STATE OF COLORADO

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
Water Quality Control Division

AUTHORIZATION TO DISCHARGE UNDER THE
COLORADO DISCHARGE PERMIT SYSTEM
PERMIT NUMBER CO0001147

In compliance with the provisions of the Colorado Water Quality Control Act, (25-8-101 et seq., CRS, 1973 as amended), for both discharges to surface and ground waters, and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq.; the "Act"), for discharges to surface waters only, the

Suncor Energy (USA) Inc.

is authorized to discharge from the **Commerce City Refinery** located at **5801 Brighton Blvd, Commerce City, CO**
Latitude: 39.803333, Longitude: -104.945556

to **Sand Creek and the South Platte River**

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I and II hereof. All discharges authorized herein shall be consistent with the terms and conditions of this permit.

This permit and the authorization to discharge shall expire at midnight XX.

Issued and Signed this XX day of XX; effective XX.

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

PUBLIC NOTICE
VERSION OF PERMIT
November 12, 2021

Meg Parish, Permits Section Manager
Water Quality Control Division

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PART I

A. PERMITTED FEATURES

Beginning no later than the effective date of this permit and lasting through the expiration date, the permittee is authorized to discharge from, and self-monitoring samples taken in accordance with the monitoring requirements shall be obtained from permitted feature(s):

Outfall	Description	Latitude Longitude	Wastewater Source	Receiving Water
002B	**Internal outfall 002**	39.8050 -104.9494	Petroleum refining and related operations, groundwater remediation, and potentially petroleum contaminated storm water	NA (see Outfall 020A)
003B	**Internal outfall 003**	39.8072 -104.9475	Groundwater remediation	NA (see Outfall 020A)
020A	**External outfall 020A** (at outfall on Sand Creek)	39.80853 -104.9476	Combination of treated wastewater from Outfalls 002 and 003	Sand Creek to South Platte River
020Z (for PFAS)	**External outfall 020A** (at outfall on Sand Creek)	39.80853 -104.9476	Combination of treated wastewater from Outfalls 002 and 003	Sand Creek to South Platte River
004A	**Mary's Pond – Plant 3** (northwest corner outfall)	39.8075 -104.946667	Stormwater runoff from Plant 3 (asphalt plant) commingled with non-contact cooling water. (SWA** Nos. 6, 7, and 10)	Sand Creek to South Platte River
004Z (for PFAS)	**Mary's Pond – Plant 3** (northwest corner outfall)	39.8075 -104.946667	Stormwater runoff from Plant 3 (asphalt plant) commingled with non-contact cooling water. (SWA** Nos. 6, 7, and 10)	Sand Creek to South Platte River
021A	**Nelson Property** (northeast corner outfall)	39.810278 -104.940556	Stormwater runoff from Suncor maintenance facility (SWA No. 4)	Sand Creek to South Platte River
021Z (for PFAS)	**Nelson Property** (northeast corner outfall)	39.810278 -104.940556	Stormwater runoff from Suncor maintenance facility (SWA No. 4)	Sand Creek to South Platte River
022A	**Nelson Property pond** (northwest corner pond)	39.810318 -104.943202	Stormwater runoff from Suncor maintenance facility (SWA No. 4)	Sand Creek to South Platte River
022Z (for PFAS)	**Nelson Property pond** (northwest corner pond)	39.810318 -104.943202	Stormwater runoff from Suncor maintenance facility (SWA No. 4)	Sand Creek to South Platte River
023A	**Detention area – Plant 1** (west end of swale)	39.809017 -104.94901	Stormwater runoff from Suncor Plant 1 (SWA Nos. 1 and 2), commingled with groundwater	Sand Creek to South Platte River
023Z (for PFAS)	**Detention area – Plant 1** (west end of swale)	39.809017 -104.94901	Stormwater runoff from Suncor Plant 1 (SWA Nos. 1 and 2), commingled with groundwater	Sand Creek to South Platte River
024A	**Detention area – Plant 2** (north end)	39.804822 -104.942079	Stormwater runoff from Suncor Plant 2 (SWA No. 8)	Sand Creek to South Platte River
024Z (for PFAS)	**Detention area – Plant 2** (north end)	39.804822 -104.942079	Stormwater runoff from Suncor Plant 2 (SWA No. 8)	Sand Creek to South Platte River

Outfall	Description	Latitude Longitude	Wastewater Source	Receiving Water
025A	**High flow outfall – Plant 1** (at sulfur rail loading gate)	39.804025 -104.944022	Stormwater runoff from Suncor Plant 1 (SWA No. 3)	Sand Creek to South Platte River
025Z (for PFAS)	**High flow outfall – Plant 1** (at sulfur rail loading gate)	39.804025 -104.944022	Stormwater runoff from Suncor Plant 1 (SWA No. 3)	Sand Creek to South Platte River
026A	**High flow outfall – Plant 3** (at ditch inlet to Mary's Pond)	39.80376 -104.940982	Stormwater runoff from Suncor Plant 3 commingled with non-contact cooling water. (SWA Nos. 6, 7, and 10)	Sand Creek to South Platte River
026Z (for PFAS)	**High flow outfall – Plant 3** (at ditch inlet to Mary's Pond)	39.80376 -104.940982	Stormwater runoff from Suncor Plant 3 commingled with non-contact cooling water. (SWA Nos. 6, 7, and 10)	Sand Creek to South Platte River
027A	**Accumulated Stormwater – Plant 2**	39.801156 - 104.94437	Accumulated stormwater runoff from East Tank Farm (Plant 2)	Sand Creek to South Platte River
027Z (for PFAS)	**Accumulated Stormwater – Plant 2**	39.801156 - 104.94437	Accumulated stormwater runoff from East Tank Farm (Plant 2)	Sand Creek to South Platte River
028A	**Retention pond – Plant 2** (southwest corner of Plant 2)	39.796733 - 104.95148	Stormwater runoff from Suncor Plant 2 area (SWA No. 9)	unnamed tributary to South Platte River
028Z (for PFAS)	**Retention pond – Plant 2** (southwest corner of Plant 2)	39.796733 - 104.95148	Stormwater runoff from Suncor Plant 2 area (SWA No. 9)	unnamed tributary to South Platte River

The location(s) provided above will serve as the point(s) of compliance for this permit and are appropriate as they are located after all treatment (as applicable) and prior to discharge to the receiving water.

UST1A is an in-stream permitted feature located upstream from the facility discharge to collect continuous ambient temperature data at 39.806107° North latitude, -104.942444 West longitude.

UST2A is an in-stream permitted feature located upstream from the facility discharge to collect continuous ambient temperature data at LATITUDE° North latitude, LONGITUDE West longitude.

Any discharge (stormwater or wastewater) to surface water from a point source other than specifically authorized by this permit (identified as a permitted feature in the above table) is prohibited.

B. PERMIT COMPLIANCE

In accordance with the Water Quality Control Commission Regulations for Effluent Limitations, Section 62.4, and the Colorado Discharge Permit System Regulations, Section 61.8(2), 5 C.C.R. 1002-61, and the federal Petroleum Refining Effluent Guidelines and Standards (40 CFR Part 419), the permitted discharge shall not contain effluent parameter concentrations which exceed the limitations specified below or exceed the specified flow limitation. All discharges authorized under this permit shall comply with all the terms and conditions required by this permit. Violation of the terms and conditions specified in this permit may be subject to civil and criminal liability pursuant to sections 25-8-601 through 612, C.R.S. Failure to take any required corrective actions, as detailed in the CORRECTIVE ACTIONS section, constitutes an independent, additional violation of this permit and may be subject to civil and criminal liability.

1. Facilities Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee as necessary to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective performance, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision may requires the operation of back-up or auxiliary facilities or similar systems.

Any sludge produced at the wastewater treatment facility shall be disposed of in accordance with State and Federal guidelines and regulations. The permittee shall take all reasonable steps to minimize or prevent any discharge of sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. As necessary, accelerated or additional monitoring to determine the nature and impact of the noncomplying discharge is required.

C. LIMITATIONS OF COVERAGE

The permit does not authorize any discharge from Webber's Pond and Finger Lake, other than to external outfall 020A following treatment at the WWTP.

D. CHEMICAL PRODUCTS

The chemical products identified in the following table are authorized for use consistent with the operating dosage(s) and effluent concentration(s) identified by the permittee (application materials) and in the fact sheet, and all associated effluent limitations, and terms and conditions of this permit.

Product/trade name		
NalClear 8181	Embreak 2W126	Scaletrol PDC9329
Sulfuric acid	Embreak 2162	Gengard GN7122
3DT-394	Cortrol OS5700	Caustic Soda
3DT-199	Cortrol OS5300	Hydrogen Peroxide
Bleach	Steamate LSA1791	Soda Ash
N-73550	Solus AP25	PC-67
3DT-178	Gengard GN7004	PP01-3911
H-550	Gengard GN7300	Prochem 4H5
N-7330	Inhibitor AZ8104	Losalt LSA1900
Nalmet 1689	Spectrus BD1501e	MDC714
Ferralyte 8131	Spectrus NX1103	MCT113
Embreak 2W157	Klaraid CDP1336	MCT515
Philmplus 5K1642	Cortrol IS3000	Citric Acid
Losalt LS1507	Polyfloc CE1169	

E. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. Numeric Effluent Limitations and Site-Specific Monitoring (Outfalls 002B, 003B, 020A, 004A, 023A, 024A, 025A, 026A, 027A and 028A)

In order to obtain an indication of the probable compliance or noncompliance with the effluent limitations specified in this part, the permittee shall monitor all effluent parameters at the frequencies and sample types specified below. Such monitoring will begin immediately and last for the life of the permit unless otherwise noted. The results of such monitoring shall be reported on the Discharge Monitoring Report form (See Part I.L.)

Self-monitoring sampling by the permittee for compliance with the effluent monitoring requirements specified in this permit, shall be performed at the location(s) noted in Part I.A. above. If the permittee, using an approved analytical method, monitors any parameter more frequently than required by this permit, then the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form (DMRs) or other forms as required by the Division. Such increased frequency shall also be indicated.

Permitted Feature UST1A, Permitted Feature Type: receiving water (ambient) (Outfalls 020A and 004A)

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations		Monitoring Requirements	
		MWAT	Daily Maximum	Frequency	Sample Type
00010	Temp DM (°C) March-Nov, starting (6 mon after effective date)		Report	Continuous	Recorder
00010	Temp DM (°C) December- Feb, (6 mon after effective date)		Report	Continuous	Recorder
00010	Temp MWAT (°C) March-Nov, (6 mon after effective date)	Report		Continuous	Recorder
00010	Temp MWAT (°C) December-Feb, (6 mon after effective date)	Report		Continuous	Recorder

Permitted Feature UST2A, Permitted Feature Type: receiving water (ambient) (Outfalls 026A)

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations		Monitoring Requirements	
		MWAT	Daily Maximum	Frequency	Sample Type
00010	Temp DM (°C) March-Nov, starting 3/1/2023		Report	Continuous	Recorder
00010	Temp DM (°C) December- Feb, starting 3/1/2023		Report	Continuous	Recorder
00010	Temp MWAT (°C) March-Nov, starting 3/1/2023	Report		Continuous	Recorder
00010	Temp MWAT (°C) December-Feb, starting 3/1/2023	Report		Continuous	Recorder

Inspections - (Outfalls 020A, 004A, 021A, 022A, 023A, 024A, 025A, 026A, 027A and 028A)

ICIS Code	**Effluent Parameter**	**Effluent Limitations (Quantity)**	**Monitoring Requirements**		**Reporting Frequency**
			Frequency	**Sample Type**	
84107	Area inspection – visual (Twice monthly facility inspection)	Pass/Fail[1]	2 days/month	Visual	Monthly
84107	Area inspection – visual (Rain event facility inspection)	Pass/Fail[2]	Each rain event	Visual	Monthly
84107	Area inspection – visual (Snow melt event facility inspection)	Pass/Fail[3]	Each snow melt event	Visual	Monthly
84110	Pond Observation (No discharge - Webber's Pond and Finger Lake)	Pass/Fail[4]	8 times/month	Visual	Monthly

[1] Completing 2 facility inspections per month is indicated as a **'Pass'**; not completing 2 inspections per month is indicated as a **'Fail'**

[2] Completing facility inspections after **every rain event** is indicated as a **'Pass'**; not completing facility inspections after every rain event is indicated as a **'Fail'**. Note: attach report to DMR documenting inspections for >10 rain events in the month

[3] Completing facility inspections after every **snow melt** event is indicated as a **'Pass'**; not completing facility inspections after every snow melt event is indicated as a **'Fail'**. Note: attach report to DMR documenting inspections for >10 snow melt events in the month.

[4] Passive or active discharges from Webber's Pond and Finger Lake (other than to the WWTP) in any of the 8 required observations is indicated as a **'Fail'**; NO passive or active discharges from Webber's Pond and Finger Lake (other than to the WWTP) in any of the 8 required observations is indicated as a **'Pass'**.

OUTFALL 002B (Internal)

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations			Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	Frequency	Sample Type
50050	Effluent Flow (MGD)	2.6		Report	Continuous	Recorder
00400	pH (su)			6.0-9.0	Daily	Grab
00310	BOD5 (lbs/day)	944.68		1700.43	5 days/week	Composite/Calculated
00530	TSS (lbs/day)	755.75		1185.15	5 days/week	Composite/Calculated
80103	COD (lbs/day)	6595.59		12710.26	5 days/week	Composite/Calculated
00152	Oil and Grease (lbs/day)	274.82		515.28	Daily	Grab/calculated
34043	Phenolic compounds (lbs/day)	3.805		12.71	Weekly	Grab/calculated
00610	Ammonia as N (lbs/day)	515.28		1133.62	5 days/week	Composite/Calculated
00745	Sulfide (lbs/day)	4.98		11.16	2 days/week	Grab/calculated
70028	Total chromium (lbs/day)	4.499		12.896	2 days/week	Composite/Calculated
01255	Hexavalent chromium (lbs/day)	0.367		0.825	2 days/week	Composite/Calculated
34030	Benzene (µg/l)			5	Weekly	Grab
49491	BTEX (µg/l)			100	Weekly	Grab

OUTFALL 003B (Internal)

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations			Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	Frequency	Sample Type
50050	Effluent Flow (MGD)	0.9		Report	Continuous	Recorder
00400	pH (su)			6.0-9.0	Daily	Grab
00310	BOD5 (mg/l)	30	45		5 days/week	Composite
00530	TSS (mg/l)	30	45		5 days/week	Composite
50060	TRC (mg/l)			0.5 mg/l	Daily	Grab
03582	Oil and Grease (mg/l)			10	Daily	Grab
34030	Benzene (µg/l)			5	Weekly	Grab
49491	BTEX (µg/l)			100	Weekly	Grab

OUTFALL 020A – external outfall to Sand Creek

Table 1. Outfall 020A

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations				Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	2-Year Average	Frequency	Sample Type
50050	Effluent Flow (MGD)	3.5		Report		Continuous	Recorder
00400	pH (su)			6.5 - 9.0		Daily	Grab
84066	Oil and Grease (Visual Sheen)			Pass/Fail[1]		Daily	Visual
00300	DO (mg/l)			5		Daily	Grab
50060	TRC (mg/l)	0.012		0.019		Daily	Grab
00010	Temperature (°C)						
	January [Until 1 year after effective date]	23.0		30.8		Continuous	Recorder
	January [Starting 1 year after effective date]	18.9		30.8		Continuous	Recorder
	February [Until 1 year after effective date]	22.3		29.2		Continuous	Recorder
	February [Starting 1 year after effective date]	17		29.2		Continuous	Recorder
	March	31.8		31.8		Continuous	Recorder
	April	28.6		28.6		Continuous	Recorder
	May [Until 1 year after effective date]	28.5		30.6		Continuous	Recorder
	May [Starting 1 year after effective date]	28.5		28.6		Continuous	Recorder
	June [Until 1 year after effective date]	28.2		29.5		Continuous	Recorder
	June [Starting 1 year after effective date]	27.5		28.6		Continuous	Recorder
	July [Until 1 year after effective date]	28.5		30.1		Continuous	Recorder
	July [Starting 1 year after effective date]	27.5		28.6		Continuous	Recorder
	August [Until 1 year after effective date]	28.4		29.7		Continuous	Recorder
	August [Starting 1 year after effective date]	27.5		28.6		Continuous	Recorder
	September [Until 1 year after effective date]	27.5		29.2		Continuous	Recorder
	September [Starting 1 year after effective date]	27.5		28.6		Continuous	Recorder
	October	28.6		28.6		Continuous	Recorder
	November	29.8		29.8		Continuous	Recorder
	December [Until 1 year after effective date]	21.2		30.7		Continuous	Recorder
	December [Starting 1 year after effective date]	16.3		30.7		Continuous	Recorder
00640	Total Inorganic Nitrogen as N (mg/l)	NA		10		5 days/Week	Composite
00610	Total Ammonia as N (mg/l)						
	January	9.2		20		5 days/Week	Composite
	February	8.3		17		5 days/Week	Composite
	March	6.5		19		5 days/Week	Composite
	April	4.9		15		5 days/Week	Composite
	May	4.3		20		5 days/Week	Composite
	June	4.1		19		5 days/Week	Composite
	July	3.6		16		5 days/Week	Composite
	August	3.7		17		5 days/Week	Composite

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations				Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	2-Year Average	Frequency	Sample Type
	September	4.2		17		5 days/Week	Composite
	October	5.6		16		5 days/Week	Composite
	November	5.8		21		5 days/Week	Composite
	December	10		23		5 days/Week	Composite
01104	Al, TR (µg/l)	1615		10071		2 Days / Week	Composite
00978	As, TR (µg/l) [Until 1 year after effective date]	4				2 Days / Week	Composite
00978	As, TR (µg/l) [Starting 1 year after effective date]	4				2 Days / Week	Composite
00978	As, TR (µg/l) Starting 6/1/2026	0.02				2 Days / Week	Composite
01113	Cd, TR (µg/l)	NA		5		2 Days / Week	Composite
01313	Cd, PD (µg/l)	1.1		4.8		2 Days / Week	Composite
01118	Cr, TR (µg/l)			50		2 Days / Week	Composite
01220	Cr+6, Dis (µg/l)	12		16		2 Days / Week	Composite
01306	Cu, PD (µg/l)	19		26		2 Days / Week	Composite
00718	CN, WAD (µg/l) [Until 1 year after effective date]	NA		17		2 Days / Week	Composite
00718	CN, WAD (µg/l) [Starting 1 year after effective date]	NA		5		2 Days / Week	Composite
01046	Fe, Dis (µg/l) [Until 1 year after effective date]	610		NA		2 Days / Week	Composite
01046	Fe, Dis (µg/l) [Starting 1 year after effective date]	314		NA		2 Days / Week	Composite
00980	Fe, TR (µg/l)	861		NA		2 Days / Week	Composite
01114	Pb, TR (µg/l)	NA		50		2 Days / Week	Composite
01318	Pb, PD (µg/l)	9.4		281		2 Days / Week	Composite
01319	Mn, PD (µg/l)	2270		4738		2 Days / Week	Composite
01056	Mn, Dis (µg/l) [Until 1 year after effective date]	426		NA		2 Days / Week	Composite
01056	Mn, Dis (µg/l) [Starting 1 year after effective date]	403		NA		2 Days / Week	Composite
01129	Mo, TR (µg/l)	158		NA		2 Days / Week	Composite
50286	Hg, Tot (µg/l)	0.011		NA		2 Days / Week	Composite
01074	Ni, TR (µg/l)	105		NA		2 Days / Week	Composite
01322	Ni, PD (µg/l)	177		1513	28	2 Days / Week	Composite
01323	Se, PD (µg/l) [Until 12/31/2023]	24		Report		2 Days / Week	Composite
01323	Se, PD (µg/l) [1/1/2024 to 12/31/2024]	24		37		2 Days / Week	Composite
01323	Se, PD (µg/l) [Starting 1/1/2025]	4.6		18		2 Days / Week	Composite
22708	U, TR (µg/l)	Report		NA		2 Days / Week	Composite
01303	Zn, PD (µg/l)	450		564	88	2 Days / Week	Composite
82057	B, Tot (mg/l)	0.79		NA		2 Days / Week	Composite
00940	Chloride (mg/l)	250		NA		2 Days / Week	Composite
81020	Sulfate (mg/l)	250		NA		2 Days / Week	Composite
51202	Sulfide as H2S (mg/l) [Until 1 year after effective date]	0.038		NA		2 Days / Week	Composite
51202	Sulfide as H2S (mg/l) [Starting 1 year after effective date]	0.0021		NA		2 Days / Week	Composite

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations				Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	2-Year Average	Frequency	Sample Type
51451	Phosphorus	Report				2 Days / Week	Composite
00949	Fluoride			Report		2 Days / Week	Composite
00918	Calcium (mg/l)	Report		Report		Monthly	Composite
00921	Magnesium (mg/l)	Report		Report		Monthly	Composite
00923	Sodium (mg/l)	Report		Report		Monthly	Composite
00440	Bicarbonate as HCO3 (mg/l)	Report		Report		Monthly	Composite
00931	SAR calculated limit*	Report		Report		Monthly	Calculated
00931	Adjusted SAR effluent**	Report		Report		Monthly	Calculated
51613	SAR pass/fail***	Pass/Fail				Monthly	Calculated
00094	EC (dS/m) [Until 1 year after effective date]	3.4				Monthly	Composite
00094	EC (dS/m) [Starting 1 year after effective date]	1.7				Monthly	Composite
11503	Radium 226 & 228, total (pci/l)	Report		NA		Quarterly	Composite
51690	Thorium 230 and 232, total (pci/l)	Report		NA		Quarterly	Composite
	WET, chronic						
TKP6C	Static Renewal 7 Day Chronic *Pimephales promelas*			NOEC or IC25 ≥ IWC		Monthly	3 Composites / Test
TKP3B	Static Renewal 7 Day Chronic *Ceriodaphnia dubia*			NOEC or IC25 ≥ IWC		Monthly	3 Composites / Test

IWC = 89%. For WET, "Composite" = 24 hour Composite

[1]Presence of a visual sheen (yes) is indicated as a 'fail', while absence of a visual sheen (no) is indicated as a 'pass'.

* This SAR limit is to be calculated using the actual measured EC value (30-day average) of the effluent and substituting this value in to the following equation to solve for SAR. The equation for determining the SAR limit is: SAR = (7.1 * EC) – 2.48. **This limitation is capped at 11 until 1 year after effective date. This limitation is capped at 9 starting 1 year after effective date.**

** The SAR value of the effluent is to be reported as the adjusted SAR. See the definitions section in Part I.C.17 for information on calculating the adjusted SAR value.

*** The permittee shall compare the SAR value of the effluent (adjusted SAR) to this calculated SAR limitation and report as Pass/Fail whether the effluent SAR meets this value. If the SAR effluent value (adjusted SAR) is less than or equal to the calculated limit, then the permittee will report "Pass" and if it is greater than the calculated limit the permittee will report "Fail."

Table 2. Outfall 020A – Organics parameters [Until 1 year after effective date]

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations				Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	2-Year Average	Frequency	Sample Type
34205	Acenaphthene (µg/l)	Report		Report		Weekly	Grab
81552	Acetone (µg/l)	Report		NA		Weekly	Grab
34210	Acrolein (µg/l)	Report		Report		Weekly	Grab
50796	Acrylamide (µg/l)	0.71		7500		Weekly	Grab

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations				Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	2-Year Average	Frequency	Sample Type
34215	Acrylonitrile (µg/l)	Report		NA		Weekly	Grab
77089	Aniline (µg/l)	Report		NA		Weekly	Grab
34220	Anthracene (PAH) (µg/l)	Report		NA		Weekly	Grab
77625	Azobenzene (µg/l)	Report		NA		Weekly	Grab
34030	Benzene (µg/l)	57		5		Weekly	Grab
39120	Benzidine (µg/l)	Report		Report		Weekly	Grab
34521	Benzo (g,h,i)perylene (PAH) (µg/l)	Report		NA		Weekly	Grab
34242	Benzo (k)fluoranthene (PAH) (µg/l)	Report		NA		Weekly	Grab
34526	Benzo(a)anthracene (PAH) (µg/l)	Report		NA		Weekly	Grab
34247	Benzo(a)pyrene (PAH) (µg/l)	Report		NA		Weekly	Grab
34230	Benzo(b)fluoranthene (PAH) (µg/l)	Report		NA		Weekly	Grab
51073	Bromodichloromethane (µg/l)	Report		Report		Weekly	Grab
32104	Bromoform (µg/l)	Report		NA		Weekly	Grab
49491	BTEX (ug/l)			100		Weekly	Grab
34292	Butyl benzyl phthalate (µg/l)	Report		NA		Weekly	Grab
32102	Carbon tetrachloride (µg/l)	Report		Report		Weekly	Grab
34273	Chlorethyl ether (BIS-2) (µg/l)	Report		NA		Weekly	Grab
34301	Chlorobenzene (µg/l)	Report		NA		Weekly	Grab
34306	Chlorodibromomethane (µg/l)	Report		NA		Weekly	Grab
32106	Chloroform (µg/l)	Report		Report		Weekly	Grab
70012	4-Chloro-3methylphenol (µg/l)	Report		Report		Weekly	Grab
34581	Chloronapthalene, 2- (µg/l)	Report		Report		Weekly	Grab
34586	Chlorophenol, 2- (µg/l)	Report		Report		Weekly	Grab
34320	Chrysene (µg/l)	Report		NA		Weekly	Grab
34556	Dibenzo(a,h)anthracene (PAH) (µg/l)	Report		NA		Weekly	Grab
77651	Dibromoethane 1,2 [Ethylene Dibromide] (µg/l)	Report		NA		Weekly	Grab
34536	Dichlorobenzene 1,2 (µg/l)	Report		NA		Weekly	Grab
34566	Dichlorobenzene 1,3 (µg/l)	Report		NA		Weekly	Grab
34571	Dichlorobenzene 1,4 (µg/l)	Report		NA		Weekly	Grab
32103	Dichloroethane 1,2 (µg/l)	Report		Report		Weekly	Grab
34501	Dichloroethylene 1,1 (µg/l)	Report		NA		Weekly	Grab
34546	Dichloroethylene 1,2-trans (µg/l)	Report		NA		Weekly	Grab
03821	Dichloromethane (methylene chloride) (µg/l)	Report		NA		Weekly	Grab
34601	Dichlorophenol 2,4 (µg/l)	Report		Report		Weekly	Grab
34631	3,3'-Dichlorobenzidine (µg/l)	Report		NA		Weekly	Grab
34336	Diethylphthalate (µg/l)	Report		NA		Weekly	Grab
34341	Dimethyl phthalate (µg/l)	Report		NA		Weekly	Grab
34606	Dimethylphenol 2,4 (µg/l)	Report		Report		Weekly	Grab
39110	Di-n-butyl phthalate (µg/l)	Report		NA		Weekly	Grab
34657	Dinitro-o-cresol 4,6 (µg/l)	Report		NA		Weekly	Grab
34616	Dinitrophenol 2,4 (µg/l)	Report		NA		Weekly	Grab
34611	Dinitrotoluene 2,4 (µg/l)	Report		NA		Weekly	Grab
34626	Dinitrotoluene 2,6 (µg/l)	Report		Report		Weekly	Grab
82388	Dioxane 1,4 (µg/l)	Report		NA		Weekly	Grab
03610	Dioxin (µg/l)	Report		Report		Weekly	Grab

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations				Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	2-Year Average	Frequency	Sample Type
34346	Diphenolhydrazine, 1,2- (µg/l)	Report		Report		Weekly	Grab
34371	Ethylbenzene (µg/l)	Report		Report		Weekly	Grab
39100	Ethylhexyl phthalate (BIS-2) (µg/l)	Report		NA		Weekly	Grab
34381	Fluorene (PAH) (µg/l)	Report		NA		Weekly	Grab
34376	Fluoranthene (PAH) (µg/l)	Report		Report		Weekly	Grab
39700	Hexachlorobenzene (µg/l)	Report		NA		Weekly	Grab
34391	Hexachlorobutadiene (µg/l)	Report		Report		Weekly	Grab
34386	Hexachlorocyclopentadiene (µg/l)	Report		Report		Weekly	Grab
30347	Hexachlorodibenzo-p-dioxin (µg/l)	Report		NA		Weekly	Grab
34396	Hexachloroethane (µg/l)	Report		Report		Weekly	Grab
34403	Indeno(1,2,3-cd)pyrene (PAH) (µg/l)	Report		NA		Weekly	Grab
34408	Isophorone (µg/l)	Report		NA		Weekly	Grab
77885	Methanol (µg/l)	Report		NA		Weekly	Grab
38677	Methyl bromide [Bromomethane] (µg/l)	Report		NA		Weekly	Grab
38678	Methyl chloride [Chloromethane] (µg/l)	Report		NA		Weekly	Grab
22417	Methyl tert-butyl ether [MTBE] (µg/l)	Report		Report		Weekly	Grab
34696	Naphthalene (PAH) (µg/l)	Report		Report		Weekly	Grab
34447	Nitrobenzene (µg/l)	Report		Report		Weekly	Grab
34646	Nitrophenol 4 (µg/l)	Report		NA		Weekly	Grab
34438	Nitrosodimethylamine N (µg/l)	Report		NA		Weekly	Grab
34433	Nitrosodiphenylamine N (µg/l)	Report		NA		Weekly	Grab
34428	N-Nitrosodi-n-propylamine (µg/l)	Report		NA		Weekly	Grab
51568	Nonylphenol (µg/l)	7.0		28		Weekly	Grab
39516	PCBs (µg/l)	Report		Report		Weekly	Grab
77793	Pentachlorobenzene (µg/l)	Report		NA		Weekly	Grab
39032	Pentachlorophenol (µg/l)	Report		Report		Weekly	Grab
34694	Phenol (µg/l)	2874		10200		Weekly	Grab
81706	Propylene oxide (µg/l)	Report		NA		Weekly	Grab
34469	Pyrene (PAH) (µg/l)	Report		NA		Weekly	Grab
77299	Quinoline (µg/l)	Report		NA		Weekly	Grab
81708	Styrene (µg/l)	Report		NA		Weekly	Grab
34516	Tetrachloroethane 1,1,2,2 (µg/l)	Report		NA		Weekly	Grab
34475	Tetrachloroethylene (PCE) (µg/l)	Report		Report		Weekly	Grab
34010	Toluene (µg/l)	Report		Report		Weekly	Grab
70022	Trichlorobenzene 1,2,4 (µg/l)	Report		Report		Weekly	Grab
34506	Trichloroethane 1,1,1 (µg/l)	Report		NA		Weekly	Grab
34511	Trichloroethane 1,1,2 (µg/l)	Report		Report		Weekly	Grab
39180	Trichloroethylene (TCE) (µg/l)	Report		Report		Weekly	Grab
34621	Trichlorophenol 2,4,6 (µg/l)	Report		NA		Weekly	Grab
77226	Trimethyl benzene 1,3,5 (µg/l)	Report		NA		Weekly	Grab
51565	Trimethylbenzene 1,2,3 (µg/l)	Report		NA		Weekly	Grab
77222	Trimethylbenzene 1,2,4 (µg/l)	Report		NA		Weekly	Grab
39175	Vinyl Chloride (µg/l)	Report		NA		Weekly	Grab
73382	Xylenes (total) (µg/l)	Report		NA		Weekly	Grab

Table 3. Outfall 020A – Organics parameters [Starting 1 year after effective date]

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations				Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	2-Year Average	Frequency	Sample Type
34205	Acenaphthene (µg/l)	584		1700		Weekly	Grab
81552	Acetone (µg/l)	215001		NA		Weekly	Grab
34210	Acrolein (µg/l)	Report		Report		Weekly	Grab
50796	Acrylamide (µg/l)	0.71		7500		Weekly	Grab
34215	Acrylonitrile (µg/l)	Report		NA		Weekly	Grab
77089	Aniline (µg/l)	198		NA		Weekly	Grab
34220	Anthracene (PAH) (µg/l)	44912		NA		Weekly	Grab
77625	Azobenzene (µg/l)	Report		NA		Weekly	Grab
34030	Benzene (µg/l)	57		5	8.6	Weekly	Grab
39120	Benzidine (µg/l)	Report		Report		Weekly	Grab
34521	Benzo (g,h,i)perylene (PAH) (µg/l)	0.0038		NA		Weekly	Grab
34242	Benzo (k)fluoranthene (PAH) (µg/l)	0.051		NA		Weekly	Grab
34526	Benzo(a)anthracene (PAH) (µg/l)	0.0051		NA		Weekly	Grab
34247	Benzo(a)pyrene (PAH) (µg/l)	0.00051		NA		Weekly	Grab
34230	Benzo(b)fluoranthene (PAH) (µg/l)	0.0051		NA		Weekly	Grab
51073	Bromodichloromethane (µg/l)	12		11000		Weekly	Grab
32104	Bromoform (µg/l)	Report		NA		Weekly	Grab
49491	BTEX (ug/l)			100		Weekly	Grab
34292	Butyl benzyl phthalate (µg/l)	2133		NA		Weekly	Grab
32102	Carbon tetrachloride (µg/l)	3.4		35200		Weekly	Grab
34273	Chlorethyl ether (BIS-2) (µg/l)	Report		NA		Weekly	Grab
34301	Chlorobenzene (µg/l)	1796		NA		Weekly	Grab
34306	Chlorodibromomethane (µg/l)	Report		NA		Weekly	Grab
32106	Chloroform (µg/l)	72		28900		Weekly	Grab
70012	4-Chloro-3methylphenol (µg/l)	6805		30		Weekly	Grab
34581	Chloronapthalene, 2- (µg/l)	Report		Report		Weekly	Grab
34586	Chlorophenol, 2- (µg/l)	168		4380		Weekly	Grab
34320	Chrysene (µg/l)	0.51		NA		Weekly	Grab
34556	Dibenzo(a,h)anthracene (PAH) (µg/l)	0.00051		NA		Weekly	Grab
77651	Dibromoethane 1,2 [Ethylene Dibromide] (µg/l)	0.58		NA		Weekly	Grab
34536	Dichlorobenzene 1,2 (µg/l)	Report		NA		Weekly	Grab
34566	Dichlorobenzene 1,3 (µg/l)	Report		NA		Weekly	Grab
34571	Dichlorobenzene 1,4 (µg/l)	213		NA		Weekly	Grab
32103	Dichloroethane 1,2 (µg/l)	12		118000		Weekly	Grab
34501	Dichloroethylene 1,1 (µg/l)	Report		NA		Weekly	Grab
34546	Dichloroethylene 1,2-trans (µg/l)	3240		NA		Weekly	Grab
03821	Dichloromethane (methylene chloride) (µg/l)	140		NA		Weekly	Grab
34601	Dichlorophenol 2,4 (µg/l)	326		2020		Weekly	Grab
34631	3,3'-Dichlorobenzidine (µg/l)	Report		NA		Weekly	Grab
34336	Diethylphthalate (µg/l)	49404		NA		Weekly	Grab
34341	Dimethyl phthalate (µg/l)	1235088		NA		Weekly	Grab
34606	Dimethylphenol 2,4 (µg/l)	954		2120		Weekly	Grab
39110	Di-n-butyl phthalate (µg/l)	5053		NA		Weekly	Grab
34657	Dinitro-o-cresol 4,6 (µg/l)	8.7		NA		Weekly	Grab

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations				Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	2-Year Average	Frequency	Sample Type
34616	Dinitrophenol 2,4 (µg/l)	454		NA		Weekly	Grab
34611	Dinitrotoluene 2,4 (µg/l)	3.6		NA		Weekly	Grab
34626	Dinitrotoluene 2,6 (µg/l)	Report		Report		Weekly	Grab
82388	Dioxane 1,4 (µg/l)	11		NA		Weekly	Grab
03610	Dioxin (µg/l)	5.7E-09		0.01		Weekly	Grab
34346	Diphenolhydrazine, 1,2- (µg/l)	0.22		270		Weekly	Grab
34371	Ethylbenzene (µg/l)	2358		32000		Weekly	Grab
39100	Ethylhexyl phthalate (BIS-2) (µg/l)	1.2		NA		Weekly	Grab
34381	Fluorene (PAH) (µg/l)	5951		NA		Weekly	Grab
34376	Fluoranthene (PAH) (µg/l)	157		3980		Weekly	Grab
39700	Hexachlorobenzene (µg/l)	Report		NA		Weekly	Grab
34391	Hexachlorobutadiene (µg/l)	Report		Report		Weekly	Grab
34386	Hexachlorocyclopentadiene (µg/l)	Report		Report		Weekly	Grab
30347	Hexachlorodibenzo-p-dioxin (µg/l)	Report		NA		Weekly	Grab
34396	Hexachloroethane (µg/l)	Report		Report		Weekly	Grab
34403	Indeno(1,2,3-cd)pyrene (PAH) (µg/l)	0.0051		NA		Weekly	Grab
34408	Isophorone (µg/l)	4042		NA		Weekly	Grab
77885	Methanol (µg/l)	453649		NA		Weekly	Grab
38677	Methyl bromide [Bromomethane] (µg/l)	Report		NA		Weekly	Grab
38678	Methyl chloride [Chloromethane] (µg/l)	Report		NA		Weekly	Grab
22417	Methyl tert-butyl ether [MTBE] (µg/l)	647		151000		Weekly	Grab
34696	Naphthalene (PAH) (µg/l)	696		2300		Weekly	Grab
34447	Nitrobenzene (µg/l)	Report		Report		Weekly	Grab
34646	Nitrophenol 4 (µg/l)	1815		NA		Weekly	Grab
34438	Nitrosodimethylamine N (µg/l)	Report		NA		Weekly	Grab
34433	Nitrosodiphenylamine N (µg/l)	6.7		NA		Weekly	Grab
34428	N-Nitrosodi-n-propylamine (µg/l)	Report		NA		Weekly	Grab
51568	Nonylphenol (µg/l)	7.0		28		Weekly	Grab
39516	PCBs (µg/l)	7.19E-05		2		Weekly	Grab
77793	Pentachlorobenzene (µg/l)	Report		NA		Weekly	Grab
39032	Pentachlorophenol (µg/l)	1.0		19		Weekly	Grab
34694	Phenol (µg/l)	2874		10200		Weekly	Grab
81706	Propylene oxide (µg/l)	4.9		NA		Weekly	Grab
34469	Pyrene (PAH) (µg/l)	4491		NA		Weekly	Grab
77299	Quinoline (µg/l)	Report		NA		Weekly	Grab
81708	Styrene (µg/l)	3240		NA		Weekly	Grab
34516	Tetrachloroethane 1,1,2,2 (µg/l)	Report		NA		Weekly	Grab
34475	Tetrachloroethylene (PCE) (µg/l)	70		5280		Weekly	Grab
34010	Toluene (µg/l)	6625		17500		Weekly	Grab
70022	Trichlorobenzene 1,2,4 (µg/l)	Report		Report		Weekly	Grab
34506	Trichloroethane 1,1,1 (µg/l)	6481		NA		Weekly	Grab
34511	Trichloroethane 1,1,2 (µg/l)	Report		Report		Weekly	Grab
39180	Trichloroethylene (TCE) (µg/l)	34		45000		Weekly	Grab
34621	Trichlorophenol 2,4,6 (µg/l)	Report		NA		Weekly	Grab
77226	Trimethyl benzene 1,3,5 (µg/l)	2171		NA		Weekly	Grab
51565	Trimethylbenzene 1,2,3 (µg/l)	2171		NA		Weekly	Grab

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations				Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	2-Year Average	Frequency	Sample Type
77222	Trimethylbenzene 1,2,4 (µg/l)	2171		NA		Weekly	Grab
39175	Vinyl Chloride (µg/l)	Report		NA		Weekly	Grab
73382	Xylenes (total) (µg/l)	45365		NA		Weekly	Grab

OUTFALL 023A- Detention Area, Plant 1

Table 1. Outfall 023A

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations			Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	Frequency	Sample Type
50050	Effluent Flow (MGD)	0.2		Report	Continuous	Recorder
03582	Oil and Grease (mg/l)			10	Daily	Grab
00310	BOD5 (mg/l)	30	45		5 days/week	Grab
00530	TSS (mg/l)	30	45		5 days/week	Grab
00400	pH (su)			6.5 - 9.0	Daily	Grab
84066	Oil and Grease (Visual Sheen)			Pass/Fail[1]	Daily	Visual
00300	DO (mg/l) [Until 1 year after effective date]			Report	Daily	Grab
00300	DO (mg/l) [Starting 1 year after effective date]			5	Daily	Grab
50060	TRC (mg/l)	0.012		0.019	Daily	Grab
00640	Total Inorganic Nitrogen as N (mg/l)	NA		10	5 days/week	Grab
00610	Total Ammonia as N (mg/l)					
	January	9.2		20	5 days/week	Grab
	February	8.3		17	5 days/week	Grab
	March	6.5		19	5 days/week	Grab
	April	4.9		15	5 days/week	Grab
	May	4.3		20	5 days/week	Grab
	June	4.1		19	5 days/week	Grab
	July	3.6		16	5 days/week	Grab
	August	3.7		17	5 days/week	Grab
	September	4.2		17	5 days/week	Grab
	October	5.6		16	5 days/week	Grab
	November	5.8		21	5 days/week	Grab
	December	10		23	5 days/week	Grab
01104	Al, TR (µg/l)	1615		10071	2 Days / Week	Grab
00978	As, TR (µg/l) [Until 1 year after effective date]	13		NA	2 Days / Week	Grab
00978	As, TR (µg/l) [Starting 1 year after effective date]	3		NA	2 Days / Week	Grab
00978	As, TR (µg/l) Starting 6/1/2026	0.02		NA	2 Days / Week	Grab
01113	Cd, TR (µg/l)	NA		5	2 Days / Week	Grab
01313	Cd, PD (µg/l)	1.1		4.8	2 Days / Week	Grab
01118	Cr, TR (µg/l)			50	2 Days / Week	Grab
01220	Cr+6, Dis (µg/l)	12		16	2 Days / Week	Grab
01306	Cu, PD (µg/l)	19		26	2 Days / Week	Grab
00718	CN, WAD (µg/l)	NA		5	2 Days / Week	Grab
01046	Fe, Dis (µg/l) [Until 1 year after effective date]	890		NA	2 Days / Week	Grab
01046	Fe, Dis (µg/l) [Starting 1 year after effective date]	314		NA	2 Days / Week	Grab
00980	Fe, TR (µg/l) [Until 1 year after effective date]	1400		NA	2 Days / Week	Grab

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations			Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	Frequency	Sample Type
00980	Fe, TR (µg/l) [Starting 1 year after effective date]	1025		NA	2 Days / Week	Grab
01114	Pb, TR (µg/l)	NA		50	2 Days / Week	Grab
01318	Pb, PD (µg/l)	12		281	2 Days / Week	Grab
01319	Mn, PD (µg/l)	2740		4738	2 Days / Week	Grab
01056	Mn, Dis (µg/l) [Until 1 year after effective date]	2500		NA	2 Days / Week	Grab
01056	Mn, Dis (µg/l) [Starting 1 year after effective date]	403		NA	2 Days / Week	Grab
01129	Mo, TR (µg/l)	158		NA	2 Days / Week	Grab
50286	Hg, Tot (µg/l) [Until 1 year after effective date]	0.022		NA	2 Days / Week	Grab
50286	Hg, Tot (µg/l) [Starting 1 year after effective date]	0.011		NA	2 Days / Week	Grab
01074	Ni, TR (µg/l)	105		NA	2 Days / Week	Grab
01322	Ni, PD (µg/l)	177		1513	2 Days / Week	Grab
01323	Se, PD (µg/l) [Until 1 year after effective date]	10.6		18	2 Days / Week	Grab
01323	Se, PD (µg/l) [Starting 1 year after effective date]	4.6		18	2 Days / Week	Grab
22708	U, TR (µg/l)	Report		NA	2 Days / Week	Grab
01303	Zn, PD (µg/l)	450		564	2 Days / Week	Grab
82057	B, Tot (mg/l)	0.79		NA	2 Days / Week	Grab
00940	Chloride (mg/l)	250		NA	2 Days / Week	Grab
81020	Sulfate (mg/l)	250		NA	2 Days / Week	Grab
51202	Sulfide as H2S (mg/l) [Until 1 year after effective date]	0.05		NA	2 Days / Week	Grab
51202	Sulfide as H2S (mg/l) [Starting 1 year after effective date]	0.0021		NA	2 Days / Week	Grab
51451	Phosphorus	Report			2 Days / Week	Grab
00949	Fluoride			Report	2 Days / Week	Grab
00918	Calcium (mg/l)	Report		Report	Monthly	Grab
00921	Magnesium (mg/l)	Report		Report	Monthly	Grab
00923	Sodium (mg/l)	Report		Report	Monthly	Grab
00440	Bicarbonate as HCO3 (mg/l)	Report		Report	Monthly	Grab
00931	SAR calculated limit*	Report		Report	Monthly	Calculate
00931	Adjusted SAR effluent**	Report		Report	Monthly	Calculate
51613	SAR pass/fail ***	pass/fail		Report	Monthly	Calculate
00094	EC (dS/m)	1.7			Monthly	Grab
11503	Radium 226 & 228, total (pci/l)	Report		NA	Quarterly	Grab
51690	Thorium 230 and 232, total (pci/l)	Report		NA	Quarterly	Grab
	WET, chronic					
TKP6C	Static Renewal 7 Day Chronic *Pimephales promelas* [Until 1 year after effective date]			Report NOEC or IC25 ≥ IWC	Monthly	3 Grabs / Test

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations			Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	Frequency	Sample Type
TKP6C	Static Renewal 7 Day Chronic *Pimephales promelas* [Starting 1 year after effective date]			NOEC or IC25 ≥ IWC	Monthly	3 Grabs / Test
TKP3B	Static Renewal 7 Day Chronic *Ceriodaphnia dubia* [Until 1 year after effective date]			Report NOEC or IC25 ≥ IWC	Monthly	3 Grabs / Test
TKP3B	Static Renewal 7 Day Chronic *Ceriodaphnia dubia* [Starting 1 year after effective date]			NOEC or IC25 ≥ IWC	Monthly	3 Grabs / Test

IWC = 30%

[1]Presence of a visual sheen (yes) is indicated as a 'fail', while absence of a visual sheen (no) is indicated as a 'pass'.

*This SAR limit is to be calculated using the actual measured EC value (30-day average) of the effluent and substituting this value in to the following equation to solve for SAR. The equation for determining the SAR limit is: SAR = (7.1 * EC) – 2.48. **This limitation is capped at 12 until 1 year after the effective date. This limitation is capped at 9 starting 1 year after the effective date.**

**The SAR value of the effluent is to be reported as the adjusted SAR. See the definitions section in Part I.C.17 for information on calculating the adjusted SAR value.

***The permittee shall compare the SAR value of the effluent (adjusted SAR) to this calculated SAR limitation and report as Pass/Fail whether the effluent SAR meets this value. If the SAR effluent value (adjusted SAR) is less than or equal to the calculated limit, then the permittee will report "Pass" and if it is greater than the calculated limit the permittee will report "Fail."

Table 2. Outfall 023A – Organics parameters [Until 1 year after effective date]

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations			Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	Frequency	Sample Type
34205	Acenaphthene (µg/l)	Report		Report	Weekly	Grab
81552	Acetone	Report		Report	Weekly	Grab
34210	Acrolein (µg/l)	Report		Report	Weekly	Grab
50796	Acrylamide (µg/l)	0.71		7500	Weekly	Grab
34215	Acrylonitrile (µg/l)	Report		NA	Weekly	Grab
77089	Aniline (µg/l)	Report		NA	Weekly	Grab
34220	Anthracene (PAH) (µg/l)	Report		NA	Weekly	Grab
77625	Azobenzene (µg/l)	Report		NA	Weekly	Grab
34030	Benzene (µg/l)	15		5	Weekly	Grab
39120	Benzidine (µg/l)	Report		Report	Weekly	Grab
34521	Benzo (g,h,i)perylene (PAH) (µg/l)	Report		NA	Weekly	Grab
34242	Benzo (k)fluoranthene (PAH) (µg/l)	Report		NA	Weekly	Grab
34526	Benzo(a)anthracene (PAH) (µg/l)	Report		NA	Weekly	Grab
34247	Benzo(a)pyrene (PAH) (µg/l)	Report		NA	Weekly	Grab
34230	Benzo(b)fluoranthene (PAH) (µg/l)	Report		NA	Weekly	Grab
51073	Bromodichloromethane (µg/l)	Report		Report	Weekly	Grab
32104	Bromoform (µg/l)	Report		NA	Weekly	Grab
49491	BTEX (ug/l)			100	Weekly	Grab
34292	Butyl benzyl phthalate (µg/l)	Report		NA	Weekly	Grab
32102	Carbon tetrachloride (µg/l)	Report		Report	Weekly	Grab

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations			Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	Frequency	Sample Type
34273	Chlorethyl ether (BIS-2) (µg/l)	Report		NA	Weekly	Grab
34301	Chlorobenzene (µg/l)	Report		NA	Weekly	Grab
34306	Chlorodibromomethane (µg/l)	Report		NA	Weekly	Grab
32106	Chloroform (µg/l)	Report		Report	Weekly	Grab
70012	4-Chloro-3methylphenol (µg/l)	Report		Report	Weekly	Grab
34581	Chloronapthalene, 2- (µg/l)	Report		Report	Weekly	Grab
34586	Chlorophenol, 2- (µg/l)	Report		Report	Weekly	Grab
34320	Chrysene (µg/l)	Report		NA	Weekly	Grab
34556	Dibenzo(a,h)anthracene (PAH) (µg/l)	Report		NA	Weekly	Grab
77651	Dibromoethane 1,2 [Ethylene Dibromide] (µg/l)	Report		NA	Weekly	Grab
34536	Dichlorobenzene 1,2 (µg/l)	Report		NA	Weekly	Grab
34566	Dichlorobenzene 1,3 (µg/l)	Report		NA	Weekly	Grab
34571	Dichlorobenzene 1,4 (µg/l)	Report		NA	Weekly	Grab
32103	Dichloroethane 1,2 (µg/l)	Report		Report	Weekly	Grab
34501	Dichloroethylene 1,1 (µg/l)	Report		NA	Weekly	Grab
34546	Dichloroethylene 1,2-trans (µg/l)	Report		NA	Weekly	Grab
03821	Dichloromethane (methylene chloride) (µg/l)	Report		NA	Weekly	Grab
34601	Dichlorophenol 2,4 (µg/l)	Report		Report	Weekly	Grab
34631	3,3'-Dichlorobenzidine (µg/l)	Report		NA	Weekly	Grab
34336	Diethylphthalate (µg/l)	Report		NA	Weekly	Grab
34341	Dimethyl phthalate (µg/l)	Report		NA	Weekly	Grab
34606	Dimethylphenol 2,4 (µg/l)	Report		Report	Weekly	Grab
39110	Di-n-butyl phthalate (µg/l)	Report		NA	Weekly	Grab
34657	Dinitro-o-cresol 4,6 (µg/l)	Report		NA	Weekly	Grab
34616	Dinitrophenol 2,4 (µg/l)	Report		NA	Weekly	Grab
34611	Dinitrotoluene 2,4 (µg/l)	Report		NA	Weekly	Grab
34626	Dinitrotoluene 2,6 (µg/l)	Report		Report	Weekly	Grab
82388	Dioxane 1,4 (µg/l)	Report		NA	Weekly	Grab
03610	Dioxin (µg/l)	Report		Report	Weekly	Grab
34346	Diphenolhydrazine, 1,2- (µg/l)	Report		Report	Weekly	Grab
34371	Ethylbenzene (µg/l)	Report		Report	Weekly	Grab
39100	Ethylhexyl phthalate (BIS-2) (µg/l)	Report		NA	Weekly	Grab
34381	Fluorene (PAH) (µg/l)	Report		NA	Weekly	Grab
34376	Fluoranthene (PAH) (µg/l)	Report		Report	Weekly	Grab
39700	Hexachlorobenzene (µg/l)	Report		NA	Weekly	Grab
34391	Hexachlorobutadiene (µg/l)	Report		Report	Weekly	Grab
34386	Hexachlorocyclopentadiene (µg/l)	Report		Report	Weekly	Grab
30347	Hexachlorodibenzo-p-dioxin (µg/l)	Report		NA	Weekly	Grab
34396	Hexachloroethane (µg/l)	Report		980	Weekly	Grab
34403	Indeno(1,2,3-cd)pyrene (PAH) (µg/l)	Report		NA	Weekly	Grab
34408	Isophorone (µg/l)	Report		NA	Weekly	Grab
77885	Methanol (µg/l)	Report		NA	Weekly	Grab
38677	Methyl bromide [Bromomethane] (µg/l)	Report		NA	Weekly	Grab

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations			Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	Frequency	Sample Type
38678	Methyl chloride [Chloromethane] (µg/l)	Report		NA	Weekly	Grab
22417	Methyl tert-butyl ether [MTBE] (µg/l)	Report		Report	Weekly	Grab
34696	Naphthalene (PAH) (µg/l)	Report		Report	Weekly	Grab
34447	Nitrobenzene (µg/l)	Report		Report	Weekly	Grab
34646	Nitrophenol 4 (µg/l)	Report		NA	Weekly	Grab
34438	Nitrosodimethylamine N (µg/l)	Report		NA	Weekly	Grab
34433	Nitrosodiphenylamine N (µg/l)	Report		NA	Weekly	Grab
34428	N-Nitrosodi-n-propylamine (µg/l)	Report		NA	Weekly	Grab
51568	Nonylphenol (µg/l)	7.0		28	Weekly	Grab
39516	PCBs (µg/l)	Report		Report	Weekly	Grab
77793	Pentachlorobenzene (µg/l)	Report		NA	Weekly	Grab
39032	Pentachlorophenol (µg/l)	Report		Report	Weekly	Grab
34694	Phenol (µg/l)	2874		10200	Weekly	Grab
81706	Propylene oxide (µg/l)	Report		NA	Weekly	Grab
34469	Pyrene (PAH) (µg/l)	Report		NA	Weekly	Grab
77299	Quinoline (µg/l)	Report		NA	Weekly	Grab
81708	Styrene (µg/l)	Report		NA	Weekly	Grab
34516	Tetrachloroethane 1,1,2,2 (µg/l)	Report		NA	Weekly	Grab
34475	Tetrachloroethylene (PCE) (µg/l)	Report		Report	Weekly	Grab
34010	Toluene (µg/l)	Report		Report	Weekly	Grab
70022	Trichlorobenzene 1,2,4 (µg/l)	Report		Report	Weekly	Grab
34506	Trichloroethane 1,1,1 (µg/l)	Report		NA	Weekly	Grab
34511	Trichloroethane 1,1,2 (µg/l)	Report		Report	Weekly	Grab
39180	Trichloroethylene (TCE) (µg/l)	Report		Report	Weekly	Grab
34621	Trichlorophenol 2,4,6 (µg/l)	Report		NA	Weekly	Grab
77226	Trimethyl benzene 1,3,5 (µg/l)	Report		NA	Weekly	Grab
51565	Trimethylbenzene 1,2,3 (µg/l)	Report		NA	Weekly	Grab
77222	Trimethylbenzene 1,2,4 (µg/l)	Report		NA	Weekly	Grab
39175	Vinyl Chloride (µg/l)	Report		NA	Weekly	Grab
73382	Xylenes (total) (µg/l)	Report		NA	Weekly	Grab

Table 3. Outfall 023A – Organics parameters [Starting 1 year after effective date]

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations			Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	Frequency	Sample Type
34205	Acenaphthene (µg/l)	584		1700	Weekly	Grab
81552	Acetone (µg/l)	215001		NA	Weekly	Grab
34210	Acrolein (µg/l)	Report		Report	Weekly	Grab
50796	Acrylamide (µg/l)	0.71		7500	Weekly	Grab
34215	Acrylonitrile (µg/l)	Report		NA	Weekly	Grab
77089	Aniline (µg/l)	198		NA	Weekly	Grab
34220	Anthracene (PAH) (µg/l)	44912		NA	Weekly	Grab
77625	Azobenzene (µg/l)	Report		NA	Weekly	Grab

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations			Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	Frequency	Sample Type
34030	Benzene (µg/l)	15		5	Weekly	Grab
39120	Benzidine (µg/l)	Report		Report	Weekly	Grab
34521	Benzo (g,h,i)perylene (PAH) (µg/l)	0.0038		NA	Weekly	Grab
34242	Benzo (k)fluoranthene (PAH) (µg/l)	0.051		NA	Weekly	Grab
34526	Benzo(a)anthracene (PAH) (µg/l)	0.0051		NA	Weekly	Grab
34247	Benzo(a)pyrene (PAH) (µg/l)	0.00051		NA	Weekly	Grab
34230	Benzo(b)fluoranthene (PAH) (µg/l)	0.0051		NA	Weekly	Grab
51073	Bromodichloromethane (µg/l)	12		11000	Weekly	Grab
32104	Bromoform (µg/l)	Report		NA	Weekly	Grab
34292	Butyl benzyl phthalate (µg/l)	2133		NA	Weekly	Grab
32102	Carbon tetrachloride (µg/l)	3.4		35200	Weekly	Grab
34273	Chlorethyl ether (BIS-2) (µg/l)	Report		NA	Weekly	Grab
34301	Chlorobenzene (µg/l)	1796		NA	Weekly	Grab
34306	Chlorodibromomethane (µg/l)	Report		NA	Weekly	Grab
32106	Chloroform (µg/l)	72		28900	Weekly	Grab
70012	4-Chloro-3methylphenol (µg/l)	6805		30	Weekly	Grab
34581	Chloronapthalene, 2- (µg/l)	Report		Report	Weekly	Grab
34586	Chlorophenol, 2- (µg/l)	168		4380	Weekly	Grab
34320	Chrysene (µg/l)	0.51		NA	Weekly	Grab
34556	Dibenzo(a,h)anthracene (PAH) (µg/l)	0.00051		NA	Weekly	Grab
77651	Dibromoethane 1,2 [Ethylene Dibromide] (µg/l)	0.58		NA	Weekly	Grab
34536	Dichlorobenzene 1,2 (µg/l)	Report		NA	Weekly	Grab
34566	Dichlorobenzene 1,3 (µg/l)	Report		NA	Weekly	Grab
34571	Dichlorobenzene 1,4 (µg/l)	213		NA	Weekly	Grab
32103	Dichloroethane 1,2 (µg/l)	12		118000	Weekly	Grab
34501	Dichloroethylene 1,1 (µg/l)	Report		NA	Weekly	Grab
34546	Dichloroethylene 1,2-trans (µg/l)	3240		NA	Weekly	Grab
03821	Dichloromethane (methylene chloride) (µg/l)	140		NA	Weekly	Grab
34601	Dichlorophenol 2,4 (µg/l)	326		2020	Weekly	Grab
34631	3,3'-Dichlorobenzidine (µg/l)	Report		NA	Weekly	Grab
34336	Diethylphthalate (µg/l)	49404		NA	Weekly	Grab
34341	Dimethyl phthalate (µg/l)	1235088		NA	Weekly	Grab
34606	Dimethylphenol 2,4 (µg/l)	954		2120	Weekly	Grab
39110	Di-n-butyl phthalate (µg/l)	5053		NA	Weekly	Grab
34657	Dinitro-o-cresol 4,6 (µg/l)	8.7		NA	Weekly	Grab
34616	Dinitrophenol 2,4 (µg/l)	454		NA	Weekly	Grab
34611	Dinitrotoluene 2,4 (µg/l)	3.6		NA	Weekly	Grab
34626	Dinitrotoluene 2,6 (µg/l)	Report		Report	Weekly	Grab
82388	Dioxane 1,4 (µg/l)	11		NA	Weekly	Grab
03610	Dioxin (µg/l)	5.7E-09		0.01	Weekly	Grab

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations			Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	Frequency	Sample Type
34346	Diphenolhydrazine, 1,2- (µg/l)	0.22		270	Weekly	Grab
34371	Ethylbenzene (µg/l)	2358		32000	Weekly	Grab
39100	Ethylhexyl phthalate (BIS-2) (µg/l)	1.2		NA	Weekly	Grab
34381	Fluorene (PAH) (µg/l)	5951		NA	Weekly	Grab
34376	Fluoranthene (PAH) (µg/l)	157		3980	Weekly	Grab
39700	Hexachlorobenzene (µg/l)	Report		NA	Weekly	Grab
34391	Hexachlorobutadiene (µg/l)	Report		Report	Weekly	Grab
34386	Hexachlorocyclopentadiene (µg/l)	Report		Report	Weekly	Grab
30347	Hexachlorodibenzo-p-dioxin (µg/l)	Report		NA	Weekly	Grab
34396	Hexachloroethane (µg/l)	Report		Report	Weekly	Grab
34403	Indeno(1,2,3-cd)pyrene (PAH) (µg/l)	0.0051		NA	Weekly	Grab
34408	Isophorone (µg/l)	4042		NA	Weekly	Grab
77885	Methanol (µg/l)	453649		NA	Weekly	Grab
38677	Methyl bromide [Bromomethane] (µg/l)	Report		NA	Weekly	Grab
38678	Methyl chloride [Chloromethane] (µg/l)	Report		NA	Weekly	Grab
22417	Methyl tert-butyl ether [MTBE] (µg/l)	647		151000	Weekly	Grab
34696	Naphthalene (PAH) (µg/l)	696		2300	Weekly	Grab
34447	Nitrobenzene (µg/l)	Report		Report	Weekly	Grab
34646	Nitrophenol 4 (µg/l)	1815		NA	Weekly	Grab
34438	Nitrosodimethylamine N (µg/l)	Report		NA	Weekly	Grab
34433	Nitrosodiphenylamine N (µg/l)	6.7		NA	Weekly	Grab
34428	N-Nitrosodi-n-propylamine (µg/l)	Report		NA	Weekly	Grab
51568	Nonylphenol (µg/l)	7.0		28	Weekly	Grab
39516	PCBs (µg/l)	7.19E-05		2	Weekly	Grab
77793	Pentachlorobenzene (µg/l)	Report		NA	Weekly	Grab
39032	Pentachlorophenol (µg/l)	1.0		19	Weekly	Grab
34694	Phenol (µg/l)	2874		10200	Weekly	Grab
81706	Propylene oxide (µg/l)	4.9		NA	Weekly	Grab
34469	Pyrene (PAH) (µg/l)	4491		NA	Weekly	Grab
77299	Quinoline (µg/l)	Report		NA	Weekly	Grab
81708	Styrene (µg/l)	3240		NA	Weekly	Grab
34516	Tetrachloroethane 1,1,2,2 (µg/l)	Report		NA	Weekly	Grab
34475	Tetrachloroethylene (PCE) (µg/l)	70		5280	Weekly	Grab
34010	Toluene (µg/l)	6625		17500	Weekly	Grab
70022	Trichlorobenzene 1,2,4 (µg/l)	Report		Report	Weekly	Grab
34506	Trichloroethane 1,1,1 (µg/l)	6481		NA	Weekly	Grab
34511	Trichloroethane 1,1,2 (µg/l)	Report		Report	Weekly	Grab
39180	Trichloroethylene (TCE) (µg/l)	34		45000	Weekly	Grab
34621	Trichlorophenol 2,4,6 (µg/l)	Report		NA	Weekly	Grab

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations			Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	Frequency	Sample Type
77226	Trimethyl benzene 1,3,5 (µg/l)	2171		NA	Weekly	Grab
51565	Trimethylbenzene 1,2,3 (µg/l)	2171		NA	Weekly	Grab
77222	Trimethylbenzene 1,2,4 (µg/l)	2171		NA	Weekly	Grab
39175	Vinyl Chloride (µg/l)	Report		NA	Weekly	Grab
73382	Xylenes (total) (µg/l)	45365		NA	Weekly	Grab

OUTFALL 004 (Mary's Pond Plant 3) and OUTFALL 026 (High Flow Outfall Plant 3)

Table 1. Outfalls 004A and 026A

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations			Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	Frequency	Sample Type
50050	Effluent Flow (MGD) **[Outfall 004A]**	0.002		Report	Continuous	Recorder
50050	Effluent Flow (MGD) **[Outfall 026A]**	0.004		Report	Continuous	Recorder
03582	Oil and Grease (mg/l)			10	Daily	Grab
00310	BOD5 (mg/l)	30	45		5 days/week	Grab
00530	TSS (mg/l)	30	45		5 days/week	Grab
50060	TRC (mg/l)			0.5 mg/l	Daily	Grab
00400	pH (su)			6.5 - 9.0	Daily	Grab
84066	Oil and Grease (Visual Sheen)			Pass/Fail[1]	Daily	Visual
00300	DO (mg/l) [Until 1 year after effective date]			Report	Daily	Grab
00300	DO (mg/l) [Starting 1 year after effective date]			5	Daily	Grab
50060	TRC (mg/l) [Until 1 year after effective date]	Report		Report	Daily	Grab
50060	TRC (mg/l) [Starting 1 year after effective date]	0.012		0.019	Daily	Grab
00010	Temperature (°C) **Outfall 004A** - [3-months after permit effective date until 1 year after effective date]					
	January	Report		Report	Continuous	Recorder
	February	Report		Report	Continuous	Recorder
	March	Report		Report	Continuous	Recorder
	April	Report		Report	Continuous	Recorder
	May	Report		Report	Continuous	Recorder
	June	Report		Report	Continuous	Recorder
	July	Report		Report	Continuous	Recorder
	August	Report		Report	Continuous	Recorder
	September	Report		Report	Continuous	Recorder
	October	Report		Report	Continuous	Recorder
	November	Report		Report	Continuous	Recorder
	December	Report		Report	Continuous	Recorder
00010	Temperature (°C) **Outfall 004A** - [Starting 1 year after effective date]					
	January	18.9		30.8	Continuous	Recorder
	February	17		29.2	Continuous	Recorder
	March	34		31.8	Continuous	Recorder
	April	28.9		28.6	Continuous	Recorder
	May	28.5		28.6	Continuous	Recorder
	June	27.5		28.6	Continuous	Recorder
	July	27.5		28.6	Continuous	Recorder
	August	27.5		28.6	Continuous	Recorder
	September	27.5		28.6	Continuous	Recorder
	October	29.6		28.6	Continuous	Recorder
	November	30.4		29.8	Continuous	Recorder
	December	16.3		30.7	Continuous	Recorder
00010	Temperature (°C) **Outfall 026A** [Starting 3-months after permit effective date]					
	January	Report		Report	Continuous	Recorder
	February	Report		Report	Continuous	Recorder

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations			Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	Frequency	Sample Type
	March	Report		Report	Continuous	Recorder
	April	Report		Report	Continuous	Recorder
	May	Report		Report	Continuous	Recorder
	June	Report		Report	Continuous	Recorder
	July	Report		Report	Continuous	Recorder
	August	Report		Report	Continuous	Recorder
	September	Report		Report	Continuous	Recorder
	October	Report		Report	Continuous	Recorder
	November	Report		Report	Continuous	Recorder
	December	Report		Report	Continuous	Recorder
00640	Total Inorganic Nitrogen as N (mg/l) [Until 1 year after effective date]	NA		Report	5 Days/Week	Grab
00640	Total Inorganic Nitrogen as N (mg/l) [Starting 1 year after effective date]	NA		10	5 Days/Week	Grab
00610	Total Ammonia as N (mg/l) [Until 1 year after effective date]					
	January	Report		Report	5 Days/Week	Grab
	February	Report		Report	5 Days/Week	Grab
	March	Report		Report	5 Days/Week	Grab
	April	Report		Report	5 Days/Week	Grab
	May	Report		Report	5 Days/Week	Grab
	June	Report		Report	5 Days/Week	Grab
	July	Report		Report	5 Days/Week	Grab
	August	Report		Report	5 Days/Week	Grab
	September	Report		Report	5 Days/Week	Grab
	October	Report		Report	5 Days/Week	Grab
	November	Report		Report	5 Days/Week	Grab
	December	Report		Report	5 Days/Week	Grab
00610	Total Ammonia as N (mg/l) [Starting 1 year after effective date]					
	January	9.2		20	5 Days/Week	Grab
	February	8.3		17	5 Days/Week	Grab
	March	6.5		19	5 Days/Week	Grab
	April	4.9		15	5 Days/Week	Grab
	May	4.3		20	5 Days/Week	Grab
	June	4.1		19	5 Days/Week	Grab
	July	3.6		16	5 Days/Week	Grab
	August	3.7		17	5 Days/Week	Grab
	September	4.2		17	5 Days/Week	Grab
	October	5.6		16	5 Days/Week	Grab
	November	5.8		21	5 Days/Week	Grab
	December	10		23	5 Days/Week	Grab
01104	Al, TR (µg/l)	1615		10071	2 Days / Week	Grab
00978	As, TR (µg/l) [Until 1 year after effective date]	Report		NA	2 Days / Week	Grab
00978	As, TR (µg/l) [Starting 1 year after effective date]	3		NA	2 Days / Week	Grab
00978	As, TR (µg/l) Starting 6/1/2026	0.02		NA	2 Days / Week	Grab
01113	Cd, TR (µg/l) [Until 1 year after effective date]	NA		Report	2 Days / Week	Grab

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations			Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	Frequency	Sample Type
01113	Cd, TR (µg/l) [Starting 1 year after effective date]	NA		5	2 Days / Week	Grab
01313	Cd, PD (µg/l) [Until 1 year after effective date]	Report		Report	2 Days / Week	Grab
01313	Cd, PD (µg/l) [Starting 1 year after effective date]	1.1		4.8	2 Days / Week	Grab
01220	Cr+6, Dis (µg/l) [Until 1 year after effective date]	Report		Report	2 Days / Week	Grab
01220	Cr+6, Dis (µg/l) [Starting 1 year after effective date]	12		16	2 Days / Week	Grab
01118	Cr, TR [Until 1 year after effective date]			Report	2 Days / Week	Grab
01118	Cr, TR [Starting 1 year after effective date]			50	2 Days / Week	Grab
01306	Cu, PD (µg/l) [Until 1 year after effective date]	Report		Report	2 Days / Week	Grab
01306	Cu, PD (µg/l) [Starting 1 year after effective date]	19		26	2 Days / Week	Grab
00718	CN, WAD (µg/l) [Until 1 year after effective date]	NA		Report	2 Days / Week	Grab
00718	CN, WAD (µg/l) [Starting 1 year after effective date]	NA		5	2 Days / Week	Grab
01046	Fe, Dis (µg/l) [Until 1 year after effective date]	Report		NA	2 Days / Week	Grab
01046	Fe, Dis (µg/l) [Starting 1 year after effective date]	314		NA	2 Days / Week	Grab
00980	Fe, TR (µg/l) [Until 1 year after effective date]	Report		NA	2 Days / Week	Grab
00980	Fe, TR (µg/l) [Starting 1 year after effective date]	1025		NA	2 Days / Week	Grab
01114	Pb, TR (µg/l) [Until 1 year after effective date]	NA		Report	2 Days / Week	Grab
01114	Pb, TR (µg/l) [Starting 1 year after effective date]	NA		50	2 Days / Week	Grab
01318	Pb, PD (µg/l) [Until 1 year after effective date]	Report		Report	2 Days / Week	Grab
01318	Pb, PD (µg/l) [Starting 1 year after effective date]	12		281	2 Days / Week	Grab
01319	Mn, PD (µg/l) [Until 1 year after effective date]	Report		Report	2 Days / Week	Grab
01319	Mn, PD (µg/l) [Starting 1 year after effective date]	2740		4738	2 Days / Week	Grab
01056	Mn, Dis (µg/l) [Until 1 year after effective date]	Report		NA	2 Days / Week	Grab
01056	Mn, Dis (µg/l) [Starting 1 year after effective date]	403		NA	2 Days / Week	Grab
01129	Mo, TR (µg/l)	158		NA	2 Days / Week	Grab
50286	Hg, Tot (µg/l) [Until 1 year after effective date]	Report		NA	2 Days / Week	Grab
50286	Hg, Tot (µg/l) [Starting 1 year after effective date]	0.011		NA	2 Days / Week	Grab
01074	Ni, TR (µg/l) [Until 1 year after effective date]	Report		NA	2 Days / Week	Grab
01074	Ni, TR (µg/l) [Starting 1 year after effective date]	105		NA	2 Days / Week	Grab
01322	Ni, PD (µg/l) [Until 1 year after effective date]	Report		Report	2 Days / Week	Grab
01322	Ni, PD (µg/l) [Starting 1 year after effective date]	177		1513	2 Days / Week	Grab

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations			Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	Frequency	Sample Type
01323	Se, PD (µg/l) **[outfall 004A]** [Until 1 year after effective date]	11.7		18	2 Days / Week	Grab
01323	Se, PD (µg/l) **[outfall 004A]** [Starting 1 year after effective date]	4.6		18	2 Days / Week	Grab
01323	Se, PD (µg/l) **[outfall 026A]** [Until 1 year after effective date]	15.6		18	2 Days / Week	Grab
01323	Se, PD (µg/l) **(outfall 026A)** [Starting 1 year after effective date]	4.6		18	2 Days / Week	Grab
22708	U, TR (µg/l)	Report		Report	2 Days / Week	Grab
01303	Zn, PD (µg/l) [Until 1 year after effective date]	Report		Report	2 Days / Week	Grab
01303	Zn, PD (µg/l) [Starting 1 year after effective date]	450		564	2 Days / Week	Grab
82057	B, Tot (mg/l)	0.79		NA	2 Days / Week	Grab
00940	Chloride (mg/l)	250		NA	2 Days / Week	Grab
81020	Sulfate (mg/l)	250		NA	2 Days / Week	Grab
51202	Sulfide as H2S (mg/l) [Until 1 year after effective date]	Report		NA	2 Days / Week	Grab
51202	Sulfide as H2S (mg/l) [Starting 1 year after effective date]	0.0021		NA	2 Days / Week	Grab
51451	Phosphorus	Report			2 Days / Week	Grab
00949	Fluoride			Report	2 Days / Week	Grab
00918	Calcium (mg/l)	Report		Report	Monthly	Grab
00921	Magnesium (mg/l)	Report		Report	Monthly	Grab
00923	Sodium (mg/l)	Report		Report	Monthly	Grab
00440	Bicarbonate as HCO3 (mg/l)	Report		Report	Monthly	Grab
00931	SAR calculated limit*	Report		Report	Monthly	Calculate
00931	Adjusted SAR effluent**	Report		Report	Monthly	Calculate
00931	SAR pass/fail ***	Pass/fail		Report	Monthly	Calculate
00094	EC (dS/m) [Until 1 year after effective date]	Report			Monthly	Grab
00094	EC (dS/m) [Starting 1 year after effective date]	1.7			Monthly	Grab
11503	Radium 226 & 228, total (pci/l)	Report		NA	Quarterly	Grab
51690	Thorium 230 and 232, total (pci/l)	Report		NA	Quarterly	Grab
	WET, acute					
TAN6C	LC50 Statre 96Hr Acute *Pimephales promelas* [Until 1 year after effective date]			Report LC50 ≥ 100	Monthly	Grab
TAN6C	LC50 Statre 96Hr Acute *Pimephales promelas* [Starting 1 year after effective date]			LC50 ≥ 100	Monthly	Grab
TAM3B	LC50 Statre 48Hr Acute *Ceriodaphnia dubia* [Until 1 year after effective date]			Report LC50 ≥ 100	Monthly	Grab
TAM3B	LC50 Statre 48Hr Acute *Ceriodaphnia dubia* [Starting 1 year after effective date]			LC50 ≥ 100	Monthly	Grab

[1]Presence of a visual sheen (yes) is indicated as a 'fail', while absence of a visual sheen (no) is indicated as a 'pass'.

* This SAR limit is to be calculated using the actual measured EC value (30-day average) of the effluent and substituting this value in to the following equation to solve for SAR. The equation for determining the SAR limit is: SAR = (7.1 * EC) – 2.48. **There is no limitation until 1 year after the effective date. This limitation is capped at 9 starting 1 year after the effective date. .**

** The SAR value of the effluent is to be reported as the adjusted SAR. See the definitions section in Part I.C.17 for information on calculating the adjusted SAR value.

*** The permittee shall compare the SAR value of the effluent (adjusted SAR) to this calculated SAR limitation and report as Pass/Fail whether the effluent SAR meets this value. If the SAR effluent value (adjusted SAR) is less than or equal to the calculated limit, then the permittee will report "Pass" and if it is greater than the calculated limit the permittee will report "Fail."

Table 2. Outfalls 004A and 026A – Organics parameters [Until 1 year after effective date]

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations			Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	Frequency	Sample Type
34205	Acenaphthene (µg/l)	Report		Report	Weekly	Grab
34210	Acrolein (µg/l)	Report		Report	Weekly	Grab
50796	Acrylamide (µg/l)	0.71		7500	Weekly	Grab
34215	Acrylonitrile (µg/l)	Report		NA	Weekly	Grab
77089	Aniline (µg/l)	Report		NA	Weekly	Grab
34220	Anthracene (PAH) (µg/l)	Report		NA	Weekly	Grab
77625	Azobenzene (µg/l)	Report		NA	Weekly	Grab
34030	Benzene (µg/l)	57		5	Weekly	Grab
39120	Benzidine (µg/l)	Report		Report	Weekly	Grab
34521	Benzo (g,h,i)perylene (PAH) (µg/l)	Report		NA	Weekly	Grab
34242	Benzo (k)fluoranthene (PAH) (µg/l)	Report		NA	Weekly	Grab
34526	Benzo(a)anthracene (PAH) (µg/l)	Report		NA	Weekly	Grab
34247	Benzo(a)pyrene (PAH) (µg/l)	Report		NA	Weekly	Grab
34230	Benzo(b)fluoranthene (PAH) (µg/l)	Report		NA	Weekly	Grab
51073	Bromodichloromethane (µg/l)	Report		Report	Weekly	Grab
32104	Bromoform (µg/l)	Report		NA	Weekly	Grab
49491	BTEX (ug/l)			100	Weekly	Grab
34292	Butyl benzyl phthalate (µg/l)	Report		NA	Weekly	Grab
32102	Carbon tetrachloride (µg/l)	Report		Report	Weekly	Grab
34273	Chlorethyl ether (BIS-2) (µg/l)	Report		NA	Weekly	Grab
34301	Chlorobenzene (µg/l)	Report		NA	Weekly	Grab
34306	Chlorodibromomethane (µg/l)	Report		NA	Weekly	Grab
32106	Chloroform (µg/l)	Report		Report	Weekly	Grab
70012	4-Chloro-3methylphenol (µg/l)	Report		Report	Weekly	Grab
34581	Chloronapthalene, 2- (µg/l)	Report		Report	Weekly	Grab
34586	Chlorophenol, 2- (µg/l)	Report		Report	Weekly	Grab
34320	Chrysene (µg/l)	Report		NA	Weekly	Grab
34556	Dibenzo(a,h)anthracene (PAH) (µg/l)	Report		NA	Weekly	Grab
77651	Dibromoethane 1,2 [Ethylene Dibromide] (µg/l)	Report		NA	Weekly	Grab
34536	Dichlorobenzene 1,2 (µg/l)	Report		NA	Weekly	Grab
34566	Dichlorobenzene 1,3 (µg/l)	Report		NA	Weekly	Grab
34571	Dichlorobenzene 1,4 (µg/l)	Report		NA	Weekly	Grab
32103	Dichloroethane 1,2 (µg/l)	Report		Report	Weekly	Grab

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations			Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	Frequency	Sample Type
34501	Dichloroethylene 1,1 (µg/l)	Report		NA	Weekly	Grab
34546	Dichloroethylene 1,2-trans (µg/l)	Report		NA	Weekly	Grab
03821	Dichloromethane (methylene chloride) (µg/l)	Report		NA	Weekly	Grab
34601	Dichlorophenol 2,4 (µg/l)	Report		Report	Weekly	Grab
34631	3,3'-Dichlorobenzidine (µg/l)	Report		NA	Weekly	Grab
34336	Diethylphthalate (µg/l)	Report		NA	Weekly	Grab
34341	Dimethyl phthalate (µg/l)	Report		NA	Weekly	Grab
34606	Dimethylphenol 2,4 (µg/l)	Report		Report	Weekly	Grab
39110	Di-n-butyl phthalate (µg/l)	Report		NA	Weekly	Grab
34657	Dinitro-o-cresol 4,6 (µg/l)	Report		NA	Weekly	Grab
34616	Dinitrophenol 2,4 (µg/l)	Report		NA	Weekly	Grab
34611	Dinitrotoluene 2,4 (µg/l)	Report		NA	Weekly	Grab
34626	Dinitrotoluene 2,6 (µg/l)	Report		Report	Weekly	Grab
82388	Dioxane 1,4 (µg/l)	Report		NA	Weekly	Grab
03610	Dioxin (µg/l)	Report		Report	Weekly	Grab
34346	Diphenolhydrazine, 1,2- (µg/l)	Report		Report	Weekly	Grab
34371	Ethylbenzene (µg/l)	Report		Report	Weekly	Grab
39100	Ethylhexyl phthalate (BIS-2) (µg/l)	Report		NA	Weekly	Grab
34381	Fluorene (PAH) (µg/l)	Report		NA	Weekly	Grab
34376	Fluoranthene (PAH) (µg/l)	Report		Report	Weekly	Grab
39700	Hexachlorobenzene (µg/l)	Report		NA	Weekly	Grab
34391	Hexachlorobutadiene (µg/l)	Report		Report	Weekly	Grab
34386	Hexachlorocyclopentadiene (µg/l)	Report		Report	Weekly	Grab
30347	Hexachlorodibenzo-p-dioxin (µg/l)	Report		NA	Weekly	Grab
34396	Hexachloroethane (µg/l)	Report		980	Weekly	Grab
34403	Indeno(1,2,3-cd)pyrene (PAH) (µg/l)	Report		NA	Weekly	Grab
34408	Isophorone (µg/l)	Report		NA	Weekly	Grab
77885	Methanol (µg/l)	Report		NA	Weekly	Grab
38677	Methyl bromide [Bromomethane] (µg/l)	Report		NA	Weekly	Grab
38678	Methyl chloride [Chloromethane] (µg/l)	Report		NA	Weekly	Grab
22417	Methyl tert-butyl ether [MTBE] (µg/l)	Report		Report	Weekly	Grab
34696	Naphthalene (PAH) (µg/l)	Report		Report	Weekly	Grab
34447	Nitrobenzene (µg/l)	Report		Report	Weekly	Grab
34646	Nitrophenol 4 (µg/l)	Report		NA	Weekly	Grab
34438	Nitrosodimethylamine N (µg/l)	Report		NA	Weekly	Grab
34433	Nitrosodiphenylamine N (µg/l)	Report		NA	Weekly	Grab
34428	N-Nitrosodi-n-propylamine (µg/l)	Report		NA	Weekly	Grab
51568	Nonylphenol (µg/l)	7.0		28	Weekly	Grab
39516	PCBs (µg/l)	Report		Report	Weekly	Grab
77793	Pentachlorobenzene (µg/l)	Report		NA	Weekly	Grab
39032	Pentachlorophenol (µg/l)	Report		Report	Weekly	Grab
34694	Phenol (µg/l)	2874		10200	Weekly	Grab
81706	Propylene oxide (µg/l)	Report		NA	Weekly	Grab
34469	Pyrene (PAH) (µg/l)	Report		NA	Weekly	Grab
77299	Quinoline (µg/l)	Report		NA	Weekly	Grab

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations			Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	Frequency	Sample Type
81708	Styrene (µg/l)	Report		NA	Weekly	Grab
34516	Tetrachloroethane 1,1,2,2 (µg/l)	Report		NA	Weekly	Grab
34475	Tetrachloroethylene (PCE) (µg/l)	Report		Report	Weekly	Grab
34010	Toluene (µg/l)	Report		Report	Weekly	Grab
70022	Trichlorobenzene 1,2,4 (µg/l)	Report		Report	Weekly	Grab
34506	Trichloroethane 1,1,1 (µg/l)	Report		NA	Weekly	Grab
34511	Trichloroethane 1,1,2 (µg/l)	Report		Report	Weekly	Grab
39180	Trichloroethylene (TCE) (µg/l)	Report		Report	Weekly	Grab
34621	Trichlorophenol 2,4,6 (µg/l)	Report		NA	Weekly	Grab
77226	Trimethyl benzene 1,3,5 (µg/l)	Report		NA	Weekly	Grab
51565	Trimethylbenzene 1,2,3 (µg/l)	Report		NA	Weekly	Grab
77222	Trimethylbenzene 1,2,4 (µg/l)	Report		NA	Weekly	Grab
39175	Vinyl Chloride (µg/l)	Report		NA	Weekly	Grab
73382	Xylenes (total) (µg/l)	Report		NA	Weekly	Grab

Table 3. Outfalls 004A and 026A – Organics parameters [Starting 1 year after effective date]

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations			Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	Frequency	Sample Type
34205	Acenaphthene (µg/l)	584		1700	Weekly	Grab
34210	Acrolein (µg/l)	Report		Report	Weekly	Grab
50796	Acrylamide (µg/l)	0.71		7500	Weekly	Grab
34215	Acrylonitrile (µg/l)	Report		NA	Weekly	Grab
77089	Aniline (µg/l)	198		NA	Weekly	Grab
34220	Anthracene (PAH) (µg/l)	44912		NA	Weekly	Grab
77625	Azobenzene (µg/l)	Report		NA	Weekly	Grab
34030	Benzene (µg/l)	57		5	Weekly	Grab
39120	Benzidine (µg/l)	Report		Report	Weekly	Grab
34521	Benzo (g,h,i)perylene (PAH) (µg/l)	0.0038		NA	Weekly	Grab
34242	Benzo (k)fluoranthene (PAH) (µg/l)	0.051		NA	Weekly	Grab
34526	Benzo(a)anthracene (PAH) (µg/l)	0.0051		NA	Weekly	Grab
34247	Benzo(a)pyrene (PAH) (µg/l)	0.00051		NA	Weekly	Grab
34230	Benzo(b)fluoranthene (PAH) (µg/l)	0.0051		NA	Weekly	Grab
51073	Bromodichloromethane (µg/l)	12		11000	Weekly	Grab
32104	Bromoform (µg/l)	Report		NA	Weekly	Grab
49491	BTEX (ug/l)			100	Weekly	Grab
34292	Butyl benzyl phthalate (µg/l)	2133		NA	Weekly	Grab
32102	Carbon tetrachloride (µg/l)	3.4		35200	Weekly	Grab
34273	Chlorethyl ether (BIS-2) (µg/l)	Report		NA	Weekly	Grab
34301	Chlorobenzene (µg/l)	1796		NA	Weekly	Grab
34306	Chlorodibromomethane (µg/l)	Report		NA	Weekly	Grab
32106	Chloroform (µg/l)	72		28900	Weekly	Grab
70012	4-Chloro-3methylphenol (µg/l)	6805		30	Weekly	Grab
34581	Chloronapthalene, 2- (µg/l)	Report		Report	Weekly	Grab
34586	Chlorophenol, 2- (µg/l)	168		4380	Weekly	Grab

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations			Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	Frequency	Sample Type
34320	Chrysene (µg/l)	0.51		NA	Weekly	Grab
34556	Dibenzo(a,h)anthracene (PAH) (µg/l)	0.00051		NA	Weekly	Grab
77651	Dibromoethane 1,2 [Ethylene Dibromide] (µg/l)	0.58		NA	Weekly	Grab
34536	Dichlorobenzene 1,2 (µg/l)	Report		NA	Weekly	Grab
34566	Dichlorobenzene 1,3 (µg/l)	Report		NA	Weekly	Grab
34571	Dichlorobenzene 1,4 (µg/l)	213		NA	Weekly	Grab
32103	Dichloroethane 1,2 (µg/l)	12		118000	Weekly	Grab
34501	Dichloroethylene 1,1 (µg/l)	Report		NA	Weekly	Grab
34546	Dichloroethylene 1,2-trans (µg/l)	3240		NA	Weekly	Grab
03821	Dichloromethane (methylene chloride) (µg/l)	140		NA	Weekly	Grab
34601	Dichlorophenol 2,4 (µg/l)	326		2020	Weekly	Grab
34631	3,3'-Dichlorobenzidine (µg/l)	Report		NA	Weekly	Grab
34336	Diethylphthalate (µg/l)	49404		NA	Weekly	Grab
34341	Dimethyl phthalate (µg/l)	1235088		NA	Weekly	Grab
34606	Dimethylphenol 2,4 (µg/l)	954		2120	Weekly	Grab
39110	Di-n-butyl phthalate (µg/l)	5053		NA	Weekly	Grab
34657	Dinitro-o-cresol 4,6 (µg/l)	8.7		NA	Weekly	Grab
34616	Dinitrophenol 2,4 (µg/l)	454		NA	Weekly	Grab
34611	Dinitrotoluene 2,4 (µg/l)	3.6		NA	Weekly	Grab
34626	Dinitrotoluene 2,6 (µg/l)	Report		Report	Weekly	Grab
82388	Dioxane 1,4 (µg/l)	11		NA	Weekly	Grab
03610	Dioxin (µg/l)	5.7E-09		0.01	Weekly	Grab
34346	Diphenolhydrazine, 1,2- (µg/l)	0.22		270	Weekly	Grab
34371	Ethylbenzene (µg/l)	2358		32000	Weekly	Grab
39100	Ethylhexyl phthalate (BIS-2) (µg/l)	1.2		NA	Weekly	Grab
34381	Fluorene (PAH) (µg/l)	5951		NA	Weekly	Grab
34376	Fluoranthene (PAH) (µg/l)	157		3980	Weekly	Grab
39700	Hexachlorobenzene (µg/l)	Report		NA	Weekly	Grab
34391	Hexachlorobutadiene (µg/l)	Report		Report	Weekly	Grab
34386	Hexachlorocyclopentadiene (µg/l)	Report		Report	Weekly	Grab
30347	Hexachlorodibenzo-p-dioxin (µg/l)	Report		NA	Weekly	Grab
34396	Hexachloroethane (µg/l)	Report		Report	Weekly	Grab
34403	Indeno(1,2,3-cd)pyrene (PAH) (µg/l)	0.0051		NA	Weekly	Grab
34408	Isophorone (µg/l)	4042		NA	Weekly	Grab
77885	Methanol (µg/l)	453649		NA	Weekly	Grab
38677	Methyl bromide [Bromomethane] (µg/l)	Report		NA	Weekly	Grab
38678	Methyl chloride [Chloromethane] (µg/l)	Report		NA	Weekly	Grab
22417	Methyl tert-butyl ether [MTBE] (µg/l)	647		151000	Weekly	Grab
34696	Naphthalene (PAH) (µg/l)	696		2300	Weekly	Grab
34447	Nitrobenzene (µg/l)	Report		Report	Weekly	Grab
34646	Nitrophenol 4 (µg/l)	1815		NA	Weekly	Grab
34438	Nitrosodimethylamine N (µg/l)	Report		NA	Weekly	Grab
34433	Nitrosodiphenylamine N (µg/l)	6.7		NA	Weekly	Grab
34428	N-Nitrosodi-n-propylamine (µg/l)	Report		NA	Weekly	Grab

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations			Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	Frequency	Sample Type
51568	Nonylphenol (µg/l)	7.0		28	Weekly	Grab
39516	PCBs (µg/l)	7.19E-05		2	Weekly	Grab
77793	Pentachlorobenzene (µg/l)	Report		NA	Weekly	Grab
39032	Pentachlorophenol (µg/l)	1.0		19	Weekly	Grab
34694	Phenol (µg/l)	2874		10200	Weekly	Grab
81706	Propylene oxide (µg/l)	4.9		NA	Weekly	Grab
34469	Pyrene (PAH) (µg/l)	4491		NA	Weekly	Grab
77299	Quinoline (µg/l)	Report		NA	Weekly	Grab
81708	Styrene (µg/l)	3240		NA	Weekly	Grab
34516	Tetrachloroethane 1,1,2,2 (µg/l)	Report		NA	Weekly	Grab
34475	Tetrachloroethylene (PCE) (µg/l)	70		5280	Weekly	Grab
34010	Toluene (µg/l)	6625		17500	Weekly	Grab
70022	Trichlorobenzene 1,2,4 (µg/l)	Report		Report	Weekly	Grab
34506	Trichloroethane 1,1,1 (µg/l)	6481		NA	Weekly	Grab
34511	Trichloroethane 1,1,2 (µg/l)	Report		Report	Weekly	Grab
39180	Trichloroethylene (TCE) (µg/l)	34		45000	Weekly	Grab
34621	Trichlorophenol 2,4,6 (µg/l)	Report		NA	Weekly	Grab
77226	Trimethyl benzene 1,3,5 (µg/l)	2171		NA	Weekly	Grab
51565	Trimethylbenzene 1,2,3 (µg/l)	2171		NA	Weekly	Grab
77222	Trimethylbenzene 1,2,4 (µg/l)	2171		NA	Weekly	Grab
39175	Vinyl Chloride (µg/l)	Report		NA	Weekly	Grab
73382	Xylenes (total) (µg/l)	45365		NA	Weekly	Grab

OUTFALLS 024A, 025A, 027A and 028A (stormwater-only)

Table 1. Outfalls 024A, 025A, 027A and 028A

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations			Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	Frequency	Sample Type
50050	Effluent Flow (MGD) **[Outfall 024A]**	0.005		Report	2 Days / Week	Instantaneous
50050	Effluent Flow (MGD) **[Outfall 025A]**	0.001		Report	2 Days / Week	Instantaneous
50050	Effluent Flow (MGD) **[Outfall 027A]**	0.04		Report	2 Days / Week	Instantaneous
50050	Effluent Flow (MGD) **[Outfall 028A]**	0.001		Report	2 Days / Week	Instantaneous
00400	pH (su)			6.5 - 9.0	Daily	Grab
00680	Total Organic Carbon (mg/l)			110	5 Days/Week	Grab
03582	Oil and Grease (mg/l)	Report		15	Daily	Grab
84066	Oil and Grease (Visual Sheen)			Pass/Fail[1]	Daily	Visual
00300	DO (mg/l)			Report	Daily	Grab
50060	TRC (mg/l)	Report		Report	Daily	Grab
00640	Total Inorganic Nitrogen as N (mg/l)	NA		Report	5 Days/Week	Grab
00610	Total Ammonia as N (mg/l)	Report		Report	5 Days/Week	Grab
01104	Al, TR (µg/l)	Report		Report	2 Days / Week	Grab
00978	As, TR (µg/l)	Report			2 Days / Week	Grab
01113	Cd, TR (µg/l)	NA		Report	2 Days / Week	Grab
01313	Cd, PD (µg/l)	Report		Report	2 Days / Week	Grab
01118	Cr, TR (µg/l)			Report	2 Days / Week	Grab
01220	Cr+6, Dis (µg/l)	Report		Report	2 Days / Week	Grab
01306	Cu, PD (µg/l)	Report		Report	2 Days / Week	Grab
00718	CN, WAD (µg/l)	NA		Report	2 Days / Week	Grab
01046	Fe, Dis (µg/l)	Report		NA	2 Days / Week	Grab
00980	Fe, TR (µg/l)	Report		NA	2 Days / Week	Grab
01114	Pb, TR (µg/l)	NA		Report	2 Days / Week	Grab
01318	Pb, PD (µg/l)	Report		Report	2 Days / Week	Grab
01319	Mn, PD (µg/l)	Report		Report	2 Days / Week	Grab
01056	Mn, Dis (µg/l)	Report		NA	2 Days / Week	Grab
01129	Mo, TR (µg/l)	Report		NA	2 Days / Week	Grab
50286	Hg, Tot (µg/l)	Report		NA	2 Days / Week	Grab
01074	Ni, TR (µg/l)	Report		NA	2 Days / Week	Grab
01322	Ni, PD (µg/l)	Report		Report	2 Days / Week	Grab
01323	Se, PD (µg/l) **[Outfall 024A]**					
	[Until 1 year after effective date]	11		18	2 Days / Week	Grab
	[Starting 1 year after effective date]	4.6		18	2 Days / Week	Grab
01323	Se, PD (µg/l) **[Outfall 025A]**					
	[Until 1 year after effective date]	6.5		18	2 Days / Week	Grab
	[Starting 1 year after effective date]	4.6		18	2 Days / Week	Grab
01323	Se, PD (µg/l) **[Outfall 027A]**					
	[Until 1 year after effective date]	13		18	2 Days / Week	Grab
	[Starting 1 year after effective date]	4.6		18	2 Days / Week	Grab
01323	Se, PD (µg/l) **[Outfall 028A]**	4.6		18	2 Days / Week	Grab
22708	U, TR (µg/l)	Report		NA	2 Days / Week	Grab
01303	Zn, PD (µg/l)	Report		Report	2 Days / Week	Grab

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations			Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	Frequency	Sample Type
82057	B, Tot (mg/l)	Report		NA	2 Days / Week	Grab
00940	Chloride (mg/l)	Report		NA	2 Days / Week	Grab
81020	Sulfate (mg/l)	Report		NA	2 Days / Week	Grab
51202	Sulfide as H2S (mg/l)	Report		Report	2 Days / Week	Grab
11503	Radium 226 & 228, total (pci/l)	Report		NA	Quarterly	Grab
51690	Thorium 230 and 232, total (pci/l)	Report		NA	Quarterly	Grab

[1]Presence of a visual sheen (yes) is indicated as a 'fail', while absence of a visual sheen (no) is indicated as a 'pass'.

Table 2. Outfalls 024A, 025A, 027A and 028A – Organic parameters

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations			Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	Frequency	Sample Type
34205	Acenaphthene (µg/l)	Report		Report	Weekly	Grab
34210	Acrolein (µg/l)	Report		Report	Weekly	Grab
50796	Acrylamide (µg/l)	Report		Report	Weekly	Grab
34215	Acrylonitrile (µg/l)	Report		NA	Weekly	Grab
77089	Aniline (µg/l)	Report		NA	Weekly	Grab
34220	Anthracene (PAH) (µg/l)	Report		NA	Weekly	Grab
77625	Azobenzene (µg/l)	Report		NA	Weekly	Grab
34030	Benzene (µg/l)	Report		5	Weekly	Grab
39120	Benzidine (µg/l)	Report		Report	Weekly	Grab
34521	Benzo (g,h,i)perylene (PAH) (µg/l)	Report		NA	Weekly	Grab
34242	Benzo (k)fluoranthene (PAH) (µg/l)	Report		NA	Weekly	Grab
34526	Benzo(a)anthracene (PAH) (µg/l)	Report		NA	Weekly	Grab
34247	Benzo(a)pyrene (PAH) (µg/l)	Report		NA	Weekly	Grab
34230	Benzo(b)fluoranthene (PAH) (µg/l)	Report		NA	Weekly	Grab
51073	Bromodichloromethane (µg/l)	Report		Report	Weekly	Grab
32104	Bromoform (µg/l)	Report		NA	Weekly	Grab
49491	BTEX (ug/l)			100	Weekly	Grab
34292	Butyl benzyl phthalate (µg/l)	Report		NA	Weekly	Grab
32102	Carbon tetrachloride (µg/l)	Report		Report	Weekly	Grab
34273	Chlorethyl ether (BIS-2) (µg/l)	Report		NA	Weekly	Grab
34301	Chlorobenzene (µg/l)	Report		NA	Weekly	Grab
34306	Chlorodibromomethane (µg/l)	Report		NA	Weekly	Grab
32106	Chloroform (µg/l)	Report		Report	Weekly	Grab
70012	4-Chloro-3methylphenol (µg/l)	Report		Report	Weekly	Grab
34581	Chloronapthalene, 2- (µg/l)	Report		Report	Weekly	Grab
34586	Chlorophenol, 2- (µg/l)	Report		Report	Weekly	Grab
34320	Chrysene (µg/l)	Report		NA	Weekly	Grab
34556	Dibenzo(a,h)anthracene (PAH) (µg/l)	Report		NA	Weekly	Grab
77651	Dibromoethane 1,2 [Ethylene Dibromide] (µg/l)	Report		NA	Weekly	Grab
34536	Dichlorobenzene 1,2 (µg/l)	Report		NA	Weekly	Grab
34566	Dichlorobenzene 1,3 (µg/l)	Report		NA	Weekly	Grab
34571	Dichlorobenzene 1,4 (µg/l)	Report		NA	Weekly	Grab

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations			Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	Frequency	Sample Type
32103	Dichloroethane 1,2 (µg/l)	Report		Report	Weekly	Grab
34501	Dichloroethylene 1,1 (µg/l)	Report		NA	Weekly	Grab
34546	Dichloroethylene 1,2-trans (µg/l)	Report		NA	Weekly	Grab
03821	Dichloromethane (methylene chloride) (µg/l)	Report		NA	Weekly	Grab
34601	Dichlorophenol 2,4 (µg/l)	Report		Report	Weekly	Grab
34631	3,3'-Dichlorobenzidine (µg/l)	Report		NA	Weekly	Grab
34336	Diethylphthalate (µg/l)	Report		NA	Weekly	Grab
34341	Dimethyl phthalate (µg/l)	Report		NA	Weekly	Grab
34606	Dimethylphenol 2,4 (µg/l)	Report		Report	Weekly	Grab
39110	Di-n-butyl phthalate (µg/l)	Report		NA	Weekly	Grab
34657	Dinitro-o-cresol 4,6 (µg/l)	Report		NA	Weekly	Grab
34616	Dinitrophenol 2,4 (µg/l)	Report		NA	Weekly	Grab
34611	Dinitrotoluene 2,4 (µg/l)	Report		NA	Weekly	Grab
34626	Dinitrotoluene 2,6 (µg/l)	Report		Report	Weekly	Grab
82388	Dioxane 1,4 (µg/l)	Report		NA	Weekly	Grab
03610	Dioxin (µg/l)	Report		Report	Weekly	Grab
34346	Diphenolhydrazine, 1,2- (µg/l)	Report		Report	Weekly	Grab
34371	Ethylbenzene (µg/l)	Report		Report	Weekly	Grab
39100	Ethylhexyl phthalate (BIS-2) (µg/l)	Report		NA	Weekly	Grab
34381	Fluorene (PAH) (µg/l)	Report		NA	Weekly	Grab
34376	Fluoranthene (PAH) (µg/l)	Report		Report	Weekly	Grab
39700	Hexachlorobenzene (µg/l)	Report		NA	Weekly	Grab
34391	Hexachlorobutadiene (µg/l)	Report		Report	Weekly	Grab
34386	Hexachlorocyclopentadiene (µg/l)	Report		Report	Weekly	Grab
30347	Hexachlorodibenzo-p-dioxin (µg/l)	Report		NA	Weekly	Grab
34396	Hexachloroethane (µg/l)	Report		Report	Weekly	Grab
34403	Indeno(1,2,3-cd)pyrene (PAH) (µg/l)	Report		NA	Weekly	Grab
34408	Isophorone (µg/l)	Report		NA	Weekly	Grab
77885	Methanol (µg/l)	Report		NA	Weekly	Grab
38677	Methyl bromide [Bromomethane] (µg/l)	Report		NA	Weekly	Grab
38678	Methyl chloride [Chloromethane] (µg/l)	Report		NA	Weekly	Grab
22417	Methyl tert-butyl ether [MTBE] (µg/l)	Report		Report	Weekly	Grab
34696	Naphthalene (PAH) (µg/l)	Report		Report	Weekly	Grab
34447	Nitrobenzene (µg/l)	Report		Report	Weekly	Grab
34646	Nitrophenol 4 (µg/l)	Report		NA	Weekly	Grab
34438	Nitrosodimethylamine N (µg/l)	Report		NA	Weekly	Grab
34433	Nitrosodiphenylamine N (µg/l)	Report		NA	Weekly	Grab
34428	N-Nitrosodi-n-propylamine (µg/l)	Report		NA	Weekly	Grab
51568	Nonylphenol (µg/l)	Report		Report	Weekly	Grab
39516	PCBs (µg/l)	Report		Report	Weekly	Grab
77793	Pentachlorobenzene (µg/l)	Report		NA	Weekly	Grab
39032	Pentachlorophenol (µg/l)	Report		Report	Weekly	Grab

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations			Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	Frequency	Sample Type
34694	Phenol (µg/l)	Report		Report	Weekly	Grab
81706	Propylene oxide (µg/l)	Report		NA	Weekly	Grab
34469	Pyrene (PAH) (µg/l)	Report		NA	Weekly	Grab
77299	Quinoline (µg/l)	Report		NA	Weekly	Grab
81708	Styrene (µg/l)	Report		NA	Weekly	Grab
34516	Tetrachloroethane 1,1,2,2 (µg/l)	Report		NA	Weekly	Grab
34475	Tetrachloroethylene (PCE) (µg/l)	Report		Report	Weekly	Grab
34010	Toluene (µg/l)	Report		Report	Weekly	Grab
70022	Trichlorobenzene 1,2,4 (µg/l)	Report		Report	Weekly	Grab
34506	Trichloroethane 1,1,1 (µg/l)	Report		NA	Weekly	Grab
34511	Trichloroethane 1,1,2 (µg/l)	Report		Report	Weekly	Grab
39180	Trichloroethylene (TCE) (µg/l)	Report		Report	Weekly	Grab
34621	Trichlorophenol 2,4,6 (µg/l)	Report		NA	Weekly	Grab
77226	Trimethyl benzene 1,3,5 (µg/l)	Report		NA	Weekly	Grab
51565	Trimethylbenzene 1,2,3 (µg/l)	Report		NA	Weekly	Grab
77222	Trimethylbenzene 1,2,4 (µg/l)	Report		NA	Weekly	Grab
39175	Vinyl Chloride (µg/l)	Report		NA	Weekly	Grab
73382	Xylenes (total) (µg/l)	Report		NA	Weekly	Grab

OUTFALLS 021A and 022A (stormwater-only)

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations			Monitoring Requirements	
		30-Day Average	7-Day Average	Daily Maximum	Frequency	Sample Type
50060	TRC (mg/l)	Report		Report	Daily	Grab
00640	Total Inorganic Nitrogen as N (mg/l)			Report	5 Days / Week	Grab
01104	Al, TR (µg/l)	Report		Report	2 Days / Week	Grab
01046	Fe, Dis (µg/l)	Report			2 Days / Week	Grab
00980	Fe, TR (µg/l)	Report			2 Days / Week	Grab
01129	Mo, TR (µg/l)	Report			2 Days / Week	Grab
82057	B, Tot (mg/l)	Report			2 Days / Week	Grab
00940	Chloride (mg/l)	Report			2 Days / Week	Grab
81020	Sulfate (mg/l)	Report			2 Days / Week	Grab
50796	Acrylamide (µg/l)	Report		Report	2 Days / Week	Grab
51568	Nonylphenol (µg/l)	Report		Report	2 Days / Week	Grab

Permitted Features 020Z, 023Z, 004Z, 026Z (for PFAS)

ICIS Code	Effluent Parameter	Effluent Limitation		Monitoring Requirements	
		Daily Maximum	30-day Average	Frequency	Sample Type
51521	Perfluorooctanoic Acid [PFOA], ng/l	Report	Report	Weekly	Grab
51522	Perfluorobutanoic Acid [PFBA], ng/l	Report	Report	Weekly	Grab
51525	Perfluorooctanesulfonamide [PFOSA (or FOSA)], ng/l	Report	Report	Weekly	Grab
51623	Perfluoropentanoic acid [PFPeA], ng/l	Report	Report	Weekly	Grab
51624	Perfluorohexanoic acid [PFHxA], ng/l	Report	Report	Weekly	Grab
51625	Perfluoroheptanoic acid [PFHpA], ng/l	Report	Report	Weekly	Grab
51626	Perfluorononanoic acid [PFNA], ng/l	Report	Report	Weekly	Grab
51627	Perfluorodecanoic acid [PFDA], ng/l	Report	Report	Weekly	Grab
51628	Perfluoroundecanoic acid [PFUnA (or PFUdA)], ng/l	Report	Report	Weekly	Grab
51629	Perfluorododecanoic acid [PFDoA], ng/l	Report	Report	Weekly	Grab
51630	Perfluorotridecanoic acid [PFTrDA (or RFTriA)], ng/l	Report	Report	Weekly	Grab
51631	Perfluorotetradecanoic acid [PFTeDA (or PFTA or PFTeA)], ng/l	Report	Report	Weekly	Grab
51643	2-[N-ethylperfluorooctanesulfonamido] acetic acid [NEtFOSAA], ng/l	Report	Report	Weekly	Grab
51644	2-[N-methylperfluorooctanesulfonamido] acetic acid [NMeFOSAA], ng/l	Report	Report	Weekly	Grab
52602	**Outfall 020Z** Perfluorobutanesulfonic acid [PFBS], ng/l	Report	421537	Weekly	Grab
52602	**Outfalls 023Z, 004Z, 026Z** Perfluorobutanesulfonic acid [PFBS], ng/l [Until 1 year after effective date]	Report	Report	Weekly	Grab
52602	**Outfalls 023Z, 004Z, 026Z** Perfluorobutanesulfonic acid [PFBS], ng/l [Starting 1 year after effective date]	Report	421537	Weekly	Grab
52603	Perfluorododecanesulfonic acid [PFDS], ng/l	Report	Report	Weekly	Grab
52604	Perfluoroheptanesulfonic acid [PFHpS], ng/l	Report	Report	Weekly	Grab
52605	**Outfall 020Z** Perfluorohexanesulfonic acid [PFHxS], ng/l	Report	731	Weekly	Grab
52605	**Outfalls 023Z, 004Z, 026Z** Perfluorohexanesulfonic acid [PFHxS], ng/l [Until 1 year after effective date]	Report	Report	Weekly	Grab
52605	**Outfalls 023Z, 004Z, 026Z** Perfluorohexanesulfonic acid [PFHxS], ng/l [Starting 1 year after effective date]	Report	731	Weekly	Grab
52606	Perfluorooctanesulfonic acid [PFOS], ng/l	Report	Report	Weekly	Grab
52607	4:2 Fluorotelomer sulfonic acid [4:2 FTS], ng/l	Report	Report	Weekly	Grab
52608	6:2 Fluorotelomer sulfonic acid [6:2 FTS], ng/l	Report	Report	Weekly	Grab
52609	8:2 Fluorotelomer sulfonic acid [8:2 FTS], ng/l	Report	Report	Weekly	Grab
52610	Perfluoropentane sulfonic acid [PFPeS], ng/l	Report	Report	Weekly	Grab
52611	Perfluorononane sulfonic acid [PFNS], ng/l	Report	Report	Weekly	Grab
52612	Hexafluoropropylene oxide dimer acid [Gen-X (or HFPO-DA or HPFA-DA], ng/l	Report	Report	Weekly	Grab
87006	**Outfall 020Z** PFAS Sum, ng/l*	70**	70**	Weekly	Calculated
87006	**Outfalls 023Z, 004Z, 026Z** PFAS Sum, ng/l* [Until 1 year after effective date]	Report	Report	Weekly	Calculated

87006	**Outfalls 023Z, 004Z, 026Z** PFAS Sum, ng/l* [Starting 1 year after effective date]	70**	70**	Weekly	Calculated

**The PFAS sum is calculated based on the following equation:

PFAS Sum (ng/l) = **[PFOA]** (ng/l) + **[PFOSA]** (ng/l) + **[PFNA]** (ng/l) + ([**NEtFOSAA]** (ng/l) * 0.85) + ([**NMeFOSAA**] (ng/l) * 0.88) + [**PFOS**] (ng/l) + ([**8:2 FTS**] (ng/l) * 0.78)

This calculation is performed for each sampling event, and the resulting daily maximum and 30-day average results shall be reported on the discharge monitoring report submitted for the monthly monitoring period.

Permitted Features 021Z, 022Z, 024Z, 025Z, 027Z and 028Z (for PFAS)

ICIS Code	Effluent Parameter	Effluent Limitation		Monitoring Requirements	
		Daily Maximum	30-day Average	Frequency	Sample Type
51521	Perfluorooctanoic Acid [PFOA], ng/l	Report	Report	Weekly	Grab
51522	Perfluorobutanoic Acid [PFBA], ng/l	Report	Report	Weekly	Grab
51525	Perfluorooctanesulfonamide [PFOSA (or FOSA)], ng/l	Report	Report	Weekly	Grab
51623	Perfluoropentanoic acid [PFPeA], ng/l	Report	Report	Weekly	Grab
51624	Perfluorohexanoic acid [PFHxA], ng/l	Report	Report	Weekly	Grab
51625	Perfluoroheptanoic acid [PFHpA], ng/l	Report	Report	Weekly	Grab
51626	Perfluorononanoic acid [PFNA], ng/l	Report	Report	Weekly	Grab
51627	Perfluorodecanoic acid [PFDA], ng/l	Report	Report	Weekly	Grab
51628	Perfluoroundecanoic acid [PFUnA (or PFUdA)], ng/l	Report	Report	Weekly	Grab
51629	Perfluorododecanoic acid [PFDoA], ng/l	Report	Report	Weekly	Grab
51630	Perfluorotridecanoic acid [PFTrDA (or RFTriA)], ng/l	Report	Report	Weekly	Grab
51631	Perfluorotetradecanoic acid [PFTeDA (or PFTA or PFTeA)], ng/l	Report	Report	Weekly	Grab
51643	2-[N-ethylperfluorooctanesulfonamido] acetic acid [NEtFOSAA], ng/l	Report	Report	Weekly	Grab
51644	2-[N-methylperfluorooctanesulfonamido] acetic acid [NMeFOSAA], ng/l	Report	Report	Weekly	Grab
52602	Perfluorobutanesulfonic acid [PFBS], ng/l	Report	Report	Weekly	Grab
52603	Perfluorododecanesulfonic acid [PFDS], ng/l	Report	Report	Weekly	Grab
52604	Perfluoroheptanesulfonic acid [PFHpS], ng/l	Report	Report	Weekly	Grab
52605	Perfluorohexanesulfonic acid [PFHxS], ng/l	Report	Report	Weekly	Grab
52606	Perfluorooctanesulfonic acid [PFOS], ng/l	Report	Report	Weekly	Grab
52607	4:2 Fluorotelomer sulfonic acid [4:2 FTS], ng/l	Report	Report	Weekly	Grab
52608	6:2 Fluorotelomer sulfonic acid [6:2 FTS], ng/l	Report	Report	Weekly	Grab
52609	8:2 Fluorotelomer sulfonic acid [8:2 FTS], ng/l	Report	Report	Weekly	Grab
52610	Perfluoropentane sulfonic acid [PFPeS], ng/l	Report	Report	Weekly	Grab
52611	Perfluorononane sulfonic acid [PFNS], ng/l	Report	Report	Weekly	Grab
52612	Hexafluoropropylene oxide dimer acid [Gen-X (or HFPO-DA or HPFA-DA], ng/l	Report	Report	Weekly	Grab
87006	PFAS Sum, ng/l*	Report	Report	Weekly	Calculated

**The PFAS sum is calculated based on the following equation:

PFAS Sum (ng/l) = **[PFOA]** (ng/l) + **[PFOSA]** (ng/l) + **[PFNA]** (ng/l) + ([**NEtFOSAA]** (ng/l) * 0.85) + ([**NMeFOSAA**] (ng/l) * 0.88) + [**PFOS**] (ng/l) + ([**8:2 FTS**] (ng/l) * 0.78)

This calculation is performed for each sampling event, and the resulting daily maximum and 30-day average results shall be reported on the discharge monitoring report submitted for the monthly monitoring period.

2. Narrative Water Quality Based Effluent Limitation (Outfalls 021A, 022A, 024A, 025A, 027A and 028A)

Discharges authorized under this permit must be controlled as necessary to meet applicable water quality standards.

The division expects that compliance with the other terms and conditions in this permit will control discharges as necessary to meet applicable water quality standards for pollutants without limits in the permit. If at any time the permittee becomes aware, or the division determines, that the authorized discharge causes or contributes to an

exceedance of applicable water quality standards, the permittee must take corrective action as required, document the corrective actions as required, and report the corrective actions to the Division as required (see CORRECTIVE ACTIONS).

If the division becomes aware of information indicating that compliance with the other terms and conditions of this permit will not control the discharge as necessary to meet applicable water quality standards, the division may include additional site-specific water quality-based effluent limitation(s) to the discharge.

3. Stormwater Practice-based Effluent Limitations (Outfalls 021A, 022A, 024A, 025A, 027A and 028A)

Practice-based limitations required by this permit include the following:

a. Minimize Exposure
The permittee must minimize (as defined in Appendix B) the exposure of pollutant sources associated with manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and runoff. Minimizing exposure may include locating these industrial materials and activities inside or protecting them with storm resistant coverings.

b. Good Housekeeping
The permittee must keep clean all areas exposed to stormwater runoff, as necessary to minimize potential sources of pollutants, using such measures as sweeping at regular intervals, keeping materials orderly and labeled, and storing materials in appropriate containers.

c. Maintenance of Control Measures
The permittee must maintain all control measures (structural and non-structural) used to achieve the effluent limits required by this permit in effective operating condition. The permittee must conduct maintenance of control measures in accordance with this permit (see CONTROL MEASURES section of this permit).

d. Spill Prevention and Response Procedures
The permittee must minimize the potential for leaks, spills and other releases that may be exposed to stormwater and develop plans for effective response to such potential spills. The permittee must at minimum implement:

i. Procedures for regularly inspecting, testing, maintaining, and repairing all industrial equipment and systems to avoid situations that may result in leaks, spills, and other releases of pollutants in stormwater discharged to receiving waters.
ii. Procedures for plainly labeling containers that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur;
iii. Preventative measures such as barriers between material storage and traffic areas, secondary containment provisions, or procedures for material storage and handling;
iv. Procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. Employees who may cause, detect, or respond to a spill or leak must be trained in these procedures and have necessary spill response equipment available; and
v. Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies. Contact information must be in locations that are readily accessible and available.

e. Erosion and Sediment Controls
The permittee must stabilize exposed areas and contain runoff using structural and/or non-structural control measures to minimize onsite erosion and sedimentation, and the resulting discharge of pollutants. Among other actions taken to meet this effluent limit, flow velocity dissipation devices must be placed at discharge locations and within outfall channels where necessary to minimize erosion and/or settle out pollutants.

f. Management of Runoff
The permittee must divert, infiltrate, reuse, contain, or treat stormwater runoff, in a manner that minimizes pollutants in stormwater discharges from the site.

g. Salt Storage Piles or Piles Containing Salt

The permittee must enclose or cover storage piles of salt, or piles containing salt, used for deicing or other commercial or industrial purposes, including maintenance of paved surfaces, and implement appropriate measures to minimize exposure resulting from adding to or removing materials from the pile.

h. Employee Training
The permittee must develop and implement a training program for employees. Training must be conducted at least **annually**, and must address the following, as applicable to the trainee's activities: the site-specific control measures used to achieve the permit effluent limits, components and goals of the SWMP, monitoring and inspection procedures, and other applicable requirements of the permit. At a minimum, the following individuals must be trained:

i. Employee(s) overseeing implementation of, revising, and amending the SWMP.
ii. Employee(s) performing installation, inspection, maintenance, and repair of control measures.
iii. Employee(s) who work in areas of industrial activity subject to this permit.
iv. Employee(s) who conduct stormwater discharge monitoring required by this permit.

i. Waste, Garbage and Floatable Debris
The permittee must minimize the discharge of waste, garbage, and floatable debris from the site by keeping exposed areas free of such materials or by intercepting them before they are discharged.

j. Dust Generation and Vehicle Tracking of Industrial Materials.
The permittee must minimize generation of dust and off-site tracking of raw, final, or waste materials.

F. WHOLE EFFLUENT TOXICITY TESTING

1. Acute WET Testing (Outfall 004A and 026A)

a. General Acute WET Testing and Reporting Requirements

The permittee shall conduct an acute 48-hour WET test using *Ceriodaphnia dubia*, and an acute 96-hour WET test using *Pimephales promelas*. Acute tests shall be conducted as a static replacement test using a single effluent grab sample. The permittee shall conduct each acute WET test in accordance with the 40 CFR Part 136 methods described in Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms, Fifth Edition, October 2002 (EPA-821-R-02-012) or its most current edition.

The following minimum dilution series should be used: 0% effluent (control), 20%, 40%, 60%, 80%, and 100% effluent. If the permittee uses more dilutions than prescribed, and accelerated testing is to be performed, the same dilution series shall be used in the accelerated testing as was used in the failed test.

Tests shall be done at the frequency listed in Part I.C. Test results shall be reported along with the Discharge Monitoring Report (DMR) submitted for the end of the reporting period when the sample was taken. (i.e., WET testing results for the calendar quarter ending March 31 shall be reported with the DMR due April 28, etc.) The permittee shall submit all laboratory statistical summary sheets, summaries of the determination of a valid, invalid or inconclusive test, and copies of the chain of custody forms, along with the DMR for the reporting period.

If a test is considered invalid, the permittee is required to perform additional testing during the monitoring period to obtain a valid test result. Failure to obtain a valid test result during the monitoring period shall result in a violation of the permit for failure to monitor.

b. Violations of the Permit Limit and Division Notification

An acute WET test is failed whenever the LC50, which represents an estimate of the effluent concentration which is lethal to 50% of the test organisms in the time period prescribed by the test, is found to be less than or equal to 100% effluent. The permittee must provide written notification of the failure of a WET test to the Division, along with a statement as to whether accelerated testing or a Toxicity Identification Evaluation (TIE) is being performed, unless otherwise exempted, in writing, by the Division. **Notification must be received by the Division within 14 calendar days of the permittee receiving notice of the WET testing results.**

c. Automatic Compliance Response

The permittee is responsible for implementing the automatic compliance response provisions of this permit when one of the following occurs:

- there is a violation of the permit limit (the LC50 endpoint is less than the applicable IWC)
- during a report-only period, when the LC50 endpoint is less than the applicable IWC
- the permittee is otherwise informed by the Division that a compliance response is necessary.

When one of the above listed events occurs, the following automatic compliance response shall apply. The permittee shall either:

- conduct accelerated testing using the single species found to be more sensitive
- conduct a Toxicity Identification Evaluation / Toxicity Reduction Evaluation (TIE/TRE) investigation as described below.

i. Accelerated Testing

If accelerated testing is being performed, testing will be at least once every two weeks for up to five tests, at the appropriate IWC, but only one test should be run at a time. Accelerated testing shall continue until; 1) two consecutive tests fail or three of five tests fail, in which case a pattern of toxicity has been demonstrated or 2) two consecutive tests pass or three of five tests pass, in which case no pattern of toxicity has been found. Note that the same dilution series should be used in the accelerated testing as was used in the initial test(s) that result in the accelerated testing requirement.

If no pattern of toxicity is found the toxicity episode is considered to be ended and routine testing is to resume. If a pattern of toxicity is found, a TIE/TRE investigation is to be performed. If a pattern of toxicity is not demonstrated but a significant level of erratic toxicity is found, the Division may require an increased frequency of routine monitoring or some other modified approach. The permittee shall provide written notification of the results within 14 calendar days of completion of the Pattern of Toxicity/No Toxicity demonstration.

ii. Toxicity Identification Evaluation / Toxicity Reduction Evaluation (TIE/TRE)

If a TIE/TRE is being performed, the results of the investigation are to be received by the Division within 180 calendar days of the demonstration of acute WET in the routine test, as defined above, or if accelerated testing was performed, the date the pattern of toxicity is demonstrated. A status report is to be provided to the Division at the 60 and 120 calendar day points of the TIE/TRE investigation. The Division may extend the time frame for investigation where reasonable justification exists. A request for an extension must be made in writing and received prior to the 180 calendar day deadline. Such request must include a justification and supporting data for such an extension.

Under a TIE, the permittee may use the time for investigation to conduct a preliminary TIE (PTIE) or move directly into the TIE. A PTIE consists of a brief search for possible sources of WET, where a specific parameter(s) is reasonably suspected to have caused such toxicity, and could be identified more simply and cost effectively than a formal TIE. If the PTIE allows resolution of the WET incident, the TIE need not necessarily be conducted in its entirety. If, however, WET is not identified or resolved during the PTIE, the TIE must be conducted within the allowed 180 calendar day time frame.

The Division recommends that the EPA guidance documents regarding TIEs be followed. If another method is to be used, this procedure should be submitted to the Division prior to initiating the TIE.

If the pollutant(s) causing toxicity is/are identified, and is/are controlled by a permit effluent limitation(s), this permit may be modified upon request to adjust permit requirements regarding the automatic compliance response.

If the pollutant(s) causing toxicity is/are identified, and is/are not controlled by a permit effluent limitation(s), the Division may develop limitations the parameter(s), and the permit may be reopened to include these limitations.

If the pollutant causing toxicity is not able to be identified, or is unable to be specifically identified, or is not able to be controlled by an effluent limit, the permittee will be required to perform either item 1 or item 2 below.

1) Conduct an investigation which demonstrates actual instream aquatic life conditions upstream and downstream of the discharge, or identify, for Division approval, and conduct an alternative investigation which demonstrates the actual instream impact. This should include WET testing and chemical analyses of the ambient water. Depending on the results of the study, the permittee may also be required to identify the control program necessary to eliminate the toxicity and its cost. Data collected may be presented to the WQCC for consideration at the next appropriate triennial review of the stream standards;

2) Move to a TRE by identifying the necessary control program or activity and proceed with elimination of the toxicity so as to meet the WET effluent limit.

If toxicity spontaneously disappears in the midst of a TIE, the permittee shall notify the Division within 10 calendar days of such disappearance. The Division may require the permittee to conduct accelerated testing to demonstrate that no pattern of toxicity exists, or may amend the permit to require an increased frequency of WET testing for some period of time. If no pattern of toxicity is demonstrated through the accelerated testing or the increased monitoring frequency, the toxicity incident response will be closed and normal WET testing shall resume.

The control program developed during a TRE consists of the measures determined to be the most feasible to eliminate WET. This may happen through the identification of the toxicant(s) and then a control program aimed specifically at that toxicant(s) or through the identification of more general toxicant treatability processes. A control program is to be developed and submitted to the Division within 180 calendar days of beginning a TRE. Status reports on the TRE are to be provided to the Division at the 60 and 120 calendar day points of the TRE investigation.

If toxicity spontaneously disappears in the midst of a TRE, the permittee shall notify the Division within 10 calendar days of such disappearance. The Division may require the permittee to conduct accelerated testing to demonstrate that no pattern of toxicity exists, or may amend the permit to require an increased frequency for some period of time. If no pattern of toxicity is demonstrated through the accelerated testing or the increased monitoring frequency, the toxicity incident response will be closed and normal WET testing shall resume.

d. Toxicity Reopener

This permit may be reopened and modified to include additional or modified numerical permit limitations, new or modified compliance response requirements, changes in the WET testing protocol, the addition of both acute and chronic WET requirements, or any other conditions related to the control of toxicants.

2. <u>Chronic WET Testing (Outfalls 020A and 023A)</u>

a. General Chronic WET Testing and Reporting Requirements

The permittee shall conduct the chronic WET test using *Ceriodaphnia dubia and Pimephales promelas*, as a static renewal 7-day test using three separate composite samples for outfall 020A, and three separate grab samples for outfall 023A. The permittee shall conduct each chronic WET test in accordance with the 40 CFR Part 136 methods described in <u>Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms</u>, Fourth Edition, October 2002 (EPA-821-R-02-013) or the most current edition.

The following minimum dilution series should be used: Outfall 020A - 0% effluent (control), 22%, 45%, 89%, 95%, and 100% effluent. Outfall 023A - 0% effluent (control), 8%, 15%, 30%, 65%, and 100% effluent. If the permittee uses more dilutions than prescribed, and accelerated testing is to be performed, the same dilution series shall be used in the accelerated testing (if applicable) as was initially used in the failed test.

Tests shall be done at the frequency listed in Part I.C. Test results shall be reported along with the Discharge Monitoring Report (DMR) submitted for the end of the reporting period when the sample was taken. (i.e., WET testing results for the calendar quarter ending March 31 shall be reported with the DMR due April 28, etc.) The permittee shall submit all laboratory statistical summary sheets, summaries of the determination of a valid, invalid or inconclusive test, and copies of the chain of custody forms, along with the DMR for the reporting period.

If a test is considered invalid, the permittee is required to perform additional testing during the monitoring period to obtain a valid test result. Failure to obtain a valid test result during the monitoring period shall result in a violation of the permit for failure to monitor.

b. Violations of the Permit Limit, Failure of One Test Statistical Endpoint and Division Notification

A chronic WET test is considered a violation of a permit limitation when both the NOEC and the IC25, for the same sub-lethal endpoint are at any effluent concentration less than the IWC. This determination is made independently for each test species. The IWCs for this permit has been determined to be: Outfalls 020A 89% effluent; 023A 30% effluent.

A chronic WET test is considered to have failed one of the two statistical endpoints when either the NOEC or the IC25 are at any effluent concentration less than the IWC. Simultaneous failure of both the NOEC and IC25 for both sub-lethal endpoints, when tests are performed on identical split samples, constitutes only a single violation of the Daily Maximum Effluent Limitation for Chronic WET specified in Part I.C of this permit. The IWCs for this permit has been determined to be: Outfalls 020A 89% effluent; 023A 30% effluent.

In the event of a permit violation, or during a report only period when both the NOEC and the IC25 are at any effluent concentration less than the IWC, or when two consecutive reporting periods have resulted in failure of one of the two statistical endpoints (regardless of which statistical endpoints are failed), the permittee must provide written notification to the Division. Such notification should explain whether it was a violation or two consecutive failures of a single endpoint, and must indicate whether accelerated testing or a Toxicity Identification Evaluation or Toxicity Reduction Evaluation (TIE or TRE) is being performed, unless otherwise exempted, in writing, by the Division. **Notification must be received by the Division within 14 calendar days of the permittee receiving notice of the WET testing results.**

c. Automatic Compliance Response

The permittee is responsible for implementing the automatic compliance response provisions of this permit when one of the following occurs:

- there is a violation of the permit limit (both the NOEC and the IC25 endpoints are less than the applicable IWC)
- during a report only period when both the NOEC and the IC25 are at any effluent concentration less than the IWC
- two consecutive monitoring periods have resulted in failure of one of the two statistical endpoints (either the IC25 or the NOEC), including during a report-only period. This determination is made independently for each test species.
- the permittee is otherwise informed by the Division that a compliance response is necessary.

When one of the above listed events occurs, the following automatic compliance response shall apply. The permittee shall either:

- conduct accelerated testing using the single species found to be more sensitive
- conduct a Toxicity Identification Evaluation (TIE) or a Toxicity Reduction Evaluation (TRE) investigation as described below.

i. Accelerated Testing

If accelerated testing is being performed, testing will be at least once every two weeks for up to five tests, running only one test at a time, using only the IC25 statistical endpoint to determine if the test passed or failed at the appropriate IWC. Accelerated testing shall continue until; 1) two consecutive tests fail or

three of five tests fail, in which case a pattern of toxicity has been demonstrated or 2) two consecutive tests pass or three of five tests pass, in which case no pattern of toxicity has been found. Note that the same dilution series should be used in the accelerated testing as was used in the initial test(s) that result in the accelerated testing requirement.

If accelerated testing is required due to failure of one statistical endpoint in two consecutive monitoring periods, and in both of those failures it was the NOEC endpoint that was failed, then the NOEC shall be the only statistical endpoint used to determine whether the accelerated testing passed or failed at the appropriate IWC. Note that the same dilution series should be used in the accelerated testing as was used in the initial test(s) that result in the accelerated testing requirement.

If no pattern of toxicity is found the toxicity episode is considered to be ended and routine testing is to resume. If a pattern of toxicity is found, a TIE/TRE investigation is to be performed. If a pattern of toxicity is not demonstrated but a significant level of erratic toxicity is found, the Division may require an increased frequency of routine monitoring or some other modified approach. The permittee shall provide written notification of the results within 14 calendar days of completion of the Pattern of Toxicity/No Toxicity demonstration.

ii. Toxicity Identification Evaluation (TIE) or Toxicity Reduction Evaluation (TRE)

If a TIE or a TRE is being performed, the results of the investigation are to be received by the Division within 180 calendar days of the demonstration chronic WET in the routine test, as defined above, or if accelerated testing was performed, the date the pattern of toxicity is demonstrated. A status report is to be provided to the Division at the 60 and 120 calendar day points of the TIE or TRE investigation. The Division may extend the time frame for investigation where reasonable justification exists. A request for an extension must be made in writing and received prior to the 180 calendar day deadline. Such request must include a justification and supporting data for such an extension.

Under a TIE, the permittee may use the time for investigation to conduct a preliminary TIE (PTIE) or move directly into the TIE. A PTIE consists of a brief search for possible sources of WET, where a specific parameter(s) is reasonably suspected to have caused such toxicity, and could be identified more simply and cost effectively than a formal TIE. If the PTIE allows resolution of the WET incident, the TIE need not necessarily be conducted in its entirety. If, however, WET is not identified or resolved during the PTIE, the TIE must be conducted within the allowed 180 calendar day time frame.

The Division recommends that the EPA guidance documents regarding TIEs be followed. If another method is to be used, this procedure should be submitted to the Division prior to initiating the TIE.

If the pollutant(s) causing toxicity is/are identified, and is/are controlled by a permit effluent limitation(s), this permit may be modified upon request to adjust permit requirements regarding the automatic compliance response.

If the pollutant(s) causing toxicity is/are identified, and is/are not controlled by a permit effluent limitation(s), the Division may develop limitations the parameter(s), and the permit may be reopened to include these limitations.

If the pollutant causing toxicity is not able to be identified, or is unable to be specifically identified, or is not able to be controlled by an effluent limit, the permittee will be required to perform either item 1 or item 2 below.

1) Conduct an investigation which demonstrates actual instream aquatic life conditions upstream and downstream of the discharge, or identify, for Division approval, and conduct an alternative investigation which demonstrates the actual instream impact. This should include WET testing and chemical analyses of the ambient water. Depending on the results of the study, the permittee may also be required to identify the control program necessary to eliminate the toxicity and its cost. Data collected may be presented to the WQCC for consideration at the next appropriate triennial review of the stream standards;

2) Move to a TRE by identifying the necessary control program or activity and proceed with elimination of the toxicity so as to meet the WET effluent limit.

If toxicity spontaneously disappears in the midst of a TIE, the permittee shall notify the Division within 10 calendar days of such disappearance. The Division may require the permittee to conduct accelerated testing to demonstrate that no pattern of toxicity exists, or may amend the permit to require an increased frequency of WET testing for some period of time. If no pattern of toxicity is demonstrated through the accelerated testing or the increased monitoring frequency, the toxicity incident response will be closed and normal WET testing shall resume.

The control program developed during a TRE consists of the measures determined to be the most feasible to eliminate WET. This may happen through the identification of the toxicant(s) and then a control program aimed specifically at that toxicant(s) or through the identification of more general toxicant treatability processes. A control program is to be developed and submitted to the Division within 180 calendar days of beginning a TRE. Status reports on the TRE are to be provided to the Division at the 60 and 120 calendar day points of the TRE investigation.

If toxicity spontaneously disappears in the midst of a TRE, the permittee shall notify the Division within 10 calendar days of such disappearance. The Division may require the permittee to conduct accelerated testing to demonstrate that no pattern of toxicity exists, or may amend the permit to require an increased frequency for some period of time. If no pattern of toxicity is demonstrated through the accelerated testing or the increased monitoring frequency, the toxicity incident response will be closed and normal WET testing shall resume.

d. Toxicity Reopener

This permit may be reopened and modified to include additional or modified numerical permit limitations, new or modified compliance response requirements, changes in the WET testing protocol, the addition of both acute and chronic WET requirements, or any other conditions related to the control of toxicants.

G. SPECIAL STUDIES AND ADDITIONAL TERMS AND CONDITIONS

1. Temperature Monitoring Equipment

The facility is required to install continuous temperature monitoring equipment by to comply with the temperature monitoring 'continuous' requirements listed Part I.E.

Code	Event	Description	Due Date
04301	Install Temperature Meters	The permittee is to submit a document certifying that continuous temperature monitoring equipment has been installed and is operational.	3-months after permit effective date

2. Per- and polyfluoroalkyl substances (PFAS)

a. The permittee must prevent the contribution of any PFAS-containing foams to Suncor's stormwater management system, including from all areas that contribute stormwater runoff to any of Suncor's outfalls.

b. The permittee must submit a report (PFAS use, storage and release study) documenting the following:

i. For all fire activities where PFAS is used, including emergency fire-fighting and training activities: an evaluation of the types of fires where foams that do not contain PFAS may be used. Note that foam with "short-chain" PFAS is still PFAS-containing PFAS.

ii. For fire types that require the use of PFAS-containing foam, procedures to prevent or minimize releases to wastewater or stormwater, including removal of residuals.

iii. An inventory of all PFAS-containing foams on the site, including where and how they are stored and collected. The inventory should include current disposal processes, if any.

c. The permittee must revise the PFAS use, storage and release study within 30 days of any changes to the information contained in the study, including any changes to the inventory.

d. The permittee must submit PFAS containment reports on an ongoing basis after any event where PFAS-containing foam is used on the site, a report must be submitted within 10 days of the event describing how much foam was used, the brand used, and how the stored, collected and disposed of in order to prevent any discharge to surface water, including any discharge via Suncor's stormwater outfalls.

Code	Event	Description	Due Date
00508	PFAS Use, Storage, Release Study	Submit PFAS study results.	6 months after the permit's effective date
	PFAS containment report	After any even where PFAS containing foam is used, submit PFAS containment report.	10 days after the event

All special studies must be submitted to the Division accompanied by a fully completed "Permit Narrative Conditions Form" available at https://www.colorado.gov/pacific/cdphe/wq-permit-forms.

3. Mixing Zone Analyses - Outfalls 004 and 026

Conduct remaining threshold tests for exclusion from further analysis under Mixing Zone Regulations. The second threshold test is the Application of the Mixing Zone Exclusion Tables (p. 20, Colorado Mixing Zone Implementation Guidance, February 2002). Under this compliance action, the permittee will collect the necessary site-specific data, perform the required analysis, and provide a report to the Division. The report will indicate the findings of this threshold test and, if not excluded, provide the workplan for the next threshold test (i.e., determining of the size of the physical and regulatory mixing zones).

Code	Event	Description	Due Date
50008	Submit Study Results	During stream flow conditions that are at or below the 15th percentile of streamflow, collect site-specific data, perform threshold tests based on Mixing Zone Exclusion Tables, and submit study results.	6 months prior to permit expiration

All special studies must be submitted to the Division accompanied by a fully completed "Permit Narrative Conditions Form" available at https://www.colorado.gov/pacific/cdphe/wq-permit-forms.

4. Burlington Ditch Study or Liner Requirement

Within two years of the effective date of the permit, the permittee must either:

1) Submit a certification that the Burlington Ditch is now fully lined; OR

2) Submit a study to the division that will demonstrate that there is currently no seepage from groundwater on the Suncor site into the Burlington Ditch and has been no such seepage in the last ten years. If the permittee chooses to submit a study, the study must take place over at least a year and include at a minimum: water level elevations; monthly GRO, DRO, BTEX, TPH data from wells on each side of the Ditch; complete elevation and concentration contours; and all other data needed to show that there is currently no seepage from groundwater on the Suncor site into the Burlington Ditch and has been no such seepage in the last ten years.

   a. If the study is indeterminate or fails to demonstrate that there is no seepage (either currently or within the last ten years) from groundwater on the Suncor site into the Burlington Ditch, the

Permittee must within six months either apply for a permit modification to add this seepage as a permitted outfall under this permit or submit a certification that the Burlington Ditch is now fully lined.

b. If the study demonstrates that there is currently no seepage from groundwater on the Suncor site into the Burlington Ditch and has been no such seepage in the last ten years, the Permittee must submit a followup report documenting its future plans for protecting the Burlington Ditch from groundwater seepage from the Suncor site.

Code	Event	Description	Due Date
50008	Submit Study Results or Full Liner	Submit a certification that the Ditch is fully lined OR study that demonstrates there is no seepage from groundwater on the Suncor site into the Burlington Ditch.	2 years after effective date of permit

All special studies must be submitted to the Division accompanied by a fully completed "Permit Narrative Conditions Form" available at https://www.colorado.gov/pacific/cdphe/wq-permit-forms.

5. Asset Management Plan

The permittee must develop and implement an asset management plan. The plan must include, at a minimum, the following:

a. Inventory of Assets. The permittee must identify and inventory all critical assets needed to comply with this permit's terms and conditions, including but not limited to the Suncor facility's treatment plants, stormwater ponds, and subsurface conduits leading to treatment facilities and/or outfalls, and any other equipment individually valued over $5000. The inventory must also include a map and CCTV inspection of all of the Suncor facility's pipes and conduits that lead to treatment facilities, outfalls, or off the site. In addition, the inventory must include soft assets such as the personnel performing the inspections required by permit and maintaining maps of the Suncor facility's pipes and conduits. The permittee must also prepare a short summary of this inventory.

b. Asset Management and Replacement Strategy. The asset management and replacement strategy should include all costs and actions (such as replacing components) required to achieve and maintain permit compliance and intended levels of service for each component for the next ten years. It should include: the purchase date, purchase price and replacement costs for the hard assets; when the permittee will conduct maintenance, rehabilitation and replacement of each inventoried asset; and a specific schedule for replacing subsurface piping over the next ten years. The permittee must also prepare a short summary of the replacement plan.

c. Required Level of Service. The plan must identify the level of performance required for each of the assets, in particular the performance required to prevent all unpermitted discharges to state waters throughout the permit term or any violations of the permit. The asset management plan must also include the current performance, consequence of failure and the likelihood of failure of each of the assets in the inventory.

The permittee must be fully implementing the asset management plan within three years of the permit's effective date.

Code	Event	Description	Due Date
50008	Submit Asset Management Plan	Submit Asset Management Plan and summaries	2 years after effective date of permit

50008	Implement Asset Management Plan	Certify that the permittee is fully implementing the asset management plan	3 years after effective date of permit

All special studies must be submitted to the Division accompanied by a fully completed "Permit Narrative Conditions Form" available at https://www.colorado.gov/pacific/cdphe/wq-permit-forms.

6. Turnaround Management Plan

The permittee must develop and implement a plan to prevent spills and permit violations during periods of "turnaround" at the Suncor site. A turnaround is a planned event where production is suspended or decreased for a specific time period in order to perform maintenance tasks. This plan must address, at a minimum:

a. How power will be maintained to all critical assets needed to comply with this permit's terms and conditions.
b. Extra precautions that will be put in place to prevent spills.
c. Extra precautions that will be put in place to promptly clean up spills (see also Stormwater Practice-based Effluent Limitations).
d. Extra precautions that will be put in place to avoid violations of all hazardous waste storage requirements, including those in the stormwater section of this permit.
e. Extra precautions that will be put in place to avoid other violations of this permit.

The permittee must be fully implementing the turnaround plan within six months of the permit's effective date.

Code	Event	Description	Due Date
50008	Submit Turnaround Plan	Submit Turnaround Plan	3 months after effective date of permit
50008	Implement Asset Management Plan	Certify that the permittee is fully implementing the turnaround plan	6 months after effective date of permit

All special studies must be submitted to the Division accompanied by a fully completed "Permit Narrative Conditions Form" available at https://www.colorado.gov/pacific/cdphe/wq-permit-forms.

7. Influent Characterization Study

The permittee shall submit an annual influent characterization study.

Code	Event	Description	Due Date
21599	Special Study	The permittee shall submit an annual influent characterization study of the influent to the WWTP and the groundwater onsite wastewater treatment system. The influent study must include the results of monthly influent sampling for the organic, metal, and inorganic parameters identified for outfall 020A, for the permit term, in an excel spreadsheet format.	Annually on December 31

All special studies must be submitted to the Division accompanied by a fully completed "Permit Narrative Conditions Form" available at https://www.colorado.gov/pacific/cdphe/wq-permit-forms.

8. Arsenic Study and Feasibility Evaluation (Outfalls 020, 023, 004, 026)

The permittee shall monitor for arsenic and several other parameters to characterize the wastewater to inform potential treatment options. The facility shall also plan for a Feasibility study. These activities will help to resolve the uncertainty regarding the portion of arsenic contribution from this facility that is reversible. These activities shall be completed in accordance with the following schedule;

Code	Event	Description	Due Date
04399	Source Identification Report	Submit (1) a progress report summarizing total recoverable and dissolved arsenic influent and effluent data to date; influent and effluent arsenic speciation, oxidation-reduction, TDS, Ca, K, Mg, Na, NO3, PO4, SO4, chloride, and total alkalinity data[1], analyzing trends or patterns in the data; (2) For outfall 020, A report identifying any other potential or possible sources of arsenic besides crude oil, which was identified as a source in the December 2013 compliance submittal (for example, evaluate if there are any process additives that contain arsenic and/or any groundwater that may contribute sources). For outfall 023, A report identifying the source of arsenic in the groundwater. For outfalls 004 and 026, a report identifying all source(s) of arsenic	1 year after the effective date
04399	Source Identification Report	Submit (1) a progress report summarizing total recoverable and dissolved arsenic influent and effluent data to date; influent and effluent oxidation-reduction, TDS, Ca, K, Mg, Na, NO3, PO4, and total Alkalinity data, analyzing trends or patterns in the data; (2) A report identifying potential options to reduce levels of total recoverable arsenic in the facility's effluent, using information available in the Updated Evaluation of Technologically Feasible Arsenic Treatment Levels (Tetra Tech, September 2019), as well as other relevant resources. At a minimum, options should include source control options and treatment options such as ferric (or alum) coagulation, adsorptive media, RO or nanofiltration, and ion exchange; 3) A plan for conducting a Feasibility Study, using Section 6.1.1 of the Updated Evaluation of Technologically Feasible Arsenic Treatment Levels (Tetra Tech, September 2019).	2 years after the effective date

9. Paired Well Evaluations

The permittee must evaluate the benzene and PFAS concentrations at the paired wells near the Sand Creek barrier wall (including but not limited to BCMW-03S and BCMW-03N and BCMW-04S and BCMW-04N) against each other on at least a quarterly basis. The permittee must document each of these evaluations and maintain these records. If this data includes evidence that the barrier wall is not preventing the discharge of pollutants to Sand Creek from the Suncor site, within 30 days of reviewing the benzene and PFAS concentrations the permittee must either apply for a permit modification to add this discharge of pollutants to this permit as a permitted feature or submit a report explaining why this discharge of pollutants is not subject to the Clean Water Act or the Water Quality Control Act.

[1] The importance of evaluating these parameters in terms of arsenic removal capabilities is discussed in the Evaluation of Technologically Feasible Arsenic Treatment Levels (Tetra Tech, September 2019)

10. Permit Modification Application Requirements

In addition to other permit re-opener and modification requirements in this permit:

a. The permittee must apply for a permit modification within 30 days of any observation of any groundwater seeps or other unpermitted discharges along the portions of the Suncor site bordering Sand Creek and the Burlington Ditch. The permittee must then apply for a permit modification to include that seep as a permitted feature.

b. The permittee must apply for a permit modification within 30 days of observation of a final and effective decision by the Water Quality Control Commission to change the antidegradation designation for the South Platte Segment 15 (COSPUS15). The permittee must apply for a permit modification that would apply the new antidegradation designation to the permit's outfalls.

11. Spill Prevention and Response Procedures

The permittee must minimize the potential for leaks, spills and other releases and develop plans for effective response to such potential spills (see also Stormwater Practice-based Effluent Limitations). The permittee must at minimum implement:

a. Procedures for regularly inspecting, testing, maintaining, and repairing all industrial equipment and systems to avoid situations that may result in leaks, spills, and other releases of pollutants to state surface waters.

b. Procedures for plainly labeling containers that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur;

c. Preventative measures such as barriers between material storage and traffic areas, secondary containment provisions, or procedures for material storage and handling;

d. Procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. Employees who may cause, detect, or respond to a spill or leak must be trained in these procedures and have necessary spill response equipment available; and

e. Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies. Contact information must be in locations that are readily accessible and available.

12. Stormwater Visual Monitoring (Outfalls 021A, 022A, 024A, 025A, 027A and 028A)

Once each quarter for the entire permit term, the permittee shall collect a stormwater sample from each outfall identified in this section, and conduct a visual assessment of each of these samples.

i. These samples should be collected in such a manner that the samples are representative of the stormwater discharge.

ii. The visual assessment must be made of a sample in a clean, clear glass or plastic container, and examined in a well-lit area. The permittee must visually inspect the sample for the presence of the following water quality characteristics:

a) Color;
b) Odor;
c) Clarity;
d) Floating solids;
e) Settled solids;
f) Suspended solids;
g) Foam;
h) Oil sheen; and
i) Other obvious indicators of stormwater pollution.

iii. Quarterly Visual Assessment Documentation. The permittee must document the visual assessment results and maintain this documentation onsite with the facility SWMP. The permittee is not required to submit visual assessment findings to the division, unless specifically requested to do so. At a minimum, visual assessment documentation of the must include:

a) Sample location(s);
b) Sample collection date and time, and visual assessment date and time for each sample;
c) Personnel collecting the sample and performing visual assessment, and their signatures;
d) Nature of the discharge (i.e., runoff or snowmelt);
e) Results of observations of the stormwater discharge;
f) Probable sources of any observed stormwater contamination; and
g) If applicable, why it was not possible to take samples within the first 30 minutes.

iv. Quarterly Visual Assessment Corrective Actions: If the visual assessment indicates the control measures for the facility are inadequate or are not being properly operated and maintained, the permittee must conduct corrective actions consistent with the Corrective Actions section of this permit.

v. The permittee shall maintain visual monitoring procedures in the SWMP.

H. Compliance Schedule(s)

Outfalls 020A, 023A, 004A, 026A

1. Activities to Meet Total Arsenic Final Limits (Outfalls 020, 023, 004, 026) – In order to meet Total Arsenic limitation, the following schedule are included in the permit.

Code	Event	Description	Due Date
Add	Add	Submit (1) a progress report summarizing total recoverable and dissolved arsenic influent and effluent data to date; influent and effluent oxidation-reduction, TDS, Ca, K, Mg, Na, NO3, PO4, and total Alkalinity data, analyzing trends or patterns in the data; (2) Submit the results of a Feasibility Study Using Section 6.1.1 of the Updated Evaluation of Technologically Feasible Arsenic Treatment Levels (Tetra Tech, September 2019) document. At a minimum, the study should include a complete evaluation of technologies such as ferric (or alum) coagulation, adsorptive media, RO or nanofiltration, and ion exchange, and should indicate if oxidation is required. The study should identify data gaps/requirements to further select a technology, recommend the need for a bench scale and/or pilot testing, identify which technologies should be tested, and identify needs for pre- and post treatment and associated testing. The study should also include the selected alternative including costs and reliability, as well as time to design and construct.	05/31/2025
43699	Facility Evaluation Plan	Submit (1) a report with the results from any required bench-scale and/or pilot-scale tests, if applicable to the selected alternative(s). (2) Submit a progress report summarizing the progress in eliminating the data gaps identified in the Feasibility study, and any changes to the selected treatment technology, or any other considerations based on new data.	12/31/2025
43699	Facility Evaluation Plan	Submit a preliminary engineering design for the selected alternative(s) such that compliance with the final limitations may be attained.	3/31/2026

00899	Implementation Schedule	Submit a detailed engineering design report for the selected alternative(s) such that compliance with the final limitations may be attained.	9/30/2026
00899	Implementation Schedule	Submit a progress report summarizing the progress in implementing the strategies (including construction) to such that compliance with the final limitations may be attained.	12/31/2026
00899	Implementation Schedule	Complete construction, begin startup/optimization for treatment	3/31/2026
CS017	Achieve Final Compliance with Discharge Limits	Submit study results that show compliance has been attained with the final limitations.	5/30/2026

Outfall 020A:

2. Activities to Meet Sulfide, Cyanide, Dissolved Iron, Dissolved Manganese, Potentially Dissolved Selenium, Temperature (MWAT: Dec-Feb; June – Aug and DM: May – Sept), EC, SAR, Volatiles and Semi-volatiles (see list of organics in Section VIII.B of the fact sheet (Parameter Evaluation).

   In order to meet the final limits for the referenced parameters, the following schedule is included in the permit.

Code	Event	Description	Due Date
43699	Facility Evaluation Plan	Submit a report that identifies strategies to control sources of the referenced parameters, treatment alternatives, water management strategies, etc. such that compliance with the final limitations may be attained.	[3-months after effective date of permit]
00899	Implementation Schedule	Submit a progress report summarizing the progress in implementing the strategies to control sources of the referenced parameters, treatment alternatives, water management strategies, etc. such that compliance with the final limitations may be attained.	[6-months after effective date of permit]
00899	Implementation Schedule	Submit a progress report summarizing the progress in implementing the strategies to control sources of the referenced parameters, treatment alternatives, water management strategies, etc. such that compliance with the final limitations may be attained.	[9-months after effective date of permit]
CS017	Achieve Final Compliance with Discharge Limits	Submit study results that show compliance has been attained with the final limitations.	[12-months after effective date of permit]

Outfall 023A:

3. Activities to Meet Sulfide, Total Recoverable Iron, Dissolved Iron, Dissolved Manganese, Total Mercury, Potentially Dissolved Selenium (chronic), SAR, PFAS, Volatiles and Semi-volatiles (see list of organics in Section VIII.B of the fact sheet (Parameter Evaluation).

   In order to meet the final limits for the referenced parameters, the following schedule is included in the permit.

Code	Event	Description	Due Date
43699	Facility Evaluation Plan	Submit a report that identifies strategies to control sources of the referenced parameters, treatment alternatives, water management strategies, etc. such that compliance with the final limitations may be attained.	[3-months after effective date of permit]
00899	Implementation Schedule	Submit a progress report summarizing the progress in implementing the strategies to control sources of the referenced parameters, treatment alternatives, water management strategies, etc. such that compliance with the final limitations may be attained.	[6-months after effective date of permit]
00899	Implementation Schedule	Submit a progress report summarizing the progress in implementing the strategies to control sources of the referenced parameters, treatment alternatives, water management strategies, etc. such that compliance with the final limitations may be attained.	[9-months after effective date of permit]
CS017	Achieve Final Compliance with Discharge Limits	Submit study results that show compliance has been attained with the final limitations.	[12-months after effective date of permit]

Outfalls 004A, and 026A:

4. Activities to Meet Dissolved Oxygen, Sulfide, Total Inorganic Nitrogen, Ammonia, Boron, Total Recoverable Cadmium, Potentially Dissolved Cadmium, Total Recoverable Trivalent Chromium, Dissolved Hexavalent chromium, Potentially Dissolved Copper, Cyanide, Total Recoverable Iron, Dissolved Iron, Total Recoverable Lead, Potentially Dissolved Lead, Potentially Dissolved Manganese, Dissolved Manganese, Total Mercury, Total Recoverable Nickel, Potentially Dissolved Nickel, Potentially Dissolved Selenium (chronic), Potentially Dissolved Zinc, Temperature, EC, SAR, PFAS, Volatiles and Semi-volatiles (see list of organics in Section VIII.B of the fact sheet (Parameter Evaluation).

   In order to meet the final limits for the referenced parameters, the following schedule is included in the permit.

Code	Event	Description	Due Date
43699	Facility Evaluation Plan	Submit a report that identifies strategies to control sources of the referenced parameters, treatment alternatives, water management strategies, etc. such that compliance with the final limitations may be attained.	[3-months after effective date of permit]
00899	Implementation Schedule	Submit a progress report summarizing the progress in implementing the strategies to control sources of the referenced parameters, treatment alternatives, water management strategies, etc. such that compliance with the final limitations may be attained.	[6-months after effective date of permit]
00899	Implementation Schedule	Submit a progress report summarizing the progress in implementing the strategies to control sources of the referenced parameters, treatment alternatives, water management strategies, etc. such that compliance with the final limitations may be attained.	[9-months after effective date of permit]
CS017	Achieve Final Compliance with Discharge Limits	Submit study results that show compliance has been attained with the final limitations.	[12-months after effective date of permit]

All documents required by this compliance schedule (except permit modification applications) must be submitted to the Division accompanied by a fully completed "Permit Narrative Conditions Form" available at https://www.colorado.gov/pacific/cdphe/wq-permit-forms.

Regulation 61.8(3)(n)(i) states that a report shall be submitted to the Division no later than 14 calendar days following each date identified in the schedule of compliance. Consistent with 61.8(5)(b), the 14 days have already been incorporated into the above dates and therefore all reports are due on or before the date listed in the table.

I. STORMWATER CONTROL MEASURES (Outfalls 021A, 022A, 024A, 025A, 027A and 028A)

All control measures used by the permittee to meet the effluent limitations contained in this permit must be selected, designed, installed, implemented, and maintained in accordance with good engineering hydrologic and pollution control, and the manufacturer's specifications, when applicable.

1. Installation and implementation specifications

Installation and implementation specifications for each control measure type used by the permittee to meet the effluent limitations contained in this permit must be retained with the SWMP (see STORMWATER MANAGEMENT PLAN section).

2. Maintenance of Control Measures and Associated Documentation

a. The permittee must maintain all control measures used to achieve the effluent limits required by this permit in effective operating condition. For this permit, maintenance includes preventative and routine maintenance, modification, repair, replacement, or installation of new control measures. Observations resulting in maintenance activities can be made during a site inspection, or during general observations of site conditions.

b. Corrective actions associated with maintaining control measures must be conducted with due diligence, as soon as possible after the need is discovered, to achieve the effluent limits required by this permit. The permittee must implement interim control measures to achieve the effluent limits required by this permit while performing maintenance of the primary control measure.

c. The permittee shall document corrective actions associated with maintaining control measures, in accordance with the CORRECTIVE ACTIONS section of this permit, and shall revise the facility SWMP to reflect replacement or installation of new control measures in accordance with the STORMWATER MANAGEMENT PLAN section requirements.

J. FACILITY INSPECTIONS (Outfalls 020A, 004A, 021A, 022A, 023A, 024A, 025A, 026A, 027A and 028A)

1. Inspection Frequency and Personnel

The permittee shall conduct and document field inspections of all drainage areas contributing runoff to the outfalls referred to in this Part, as follows:

a. Conduct at least **twice monthly** comprehensive facility inspections per year. Inspections shall be conducted at least 10 days apart.

b. Conduct facility inspections during **each runoff event**, which for a rain event means during or within 24 hours after the end of a measureable storm event; and for a snowmelt event, means at a time when a measurable discharge occurs from the facility.

c. The permittee shall ensure that inspections are conducted by qualified personnel.

d. Adverse Weather Conditions: When adverse weather conditions prevent field inspections according to the required frequency, the permittee must document the basis for the failure to inspect, and maintain the documentation with the SWMP.

Adverse conditions are those that are dangerous or create inaccessibility for personnel, such as local flooding, high winds, winter weather, or electrical storms. Evidence to support this basis may include the dates that monitoring attempts were made; photographs; field notes and official weather data from a scientifically recognized organization, such as NOAA or the NWS, that establish site inaccessibility, etc.

2. Inspection Scope

Each inspection shall include:

a. Observations made at stormwater sampling locations and areas where stormwater associated with industrial activity is discharged off-site; or discharged to waters of the state, or to a storm sewer system that drains to waters of the state.

b. Observations for the presence of floating materials, visible oil sheen, discoloration, turbidity, odor, etc. in the stormwater discharge(s).

c. Observations of the condition of and around stormwater outfalls, including flow dissipation measures to prevent scouring.

d. Observations for the presence of illicit discharges or other non-permitted discharges such as domestic wastewater, noncontact cooling water, or process wastewater (including leachate).

e. A verification that the descriptions of potential pollutant sources required under this permit are accurate.

f. A verification that the site map in the SWMP reflects current conditions.

g. Observations for the presence of any groundwater seeps or other unpermitted discharges along the portions of the Suncor site bordering Sand Creek, documentation of seep locations, and seep flow.

h. An assessment of all control measures used to comply with the effluent limits contained in this permit, noting all of the following:

   i. Effectiveness of control measures inspected.
   ii. Locations of control measures that need maintenance or repair.
   iii. Reason maintenance or repair is needed and a schedule for maintenance or repair.
   iv. Locations where additional or different control measures are needed and the rationale for the additional or different control measures.

3. Inspection DMR Reporting and Documentation

The permittee must submit Discharge Monitoring Reports (DMRs) for facility inspections on a monthly basis to the division.

In addition, the permittee shall document the findings for each inspection in an inspection report or checklist, and keep the record onsite with the facility SWMP. The permittee shall ensure each inspection report documents the observations, verifications and assessments required in this section, and additionally includes:

a. The inspection date and time;

b. Locations inspected;

c. Weather information and a description of any discharges occurring at the time of the inspection;

d. A statement that, in the judgment of 1) the person conducting the site inspection, and 2) the person described in the REPORTING AND RECORDKEEPING section, the site is either in compliance or out of compliance with the terms and conditions of this permit, with respect to this section;

e. A summary report and a schedule of implementation of the corrective actions that the permittee has taken or plans to take if the site inspection indicates that the site is out of compliance;

f. Name, title, and signature of the person conducting site inspection; and the following statement: "I certify that this report is true, accurate, and complete, to the best of my knowledge and belief.";

g. Certification and signature of the person described in REPORTING AND RECORDKEEPING, or a duly authorized representative of the facility thereof.

4. Non-Compliance discovered during inspection

Any corrective action required as a result of a facility inspection must be performed consistent with the CORRECTIVE ACTIONS section of this permit, and retained with the SWMP.

K. POND INSPECTIONS (Outfalls 020A, 004A, 021A, 022A, 023A, 024A, 025A, 026A, 027A and 028A)

The permittee shall conduct field inspections of **Webber's Pond and Finger Lake** detention areas **8 times/month** to confirm that there are no passive or active discharges, including overtopping, from Webber's Pond and Finger Lake (other than to the WWTP).

The permittee must submit Discharge Monitoring Reports (DMRs) for facility inspections on a monthly basis to the division.

L. STORMWATER CORRECTIVE ACTIONS (Outfalls 021A, 022A, 024A, 025A, 027A and 028A)

1. Conditions that must be Eliminated

If any of the following conditions occur within the drainage areas associated with the referenced outfalls at the permitted facility (as identified by the permittee; the Division; or an EPA official, or local, or State entity), the permittee must review and revise the selection, design, installation, and implementation of facility control measures to ensure that the condition is eliminated and will not be repeated in the future:

a. an unauthorized release or discharge (e.g., spill, leak, or discharge of non-stormwater not authorized by a CDPS permit) occurs;

b. facility control measures are not stringent enough for the discharge to meet applicable water quality standards;

c. modifications to the facility control measures are necessary to meet the practice-based effluent limits in this permit; or

d. the permittee finds in a facility inspection, that facility control measures are not properly selected, designed, installed, operated or maintained.

2. Condition that Requires Review and Modification

If the following condition occurs, the permittee must review the selection, design, installation, and implementation of facility control measures to determine the appropriate modifications necessary to attain the effluent limits in this permit:

a. construction or a change in design, operation, or maintenance at the facility significantly changes the nature of pollutants discharged in stormwater from the facility, or significantly increases the quantity of pollutants discharged.

3. Corrective Action Reports and Deadlines

The permittee must document discovery of any condition listed in this section, within **5 days** as described below, submit the documentation in an annual report as required in the REPORTING AND RECORDKEEPING section, and retain a copy onsite with the facility SWMP.

Within five (5) days of discovery of any condition listed in listed in this section, the permittee must document the following information:

a. Identification of the condition triggering the need for corrective action review;
b. Description of the problem identified;
c. Date the problem was identified;
d. Summary of corrective action taken or to be taken (or, for triggering events that require Review and Modification and the permittee determines that corrective action is not necessary, the basis for this determination);
e. Notice of whether SWMP modifications are required as a result of this discovery or corrective action;
f. Date corrective action initiated; and
g. Date corrective action completed or expected to be completed.

4. Control measure modification

Modification of any control measure as part of the corrective action required by the CORRECTIVE ACTIONS section must be performed consistent with the CONTROL MEASURES section of this permit.

M. STORMWATER MANAGEMENT PLAN (SWMP) (Outfalls 021A, 022A, 024A, 025A, 027A and 028A)

1. General SWMP Requirements

The following administrative requirements apply to the SWMP written to address all drainage areas contributing runoff to the outfalls referred to in this Part. **The permittee shall modify the facility SWMP to comply with the requirements of this permit within 90 days of the effective date of this permit.**

a. SWMP requirement: The permittee must develop, implement, and maintain a SWMP. The SWMP shall be prepared in accordance with good engineering, hydrologic and pollution control practices (the SWMP need not be prepared by a registered engineer). The permittee must modify the SWMP to reflect current site conditions.

b. Submission: The permittee must submit the SWMP to the division if requested.

c. Signatory Requirements: The permittee must sign the SWMP in accordance with the Part II.K of this permit; this requirement applies to the original SWMP prepared for the facility, **and** each time the permittee modifies a SWMP.

d. Permit Retention: The permittee must maintain a copy of this permit with the SWMP.

e. SWMP Retention: The permittee must retain a copy of the SWMP at the facility unless another location, specified by the permittee, is approved by the Division.

f. Consistency with Other Plans: The permittee may incorporate, by reference, applicable portions of plans prepared for other purposes at their facility. Plans or portions of plans incorporated by reference into a SWMP become enforceable requirements of this permit and must be available along with the SWMP.

g. Required SWMP Modifications:

i. Division initiated:
   a) The permittee must modify the SWMP when notified by the division that it does not meet one or more of the requirements of this permit. Unless otherwise provided by the division, the permittee shall have 30 days after notification to make the necessary changes to the SWMP and implement them.
   b) The division may require the permittee to submit the modified SWMP to the division.
   c) If the division determines that the permittee's stormwater discharges do not, or may not, achieve the effluent limits required by this permit, the division may require the permittee, within a specified time period, to develop and implement a supplemental control measure action plan,

which describes additional SWMP modifications to adequately address the identified water quality concerns.

ii. Permittee initiated:
   a) The permittee must modify the SWMP whenever necessary to address any of the triggering conditions for corrective action in the CORRECTIVE ACTIONS section to ensure that they do not reoccur.
   b) The permittee must modify the SWMP whenever there is a change in design, construction, operation, or maintenance at the facility that significantly changes the nature of pollutants discharged in stormwater from the facility, significantly increases the quantity of pollutants discharged, or that requires the permittee to implement new or modified control measures.
   c) The SWMP modifications may include a schedule for control measure design and implementation, provided that interim control measures needed to comply with the permit are documented in the SWMP and implemented during the design period.
   d) The permittee must make all SWMP modifications prior to changes in site conditions; or for changes in response to site conditions, as soon as practicable, but in no case more than 72 hours after the changes(s) in the field.

2. Specific SWMP Requirements

The SWMP shall contain the elements described in this section for all drainage areas contributing runoff to the outfalls referred to in this Part.

a. SWMP Administrator: The SWMP shall identify a specific individual(s) by name or by title whose responsibilities include: SWMP development, implementation, maintenance, and modification.

b. Facility Description: The facility description shall include:

   i. A narrative description of the industrial activities conducted at the facility;
   ii. The total size of the facility property in acres;
   iii. The general layout of the facility including buildings and storage of raw materials, and the flow of goods and materials through the facility.

c. Facility Map: The SWMP shall include a legible site map(s), showing the entire facility, and vicinity as appropriate, identifying:

   i. The boundary of the facility and processing operation.
   ii. The location of the facility in relation to surface waters that receive industrial stormwater discharges from the facility (including the name of the surface water; if the name is not known, indicate that on the map); a separate vicinity map may be necessary to comply with this requirement;
   iii. Location of significant impervious surfaces within the facility property boundaries, including paved areas and buildings;
   iv. The locations of all facility stormwater conveyances including ditches, pipes, and swales;
   v. The locations of stormwater inlets and outfalls, with the identification code for each outfall (e.g., Outfall 001), and an approximate outline of the areas draining to each outfall;
   vi. Directions of stormwater flow indicated by arrows;
   vii. The areas where industrial activities are currently or have previously been conducted, where such activities are exposed to precipitation. This includes all areas of soil disturbance and reclamation/revegetation.
   viii. Locations of all pollutant sources (actual or potential) associated with specific industrial activities as identified in the Facility Inventory and Assessment of Pollutant Sources below;
   ix. Location of all structural and applicable non-structural control measures used to meet the effluent limits required by this permit;
   x. Locations where significant spills or leaks identified below have occurred;
   xi. Locations of all stormwater monitoring points applicable to the facility (visual monitoring; numeric effluent monitoring, water quality-based monitoring);
   xii. Locations and sources of run-on to the facility from adjacent property that contains significant quantities of pollutants.

d. Facility Inventory and Assessment of Pollutant Sources: The facility inventory and assessment shall include the following:

i. Inventory of facility activities and equipment
The inventory shall identify all areas (except interior areas that are not exposed to precipitation) associated with industrial activities that have been, or may potentially be, sources of pollutants, that contribute, or have the potential to contribute, any pollutants to stormwater, including but not limited to the following:

a) Loading and unloading of materials, including solids and liquids.
b) Outdoor storage of materials or products, including solids and liquids, to include areas used for storage or disposal of overburden, materials, soils or wastes; and fertilizer or chemical storage areas.
c) Outdoor manufacturing and processing, to include areas used for milling and processing.
d) On-site dust or particulate generating processes, including dust collection devices and vents.
e) On-site waste treatment, storage, or disposal, including waste ponds and solid waste management units.
f) Vehicle and equipment fueling, maintenance, and/or cleaning (includes washing).
g) Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility.
h) Roofs or other surfaces exposed to air emissions from a manufacturing building or a process area, including vents and stacks from metal processing and similar operations.
i) Roofs and associated surfaces composed of galvanized materials that may be mobilized by stormwater (e.g., roofs, ducts, heating/air conditioning equipment, gutters and downspouts).

ii. Inventory of materials
The inventory shall list materials that contribute, or have the potential to contribute, pollutants to stormwater, including but not limited to the following:

a) The types of materials handled at the facility that may be exposed to precipitation or runoff and could result in stormwater pollution.
b) The types of materials handled at the facility that may leak or spill, and be exposed to precipitation or runoff and result in stormwater pollution.
c) A narrative description of any potential sources of pollutants from past activities, materials and spills that could contribute pollutants to stormwater discharges, and the corresponding outfall(s) that would be affected by such spills and leaks. The description shall include the method and location of any on-site storage or disposal; and documentation of all significant spills and leaks of oil or toxic or hazardous pollutants that occurred at exposed areas, or that drained to a stormwater conveyance, in the 3 years prior to the SWMP preparation date.

iii. Assessment of potential pollutant sources
The assessment of potential pollutant sources shall provide a short narrative or tabulation describing the potential of a pollutant to be present in stormwater discharges for each facility activity, equipment and material identified above. The permittee shall update this narrative when data become available to verify the presence or absence of these pollutants.

e. Description of Control Measures

i. The permittee shall document the location and type of each non-structural and structural control measure implemented at the facility to meet the effluent limitations contained in this permit. Documentation must include those control measures implemented for stormwater run-on that commingles with any discharges covered under this permit.

ii. Installation and implementation specifications for each control measure used by the permittee to meet the effluent limitations contained in this permit must be retained with the SWMP.

f. Additional Control Measure Requirements: The permittee shall document the schedules, procedures, and evaluation results for the following subset of practice-based effluent limitations (see EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS section).

i. Good Housekeeping – A schedule for regular pickup and disposal of waste materials, along with routine inspections for leaks and conditions of drums, tanks and containers.

ii. Maintenance – Preventative maintenance schedules for industrial equipment and systems; control measures; and any back-up practices in place should a runoff event occur while a control measure is off-line.

iii. Spill Prevention and Response Procedures – Procedures for preventing, responding to, and reporting spills and leaks. The permittee may reference other plans (e.g., a Spill Prevention Control and Countermeasure (SPCC) plan) otherwise required by a permit for the facility, provided that a copy of the other plan is kept onsite with the SWMP, and made available for review consistent with SWMP Requirements.

iv. Employee Training – A schedule for all types of training required by this permit, content of the training, and log of the dates on which specific employees received training.

v. Non-Stormwater Discharges – Documentation of the stormwater conveyance system evaluation for the presence of non-stormwater discharges not authorized in this permit, and the elimination of all unauthorized discharges. Documentation of the evaluation must include:

a) The date of any evaluation;
b) A description of the evaluation criteria used;
c) A list of the outfalls or onsite drainage points that were directly observed during the evaluation;
d) The different types of non-stormwater discharge(s) and source locations; and
e) The action(s) taken, such as a list of control measures used to eliminate unauthorized discharge(s), if any were identified.

g. Inspection Procedures and Documentation: The permittee shall document inspection procedures, and maintain such procedures and other documentation with the SWMP, as follows:

i. The permittee shall document procedures for performing the facility inspections required of the permit (see FACILITY INSPECTIONS). Procedures must identify:

a) Person(s) or positions of person(s) responsible for inspection;
b) Schedules for conducting inspections; and
c) Specific items to be covered by the inspection, including inspection schedules for specific outfalls.

ii. The permittee shall maintain inspection documentation with the SWMP as required by this permit.

h. Monitoring Procedures and Documentation: The permittee shall document monitoring procedures, and maintain such procedures and other documentation with the SWMP, as follows:

i. The permittee shall document procedures for performing the monitoring required by the permit, to include visual assessment monitoring.

ii. For each type of monitoring, procedures must identify:

a) Locations where samples are collected, and outfall identification by its unique identifying number;
b) Staff responsible for conducting stormwater sampling;
c) Procedures for sample collection and handling, including any deviations from sampling within the first 30 minutes of a measurable storm event, as applicable to the discharge.
d) Parameters for analysis, holding times and preservatives, analytical methods, and laboratory quantitation levels;
e) Procedures for sending samples to a laboratory;
f) The numeric control values applicable to discharges from each outfall.

iii. The permittee must maintain Quarterly Visual Assessment documentation with the SWMP.

i. Corrective Action Documentation: The permittee must maintain a copy of all corrective actions documentation for actions taken consistent with of this permit (see CORRECTIVE ACTIONS section) with the facility SWMP.

N. PERMIT SPECIFIC MONITORING AND SAMPLING REQUIREMENTS

1. Representative Sampling

Samples and measurements taken for the respective identified monitoring points as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, before the effluent joins or is diluted by any other wastestream, body of water, or substance. Monitoring points shall not be changed without notification to and approval by the Division.

2. Influent and Effluent Sampling Points

Influent (if required) and effluent sampling points shall be so designed or modified so that: 1) a sample of the influent can be obtained after preliminary treatment and prior to primary or biological treatment and 2) a sample of the effluent can be obtained at a point after the final treatment process and prior to discharge to state waters. The permittee shall provide access to the Division to sample at these points.

3. Analytical and Sampling Methods for Monitoring and Reporting

The permittee shall install, calibrate, use and maintain monitoring methods and equipment, including biological and indicated pollutant monitoring methods. All sampling shall be performed by the permittee according to specified methods in 40 C.F.R. Part 136; methods approved by EPA pursuant to 40 C.F.R. Part 136; or methods approved by the division in the absence of a method specified in or approved pursuant to 40 C.F.R. Part 136.

The permittee may use an equivalent and acceptable alternative to an EPA-approved method without EPA review where the requirements of 40 CFR Part 136.6 are met and documented. The permittee may use an Alternative Test Procedure (ATP). An ATP is defined as a way in which an analyte is identified and quantified that is reviewed and approved by EPA in accordance with 40 CFR Part 136.4 for nationwide use, or a modification to a 40 CFR 136 approved method that is reviewed and approved by EPA in accordance with 40 CFR Part 136.5 for limited use.

a. The permittee must select a test procedure that is “sufficiently sensitive” for all monitoring conducted in accordance with this permit.

b. The PQLs for specific parameters are listed in Table 1 below. Quantification Limits and method requirements for other parameters included in this permit are also listed below.

c. If the permit contains an interim effluent limitation (a limit is report until such time as a numeric effluent limit becomes effective) for a parameter, the final numeric effluent limit shall be considered the AWQC for the purpose of determining whether a test method is sufficiently sensitive.

d. When the analytical method which complies with the above requirements has an ML greater than the permit limit, and the permittee’s analytical result is less than the ML, the permittee shall report "BDL" on the DMR. Such reports will not be considered as violations of the permit limit, as long as the method is sufficiently sensitive. For parameters that have a report only limitation, and the permittee’s analytical result is less than the ML, (where X = the ML) “< X” shall be reported on the DMR.

e. In the calculation of average concentrations (i.e. 7- day, 30-day average, 2-year rolling average) any individual analytical result that is less than the ML shall be considered to be zero for the calculation purposes. When reporting:

   If all individual analytical results are less than the ML, the permittee shall report either “BDL” or “<X” (where X = the ML), following the guidance above.

If one or more individual results is greater than the ML, an average shall be calculated and reported. Note that it does not matter if the final calculated average is greater or less than the ML, it must be reported as a value.

Table 1: Practical quantitation limits – Metals, inorganics, nutrients, radiological parameters, and nonylphenol

Parameter	Reporting Units	PQL	Parameter	Reporting Units	PQL
Aluminum	µg/L[1]	15	Ammonia Nitrogen	mg/L[2] N	0.2
Antimony	µg/L	2	Nitrate+Nitrite Nitrogen	mg/L N	0.1
Arsenic	µg/L	1	Nitrate Nitrogen	mg/L N	0.1
Barium	µg/L	1	Nitrite Nitrogen	mg/L N	0.05
Beryllium	µg/L	2	Total Kjeldahl Nitrogen	mg/L N	0.5
Boron	µg/L	20	Total Nitrogen	mg/L N	0.5
Cadmium	µg/L	0.5	Total Inorganic Nitrogen	mg/L N	0.2
Calcium	µg/L	120	Phosphorus	mg/L P	0.05[3]
Chromium	µg/L	20	BOD/CBOD	mg/L	2
Chromium, Trivalent	µg/L	---	Chloride	mg/L	2
Chromium, Hexavalent	µg/L	20[3, 4]	Total Residual Chlorine, DPD	mg/L	0.5
Copper	µg/L	2	Total Residual Chlorine, Amperiometric	mg/L	0.05
Iron	µg/L	20[3]	Cyanide	µg/L	10[3]
Lead	µg/L	0.5	Fluoride	mg/L	0.5
Magnesium	µg/L	35	Phenols	µg/L	30
Manganese	µg/L	2	Sulfate	mg/L	2
Mercury	µg/L	0.2[3]	Sulfide	mg/L H_2S	0.1
Mercury, Low Level	µg/L	0.002	Total Dissolved Solids (TDS)	mg/L	10
Molybdenum	µg/L	0.5	Total Suspended Solids (TSS)	mg/L	5
Nickel	µg/L	1	Radium-226	pCi/L	1
Selenium	µg/ L	1[3]	Radium-228	pCi/L	1
Silver	µg/ L	0.5	Uranium	µg/ L	1
Sodium	µg/ L	150	Nonylphenol, ASTM D7065	µg/ L	10
Thallium	µg/ L	0.5			
Zinc	µg/ L	10			

[1] µg/L = micrograms per liter
[2] mg/L = milligrams per liter
[3] PQL established based on parameter specific evaluation
[4] For hexavalent chromium, samples must be unacidified so dissolved concentrations will be measured rather than potentially dissolved concentrations.

f. PFAS Analysis - At the time of permit issuance, there is no EPA-approved analytical method for analyzing PFAS in wastewaters (non-potable) that are approved for Clean Water Act monitoring in accordance with 40 CFR Part 136 (Appendix B). The analytical method for the parameters in the table below shall be compliant with the requirements set forth in the Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories (DoD QSM 5.1 or later [Table B-15: Per- and Polyfluoroalkyl Substances (PFAS)

Using Liquid Chromatography Tandem Mass] Spectrometry (LC/MS/MS) With Isotope Dilution or Internal Standard Quantification in Matrices Other Than Drinking Water]).

At a minimum, the laboratory selected shall be able to analyze and quantify the PFAS listed in Table 2 at or below the associated PFAS quantification limits (PFAS QL). If the laboratory selected is capable of achieving a quantification limit for a specific PFAS that is lower than the PFAS QL listed below, analytical results should be reported to the department relative to the lower laboratory quantification limit, and not reported as "less than" the PFAS QL in the table below.

Any 40 CFR Part 136 (Appendix B) approved method for analyzing PFAS in wastewater that becomes available in the future would replace this current analytical method requirement.

Table 2. PFAS Quantification limits – Per- and Poly-fluoroalkyl substances (PFAS)

Parameter	Units[1]	PFAS QL	Parameter	Units[1]	PFAS QL
Perfluorooctanoic Acid [PFOA]	ng/L	2	2-[N-methylperfluorooctanesulfonamido] acetic acid [NMeFOSAA]	ng/L	20
Perfluorobutanoic Acid [PFBA]	ng/L	7	Perfluorobutanesulfonic acid [PFBS]	ng/L	2
Perfluorooctanesulfonamide [PFOSA (or FOSA)]	ng/L	2	Perfluorododecanesulfonic acid [PFDS]	ng/L	2
Perfluoropentanoic acid [PFPeA]	ng/L	3	Perfluoroheptanesulfonic acid [PFHpS]	ng/L	2
Perfluorohexanoic acid [PFHxA]	ng/L	10	Perfluorohexanesulfonic acid [PFHxS]	ng/L	2
Perfluoroheptanoic acid [PFHpA]	ng/L	3	Perfluorooctanesulfonic acid [PFOS]	ng/L	2
Perfluorononanoic acid [PFNA]	ng/L	2	4:2 Fluorotelomer sulfonic acid [4:2 FTS]	ng/L	20
Perfluorodecanoic acid [PFDA]	ng/L	2	6:2 Fluorotelomer sulfonic acid [6:2 FTS]	ng/L	55
Perfluoroundecanoic acid [PFUnA (or PFUdA)]	ng/L	2	8:2 Fluorotelomer sulfonic acid [8:2 FTS]	ng/L	20
Perfluorododecanoic acid [PFDoA]	ng/L	2	Perfluoropentane sulfonic acid [PFPeS]	ng/L	2
Perfluorotridecanoic acid [PFTrDA (or RFTriA)]	ng/L	2	Perfluorononane sulfonic acid [PFNS]	ng/L	2
Perfluorotetradecanoic acid [PFTeDA (or PFTA or PFTeA)]	ng/L	2	Hexafluoropropylene oxide dimer acid [Gen-X (or HFPO-DA or HPFA-DA]	ng/L	6
2-[N-ethylperfluorooctanesulfonamido] acetic acid [NEtFOSAA]	ng/L	20			

[1] ng/L = nanograms per liter

4. Flow Measuring Device

If not already a part of the permitted facility, within ninety (90) days after the effective date of the permit, a flow measuring device shall be installed to give representative values of effluent quantities at the respective discharge points. Unless specifically exempted, or modified in the EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS section, a flow measuring device will be applicable at all designated discharge points.

At the request of the Division, the permittee shall show proof of the accuracy of any flow-measuring device used in obtaining data submitted in the monitoring report. The flow-measuring device must indicate values within ten (10) percent of the actual flow being measured.

5. Adverse Weather Conditions

When adverse weather conditions prevent sample collection according to the relevant monitoring schedule, the permittee must take a substitute sample, as possible, during the remaining monitoring period; for stormwater, the permittee must take a substitute sample during the next qualifying storm event. Adverse conditions are those that are dangerous or create inaccessibility for personnel, such as local flooding, high winds, winter weather, or electrical storms.

Adverse weather does not exempt the permittee from having to file timely DMRs. The permittee must report any failure to monitor, including the basis for not sampling during the usual reporting period. Evidence to support this

basis may include the dates that monitoring attempts were made; photographs; field notes and official weather data from a scientifically recognized organization, such as NOAA or the NWS, that establish site inaccessibility, etc.

6. Stormwater sampling provisions (Outfalls 021A, 022A, 024A, 025A, 027A and 028A)

a. Measurable Storm Events

i. Rain event. The permittee must conduct all required monitoring on a storm event that results in an actual discharge from the facility ("measurable storm event"), and that follows the preceding measurable storm event by at least 72 hours (3 days), except as provided in b., below.

ii. Snowmelt event. The permittee must conduct snowmelt monitoring at a time when a measurable discharge occurs from the facility, except as provided in b., below.

b. Detained stormwater

In the event stormwater is detained at the facility, such as in a detention pond/area, the permittee must conduct all required monitoring on discharges from such detention areas, whether the discharge results from a rain or snowmelt event or from the manual release of accumulated stormwater from the detention area. This requirement only pertains to those discharges from detention areas that result in an actual discharge from the facility, or a discharge to surface water within the facility.

c. Storm Event Information (Outfalls 021A, 022A)

i. Rain event. The permittee must document the information below for each monitored event. Such documentation is not required for events that do not meet the measureable storm event criteria above, or that are not monitored to meet the requirements of this permit.

a) The date, time of the start of the discharge, time of sampling, duration (in hours) of the rainfall event, and magnitude (in inches) of the storm event sampled;
b) The duration between the storm event sampled and the end of the most recent storm event that produced a discharge.

ii. Snowmelt monitoring. The permittee must document the date of the sampling event for each monitored snowmelt event.

d. Sample Type and Requirements

i. Grab samples shall be used for all monitoring and shall not be combined.

ii. Permittees must take a minimum of one grab sample from a discharge resulting from a measurable storm event.

iii. Grab samples must be collected within the first 30 minutes of a measurable storm event (see Measureable Storm Events above). If it is not possible to collect the sample within the first 30 minutes of a measurable storm event, the sample must be collected as soon as practicable after the first 30 minutes, and documentation must be kept with the SWMP explaining why it was not possible to take samples within the first 30 minutes.

iv. In the case of snowmelt, samples must be taken during a period with a measurable discharge.

v. All discharge samples at a facility must be taken during the same storm event, if feasible.

O. PERMIT SPECIFIC REPORTING AND RECORDKEEPING

1. Routine Reporting of Data- Discharge Monitoring Report

The permittee shall report the data gathered in compliance with this permit on a **monthly** basis. Reporting of all data gathered shall comply with the requirements of this part and Part II of this permit.

Monitoring results shall be summarized for each calendar month via the division's NetDMR service unless a waiver is granted in compliance with 40 CFR 127. If a waiver is granted, monitoring results shall be reported on division approved discharge monitoring report (DMR) forms (EPA form 3320-1).

Reporting No Discharge:
If no discharge occurs during the reporting period, a DMR must still be submitted. However, "No Discharge" shall be reported on the DMR.

When submitting monitoring results via NetDMR, the Copy of Record shall reflect that the DMR was signed and submitted no later than the 28th day of the month following the reporting period. If submitting DMRs by mail, which is only allowed if a waiver has been granted, one copy of the DMR form shall be mailed to the division at the address provided below, so that the DMR is received no later than the 28th day of the month following the reporting period.

If mailing, the original signed copy of each DMR shall be submitted to the division at the following address:

Colorado Department of Public Health and Environment
Water Quality Control Division
WQCD-P-B2
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

The Discharge Monitoring Report paper and electronic forms shall be filled out accurately and completely in accordance with the requirements of this permit and the instructions on the forms; and signed by an authorized person as identified in Part II.K.

2. Additional Stormwater- specific requirements (Outfalls 021A, 022A, 024A, 025A, 027A and 028A)

a. Annual Report:

ICIS Code	Description	Due date	Frequency
00308	The permittee shall submit an annual report to the division for the reporting period January 1 through December 31	March 1	Annual

i. The Annual Report shall include:

- Name of permittee, address, phone number
- Permit number
- Facility name and physical address
- Contact person name, title, and phone number
- Summary of inspection dates
- Summary of visual monitoring
- Corrective action documentation as required in the CORRECTIVE ACTON section and status of any outstanding corrective action(s).

ii. The signed copy of each annual report shall be submitted to the Division at the address below, and a copy maintained with the SWMP.

Attn: Annual Report
Colorado Department of Public Health and Environment
Water Quality Control Division
WQCD-P-B2
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

b. SWMP Records: The permittee shall retain copies of the facility SWMP, including any modifications made during the term of this permit, documentation related to corrective actions taken, all reports and

certifications required by this permit, monitoring data, and records of all data used to complete the application to be covered by this permit, for a period of at least 3 years from the date that coverage under this permit expires or is terminated.

3. **Public Notifications of Spills and Violations**

Within twenty four (24) hours of any event requiring notification to the division under Part II.L(7) of this permit or by section 25-8-601(2), C.R.S. of the Water Quality Control Act, the permittee will provide notice to the community of the event through the permittee's Refinery Notifications program, which updates subscribers via text message, phone call or email in English or Spanish, or, should that program be discontinued, a similar program to notify the public via text. Within forty eight (48) hours of this event, the permittee must send the division a copy of the notice and when it was delivered.

P. OTHER TERMS AND CONDITIONS

All dischargers must comply with the lawful requirements of counties, drainage districts and other state or local agencies regarding any discharges of stormwater to storm drain systems or other water courses under their jurisdiction.

PART II

Part II contains standard conditions required by federal regulation to be included in all NPDES permits (see 40 C.F.R. 122.41). Part I contains permit specific requirements. To the extent that Part I conflicts with the standard terms and conditions of Part II, the requirements of Part I shall control.

A. DUTY TO COMPLY

1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Colorado Water Quality Control Act and is grounds for: 1) enforcement action; 2) permit termination, revocation and reissuance, or modification; or 3) denial of a permit renewal application.
2. Federal Enforcement:
    a. The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal (see 40 CFR 122.2) established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
    b. The Clean Water Act provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed $25,000 per day for each violation. The Clean Water Act provides that any person who *negligently* violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than 2 years, or both. Any person who *knowingly* violates such sections, or such conditions or limitations is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than 6 years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions.
    c. Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed $10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $25,000. Penalties for Class II violations are not to exceed $10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $125,000.

B. DUTY TO REAPPLY

If the permittee plans to continue an activity regulated by this permit after the expiration date of this permit, the permittee must submit a permit application at least 180 days before this permit expires as required by Regulations 61.4 and 61.10.

C. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. DUTY TO MITIGATE
The permittee must take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

E. PROPER OPERATION AND MAINTENANCE
The permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this permit. See 40 C.F.R. §122.41(e).

F. PERMIT ACTIONS
This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. Any request for modification, revocation, reissuance, or termination under this permit must comply with all terms and conditions of Regulation 61.8(8). See also 40 C.F.R. § 122.41(f).

G. PROPERTY RIGHTS

In accordance with 40 CFR §122.41(g) and Regulation 61.8(9):

1. The issuance of a permit does not convey any property or water rights in either real or personal property, or stream flows or any exclusive privilege.
2. The issuance of a permit does not authorize any injury to person or property or any invasion of personal rights, nor does it authorize the infringement of federal, state, or local laws or regulations.
3. Except for any toxic effluent standard or prohibition imposed under Section 307 of the Clean Water Act or any standard for sewage sludge use or disposal under Section 405(d) of the Federal act, compliance with a permit during its term constitutes compliance, for purposes of enforcement, with Sections 301, 302, 306, 318, 403, and 405(a) and (b) of the Clean Water Act. However, a permit may be modified, revoked and reissued, or terminated during its term for cause as set forth in Section 61.8(8) of the Colorado Discharge Permit System Regulations. See 61.8(9)(c).

H. DUTY TO PROVIDE INFORMATION
The permittee shall furnish to the Division, within a reasonable time, any information which the Division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Division, upon request, copies of records required to be kept by this permit in accordance with 40 C.F.R. §122.41(h) and/or Regulation 61.8(3)(q).

I. INSPECTION AND ENTRY
The permittee shall allow the Division and the authorized representative, including U.S. EPA, and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials as required by law, to conduct inspections in accordance with 40 C.F.R. §122.41(i), Regulation 61.8(3), and Regulation 61.8(4):

1. To enter upon the permittee's premises where a regulated facility or activity is located or conducted in which any records are required to be kept under the terms and conditions of this permit;
2. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit and to inspect any facilities, equipment (including monitoring and control equipment), practices, operations or monitoring method regulated or required in the permit;
3. To enter upon the permittee's premises in a reasonable manner and at a reasonable time to inspect or investigate, any actual, suspected, or potential source of water pollution, or to ascertain compliance or noncompliance with the Colorado Water Quality Control Act or any other applicable state or federal statute or regulation or any order promulgated by the Division, and;

4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

J. MONITORING AND RECORDS

1. Samples and measurements taken for the purpose of monitoring must be representative of the volume and nature of the monitored activity. See 40 C.F.R. § 122.41(j)(1).
2. Monitoring must be conducted according to test procedures approved under 40 C.F.R. part 136 for the analyses of pollutants unless another method is required under 40 C.F.R. subchapters N or O. In the case of pollutants for which there are no approved methods under 40 C.F.R. part 136 or otherwise required under 40 C.F.R. subchapters N or O, monitoring must be conducted according to a test procedure specified in this permit for such pollutants. See 40 C.F.R. § 122.41(j)(4); 122.44(i)(1)(iv)(A).
3. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the permittee or when requested by the Division or Regional Administrator.
4. Records of monitoring information must include:
    a. The date, exact place, and time of sampling or measurements;
    b. The individual(s) who performed the sampling or measurements;
    c. The date(s) analyses were performed
    d. The individual(s) who performed the analyses;
    e. The analytical techniques or methods used; and
    f. The results of such analyses.
5. The permittee shall install, calibrate, use and maintain monitoring methods and equipment, including biological and indicated pollutant monitoring methods. See Regulation 61.8(4)(b)(iii). All sampling shall be performed by the permittee according to sufficiently sensitive test procedures required by 40 C.F.R. 122.44(i)(1)(iv) or methods approved by the Division, in the absence of a method specified in or approved pursuant to 40 C.F.R. Part 136.
6. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

K. SIGNATORY REQUIREMENTS

1. Authorization to Sign: All documents required to be submitted to the Division by the permit must be signed in accordance with 40 CFR §122.22, Regulation 61.4, and the following criteria:
    a. For a corporation: By a responsible corporate officer. For the purpose of this subsection, a responsible corporate officer means: (i) a president, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate

information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

b. For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or

c. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this subsection, a principal executive officer of a federal agency includes (i) the chief or principal executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency. (e.g., Regional Administrator of EPA). For purposes of this section, a principal executive officer has responsibility for the overall operation of the facility from which the discharge originates.

d. By a duly authorized representative in accordance with 40 C.F.R. 122.22(b), only if:

   i. the authorization is made in writing by a person described in Part II.K.1.a, b, or c above;

   ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and,

   iii. The written authorization is submitted to the Division.

2. Any person(s) signing documents required for submittal to the Division must make the following certification:

   "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

3. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both. See 40 C.F.R. §122.41(k)(2).

L. REPORTING REQUIREMENTS

1. Planned Changes: The permittee shall give advance notice to the Division, in writing, of any planned physical alterations or additions to the permitted facility in accordance with 40 CFR §122.41(l) and Regulation 61.8(5)(a) and Part II.O. of this permit. Notice is required only when:

   a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR §122.29(b); or

   b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR §122.41(a)(1).

   c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. See 40 C.F.R. §122.41(l)(1)(iii).

2. Anticipated Non-Compliance: The permittee shall give advance notice to the Division, in writing, of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements. The timing of notification requirements differs based on the type of non-compliance as described below.

3. Transfer of Ownership or Control: The permittee shall notify the Division, in writing, thirty (30) calendar days in advance of a proposed transfer of the permit. This permit is not transferable to any person except after notice to the Division. The Division may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act. See Regulation 61.8(6); 40 C.F.R. §§ 122.41(l)(iii) and 122.61.
4. Monitoring reports: Monitoring results must be reported at the intervals specified in this permit.
    a. If the permittee monitors any pollutant at the approved monitoring locations listed in Part I more frequently than that required by this permit using test procedures approved under 40 CFR Part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Division. See 40 CFR 122.41(l)(4).
    b. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Division in the permit.
5. Submission of Discharge Monitoring Reports (DMRs): DMRs shall be submitted electronically through NetDMR system unless the permittee requests and is granted a waiver of the electronic reporting requirement by the Division pursuant to Regulation 61.8(4)(d).
6. Compliance Schedules: Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule in the permit, shall be submitted on or before the date listed in the compliance schedule section. The fourteen (14) calendar day provision in Regulation 61.8(4)(n)(i) has been incorporated into the due date.
7. Twenty-four hour reporting:
    a. In addition to the reports required elsewhere in this permit, the permittee shall report the following circumstances orally within twenty-four (24) hours from the time the permittee becomes aware of the circumstances, and shall mail to the Division a written report containing the information requested within five (5) working days after becoming aware of the following circumstances:
        i. Circumstances leading to any noncompliance which may endanger health or the environment regardless of the cause of the incident;
        ii. Circumstances leading to any unanticipated bypass which exceeds any effluent limitations in the permit;
        iii. Circumstances leading to any upset which causes an exceedance of any effluent limitation in the permit; or
        iv. Daily maximum violations for any of the pollutants limited by Part I.A of this permit as specified in Part III of this permit. This includes any toxic pollutant or hazardous substance or any pollutant specifically identified as the method to control any toxic pollutant or hazardous substance.
    b. The report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
    c. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (combined sewer overflows, sanitary sewer overflows, or bypass events), type of sewer overflow structure (e.g., manhole, combine sewer overflow outfall), discharge volumes untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the sewer overflow event, and whether the noncompliance was related to wet weather. See 40 CFR 122.41(l)(6)(i).
        i. As of December 21, 2020 all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events submitted in compliance with this section must be submitted electronically by the permittee to the Division.
8. Other non-compliance: A permittee must report all instances of noncompliance at the time monitoring reports are due. These reports may be submitted annually in accordance with Regulation 61.8(4)(p) and/or 61.8(5)(f), but may be submitted at a more frequent interval.

M. BYPASS

1. Definitions:
    a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility in accordance with 40 CFR §122.41(m)(1)(i) and/or Regulation 61.2(12).
    b. Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. See 40 CFR §122.41(m)(1)(ii).
2. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of 40 CFR 122.41(m)(3) and (m)(4). See 40 CFR §122.41(m)(2).
3. Notice of bypass:
    a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, the permittee shall submit prior notice, if possible, at least ten (10) days before the date of the bypass. See 40 CFR §122.41(m)(3)(i) and/or Regulation 61.9(5)(c).
    b. Unanticipated bypass. You must submit notice of an unanticipated bypass as required in Part II.L.7. See also 40 CFR §122.41(m)(3)(ii).
4. Prohibition of Bypass: Bypasses are prohibited and the Division may take enforcement action against the permittee for bypass, unless:
    a. the bypass is unavoidable to prevent loss of life, personal injury, or severe property damage;
    b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
    c. Proper notices were submitted to the Division.
        i. The Division may approve an anticipated bypass, after considering its adverse effects, if the Division determines that it will meet the three conditions listed.

N. UPSET

1. Definition: "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.
   See 40 CFR §122.41(n) and Regulation 61.2(113),
2. Effect of an upset: An upset constitutes an affirmative defense to an action brought for noncompliance with permit effluent limitations if the requirements of section 3 are met. A determination made during administrative review of claims that noncompliance was caused by upset is final administrative action subject to judicial review in accordance with Regulation 61.8(3)(j).

   ***special note:** this provision is consistent with the definition of "Upset" as codified in Regulation 61.2(113). However, the Colorado regulatory definition of upset is less stringent than the federal code of regulations, which restricts the use of an upset defense to noncompliance with technology-based permit effluent limitations only.*

3. Conditions necessary for demonstration of an Upset: A permittee who wishes to establish the affirmative defense of upset shall demonstrate through properly signed contemporaneous operating logs, or other relevant evidence that:
    a. an upset occurred and the permittee can identify the cause(s) of the upset;

b. the permitted facility was at the time being properly maintained; and
c. the permittee submitted notice of the upset as required in Part II.L.7 (24-hour notice); and
d. The permittee complied with any remedial measure necessary to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. See also 40 C.F.R. 122.41(n)(3)(i)-(iv).

***special note:** this provision is consistent with the definition of "Conditions necessary for demonstration of upset" as codified in Regulation 61.8(3)(j)(ii). However, the Colorado regulatory definition of upset is less stringent than the federal code of regulations, which restricts the use of an upset defense to demonstrate that a facility was properly operated and maintained. Colorado's regulatory definition of "Conditions necessary for demonstration of upset" is less stringent than the requirements of the federal Clean Water Act.*

4. In addition to the demonstration required above, a permittee who wishes to establish the affirmative defense of upset for a violation of effluent limitations based upon water quality standards shall also demonstrate through monitoring, modeling or other methods that the relevant standards were achieved in the receiving water.
5. Burden of Proof: In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

O. REOPENER CLAUSE

Procedures for modification or revocation. Permit modification or revocation of this permit or coverage under this permit will be conducted according to Regulation 61.8(8). This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations (and compliance schedule, if necessary), or other appropriate requirements if one of the following events occurs, including but not limited to:

1. Water Quality Standards: The water quality standards of the receiving water(s) to which the permittee discharges are modified in such a manner as to require different effluent limits than contained in this permit.
2. Wasteload Allocation: A wasteload allocation is developed and approved by the State of Colorado and/or EPA for incorporation in this permit.
3. Discharger-specific variance: A variance is adopted by the Water Quality Control Commission.

P. OTHER INFORMATION

When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Division or U.S. EPA, the Discharger shall promptly submit such facts or information. See 40 C.F.R. § 122.41(l)(8).

Q. SEVERABILITY

The provisions of this permit are severable. If any provisions or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances and the application of the remainder of this permit shall not be affected.

R. NOTIFICATION REQUIREMENTS

1. Notification to Parties: All notification requirements shall be directed as follows:
   a. Oral Notifications, during normal business hours shall be to:

      CDPHE-Emergency Reporting Line: 1-877-518-5608; or

      Water Quality Protection Section – Compliance Program
      Water Quality Control Division
      Telephone: (303) 692-3500

      After hours notifications should be made to the CDPHE-Emergency Reporting Line: 1-877-518-5608.

   b. Written notification shall be to:

Water Quality Protection Section – Compliance Program
Water Quality Control Division
Colorado Department of Public Health and Environment
WQCD-WQP-B2
4300 Cherry Creek Drive South
Denver, CO 80246-1530

S. RESPONSIBILITIES
Reduction, Loss, or Failure of Treatment Facility: The permittee has the duty to halt or reduce any activity if necessary to maintain compliance with the effluent limitations of the permit. It shall not be a defense for a permittee in an enforcement action that it would be necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

T. OIL AND HAZARDOUS SUBSTANCES LIABILITY
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under Section 311 (Oil and Hazardous Substance Liability) of the Clean Water Act.

U. EMERGENCY POWERS
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority granted by Section 510 of the Clean Water Act. Nothing in this permit shall be construed to prevent or limit application of any emergency power of the Division.

V. CONFIDENTIALITY
Any information relating to any secret process, method of manufacture or production, or sales or marketing data which has been declared confidential by the permittee, and which may be acquired, ascertained, or discovered, whether in any sampling investigation, emergency investigation, Colorado Open Records Act (CORA) request, or otherwise, shall not be publicly disclosed by any member, officer, or employee of the Water Quality Control Commission or the Division, but shall be kept confidential. Any person seeking to invoke the protection of this section shall bear the burden of proving its applicability. This section shall never be interpreted as preventing full disclosure of effluent data.

W. FEES
The permittee is required to submit payment of an annual fee as set forth in the 2016 amendments to the Water Quality Control Act. Section 25-8-502 (1.1)(b), and the Regulation 61.15 as amended. Failure to submit the required fee when due and payable is a violation of the permit and will result in enforcement action pursuant to Section 25-8-601 et. seq., C.R.S.1973 as amended.

X. DURATION OF PERMIT
The duration of a permit shall be for a fixed term and shall not exceed five (5) years. If the permittee desires to continue to discharge, a permit renewal application shall be submitted at least one hundred eighty (180) calendar days before this permit expires. Filing of a timely and complete application shall cause the expired permit to continue in force to the effective date of the new permit. The permit's duration may be extended only through administrative extensions and not through interim modifications. If the permittee anticipates there will be no discharge after the expiration date of this permit, the Division should be promptly notified so that it can terminate the permit in accordance with Regulation 61.

Y. SECTION 307 TOXICS
If a toxic effluent standard or prohibition, including any applicable schedule of compliance specified, is established by regulation pursuant to Section 307 of the Clean Water Act for a toxic pollutant which is present in the permittee's discharge and such standard or prohibition is more stringent than any limitation upon such pollutant in the discharge permit, the Division shall institute proceedings to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition.
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PART III

APPENDIX A-Categorical Industries and Pollutants

Table I—Testing Requirements for Organic Toxic Pollutants by Industrial Category for Existing Dischargers

Industry Category	
Adhesives and sealants	Ore mining
Aluminum forming	Organic chemicals manufacturing
Auto and other laundries	Paint and ink formulation
Battery manufacturing	Pesticides
Coal mining	Petroleum refining
Coil coating	Pharmaceutical preparations
Copper forming	Photographic equipment and supplies
Electrical and electronic components	Plastics processing
Electroplating	Plastic and synthetic materials manufacturing
Explosives manufacturing	Porcelain enameling
Foundries	Printing and publishing
Gum and wood chemicals	Pulp and paper mills
Inorganic chemicals manufacturing	Rubber processing
Iron and steel manufacturing	Soap and detergent manufacturing
Leather tanning and finishing	Steam electric power plants
Mechanical products manufacturing	Textile mills
Nonferrous metals manufacturing	Timber products processing

Table II—Organic Toxic Pollutants in Each of Four Fractions in Analysis by Gas Chromatography/Mass

Volatiles	Acid Compounds	Base/Neutral	Pesticides
1V acrolein	1A 2-chlorophenol	1B acenaphthene	1P aldrin
2V acrylonitrile	2A 2,4-dichlorophenol	2B acenaphthylene	2P alpha-BHC
3V benzene	3A 2,4-dimethylphenol	3B anthracene	3P beta-BHC
5V bromoform	4A 4,6-dinitro-o-cresol	4B benzidine	4P gamma-BHC
6V carbon tetrachloride	5A 2,4-dinitrophenol	5B benzo(a)anthracene	5P delta-BHC
7V chlorobenzene	6A 2-nitrophenol	6B benzo(a)pyrene	6P chlordane
8V chlorodibromomethane	7A 4-nitrophenol	7B 3,4-benzofluoranthene	7P 4,4′-DDT
9V chloroethane	8A p-chloro-m-cresol	8B benzo(ghi)perylene	8P 4,4′-DDE
10V 2-chloroethylvinyl ether	9A pentachlorophenol	9B benzo(k)fluoranthene	9P 4,4′-DDD
11V chloroform	10A phenol	10B bis(2-chloroethoxy)methane	10P dieldrin
12V dichlorobromomethane	11A 2,4,6-trichlorophenol	11B bis(2-chloroethyl)ether	11P alpha-endosulfan
14V 1,1-dichloroethane		12B bis(2-chloroisopropyl)ether	12P beta-endosulfan
15V 1,2-dichloroethane		13B bis (2-ethylhexyl)phthalate	13P endosulfan sulfate
16V 1,1-dichloroethylene		14B 4-bromophenyl phenyl ether	14P endrin
17V 1,2-dichloropropane		15B butylbenzyl phthalate	15P endrin aldehyde
18V 1,3-dichloropropylene		16B 2-chloronaphthalene	16P heptachlor
19V ethylbenzene		17B 4-chlorophenyl phenyl ether	17P heptachlor epoxide
20V methyl bromide		18B chrysene	18P PCB-1242
21V methyl chloride		19B dibenzo(a,h)anthracene	19P PCB-1254
22V methylene chloride		20B 1,2-dichlorobenzene	20P PCB-1221
23V 1,1,2,2-tetrachloroethane		21B 1,3-dichlorobenzene	21P PCB-1232
24V tetrachloroethylene		22B 1,4-dichlorobenzene	22P PCB-1248
25V toluene		23B 3,3′-dichlorobenzidine	23P PCB-1260
26V 1,2-trans-dichloroethylene		24B diethyl phthalate	24P PCB-1016
27V 1,1,1-trichloroethane		25B dimethyl phthalate	25P toxaphene
28V 1,1,2-trichloroethane		26B di-n-butyl phthalate	
29V trichloroethylene		27B 2,4-dinitrotoluene	
31V vinyl chloride		28B 2,6-dinitrotoluene	
		29B di-n-octyl phthalate	
		30B 1,2-diphenylhydrazine (as azobenzene)	
		31B fluroranthene	
		32B fluorene	
		33B hexachlorobenzene	
		34B hexachlorobutadiene	
		35B hexachlorocyclopentadiene	
		36B hexachloroethane	
		37B indeno(1,2,3-cd)pyrene	
		38B isophorone	
		39B napthalene	
		40B nitrobenzene	
		41B N-nitrosodimethylamine	
		42B N-nitrosodi-n-propylamine	
		43B N-nitrosodiphenylamine	
		44B phenanthrene	
		45B pyrene	
		46B 1,2,4-trichlorobenzene	

Table III—Other Toxic Pollutants (Metals and Cyanide) and Total Phenols

Antimony, Total
Arsenic, Total
Beryllium, Total
Cadmium, Total
Chromium, Total
Copper, Total
Lead, Total
Mercury, Total
Nickel, Total
Selenium, Total
Silver, Total
Thallium, Total
Zinc, Total
Cyanide, Total
Phenols, Total

Table IV—Conventional and Nonconventional Pollutants Required To Be Tested by Existing Dischargers if Expected to be Present

Bromide
Chlorine, Total Residual
Color
Fecal Coliform
Fluoride
Nitrate-Nitrite
Nitrogen, Total Organic
Oil and Grease
Phosphorus, Total
Radioactivity
Sulfate
Sulfide
Sulfite
Surfactants
Aluminum, Total
Barium, Total
Boron, Total
Cobalt, Total
Iron, Total
Magnesium, Total
Molybdenum, Total
Manganese, Total
Tin, Total
Titanium, Total

Table V—Toxic Pollutants and Hazardous Substances Required To Be Identified by Existing Dischargers if Expected To Be Present

Toxic Pollutants

Asbestos

Hazardous Substances

Allyl alcohol
Allyl chloride
Amyl acetate
Aniline
Benzonitrile
Benzyl chloride
Butyl acetate
Butylamine
Captan
Carbaryl
Carbofuran
Carbon disulfide
Chlorpyrifos
Coumaphos
Cresol
Crotonaldehyde
Cyclohexane
2,4-D (2,4-Dichlorophenoxy acetic acid)
Diazinon
Dicamba
Dichlobenil
Dichlone
2,2-Dichloropropionic acid
Dichlorvos
Diethyl amine
Dimethyl amine
Dintrobenzene
Diquat
Disulfoton
Diuron
Epichlorohydrin
Ethion
Ethylene diamine
Ethylene dibromide
Formaldehyde
Furfural
Guthion
Isoprene
Isopropanolamine Dodecylbenzenesulfonate
Kelthane
Kepone
Malathion
Mercaptodimethur
Methoxychlor
Methyl mercaptan
Methyl methacrylate
Methyl parathion
Mevinphos
Mexacarbate
Monoethyl amine
Monomethyl amine
Naled
Napthenic acid
Nitrotoluene
Parathion
Phenolsulfanate
Phosgene
Propargite
Propylene oxide
Pyrethrins
Quinoline
Resorcinol
Strontium
Strychnine
Styrene
2,4,5-T (2,4,5-Trichlorophenoxy acetic acid)
TDE (Tetrachlorodiphenylethane)
2,4,5-TP [2-(2,4,5-Trichlorophenoxy) propanoic acid]
Trichlorofan
Triethanolamine dodecylbenzenesulfonate
Triethylamine
Trimethylamine
Uranium
Vanadium
Vinyl acetate
Xylene
Xylenol
Zirconium

APPENDIX B-Definitions

1. "Acute Toxicity" - The acute toxicity limitation is exceeded if the LC50 is at any effluent concentration less than or equal to the IWC indicated in this permit.

2. “Antidegradation limits” – See “Two (2) - Year Rolling Average”.

3. “Applicable water quality criterion (AWQC)” is the quantitation target level or goal. The AWQC may be one of the following:

   Where an effluent limit has been established,
   i. The AWQC is the effluent limit.

   Where an effluent limit has not been established, the AWQC may be
   i. An applicable technology based effluent limit (TBEL);
   ii. Half of a water quality standard;
   iii. Half of a water quality standard as assessed in the receiving water, or potential WQBEL; or
   iv. Half of a potential antidegradation based effluent limitation, which can be an antidegradation based average concentration or a potential non-impact limit.

4. "Best Management Practices (BMPs)" – schedules of activities, practices (and prohibitions of practices), structures, vegetation, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to state waters. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. See 5 CCR 1002-61.2(9).

5. "Chronic toxicity", which includes lethality and growth or reproduction, occurs when the NOEC and IC25 are at an effluent concentration less than the IWC indicated in this permit.

6. "Composite" sample is a minimum of four (4) grab samples collected at equally spaced two (2) hour intervals and proportioned according to flow. For a SBR type treatment system, a composite sample is defined as sampling equal aliquots during the beginning, middle and end of a decant period, for two consecutive periods during a day (if possible).

7. "Continuous" measurement, is a measurement obtained from an automatic recording device which continually measures the effluent for the parameter in question, or that provides measurements at specified intervals.

8. "Control Measure" refers to any BMP or other method (including effluent limitations) used to prevent or reduce the discharge of pollutants to waters of the state.

9. "Daily Maximum limitation" for all parameters (except temperature, pH, dissolved oxygen, and WET) means the limitation for this parameter shall be applied as an average of all samples collected in one calendar day. For these parameters the DMR shall include the highest of the daily averages. For pH and dissolved oxygen, this means an instantaneous maximum (and/or instantaneous minimum) value. For WET, this means an instantaneous minimum value. The instantaneous value is defined as the analytical result of any individual sample. For pH and dissolved oxygen, DMRs shall include the maximum (and/or minimum) of all instantaneous values within the calendar month. For WET, DMRs shall include the minimum of all instantaneous values within the reporting period. For pH and dissolved oxygen, the value beyond the noted daily maximum limitation for the indicated parameter shall be considered a violation of this permit. For temperature, see Daily Maximum Temperature. For WET violation and failure descriptions, see Part I.D.

10. “Daily Maximum Temperature (DM)” is defined in the Basic Standards and Methodologies for Surface Water 1002-31, as the highest two-hour average water temperature recorded during a given 24-hour period. This will be determined using a rolling 2-hour maximum temperature. If data is collected every 15 minutes, a 2 hour maximum can be determined on every data point after the initial 2 hours of collection. Note that the time periods that overlap days (Wednesday night to Thursday morning) do not matter as the reported value on the DMR is the greatest of all the 2-hour averages.

This would continue throughout the course of a calendar day. The highest of these 2 hour averages over a month would be reported on the DMR as the daily maximum temperature. At the end/beginning of a month, the collected data should be used for the month that contains the greatest number of minutes in the 2-hour maximum.

11. "Discharge" - when used without qualification, means the "discharge of a pollutant." See 5 CCR 1002-61.2(22).

12. "Discharge of a pollutant" - the introduction or addition of a pollutant into state waters. See 25-8-103(3) C.R.S.

13. "Dissolved (D) metals fraction" is defined in the Basic Standards and Methodologies for Surface Water 1002-31, as that portion of a water and suspended sediment sample which passed through a 0.40 or 0.45 UM (micron) membrane filter. Determinations of "dissolved" constituents are made using the filtrate. This may include some very small (colloidal) suspended particles which passed through the membrane filter as well as the amount of substance present in true chemical solution.

14. "Geometric mean" for *E. coli* bacteria concentrations, the thirty (30) day and seven (7) day averages shall be determined as the geometric mean of all samples collected in a thirty (30) day period and the geometric mean of all samples taken in a seven (7) consecutive day period respectively. The geometric mean may be calculated using two different methods. For the methods shown, a, b, c, d, etc. are individual sample results, and n is the total number of samples.

    Method 1:

    Geometric Mean = $(a*b*c*d*...)^{(1/n)}$ "*" - means multiply

    Method 2:

    Geometric Mean = antilog ([log(a)+log(b)+log(c)+log(d)+...]/n)

    Graphical methods, even though they may also employ the use of logarithms, may introduce significant error and may not be used.

    In calculating the geometric mean, for those individual sample results that are reported by the analytical laboratory to be "less than" a numeric value, a value of 1 should be used in the calculations. If all individual analytical results for the month are reported to be less than numeric values, then report "less than" the largest of those numeric values on the monthly DMR. Otherwise, report the calculated value.

    For any individual analytical result of "too numerous to count" (TNTC), that analysis shall be considered to be invalid and another sample shall be promptly collected for analysis. If another sample cannot be collected within the same sampling period for which the invalid sample was collected (during the same month if monthly sampling is required, during the same week if weekly sampling is required, etc.), then the following procedures apply:

    i. A minimum of two samples shall be collected for coliform analysis within the next sampling period.

    ii. If the sampling frequency is monthly or less frequent: For the period with the invalid sample results, leave the spaces on the corresponding DMR for reporting coliform results empty and attach to the DMR a letter noting that a result of TNTC was obtained for that period, and explain why another sample for that period had not been collected.

    iii. If the sampling frequency is more frequent than monthly: Eliminate the result of TNTC from any further calculations, and use all the other results obtained within that month for reporting purposes. Attach a letter noting that a result of TNTC was obtained, and list all individual analytical results and corresponding sampling dates for that month.

15. "Good Engineering, Hydrologic and Pollution Control Practices" - methods, procedures, and practices that a) are based on basic scientific fact(s); b) reflect best industry practices and standards; c) are appropriate for the conditions and pollutant sources; and d) provide appropriate solutions to meet the associated permit requirements, including all effluent limitations.

16. "Grab" sample, is a single "dip and take" sample so as to be representative of the parameter being monitored.

17. “IC25” or “Inhibition Concentration” is a point estimate of the toxicant concentration that would cause a given percent reduction in a non-lethal biological measurement (e.g. growth or reproduction) calculated from a continuous model (i.e. interpolation method). IC25 is a point estimate of the toxic concentration that would cause a 25-percent reduction in a non-lethal biological measurement.

18. "Industrial Activity" – for this permit means those activities identified by the SIC codes described in the applicability section of the permit.

19. "Industrial Stormwater" - stormwater runoff from industrial activity.

20. "In-situ" measurement is defined as a single reading, observation or measurement taken in the field at the point of discharge.

21. "Instantaneous" measurement is a single reading, observation, or measurement performed on site using existing monitoring facilities.

22. “LC50” or “Lethal Concentration” is the toxic or effluent concentration that would cause death in 50 percent of the test organisms over a specified period of time.

23. “Maximum Weekly Average Temperature (MWAT)” is defined in the Basic Standards and Methodologies for Surface Water 1002-31, as an implementation statistic that is calculated from field monitoring data. The MWAT is calculated as the largest mathematical mean of multiple, equally spaced, daily temperatures over a seven-day consecutive period, with a minimum of three data points spaced equally through the day. For lakes and reservoirs, the MWAT is assumed to be equivalent to the maximum WAT from at least three profiles distributed throughout the growing season (generally July-September).

    The MWAT is calculated by averaging all temperature data points collected during a calendar day, and then averaging the daily average temperatures for 7 consecutive days. This 7 day averaging period is a rolling average, i.e. on the 8th day, the MWAT will be the averages of the daily averages of days 2-8. The value to be reported on the DMR is the highest of all the rolling 7-day averages throughout the month. For those days that are at the end/beginning of the month, the data shall be reported for the month that contains 4 of the 7 days.

    Day 1: Average of all temperature data collected during the calendar day.
    Day 2: Average of all temperature data collected during the calendar day.
    Day 3: Average of all temperature data collected during the calendar day.
    Day 4: Average of all temperature data collected during the calendar day.
    Day 5: Average of all temperature data collected during the calendar day.
    Day 6: Average of all temperature data collected during the calendar day.
    Day 7: Average of all temperature data collected during the calendar day.
    1st MWAT Calculation as average of previous 7 days
    Day 8: Average of all temperature data collected during the calendar day.
    2nd MWAT Calculation as average of previous 7 days
    Day 9: Average of all temperature data collected during the calendar day.
    3rd MWAT Calculation as average of previous 7 days

24. "Measurable storm event" - a storm event that results in an actual discharge from the facility.

25. "Minimize" - reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practice.

26. “Minimum level (ML)” means the lowest concentration of an analyte that can be accurately and precisely quantified using a given method, as determined by the laboratory.

27. “NOEC” or “No-Observed-Effect-Concentration” is the highest concentration of toxicant to which organisms are exposed in a full life cycle or partial life cycle (short term) test, that causes no observable adverse effects on the test organisms (i.e. the highest concentration of toxicant in which the values for the observed responses are not

statistically different from the controls). This value is used, along with other factors, to determine toxicity limits in permits.

28. "Person" - an individual, corporation, partnership, association, state or political subdivision thereof, federal agency, state agency, municipality, Commission, or interstate body. See 5 CCR 1002-61.2(73).

29. "Pollutant" - dredged spoil, dirt, slurry, solid waste, incinerator residue, sewage, sewage sludge, garbage, trash, chemical waste, biological nutrient, biological material, radioactive material, heat, wrecked or discarded equipment, rock, sand, or any industrial, municipal or agricultural waste. See 5 CCR 1002-61.2(76).

30. "Potentially dissolved (PD) metals fraction" is defined in the Basic Standards and Methodologies for Surface Water 1002-31, as that portion of a constituent measured from the filtrate of a water and suspended sediment sample that was first treated with nitric acid to a pH of 2 or less and let stand for 8 to 96 hours prior to sample filtration using a 0.40 or 0.45-UM (micron) membrane filter. Note the "potentially dissolved" method cannot be used where nitric acid will interfere with the analytical procedure used for the constituent measured.

31. "Practical Quantitation Limit (PQL)" means the minimum concentration of an analyte (substance) that can be measured with a high degree of confidence that the analyte is present at or above that concentration. The use of PQL in this document may refer to those PQLs shown in Part I.D of this permit or the PQLs of an individual laboratory.

32. "Qualified Personnel" for stormwater provisions - those who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at a facility, and who can also evaluate the effectiveness of control measures.

33. "Quarterly measurement frequency" means samples may be collected at any time during the calendar quarter if a continual discharge occurs. If the discharge is intermittent, then samples shall be collected during the period that discharge occurs.

34. "Recorder" requires the continuous operation of an automatic data retention device for providing required records such as a data logger, a chart and/or totalizer (or drinking water rotor meters or pump hour meters where previously approved.)

35. SAR and Adjusted SAR - The equation for calculation of SAR-adj is:

$$SAR\text{-}adj = \frac{Na^{+}}{\sqrt{\frac{Ca_{x} + Mg^{++}}{2}}}$$

Where:

Na^{+} = Sodium in the effluent reported in meq/l
Mg^{++} = Magnesium in the effluent reported in meq/l
Ca_x = calcium (in meq/l) in the effluent modified due to the ratio of bicarbonate to calcium

The values for sodium (Na^{+}), calcium (Ca^{++}), bicarbonate (HCO_3^{-}) and magnesium (Mg^{++}) in this equation are expressed in units of milliequivalents per liter (meq/l). Generally, data for these parameters are reported in terms of mg/l, which must then be converted to calculate the SAR. The conversions are:

$$\text{meq/l} = \frac{Concentration\ in\ mg/l}{Equivalent\ weight\ in\ mg/meq}$$

Where the equivalent weights are determined based on the atomic weight of the element divided by the ion's charge:

Na^{+} = 23.0 mg/meq (atomic weight of 23, charge of 1)
Ca^{++} = 20.0 mg/meq (atomic weight of 40.078, charge of 2)

Mg^{++} = 12.15 mg/meq (atomic weight of 24.3, charge of 2)
HCO_3^- = 61 mg/mep (atomic weight of 61, charge of 1)

The *EC* and the HCO_3^-/Ca^{++} ratio in the effluent (calculated by dividing the HCO_3^- in meq/l by the Ca^{++} in meq/l) are used to determine the Ca_x using the following table.

Table – Modified Calcium Determination for Adjusted Sodium Adsorption Ratio

HCO_3/Ca Ratio And *EC* [1], [2], [3]													
Salinity of Effluent (*EC*)(dS/m)													
		0.1	**0.2**	**0.3**	**0.5**	**0.7**	**1.0**	**1.5**	**2.0**	**3.0**	**4.0**	**6.0**	**8.0**
Ratio of HCO_3/Ca	**.05**	13.20	13.61	13.92	14.40	14.79	15.26	15.91	16.43	17.28	17.97	19.07	19.94
	.10	8.31	8.57	8.77	9.07	9.31	9.62	10.02	10.35	10.89	11.32	12.01	12.56
	.15	6.34	6.54	6.69	6.92	7.11	7.34	7.65	7.90	8.31	8.64	9.17	9.58
	.20	5.24	5.40	5.52	5.71	5.87	6.06	6.31	6.52	6.86	7.13	7.57	7.91
	.25	4.51	4.65	4.76	4.92	5.06	5.22	5.44	5.62	5.91	6.15	6.52	6.82
	.30	4.00	4.12	4.21	4.36	4.48	4.62	4.82	4.98	5.24	5.44	5.77	6.04
	.35	3.61	3.72	3.80	3.94	4.04	4.17	4.35	4.49	4.72	4.91	5.21	5.45
	.40	3.30	3.40	3.48	3.60	3.70	3.82	3.98	4.11	4.32	4.49	4.77	4.98
	.45	3.05	3.14	3.22	3.33	3.42	3.53	3.68	3.80	4.00	4.15	4.41	4.61
	.50	2.84	2.93	3.00	3.10	3.19	3.29	3.43	3.54	3.72	3.87	4.11	4.30
	.75	2.17	2.24	2.29	2.37	2.43	2.51	2.62	2.70	2.84	2.95	3.14	3.28
	1.00	1.79	1.85	1.89	1.96	2.01	2.09	2.16	2.23	2.35	2.44	2.59	2.71
	1.25	1.54	1.59	1.63	1.68	1.73	1.78	1.86	1.92	2.02	2.10	2.23	2.33
	1.50	1.37	1.41	1.44	1.49	1.53	1.58	1.65	1.70	1.79	1.86	1.97	2.07
	1.75	1.23	1.27	1.30	1.35	1.38	1.43	1.49	1.54	1.62	1.68	1.78	1.86
	2.00	1.13	1.16	1.19	1.23	1.26	1.31	1.36	1.40	1.48	1.54	1.63	1.70
	2.25	1.04	1.08	1.10	1.14	1.17	1.21	1.26	1.30	1.37	1.42	1.51	1.58
	2.50	0.97	1.00	1.02	1.06	1.09	1.12	1.17	1.21	1.27	1.32	1.40	1.47
	3.00	0.85	0.89	0.91	0.94	0.96	1.00	1.04	1.07	1.13	1.17	1.24	1.30
	3.50	0.78	0.80	0.82	0.85	0.87	0.90	0.94	0.97	1.02	1.06	1.12	1.17
	4.00	0.71	0.73	0.75	0.78	0.80	0.82	0.86	0.88	0.93	0.97	1.03	1.07
	4.50	0.66	0.68	0.69	0.72	0.74	0.76	0.79	0.82	0.86	0.90	0.95	0.99
	5.00	0.61	0.63	0.65	0.67	0.69	0.71	0.74	0.76	0.80	0.83	0.88	0.93
	7.00	0.49	0.50	0.52	0.53	0.55	0.57	0.59	0.61	0.64	0.67	0.71	0.74
	10.00	0.39	0.40	0.41	0.42	0.43	0.45	0.47	0.48	0.51	0.53	0.56	0.58
	20.00	0.24	0.25	0.26	0.26	0.27	0.28	0.29	0.30	0.32	0.33	0.35	0.37
	30.00	0.18	0.19	0.20	0.20	0.21	0.21	0.22	0.23	0.24	0.25	0.27	0.28

[1] Adapted from Suarez (1981).
[2] Assumes a soil source of calcium from lime ($CaCO_3$) or silicates; no precipitation of magnesium, and partial pressure of CO_2 near the soil surface (P_{CO2}) is 0.0007 atmospheres.
[3] Ca_x, HCO_3, Ca are reported in meq/l; EC is in dS/m (deciSiemens per meter).

Because values will not always be quantified at the exact *EC* or HCO_3^-/Ca^{++} ratio in the table, the resulting Ca_x must be determined based on the closest value to the calculated value. For example, for a calculated *EC* of 2.45 dS/m, the column for the *EC* of 2.0 would be used. However, for a calculated *EC* of 5.1, the corresponding column for the *EC* of 6.0 would be used. Similarly, for a HCO_3^-/Ca^{++} ratio of 25.1, the row for the 30 ratio would be used.

The Division acknowledges that some effluents may have electrical conductivity levels that fall outside of this table, and others have bicarbonate to calcium ratios that fall outside this table. For example, some data reflect HCO_3^-/Ca^{++} ratios greater than 30 due to bicarbonate concentrations reported greater than 1000 mg/l versus calcium concentrations generally less than 10 mg/l (i.e., corresponding to HCO_3^-/Ca^{++} ratios greater than 100).

Despite these high values exceeding the chart's boundaries, it is noted that the higher the HCO_3^-/Ca^{++} ratio, the greater the SAR-adj. Thus, using the Ca_x values corresponding to the final row containing bicarbonate/calcium ratios of 30, the permittee will actually calculate an SAR-adj that is less than the value calculated if additional rows reflecting HCO_3^-/Ca^{++} ratios of greater than 100 were added.

36. "Seven (7) day average" means, with the exception of fecal coliform or *E. coli* bacteria (see geometric mean), the arithmetic mean of all samples collected in a seven (7) consecutive day period. Such seven (7) day averages shall be calculated for all calendar weeks, which are defined as beginning on Sunday and ending on Saturday. If the calendar week overlaps two months (i.e. the Sunday is in one month and the Saturday in the following month), the seven (7) day average calculated for that calendar week shall be associated with the month that contains the Saturday. Samples may not be used for more than one (1) reporting period. **(See the "Analytical and Sampling Methods for Monitoring and Reporting Section in Part I.D.3 for guidance on calculating averages and reporting analytical results that are less than the PQL).**

37. "Stormwater" - stormwater runoff, snow melt runoff, and surface runoff and drainage. See 5 CCR 1002-61.2(103).

38. "Sufficiently sensitive test procedures":

    i. An analytical method is ''sufficiently sensitive'' when the method detects and accurately and precisely quantifies the amount of the analyte. In other words there is a valid positive result; or
    ii. An analytical method is "sufficiently sensitive" when the method accurately and precisely quantifies the result to the AWQC, as demonstrated by the ML is less than or equal to the AWQC. In other words, the level of precision is adequate to inform decision making; or
    iii. An analytical method is "sufficiently sensitive" when the method achieves the required level of accuracy and precision, as demonstrated by the ML is less than or equal to the PQL. In other words, the most sensitive method is being used and properly followed.

39. "Thirty (30) day average" means, except for fecal coliform or *E. coli* bacteria (see geometric mean), the arithmetic mean of all samples collected during a thirty (30) consecutive-day period. The permittee shall report the appropriate mean of all self-monitoring sample data collected during the calendar month on the Discharge Monitoring Reports. Samples shall not be used for more than one (1) reporting period. **(See the "Analytical and Sampling Methods for Monitoring and Reporting Section in Part I.D.3 for guidance on calculating averages and reporting analytical results that are less than the PQL).**

40. Toxicity Identification Evaluation (TIE) is a set of site-specific procedures used to identify the specific chemical(s) causing effluent toxicity.

41. "Total Inorganic Nitrogen (T.I.N.)" is an aggregate parameter determined based on ammonia, nitrate and nitrite concentrations. To determine T.I.N. concentrations, the facility must monitor for total ammonia and total nitrate plus nitrite (or nitrate and nitrite individually) on the same days. The calculated T.I.N. concentrations in mg/L shall then be determined as the sum of the analytical results of same-day sampling for total ammonia (as N) in mg/L, and total nitrate plus nitrite (as N) in mg/L (or nitrate as N and nitrite as N individually). From these calculated T.I.N. concentrations, the daily maximum and thirty (30) day average concentrations for T.I.N. shall be determined in the same manner as set out in the definitions for the daily maximum and thirty (30) day average. **(See the "Analytical and Sampling Methods for Monitoring and Reporting Section in Part I.D.5 for guidance on calculating averages and reporting analytical results that are less than the PQL).**

42. "Total Metals" means the concentration of metals determined on an unfiltered sample following vigorous digestion (Section 4.1.3), or the sum of the concentrations of metals in both the dissolved and suspended fractions, as described in Manual of Methods for Chemical Analysis of Water and Wastes, U.S. Environmental Protection Agency, March 1979, or its equivalent.

43. "Total Recoverable Metals" means that portion of a water and suspended sediment sample measured by the total recoverable analytical procedure described in Methods for Chemical Analysis of Water and Wastes, U.S. Environmental Protection Agency, March 1979 or its equivalent.

44. Toxicity Reduction Evaluation (TRE) is a site-specific study conducted in a step-wise process to identify the causative agents of effluent toxicity, isolate the source of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in effluent toxicity after the control measures are put in place.

45. "Twenty four (24) hour composite" sample is a combination of at least eight (8) sample aliquots of at least 100 milliliters, collected at equally spaced intervals during the operating hours of a facility over a twenty-four (24) hour period. For volatile pollutants, aliquots must be combined in the laboratory immediately before analysis. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the wastewater or effluent flow at the time of sampling or the total wastewater or effluent flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically.

46. "Twice Monthly" monitoring frequency means that two samples shall be collected each calendar month on separate weeks with at least one full week between the two sample dates. Also, there shall be at least one full week between the second sample of a month and the first sample of the following month.

47. "Two (2) -Year Rolling Average" (Antidegradation limits)- the average of all monthly average data collected in a two year period. Reporting of two-year rolling average results should begin in the first DMR due once the reporting requirements has been in place for a two year period. To calculate a two-year rolling average, add the current monthly average to the previous 23 monthly averages and divide the total by 24. This methodology continues on a rolling basis as long as the two year rolling average reporting and/or effluent limit applies (i.e., in the first reporting period use data from month 1 to month 24, in the second reporting period use data from month 2 to month 25, then month 3 to month 26, etc.). Ongoing reporting is required across permit terms when data is available for a two year period.

48. "Visual" observation is observing the discharge to check for the presence of a visible sheen or floating oil.

49. "Water Quality Control Division" or "Division" means the state Water Quality Control Division as established in 25-8-101 et al.)

Additional relevant definitions are found in the Colorado Water Quality Control Act, CRS §§ 25-8-101 et seq., the Colorado Discharge Permit System Regulations, Regulation 61 (5 CCR 1002-61) and other applicable regulations.