority to require toxicity testing is in 6NYCRR 702.9. TOGS 1.3.2 describes the procedures which should be followed when determining whether to include toxicity testing in a SPDES permit and how to implement a toxicity testing program. Per TOGS 1.3.2, WET testing may be required when any one of the following seven criteria are applicable:

1. There is the presence of substances in the effluent for which ambient water quality criteria do not exist.
2. There are uncertainties in the development of TMDLs, WLAs, and WQBELs, caused by inadequate ambient and/or discharge data, high natural background concentrations of pollutants, available treatment technology, and other such factors.
3. There is the presence of substances for which WQBELs are below analytical detectability.
4. There is the possibility of complex synergistic or additive effects of chemicals, typically when the number of metals or organic compounds discharged by the permittee equals or exceeds five.
5. There are observed detrimental effects on the receiving water biota.
6. Previous WET testing indicated a problem.
7. POTWs which exceed a discharge of 1 MGD. Facilities of less than 1 MGD may be required to test, e.g., POTWs <1 MGD which are managing industrial pretreatment programs.

Minimum Level of Detection

Pursuant to 40 CFR 122.44(i)(1)(iv) and 6 NYCRR 750-2.5(d), SPDES permits must contain monitoring requirements using sufficiently sensitive test procedures approved under 40 CFR Part 136. A method is "sufficiently sensitive" when the method's minimum level (ML) is at or below the level of the effluent limitation established in the permit for the measured pollutant parameter; or the lowest ML of the analytical methods approved under 40 CFR Part 136. The ML represents the lowest level that can be measured within specified limitations of precision and accuracy during routine laboratory operations on most effluent matrices. When establishing effluent limitations for a specific parameter (based on technology or water quality requirements), it is possible that the calculated limitation will fall below the ML established by the approved analytical method(s). In these instances, the calculated limitation is included in the permit with a compliance level set equal to the ML of the most sensitive method.

Monitoring Requirements

CWA section 308, 40 CFR 122.44(i), 6 NYCRR 750-1.13, and 750-2.5 require that monitoring be included in permits to determine compliance with effluent limitations. Additional effluent monitoring may also be required to gather data to determine if effluent limitations may be required. The permittee is responsible for conducting the monitoring and reporting results on Discharge Monitoring Reports (DMRs). The permit contains the monitoring requirements for the facility. Monitoring frequency is based on the minimum sampling necessary to adequately monitor the facility's performance and characterize the nature of the discharge of the monitored flow or pollutant. Variable effluent flows and pollutant levels may be required to be monitored at more frequent intervals than relatively constant effluent flow and pollutant levels (6 NYCRR 750-1.13). For industrial facilities, sampling frequency is based on guidance provided in TOGS 1.2.1. For municipal facilities, sampling frequency is based on guidance provided in TOGS 1.3.3.

Other Conditions

Mercury

The multiple discharge variance (MDV) for mercury was developed in accordance with 6 NYCRR 702.17(h) "to address widespread standard or guidance value attainment issues including the presence of a ubiquitous pollutant or naturally high levels of a pollutant in a watershed." The first MDV was issued in October 2010, and subsequently revised and reissued in 2015; each subsequent iteration of the MDV is designed to build off the previous version, to make reasonable progress towards the water quality standard (WQS) of 0.7 ng/L dissolved mercury. The MDV is necessary because human-caused conditions or sources of mercury prevent attainment of the WQS and cannot be remedied (i.e., mercury is ubiquitous in New York waters at levels above the WQS and compliance with a water quality based effluent limitation (WQBEL) for mercury cannot be achieved with demonstrated effluent treatment technologies). The DEC has determined that the MDV is consistent with the protection of public health, safety, and welfare. During the effective period of this MDV, any increased risks to human health are mitigated by fish consumption advisories issued periodically by the NYSDOH.

All surface water SPDES permittees are eligible for authorization by the MDV provided they meet the requirements specified in DOW 1.3.10.

Schedules of Compliance

Schedules of compliance are included in accordance with 40 CFR Part 132 Attachment F, Procedure 9, 40 CFR 122.47 and 6 NYCRR 750-1.14. Schedules of compliance are intended to, in the shortest reasonable time, achieve compliance with applicable effluent standards and limitations, water quality standards, and other applicable requirements. Where the time for compliance is more than nine months, the schedule of compliance must include interim requirements and dates for their achievement. If the time necessary to complete the interim milestones is more than nine months, and not readily divisible into stages for completion, progress reports must be required.

Schedule(s) of Additional Submittals

Schedules of Additional Submittals are used to summarize the deliverables required by the permit not identified in a separate Schedule of Compliance.

Best Management Practices (BMP) for Industrial Facilities

BMP plans are authorized for inclusion in NPDES permits pursuant to Sections 304(e) and 402 (a)(1) of the Clean Water Act, and 6 NYCRR 750-1.14(f). The regulations pertaining to BMPs are promulgated under 40 CFR Part 125, Subpart K. These regulations specifically address surface water discharges.