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 CO0038776

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

Mountain Coal Company, LLC

is authorized to discharge from the facility's West Elk Mine located 5174 Highway 133 in Somerset, CO,
38.92500°latitude North, 107.45000°longitude West

to **North Fork of Gunnison River, Sylvester Gulch, Dry Fork of Minnesota Creek**

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.

The applicant may demand an adjudicatory hearing within thirty (30) calendar days of the date of issuance of the final permit determination, per the Colorado Discharge Permit System Regulations, 61.7(1). Should the applicant choose to contest any of the effluent limitations, monitoring requirements or other conditions contained herein, the applicant must comply with Section 24-4-104 CRS and the Colorado Discharge Permit System Regulations. Failure to contest any such effluent limitation, monitoring requirement, or other condition, constitutes consent to the condition by the Applicant.

This permit and the authorization to discharge shall expire at midnight, September 30, 2024

Issued and Signed this 31st day of December, 2020

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Meg Parish

Meg Parish, Permits Section Manager
Water Quality Control Division

Permit Action Summary
Modification 4—Major Amendment: Issued 12/31/2020; Effective 2/1/2020 (Parts I.A, I.C.3, I.C.4, I.C.5, I.G, I.H, I.I, I.J, I.L.2)
Modification 3 – Major Amendment: Issued 4/28/2020; Effective 5/1/2020 (Parts I.A, I.C, I.D, I.F, I.G, I.H, I.I, I.J, I.K)
Modification 2—Minor Modification: Issued 12/17/2019; Effective 12/17/2019 (Part I.A, Part I.C.1, and Part I.C.2)
Modification 1 – Minor Modification: Issued 10/31/2019; Effective 10/31/2019 (Part I.C.1 and Part I.J.1)
Originally Issued: 8/30/2019; Effective 10/1/2019

TABLE OF CONTENTS

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	Feature Name	Latitude (° N)	Longitude (°W)	Wastewater Source	Receiving Water
005	Pond MB-3	38.927778	107.445278	Equipment and facility wash down water; stormwater runoff from coal storage areas	NFGR
007	WWTF	38.9275	107.448056	Domestic wastewater	NA
008	Pond MB-4	38.928611	107.446944	Wash down water from train loadout	NFGR
009	Pond MB-5	38.929444	107.452222	Stormwater runoff from undisturbed native lands and surface runoff from facilities areas including coal stockpiles, buildings, parking lots, roads, and revegetated soil stockpiles); equipment and facilities washdown water, mine water and treated WWTP effluent	NFGR
011	Sly Gulch Fan	38.91278	107.44194	Natural groundwater pumped through the ventilation portal	Sylvester Gulch
012	Deer Creek Shaft	38.8811	107.46189	Mine water inflow discharge from the Deer Creek ventilation shaft	Dry Fork of Minnesota Creek
014	Pond SG-1	38.905278	107.443056	Stormwater runoff from Sylvester Gulch ventilation fan facilities including buildings, graveled roads and pads, and revegetated topsoil piles	Sylvester Gulch
015	RPE Pond	38.925833	107.435556	surface runoff from the refuse pile expansion and refuse pile east areas including reclaimed outslopes and open refuse bench and underdrains	NFGR
017	Mine Water Treatment Ponds	38.910278	107.445833	Mine water discharge	Sylvester Gulch
019	NSSA Pond	38.928333	107.439722	Stormwater runoff from revegetated topsoil stockpiles	NFGR
020	CSLY-3	38.922500	107.440278	Stormwater from undisturbed/native lands and road	Sylvester Gulch
021	CSLY-4	38.921389	107.440833	Stormwater only from Drainage Basin 49C1; undisturbed/native lands with a short segment of graveled road	Sylvester Gulch
022	CSLY-5	38.92	107. 440833	Stormwater only from Drainage Basin 49B2; undisturbed/native lands with a short segment of graveled road	Sylvester Gulch
023	CSLY-6	38.919167	107.441111	Stormwater only from Drainage Basin 49B1 & 47C; undisturbed/native lands with short segments of graveled & revegetated two-track roads & a water tank	Sylvester Gulch
024	CSLY-7	38.916944	107.441111	Stormwater only from Drainage Basin 49A5; undisturbed/native lands with a short segment of graveled road	Sylvester Gulch

Outfall	Feature Name	Latitude (° N)	Longitude (°W)	Wastewater Source	Receiving Water
025	CSLY-8	38.915248	107.441631	Stormwater only from Drainage Basin 49A4 & 47B; undisturbed/native lands with a short segment of graveled road and the Sly Gulch fan building and pad	Sylvester Gulch
026	CSLY-9	38.912203	107.443103	Stormwater only Drainage Basin 49A3; undisturbed/native lands with a short segment of graveled road and revegetated subsoil stockpile	Sylvester Gulch
027	CSLY-11	38.911447	107.443705	Stormwater only from Drainage Basin 49A2; undisturbed/native lands with a short segment of graveled road, revegetated subsoil stockpile and electrical substation	Sylvester Gulch
028	CSLY-13	38.909722	107.446389	Stormwater only from Drainage Basin 49A1; revegetated Topsoil Pile #3	Sylvester Gulch
029	CSLY-14	38.908889	107.447222	Stormwater only from Drainage Basin 47A; undisturbed/native lands with a short segment of revegetated two-track road	Sylvester Gulch
030	CSLY-17	38.907229	107.444701	Stormwater only from Drainage Basins 46B1 & 46B2: undisturbed/native lands with a short segment of graveled road, a portion of topsoil pile #4 and the dewatering borehole building and pad	Sylvester Gulch
031	CSLY-19	38.906111	107.442777	Stormwater only from Drainage Basin 41A & 41B; undisturbed/native lands with a segment of graveled road	Sylvester Gulch
032	CSLY-21	38.903089	107.442437	Stormwater only from Drainage Basins 43A & 43F; undisturbed/native lands with a short segment of graveled road and a portion of the shaft #3 fan building and pad	Sylvester Gulch
033	CSLY-22	38.899529	107.440869	Internal outfall consisting of stormwater only from Drainage Basins 43D & 43E; undisturbed/native lands with a short segment of revegetated two-track road and a portion of the shaft #3 fan building and pad	NA (See outfall 034)
034	CSLY-23	38.899419	107.441138	Comingled discharge of internal outfall 033 and stormwater only from Drainage Basin 43B and 43C; undisturbed/native lands with a short segment of graveled road.	Sylvester Gulch
035	Coal Train Loadout and Access Road’	38.928774	107.447137	Surface runoff from Coal Train Loadout and Access Road	NFGR
036	E1-11.5	38.885231	107.451069	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
037	E2-9	38.881064	107.453486	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
038	E3-06	38.877936	107.456286	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
039	E4-15	38.872281	107.445725	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
040	E4-16	38.872617	107.450425	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek

Outfall	Feature Name	Latitude (° N)	Longitude (°W)	Wastewater Source	Receiving Water
041	E4-17	38.873811	107.454594	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
042	E4-18	38.874433	107.458089	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
043	E5-1, 2, 3	38.863250	107.414800	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
046	E5-4	38.863483	107.416867	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
047	E5-5	38.863908	107.419706	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
048	E5-6, 7	38.864956	107.421778	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
050	E5-8	38.864925	107.425183	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
051	E5-9, 10	38.865064	107.428325	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
053	E5-11	38.865661	107.431583	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
054	E5-12,13	38.866114	107.435475	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
056	E5-14	38.867189	107.438142	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
057	E5-15	38.867619	107.441347	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
058	E5-16	38.868281	107.444325	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
059	E5-17	38.868700	107.446875	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
060	E5-18	38.869231	107.450306	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
061	E5-20	38.870286	107.458150	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
062	E6-1, 2, 3	38.859606	107.419931	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
065	E6-4	38.859647	107.422642	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
066	E6-5	38.860950	107.424481	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
067	E6-6	38.861367	107.426856	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
068	E6-7	38.861781	107.423725	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
069	E6-8, 9	38.861836	107.433056	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
071	E6-10	38.862033	107.436697	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
072	E6-11	38.861519	107.440628	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek

Outfall	Feature Name	Latitude (° N)	Longitude (°W)	Wastewater Source	Receiving Water
073	E6-12	38.863525	107.444547	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
074	E6-13	38.864878	107.448867	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
075	E6-14	38.015800	107.454031	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
076	E7-1	38.856597	107.421511	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
077	E7-2	38.856639	107.422153	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
078	E7-3	38.856994	107.423575	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
079	E7-4	38.857444	107.425614	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
080	E7-5	38.857842	107.428333	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
081	E7-6	38.858417	107.431031	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
082	E7-7	38.859083	107.433072	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
083	E7-8	38.859400	107.437500	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
084	E7-9	38.859814	107.440903	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
085	E7-10	38.860217	107.443583	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
086	E7-11	38.861100	107.447094	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
087	E7-12	38.861697	107.450772	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
088	E8-1	38.852733	107.423497	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
089	E8-2	38.853400	107.424236	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
090	E8-3	38.853547	107.425864	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
091	E8-4	38.853764	107.427494	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
092	E8-5	38.854117	107.430381	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
093	E8-6	38.854794	107.432894	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
094	E8-7	38.855319	107.436053	Surface runoff from reclaimed mine vent borehole pad	Trib. to Minnesota Creek
095	E8-8	38.855992	107.440194	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
096	E14-1	38.853922	107.464038	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek

Outfall	Feature Name	Latitude (° N)	Longitude (°W)	Wastewater Source	Receiving Water
097	E14-2	38.853548	107.458717	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
098	SS1-1	38.847919	107.423661	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
099	SS1-2	38.847863	107.424904	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
100	SS1-3	38.848389	107.426482	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
101	SS1-4	38.848746	107.428586	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
102	SS1-5	38.849109	107.430596	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
103	SS1-6	38.849585	107.43319	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
104	SS1-7	38.849996	107.435739	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
105	SS2-1	38.844198	107.424342	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
106	SS2-2	38.844315	107.425028	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
107	SS2-3	38.844416	107.427357	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
108	SS2-4	38.844756	107.429218	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
109	SS2-5	38.845329	107.431251	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
110	SS2-6	38.845508	107.433987	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
111	SS2-7	38.845498	107.43645	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
112	SS2-8	38.846814	107.43968	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
113	SS3-1	38.840679	107.425389	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
114	SS3-2	38.840658	107.426044	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
115	SS3-3	38.841013	107.428101	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
116	SS3-4	38.841368	107.430158	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
117	SS3-5	38.841723	107.432215	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
118	SS3-6	38.842167	107.434786	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
119	SS3-7	38.842611	107.437357	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
120	SS4-1	38.836888	107.42639	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek

Outfall	Feature Name	Latitude (° N)	Longitude (°W)	Wastewater Source	Receiving Water
121	SS4-2	38.837004	107.427076	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
122	SS4-3	38.837359	107.429133	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
123	SS4-4	38.837714	107.43119	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
124	SS4-5	38.838069	107.433247	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek
125	SS4-6	38.838602	107.436332	Surface runoff from mine vent borehole pad/topsoil stockpile	Trib. to Minnesota Creek

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. Any discharge to the waters of the State from a point source other than specifically authorized by this permit is prohibited.

UST1A is an in-stream permitted feature located upstream from the facility discharge to collect continuous ambient temperature data at 38.90500° North latitude, 107.443056 West longitude.

UST2A is an in-stream permitted feature located upstream from the facility discharge to collect continuous ambient temperature data at 38.88139° North latitude, 107.45102° West longitude.

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 Effluent Limitation Guideline for the Coal Mining Point Source (40 CFR 434), 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.

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 requires the operation of back-up or auxiliary facilities or similar systems when installed by the permittee only when necessary to achieve compliance with the conditions of the permit.

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. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. Numeric Effluent Limitations and Site-Specific Monitoring (Outfalls 005, 007, 008, 009, 011, 012, 014, 015, 017, 025, 026, 027, 030, 032, 033, 034, and 035)

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.

a. Oil and Grease Monitoring: For every permitted feature with oil and grease monitoring, in the event an oil sheen or floating oil is observed, a grab sample shall be collected, analyzed, and reported on the appropriate DMR. In addition, corrective action shall be taken immediately to mitigate the discharge of oil and grease. A description of the corrective action taken should be included with the DMR.

b. Salinity Parameters In order to obtain an indication of the quantity of Salinity, measured as total dissolved solids (TDS), being discharged from the site the permittee shall monitor the wastewater effluent. Self-monitoring samples taken in compliance with the monitoring requirements specified in this part shall be taken at those locations listed in Part I.A.

c. Alternate Limitation Burden of Proof Requirements: In conformance with 40 CFR 434.63, the permittee has the burden of proof when requesting relief from total suspended solids (TSS), total iron and/or settleable solids limitations, as appropriate. The alternate limitations apply to outfalls 005, 008, 009, 014, and 015 only.

   For rainfall, to waive TSS and total iron limitations, the permittee must prove that the discharge occurred during the precipitation event, or within 48 hours after measurable precipitation has stopped. In addition, to waive settleable solids limitations, the permittee must prove that the discharge occurred during the precipitation event, or within 48 hours after precipitation greater than the 10-year, 24-hour event has stopped.

   For snowmelt, to waive TSS and total iron limitations, the permittee must prove that the discharge occurred during pond inflow from the snow melt event, or within 48 hours after pond inflow has stopped. In addition, to waive settleable solids limitations, the permittee must prove that the discharge occurred during pond inflow from the snow melt event, or within 48 hours after pond inflow volume greater than the 10-year, 24-hour event has stopped.

   The permittee must submit documentation that the treatment facilities were properly operated and maintained prior to and during the storm event with any request for relief from primary limitations. The division shall determine the adequacy of proof. As part of this determination, the division shall evaluate whether the permittee could have controlled the discharge in such a manner that primary limitations could have been met, whether proper sediment storage levels were maintained and the ponds had sufficient water and sediment capacity for the storm event, plus other relevant factors. All manual pond dewatering must meet TSS and total iron limitations.

   All data/documentation required by the permit which cannot be reported on applicable discharge monitoring report forms (DMRs) shall be reported in a letter as an attachment to the DMR. Submittal of documentation of containment, maintenance and precipitation records above does not exempt the permittee from the notification requirements of this permit (see NOTIFICATION REQUIREMENTS).

Permitted Feature UST1A (Sylvester Gulch), Permitted Feature Type: receiving water (ambient)

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations		Monitoring Requirements	
		MWAT	Daily Maximum	Frequency	Sample Type
00010	Temp DM (°C) March-Nov, starting 7/1/2020		Report	Continuous	Recorder
00010	Temp DM (°C) December-Feb, starting 7/1/2020		Report	Continuous	Recorder
00010	Temp MWAT (°C) March-Nov, starting 7/1/2020	Report		Continuous	Recorder

00010	Temp MWAT (°C) December- Feb, starting 7/1/2020	Report		Continuous	Recorder

Permitted Feature UST2A (Dry Fork of Minnesota Creek), Permitted Feature Type: receiving water (ambient)

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations		Monitoring Requirements	
		MWAT	Daily Maximum	Frequency	Sample Type
00010	Temp DM (°C) Jun-Sep, starting 7/1/2020		Report	Continuous	Recorder
00010	Temp DM (°C) Oct- May, starting 7/1/2020		Report	Continuous	Recorder
00010	Temp MWAT (°C) Jun-Sep, starting 7/1/2020	Report		Continuous	Recorder
00010	Temp MWAT (°C) Oct- May, starting 7/1/2020	Report		Continuous	Recorder

Outfall 005A

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)	0.04		Report	Monthly	Instantaneous
00400	pH (su)			6.5-9.0	Monthly	Grab
00530	TSS, effluent (mg/l)	35		70	Monthly	Grab
84066	Oil and Grease (visual)			Report	Monthly	Visual
03582	Oil and Grease (mg/l)			10	Contingent	Grab
70295	TDS (mg/l)	Report		Report	Quarterly	Grab
00978	As, TR (µg/l)	Report			2 Days/Month	Grab
01118	Cr, TR (µg/l)	Report		Report	2 Days/Month	Grab
04262	Cr+3, TR (µg/l)			Report	2 Days/Month	Grab
01314	Cr+3, PD (µg/l)	Report			2 Days/Month	Grab
01306	Cu, PD (µg/l)	Report		Report	2 Days/Month	Grab
01046	Fe, Dis (µg/l)	3297			2 Days/Month	Grab
00980	Fe, TR (µg/l)	3500		7000	Monthly	Grab
01114	Pb, TR (µg/l)			Report	2 Days/Month	Grab
01318	Pb, PD (µg/l)	Report		Report	2 Days/Month	Grab
01056	Mn, Dis (µg/l)	Report			2 Days/Month	Grab
01319	Mn, PD (µg/l)	Report		Report	2 Days/Month	Grab
50286	Hg, Tot (µg/l)	Report			2 Days/Month	Grab
01074	Ni, TR (µg/l)	Report			2 Days/Month	Grab
01322	Ni, PD (µg/l)	Report		Report	2 Days/Month	Grab
01323	Se, PD (µg/l)	Report		Report	2 Days/Month	Grab
01303	Zn, PD (µg/l)	Report		Report	2 Days/Month	Grab
82057	B, Tot (mg/l)	Report			2 Days/Month	Grab
00940	Chloride (mg/l)	Report			2 Days/Month	Grab
81020	Sulfate (mg/l)	Report			2 Days/Month	Grab
51202	Sulfide as H2S (mg/l)	Report			2 Days/Month	Grab

00918	Calcium (mg/l)	Report		Report	2 Days/Month	Grab
00921	Magnesium (mg/l)	Report		Report	2 Days/Month	Grab
00923	Sodium (mg/l)	Report		Report	2 Days/Month	Grab
00440	Bicarbonate as HCO_3 (mg/l)	Report		Report	2 Days/Month	Grab
00931	SAR calculated limit*	Report		Report	2 Days/Month	Calculated
00931	Adjusted SAR effluent**	Report		Report	2 Days/Month	Calculated
00094	EC (dS/m)	Report			2 Days/Month	Grab
	WET, acute until 9/30/21					
TAN6C	LC50 Statre 96Hr Acute *Pimephales promelas*			Report; LC50 $\geq$ 100	Quarterly	Grab
TAM3C	LC50 Statre 48Hr Acute *Daphnia magna*			Report; LC50 $\geq$ 100	Quarterly	Grab
	WET, acute beginning 10/1/21					
TAN6C	LC50 Statre 96Hr Acute *Pimephales promelas*			LC50 $\geq$ 100	Quarterly	Grab
TAM3C	LC50 Statre 48Hr Acute *Daphnia magna*			LC50 $\geq$ 100	Quarterly	Grab

* 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.

** 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.

ALTERNATE LIMITATIONS

Any discharge or increase in the volume of a discharge is caused by precipitation within any 24-hour period **less than or equal to** the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) may comply with alternate limitations subject to burden of proof requirements as described in the EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS section.

The following limits for Fe(TR) and Settleable Solids may be substituted for the Fe(TR) and TSS limitations contained in the previous table. All other parameters remain unchanged.

Alternate Limits Outfall 005 (less than or equal to the 10-year, 24-hour precipitation event)

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)	3500		Report	Monthly	Grab
00545	Settleable Solids (ml/l)	Report		0.5	Monthly	Grab

ALTERNATE LIMITATIONS

Any discharge or increase in volume of a discharge caused by precipitation within any 24-hour period **greater than** the 10-year, 24-hour event (or series of storms or snowmelt of equivalent volume) may comply with alternate limitations subject to burden of proof requirements as described in the EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS section.

The following limit for Fe(TR) may be substituted for that contained in the previous table. TSS and Settleable Solids monitoring/ effluent limitations are not required. All other parameters remain unchanged.

Alternate Limits Outfall 005 (greater than the 10-year, 24-hour precipitation event)

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)	3500		Report	Monthly	Grab

Outfall 007

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)	0.02		Report	Continuous	Recorder
74055	Fecal Coliform (#/100 ml) until 10/31/2020	6000	12,000		Monthly	Grab
00610	Total Ammonia as N (mg/l), until 7/31/20	Report		Report	Monthly	Grab
00610	Total Ammonia as N (mg/l), beginning 8/1/20					
	January	85		85	Monthly	Grab
	February	85		85	Monthly	Grab
	March	85		85	Monthly	Grab
	April	85		85	Monthly	Grab
	May	85		85	Monthly	Grab
	June	85		85	Monthly	Grab
	July	85		85	Monthly	Grab
	August	85		85	Monthly	Grab
	September	85		85	Monthly	Grab
	October	85		85	Monthly	Grab
	November	85		85	Monthly	Grab
	December	85		85	Monthly	Grab
00310	BOD5, effluent (mg/l)	30	45		Monthly	Grab
00310	BOD5, effluent (lbs/day)	5		Report	Monthly	Calculated
00530	TSS, effluent (mg/l)	75	110		Weekly	Grab
00530	TSS, effluent (lbs/day)	12		Report	Weekly	Calculated

Outfall 008A

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)	0.03		Report	Monthly	Instantaneous
00400	pH (su)			6.5-9.0	Monthly	Grab
00530	TSS, effluent (mg/l)	35		70	Monthly	Grab
84066	Oil and Grease (visual)			Report	Monthly	Visual
03582	Oil and Grease (mg/l)			10	Contingent	Grab
70295	TDS (mg/l)	Report		Report	Quarterly	Grab
00978	As, TR (µg/l)	Report			2 Days/Month	Grab

01118	Cr, TR (µg/l)	Report		Report	2 Days/Month	Grab
04262	Cr+3, TR (µg/l)			Report	2 Days/Month	Grab
01314	Cr+3, PD (µg/l)	Report			2 Days/Month	Grab
01306	Cu, PD (µg/l)	Report		Report	2 Days/Month	Grab
01046	Fe, Dis (µg/l)	3297			2 Days/Month	Grab
00980	Fe, TR (µg/l)	3000		6000	Monthly	Grab
01114	Pb, TR (µg/l)			Report	2 Days/Month	Grab
01318	Pb, PD (µg/l)	Report		Report	2 Days/Month	Grab
01056	Mn, Dis (µg/l)	Report			2 Days/Month	Grab
01319	Mn, PD (µg/l)	Report		Report	2 Days/Month	Grab
50286	Hg, Tot (µg/l)	Report			2 Days/Month	Grab
01074	Ni, TR (µg/l)	Report			2 Days/Month	Grab
01322	Ni, PD (µg/l)	Report		Report	2 Days/Month	Grab
01323	Se, PD (µg/l)	Report		Report	2 Days/Month	Grab
01303	Zn, PD (µg/l)	Report		Report	2 Days/Month	Grab
82057	B, Tot (mg/l)	Report			2 Days/Month	Grab
00940	Chloride (mg/l)	Report			2 Days/Month	Grab
81020	Sulfate (mg/l)	Report			2 Days/Month	Grab
51202	Sulfide as H2S (mg/l)	Report			2 Days/Month	Grab
00918	Calcium (mg/l)	Report		Report	2 Days/Month	Grab
00921	Magnesium (mg/l)	Report		Report	2 Days/Month	Grab
00923	Sodium (mg/l)	Report		Report	2 Days/Month	Grab
00440	Bicarbonate as HCO_3 (mg/l)	Report		Report	2 Days/Month	Grab
00931	SAR calculated limit*	Report		Report	2 Days/Month	Calculated
00931	Adjusted SAR effluent**	Report		Report	2 Days/Month	Calculated
00094	EC (dS/m)	Report			2 Days/Month	Grab
	WET, acute until 9/30/21					
TAN6C	LC50 Statre 96Hr Acute *Pimephales promelas*			Report; LC50 $\geq$ 100	Quarterly	Grab
TAM3C	LC50 Statre 48Hr Acute *Daphnia magna*			Report; LC50 $\geq$ 100	Quarterly	Grab
	WET, acute beginning 10/1/21					
TAN6C	LC50 Statre 96Hr Acute *Pimephales promelas*			LC50 $\geq$ 100	Quarterly	Grab
TAM3C	LC50 Statre 48Hr Acute *Daphnia magna*			LC50 $\geq$ 100	Quarterly	Grab

* 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.

** 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.

ALTERNATE LIMITATIONS

Any discharge or increase in the volume of a discharge is caused by precipitation within any 24-hour period **less than or equal to** the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) may comply with alternate limitations subject to burden of proof requirements as described in the EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS section.

The following limits for Fe(TR) and Settleable Solids may be substituted for the Fe(TR) and TSS limitations contained in the previous table. All other parameters remain unchanged.

Alternate Limits Outfall 008 (less than or equal to the 10-year, 24-hour precipitation event)

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)	3500		Report	Monthly	Grab
00545	Settleable Solids (ml/l)	Report		0.5	Monthly	Grab

ALTERNATE LIMITATIONS

Any discharge or increase in volume of a discharge caused by precipitation within any 24-hour period **greater than** the 10-year, 24-hour event (or series of storms or snowmelt of equivalent volume) may comply with alternate limitations subject to burden of proof requirements as described in the EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS section.

The following limit for Fe(TR) may be substituted for that contained in the previous table. TSS and Settleable Solids monitoring/ effluent limitations are not required. All other parameters remain unchanged.

Alternate Limits Outfall 008 (greater than the 10-year, 24-hour precipitation event)

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)	3500		Report	Monthly	Grab

Outfall 009A

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)	0.23		Report	Monthly	Instantaneous
00400	pH (su)			6.5-9.0	Monthly	Grab
74055	Fecal Coliform (#/100 ml) until 10/31/2020	Report	Report		Monthly	Grab
51040	*E. coli* (#/100 ml) beginning 11/1/2020	2000	4000		2 Days/Month	Grab
50060	TRC (mg/l)			0.5	2 Days/Month	Grab
00640	Total Inorganic Nitrogen as N (mg/l) until 7/31/20			Report	2 Days/Month	Grab
00640	Total Inorganic Nitrogen as N (mg/l) beginning 8/1/20			652	2 Days/Month	Grab
00530	TSS, effluent (mg/l)	35		70	Monthly	Grab

84066	Oil and Grease (visual)			Report	Monthly	Visual
03582	Oil and Grease (mg/l)			10	Contingent	Grab
70295	TDS (mg/l)	Report		Report	Quarterly	Grab
00978	As, TR (µg/l)	Report			2 Days/Month	Grab
01118	Cr, TR (µg/l)	Report		Report	2 Days/Month	Grab
04262	Cr+3, TR (µg/l)			Report	2 Days/Month	Grab
01314	Cr+3, PD (µg/l)	Report			2 Days/Month	Grab
01306	Cu, PD (µg/l)	Report		Report	2 Days/Month	Grab
01046	Fe, Dis (µg/l)	3297			2 Days/Month	Grab
00980	Fe, TR (µg/l)	3000		6000	Monthly	Grab
01114	Pb, TR (µg/l)			Report	2 Days/Month	Grab
01318	Pb, PD (µg/l)	Report		Report	2 Days/Month	Grab
01056	Mn, Dis (µg/l)	Report			2 Days/Month	Grab
01319	Mn, PD (µg/l)	Report		Report	2 Days/Month	Grab
50286	Hg, Tot (µg/l)	Report			2 Days/Month	Grab
01074	Ni, TR (µg/l)	Report			2 Days/Month	Grab
01322	Ni, PD (µg/l)	Report		Report	2 Days/Month	Grab
01323	Se, PD (µg/l)	Report		Report	2 Days/Month	Grab
01303	Zn, PD (µg/l)	Report		Report	2 Days/Month	Grab
82057	B, Tot (mg/l)	Report			2 Days/Month	Grab
00940	Chloride (mg/l)	Report			2 Days/Month	Grab
81020	Sulfate (mg/l)	Report			2 Days/Month	Grab
51202	Sulfide as H2S (mg/l)	Report			2 Days/Month	Grab
00918	Calcium (mg/l)	Report		Report	2 Days/Month	Grab
00921	Magnesium (mg/l)	Report		Report	2 Days/Month	Grab
00923	Sodium (mg/l)	Report		Report	2 Days/Month	Grab
00440	Bicarbonate as HCO_3 (mg/l)	Report		Report	2 Days/Month	Grab
00931	SAR calculated limit*	Report		Report	2 Days/Month	Calculated
00931	Adjusted SAR effluent**	Report		Report	2 Days/Month	Calculated
00094	EC (dS/m)	Report			2 Days/Month	Grab
	WET, acute					
TAN6C	LC50 Statre 96Hr Acute *Pimephales promelas*			LC50 $\geq$ 100	Quarterly	Grab
TAM3C	LC50 Statre 48Hr Acute *Daphnia magna*			LC50 $\geq$ 100	Quarterly	Grab

* 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.

** 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.

ALTERNATE LIMITATIONS

Any discharge or increase in the volume of a discharge is caused by precipitation within any 24-hour period **less than or equal to** the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) may comply with alternate limitations subject to burden of proof requirements as described in the EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS section.

The following limits for Fe(TR) and Settleable Solids may be substituted for the Fe(TR) and TSS limitations contained in the previous table. All other parameters remain unchanged.

Alternate Limits Outfall 009 (less than or equal to the 10-year, 24-hour precipitation event)

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)	3500		Report	Monthly	Grab
00545	Settleable Solids (ml/l)	Report		0.5	Monthly	Grab

ALTERNATE LIMITATIONS

Any discharge or increase in volume of a discharge caused by precipitation within any 24-hour period **greater than** the 10-year, 24-hour event (or series of storms or snowmelt of equivalent volume) may comply with alternate limitations subject to burden of proof requirements as described in the EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS section.

The following limit for Fe(TR) may be substituted for that contained in the previous table. TSS and Settleable Solids monitoring/ effluent limitations are not required. All other parameters remain unchanged.

Alternate Limits Outfall 009 (greater than the 10-year, 24-hour precipitation event)

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)	3500		Report	Monthly	Grab

Outfall 011A

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)	0.014		Report	Weekly	Instantaneous
00010	Temp Daily Max (°C) Mar-Nov, beginning 7/1/2020			Report	Continuous	Recorder
00010	Temp Daily Max (°C) Dec-Feb, beginning 7/1/2020			Report	Continuous	Recorder
00010	Temp MWAT (°C) Mar-Nov, beginning 7/1/2020		Report		Continuous	Recorder
00010	Temp MWAT (°C) Dec-Feb, beginning 7/1/2020		Report		Continuous	Recorder
00400	pH (su)			6.5-9.0	Weekly	Grab

00530	TSS, effluent (mg/l)	35		70	Monthly	Grab
84066	Oil and Grease (visual)			Report	Weekly	Visual
03582	Oil and Grease (mg/l)			10	Contingent	Grab
70295	TDS (mg/l)	Report		Report	Quarterly	Grab
00978	As, TR (µg/l)	Report			2 Days/Month	Grab
01118	Cr, TR (µg/l)	Report		Report	2 Days/Month	Grab
04262	Cr+3, TR (µg/l)			Report	2 Days/Month	Grab
01314	Cr+3, PD (µg/l)	Report			2 Days/Month	Grab
01306	Cu, PD (µg/l)	Report		Report	2 Days/Month	Grab
00980	Fe, TR (µg/l)	1000		6000	Monthly	Grab
01114	Pb, TR (µg/l)			Report	2 Days/Month	Grab
01318	Pb, PD (µg/l)	Report		Report	2 Days/Month	Grab
01056	Mn, Dis (µg/l)	Report			2 Days/Month	Grab
01319	Mn, PD (µg/l)	Report		Report	2 Days/Month	Grab
50286	Hg, Tot (µg/l)	Report			2 Days/Month	Grab
01074	Ni, TR (µg/l)	Report			2 Days/Month	Grab
01322	Ni, PD (µg/l)	Report		Report	2 Days/Month	Grab
01323	Se, PD (µg/l)	Report		Report	2 Days/Month	Grab
01303	Zn, PD (µg/l)	Report		Report	2 Days/Month	Grab
82057	B, Tot (mg/l)	Report			2 Days/Month	Grab
00940	Chloride (mg/l)	Report			2 Days/Month	Grab
81020	Sulfate (mg/l)	Report			2 Days/Month	Grab
51202	Sulfide as H2S (mg/l)	Report			2 Days/Month	Grab
00918	Calcium (mg/l)	Report		Report	2 Days/Month	Grab
00921	Magnesium (mg/l)	Report		Report	2 Days/Month	Grab
00923	Sodium (mg/l)	Report		Report	2 Days/Month	Grab
00440	Bicarbonate as HCO_3 (mg/l)	Report		Report	2 Days/Month	Grab
00931	SAR calculated limit*	Report		Report	2 Days/Month	Calculated
00931	Adjusted SAR effluent**	Report		Report	2 Days/Month	Calculated
00094	EC (dS/m)	Report			2 Days/Month	Grab
	WET, acute beginning October 1, 2021					
TAN6C	LC50 Statre 96Hr Acute* *Pimephales promelas*			LC50 $\geq$ 100	Quarterly	3 Grabs / Test
TAM3C	LC50 Statre 48Hr Acute *Daphnia magna*			LC50 $\geq$ 100	Quarterly	3 Grabs / Test
51484	Number of days discharging**	<10	<3		Monthly	Calculated
81381	Duration of discharge (days)**		<3		Weekly	Calculated

* 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.

** 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.

Outfall 012A

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)	0.072		Report	Weekly	Instantaneous
00010	Temp Daily Max (°C) Jun-Sep, beginning 7/1/2020			Report	Continuous	Recorder
00010	Temp Daily Max (°C) Oct-May, beginning 7/1/2020			Report	Continuous	Recorder
00010	Temp MWAT (°C) Jun-Sep, beginning 7/1/2020		Report		Continuous	Recorder
00010	Temp MWAT (°C) Oct-May, beginning 7/1/2020		Report		Continuous	Recorder
00400	pH (su)			6.5-9.0	Weekly	Grab
00530	TSS, effluent (mg/l)	35		70	Monthly	Grab
84066	Oil and Grease (visual)			Report	Weekly	Visual
03582	Oil and Grease (mg/l)			10	Contingent	Grab
70295	TDS (mg/l)	Report		Report	Quarterly	Grab
00978	As, TR (µg/l)	Report			2 Days/Month	Grab
01118	Cr, TR (µg/l)	Report		Report	2 Days/Month	Grab
04262	Cr+3, TR (µg/l)			Report	2 Days/Month	Grab
01314	Cr+3, PD (µg/l)	Report			2 Days/Month	Grab
01306	Cu, PD (µg/l)	Report		Report	2 Days/Month	Grab
01046	Fe, Dis (µg/l), until 7/31/22	Report			2 Days/Month	Grab
01046	Fe, Dis (µg/l), beginning 8/1/22	300			2 Days/Month	Grab
00980	Fe, TR (µg/l), until 7/31/22	3500		7000	Monthly	Grab
00980	Fe, TR (µg/l), beginning 8/1/22	1000		6000	Monthly	Grab
01114	Pb, TR (µg/l)			Report	2 Days/Month	Grab
01318	Pb, PD (µg/l)	Report		Report	2 Days/Month	Grab
01056	Mn, Dis (µg/l)	Report			2 Days/Month	Grab
01319	Mn, PD (µg/l)	Report		Report	2 Days/Month	Grab
50286	Hg, Tot (µg/l)	Report			2 Days/Month	Grab
01074	Ni, TR (µg/l)	Report			2 Days/Month	Grab
01322	Ni, PD (µg/l)	Report		Report	2 Days/Month	Grab
01323	Se, PD (µg/l)	Report		Report	2 Days/Month	Grab
01303	Zn, PD (µg/l)	Report		Report	2 Days/Month	Grab

82057	B, Tot (mg/l)	Report			2 Days/Month	Grab
00940	Chloride (mg/l)	Report			2 Days/Month	Grab
81020	Sulfate (mg/l)	Report			2 Days/Month	Grab
51202	Sulfide as H2S (mg/l)	Report			2 Days/Month	Grab
	WET, acute					
TAN6C	LC50 Statre 96Hr Acute* *Pimephales promelas*			LC50 ≥ 100	Quarterly	3 Grabs / Test
TAM3C	LC50 Statre 48Hr Acute *Daphnia magna*			LC50 ≥ 100	Quarterly	3 Grabs / Test
51484	Number of days discharging**	<10	<3		Monthly	Calculated
81381	Duration of discharge (days)**		<3		Weekly	Calculated

*ACUTE WET BASED ON INTERMITTENT DISCHARGE. SEE DEFINITIONS.
**Please note, there is no 30-day average or 7-day average for the purpose of intermittent discharge. The 30-day average shall represent the 30-day (monthly) maximum in relation to the intermittent discharge definition. The 7-day average shall represent the 7-day (weekly) maximum in relation to the intermittent discharge definition.

Outfall 014A

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)	0.03		Report	Monthly	Instantaneous
00010	Temp Daily Max (°C) Mar-Nov, beginning 7/1/2020			Report	Continuous	Recorder
00010	Temp Daily Max (°C) Dec-Feb, beginning 7/1/2020			Report	Continuous	Recorder
00010	Temp MWAT (°C) Mar-Nov, beginning 7/1/2020		Report		Continuous	Recorder
00010	Temp MWAT (°C) Dec-Feb, beginning 7/1/2020		Report		Continuous	Recorder
00400	pH (su)			6.5-9.0	Monthly	Grab
00530	TSS, effluent (mg/l)	35		70	Monthly	Grab
00978	As, TR (µg/l)	Report			Quarterly	Grab
01118	Cr, TR (µg/l)	Report		Report	Quarterly	Grab
04262	Cr+3, TR (µg/l)			Report	Quarterly	Grab
01314	Cr+3, PD (µg/l)	Report			Quarterly	Grab
01306	Cu, PD (µg/l)	Report		Report	Quarterly	Grab
00980	Fe, TR (µg/l), until 7/31/22	3500		7000	Monthly	Grab
00980	Fe, TR (µg/l), beginning 8/1/22	1000		6000	Monthly	Grab
01114	Pb, TR (µg/l)			Report	Quarterly	Grab

01318	Pb, PD (µg/l)	Report		Report	Quarterly	Grab
01056	Mn, Dis (µg/l)	Report			Quarterly	Grab
01319	Mn, PD (µg/l)	Report		Report	Quarterly	Grab
50286	Hg, Tot (µg/l)	Report			Quarterly	Grab
01074	Ni, TR (µg/l)	Report			Quarterly	Grab
01322	Ni, PD (µg/l)	Report		Report	Quarterly	Grab
01323	Se, PD (µg/l)	Report		Report	Quarterly	Grab
01303	Zn, PD (µg/l)	Report		Report	Quarterly	Grab
82057	B, Tot (mg/l)	Report			Quarterly	Grab
00940	Chloride (mg/l)	Report			Quarterly	Grab
81020	Sulfate (mg/l)	Report			Quarterly	Grab
51202	Sulfide as H2S (mg/l)	Report			Quarterly	Grab

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

ALTERNATE LIMITATIONS

Any discharge or increase in the volume of a discharge is caused by precipitation within any 24-hour period **less than or equal to** the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) may comply with alternate limitations subject to burden of proof requirements as described in the EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS section.

The following limits for Fe(TR) and Settleable Solids may be substituted for the Fe(TR) and TSS limitations contained in the previous table. All other parameters remain unchanged.

Alternate Limits Outfall 014 (less than or equal to the 10-year, 24-hour precipitation event)

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), until 7/31/22	Report		Report	Monthly	Grab
00980	Fe, TR (µg/l), beginning 8/1/22	1000		Report	Monthly	Grab
00545	Settleable Solids (ml/l)	Report		0.5	Monthly	Grab

ALTERNATE LIMITATIONS

Any discharge or increase in volume of a discharge caused by precipitation within any 24-hour period **greater than** the 10-year, 24-hour event (or series of storms or snowmelt of equivalent volume) may comply with alternate limitations subject to burden of proof requirements as described in the EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS section.

The following limit for Fe(TR) may be substituted for that contained in the previous table. TSS and Settleable Solids monitoring/ effluent limitations are not required. All other parameters remain unchanged.

Alternate Limits Outfall 014 (greater than the 10-year, 24-hour precipitation event)

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), until 7/31/22	Report		Report	Monthly	Grab
00980	Fe, TR (µg/l), beginning 8/1/22	1000		Report	Monthly	Grab

Outfall 015A

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)	0.049		Report	Monthly	Instantaneous
00400	pH (su)			6.5-9.0	Monthly	Grab
00530	TSS, effluent (mg/l)	35		70	Monthly	Grab
84066	Oil and Grease (visual)			Report	Monthly	Visual
03582	Oil and Grease (mg/l)			10	Contingent	Grab
70295	TDS (mg/l)	Report		Report	Quarterly	Grab
00978	As, TR (µg/l)	Report			2 Days/Month	Grab
01118	Cr, TR (µg/l)	Report		Report	2 Days/Month	Grab
04262	Cr+3, TR (µg/l)			Report	2 Days/Month	Grab
01314	Cr+3, PD (µg/l)	Report			2 Days/Month	Grab
01306	Cu, PD (µg/l)	Report		Report	2 Days/Month	Grab
01046	Fe, Dis (µg/l)	3297			2 Days/Month	Grab
00980	Fe, TR (µg/l)	3000		6000	Monthly	Grab
01114	Pb, TR (µg/l)			Report	2 Days/Month	Grab
01318	Pb, PD (µg/l)	Report		Report	2 Days/Month	Grab
01056	Mn, Dis (µg/l)	Report			2 Days/Month	Grab
01319	Mn, PD (µg/l)	Report		Report	2 Days/Month	Grab
50286	Hg, Tot (µg/l)	Report			2 Days/Month	Grab
01074	Ni, TR (µg/l)	Report			2 Days/Month	Grab
01322	Ni, PD (µg/l)	Report		Report	2 Days/Month	Grab
01323	Se, PD (µg/l)	Report		Report	2 Days/Month	Grab
01303	Zn, PD (µg/l)	Report		Report	2 Days/Month	Grab
82057	B, Tot (mg/l)	Report			2 Days/Month	Grab
00940	Chloride (mg/l)	Report			2 Days/Month	Grab
81020	Sulfate (mg/l)	Report			2 Days/Month	Grab
51202	Sulfide as H2S (mg/l)	Report			2 Days/Month	Grab
00918	Calcium (mg/l)	Report		Report	2 Days/Month	Grab
00921	Magnesium (mg/l)	Report		Report	2 Days/Month	Grab
00923	Sodium (mg/l)	Report		Report	2 Days/Month	Grab
00440	Bicarbonate as HCO_3 (mg/l)	Report		Report	2 Days/Month	Grab
00931	SAR calculated limit*	Report		Report	2 Days/Month	Calculated
00931	Adjusted SAR effluent**	Report		Report	2 Days/Month	Calculated
00094	EC (dS/m)	Report			2 Days/Month	Grab
	WET, acute until 9/30/21					
TAN6C	LC50 Statre 96Hr Acute *Pimephales promelas*			Report; LC50 $\geq$ 100	Quarterly	Grab

TAM3C	LC50 Statre 48Hr Acute *Daphnia magna*			Report; LC50 ≥ 100	Quarterly	Grab
	WET, acute beginning 10/1/21					
TAN6C	LC50 Statre 96Hr Acute *Pimephales promelas*			LC50 ≥ 100	Quarterly	Grab
TAM3C	LC50 Statre 48Hr Acute *Daphnia magna*			LC50 ≥ 100	Quarterly	Grab

** 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.

*** 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.

ALTERNATE LIMITATIONS

Any discharge or increase in the volume of a discharge is caused by precipitation within any 24-hour period **less than or equal to** the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) may comply with alternate limitations subject to burden of proof requirements as described in the EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS section.

The following limits for Fe(TR) and Settleable Solids may be substituted for the Fe(TR) and TSS limitations contained in the previous table. All other parameters remain unchanged.

Alternate Limits Outfall 015 (less than or equal to the 10-year, 24-hour precipitation event)

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), until 7/31/22	Report		Report	Monthly	Grab
00980	Fe, TR (µg/l), beginning 8/1/22	3500		Report	Monthly	Grab
00545	Settleable Solids (ml/l)	Report		0.5	Monthly	Grab

ALTERNATE LIMITATIONS

Any discharge or increase in volume of a discharge caused by precipitation within any 24-hour period **greater than** the 10-year, 24-hour event (or series of storms or snowmelt of equivalent volume) may comply with alternate limitations subject to burden of proof requirements as described in the EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS section.

The following limit for Fe(TR) may be substituted for that contained in the previous table. TSS and Settleable Solids monitoring/ effluent limitations are not required. All other parameters remain unchanged.

Alternate Limits Outfall 015 (greater than the 10-year, 24-hour precipitation event)

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), until 7/31/22	Report		Report	Monthly	Grab
00980	Fe, TR (µg/l), beginning 8/1/22	3500		Report	Monthly	Grab

Outfall 017A

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)	0.29		Report	Weekly	Instantaneous
00010	Temp Daily Max (°C) Mar-Nov, beginning 7/1/2020			Report	Continuous	Recorder
00010	Temp Daily Max (°C) Dec-Feb, beginning 7/1/2020			Report	Continuous	Recorder
00010	Temp MWAT (°C) Mar-Nov, beginning 7/1/2020		Report		Continuous	Recorder
00010	Temp MWAT (°C) Dec-Feb, beginning 7/1/2020		Report		Continuous	Recorder
00400	pH (su)			6.5-9.0	Weekly	Grab
00530	TSS, effluent (mg/l)	35		70	Monthly	Grab
84066	Oil and Grease (visual)			Report	Weekly	Visual
03582	Oil and Grease (mg/l)			10	Contingent	Grab
70295	TDS (mg/l)	Report		Report	Quarterly	Grab
00978	As, TR (µg/l) until 12/31/2024	100			2 Days/Month	Grab
00978	As, TR (µg/l) beginning 1/1/2025 until 12/31/2027	5			2 Days/Month	Grab
00978	As, TR (µg/l) beginning 1/1/2028	0.02			2 Days/Month	Grab
01118	Cr, TR (µg/l)	Report		Report	2 Days/Month	Grab
04262	Cr+3, TR (µg/l)			Report	2 Days/Month	Grab
01314	Cr+3, PD (µg/l)	Report			2 Days/Month	Grab
01306	Cu, PD (µg/l)	Report		Report	2 Days/Month	Grab
00980	Fe, TR (µg/l)	1000		6000	Monthly	Grab
01114	Pb, TR (µg/l)			Report	2 Days/Month	Grab
01318	Pb, PD (µg/l)	Report		Report	2 Days/Month	Grab
01056	Mn, Dis (µg/l)	Report			2 Days/Month	Grab
01319	Mn, PD (µg/l)	Report		Report	2 Days/Month	Grab
50286	Hg, Tot (µg/l)	Report			2 Days/Month	Grab
01074	Ni, TR (µg/l)	Report			2 Days/Month	Grab
01322	Ni, PD (µg/l)	Report		Report	2 Days/Month	Grab
01323	Se, PD (µg/l)	Report		Report	2 Days/Month	Grab
01303	Zn, PD (µg/l)	Report		Report	2 Days/Month	Grab
82057	B, Tot (mg/l) until 7/31/22	2.59			2 Days/Month	Grab
82057	B, Tot (mg/l) beginning 8/1/22	0.75			2 Days/Month	Grab
00940	Chloride (mg/l)	Report			2 Days/Month	Grab
81020	Sulfate (mg/l)	Report			2 Days/Month	Grab
51202	Sulfide as H2S (mg/l)	Report			2 Days/Month	Grab
00918	Calcium (mg/l)	Report		Report	2 Days/Month	Grab
00921	Magnesium (mg/l)	Report		Report	2 Days/Month	Grab
00923	Sodium (mg/l)	Report		Report	2 Days/Month	Grab

00440	Bicarbonate as HCO_3 (mg/l)	Report		Report	2 Days/Month	Grab
00931	SAR calculated limit*	Report		Report	2 Days/Month	Calculated
00931	Adjusted SAR effluent**	Report		Report	2 Days/Month	Calculated
00094	EC (dS/m)	Report			2 Days/Month	Grab
	WET, acute					
TAN6C	LC50 Statre 96Hr Acute*** *Pimephales promelas*			LC50 $\geq$ 100	Quarterly	3 Grabs / Test
TAM3C	LC50 Statre 48Hr Acute *Daphnia magna*			LC50 $\geq$ 100	Quarterly	3 Grabs / Test
51484	Number of days discharging****	<10	<3		Monthly	Calculated
81381	Duration of discharge (days)****		<3		Weekly	Calculated

* 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.

** 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.

***ACUTE WET BASED ON INTERMITTENT DISCHARGE. SEE DEFINITIONS.
****Please note, there is no 30-day average or 7-day average for the purpose of intermittent discharge. The 30-day average shall represent the 30-day (monthly) maximum in relation to the intermittent discharge definition. The 7-day average shall represent the 7-day (weekly) maximum in relation to the intermittent discharge definition.

Outfall 025A

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)	1.35		Report	Monthly	Instantaneous
00400	pH (su)			6.5-9.0	Monthly	Grab
00530	TSS, effluent (mg/l)	35		70	Monthly	Grab
00545	Settleable Solids (ml/l)	Report		Report	Monthly	Grab
00978	As, TR (µg/l)	Report			Quarterly	Grab
01118	Cr, TR (µg/l)	Report		Report	Quarterly	Grab
04262	Cr+3, TR (µg/l)			Report	Quarterly	Grab
01314	Cr+3, PD (µg/l)	Report			Quarterly	Grab
01306	Cu, PD (µg/l)	Report		Report	Quarterly	Grab
00980	Fe, TR (µg/l), until 7/31/22	Report		6000	Monthly	Grab
00980	Fe, TR (µg/l), beginning 8/1/22	1000		6000	Monthly	Grab
01114	Pb, TR (µg/l)			Report	Quarterly	Grab
01318	Pb, PD (µg/l)	Report		Report	Quarterly	Grab
01056	Mn, Dis (µg/l)	Report			Quarterly	Grab
01319	Mn, PD (µg/l)	Report		Report	Quarterly	Grab

50286	Hg, Tot (µg/l)	Report			Quarterly	Grab
01074	Ni, TR (µg/l)	Report			Quarterly	Grab
01322	Ni, PD (µg/l)	Report		Report	Quarterly	Grab
01323	Se, PD (µg/l)	Report		Report	Quarterly	Grab
01303	Zn, PD (µg/l)	Report		Report	Quarterly	Grab
82057	B, Tot (mg/l)	Report			Quarterly	Grab
00940	Chloride (mg/l)	Report			Quarterly	Grab
81020	Sulfate (mg/l)	Report			Quarterly	Grab
51202	Sulfide as H2S (mg/l)	Report			Quarterly	Grab

Outfall 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)	0.22		Report	Monthly	Instantaneous
00400	pH (su)			6.5-9.0	Monthly	Grab
00530	TSS, effluent (mg/l)	35		70	Monthly	Grab
00545	Settleable Solids (ml/l)	Report		Report	Monthly	Grab
00978	As, TR (µg/l)	Report			Quarterly	Grab
01118	Cr, TR (µg/l)	Report		Report	Quarterly	Grab
04262	Cr+3, TR (µg/l)			Report	Quarterly	Grab
01314	Cr+3, PD (µg/l)	Report			Quarterly	Grab
01306	Cu, PD (µg/l)	Report		Report	Quarterly	Grab
00980	Fe, TR (µg/l), until 7/31/22	Report		6000	Monthly	Grab
00980	Fe, TR (µg/l), beginning 8/1/22	1000		6000	Monthly	Grab
01114	Pb, TR (µg/l)			Report	Quarterly	Grab
01318	Pb, PD (µg/l)	Report		Report	Quarterly	Grab
01056	Mn, Dis (µg/l)	Report			Quarterly	Grab
01319	Mn, PD (µg/l)	Report		Report	Quarterly	Grab
50286	Hg, Tot (µg/l)	Report			Quarterly	Grab
01074	Ni, TR (µg/l)	Report			Quarterly	Grab
01322	Ni, PD (µg/l)	Report		Report	Quarterly	Grab
01323	Se, PD (µg/l)	Report		Report	Quarterly	Grab
01303	Zn, PD (µg/l)	Report		Report	Quarterly	Grab
82057	B, Tot (mg/l)	Report			Quarterly	Grab
00940	Chloride (mg/l)	Report			Quarterly	Grab
81020	Sulfate (mg/l)	Report			Quarterly	Grab
51202	Sulfide as H2S (mg/l)	Report			Quarterly	Grab

Outfalls 027A

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)	0.48		Report	Monthly	Instantaneous
00400	pH (su)			6.5-9.0	Monthly	Grab
00530	TSS, effluent (mg/l)	35		70	Monthly	Grab
00545	Settleable Solids (ml/l)	Report		Report	Monthly	Grab
00978	As, TR (µg/l)	Report			Quarterly	Grab
01118	Cr, TR (µg/l)	Report		Report	Quarterly	Grab
04262	Cr+3, TR (µg/l)			Report	Quarterly	Grab
01314	Cr+3, PD (µg/l)	Report			Quarterly	Grab
01306	Cu, PD (µg/l)	Report		Report	Quarterly	Grab
00980	Fe, TR (µg/l), until 7/31/22	Report		6000	Monthly	Grab
00980	Fe, TR (µg/l), beginning 8/1/22	1000		6000	Monthly	Grab
01114	Pb, TR (µg/l)			Report	Quarterly	Grab
01318	Pb, PD (µg/l)	Report		Report	Quarterly	Grab
01056	Mn, Dis (µg/l)	Report			Quarterly	Grab
01319	Mn, PD (µg/l)	Report		Report	Quarterly	Grab
50286	Hg, Tot (µg/l)	Report			Quarterly	Grab
01074	Ni, TR (µg/l)	Report			Quarterly	Grab
01322	Ni, PD (µg/l)	Report		Report	Quarterly	Grab
01323	Se, PD (µg/l)	Report		Report	Quarterly	Grab
01303	Zn, PD (µg/l)	Report		Report	Quarterly	Grab
82057	B, Tot (mg/l)	Report			Quarterly	Grab
00940	Chloride (mg/l)	Report			Quarterly	Grab
81020	Sulfate (mg/l)	Report			Quarterly	Grab
51202	Sulfide as H2S (mg/l)	Report			Quarterly	Grab

Outfall 030A

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)	0.07		Report	Monthly	Instantaneous
00400	pH (su)			6.5-9.0	Monthly	Grab
00530	TSS, effluent (mg/l)	35		70	Monthly	Grab
00545	Settleable Solids (ml/l)	Report		Report	Monthly	Grab
70295	TDS (mg/l)	Report		Report	Quarterly	Grab
00978	As, TR (µg/l)	Report			Quarterly	Grab
01118	Cr, TR (µg/l)	Report		Report	Quarterly	Grab
04262	Cr+3, TR (µg/l)			Report	Quarterly	Grab
01314	Cr+3, PD (µg/l)	Report			Quarterly	Grab

01306	Cu, PD (µg/l)	Report		Report	Quarterly	Grab
00980	Fe, TR (µg/l), until 7/31/22	Report		6000	Monthly	Grab
00980	Fe, TR (µg/l), beginning 8/1/22	1000		6000	Monthly	Grab
01114	Pb, TR (µg/l)			Report	Quarterly	Grab
01318	Pb, PD (µg/l)	Report		Report	Quarterly	Grab
01056	Mn, Dis (µg/l)	Report			Quarterly	Grab
01319	Mn, PD (µg/l)	Report		Report	Quarterly	Grab
50286	Hg, Tot (µg/l)	Report			Quarterly	Grab
01074	Ni, TR (µg/l)	Report			Quarterly	Grab
01322	Ni, PD (µg/l)	Report		Report	Quarterly	Grab
01323	Se, PD (µg/l)	Report		Report	Quarterly	Grab
01303	Zn, PD (µg/l)	Report		Report	Quarterly	Grab
82057	B, Tot (mg/l)	Report			Quarterly	Grab
00940	Chloride (mg/l)	Report			Quarterly	Grab
81020	Sulfate (mg/l)	Report			Quarterly	Grab
51202	Sulfide as H2S (mg/l)	Report			Quarterly	Grab

Outfall 032A

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)	0.58		Report	Monthly	Instantaneous
00400	pH (su)			6.5-9.0	Monthly	Grab
00530	TSS, effluent (mg/l)	35		70	Monthly	Grab
00545	Settleable Solids (ml/l)	Report		Report	Monthly	Grab
00978	As, TR (µg/l)	Report			Quarterly	Grab
01118	Cr, TR (µg/l)	Report		Report	Quarterly	Grab
04262	Cr+3, TR (µg/l)			Report	Quarterly	Grab
01314	Cr+3, PD (µg/l)	Report			Quarterly	Grab
01306	Cu, PD (µg/l)	Report		Report	Quarterly	Grab
00980	Fe, TR (µg/l), until 7/31/22	Report		6000	Monthly	Grab
00980	Fe, TR (µg/l), beginning 8/1/22	1000		6000	Monthly	Grab
01114	Pb, TR (µg/l)			Report	Quarterly	Grab
01318	Pb, PD (µg/l)	Report		Report	Quarterly	Grab
01056	Mn, Dis (µg/l)	Report			Quarterly	Grab
01319	Mn, PD (µg/l)	Report		Report	Quarterly	Grab
50286	Hg, Tot (µg/l)	Report			Quarterly	Grab
01074	Ni, TR (µg/l)	Report			Quarterly	Grab
01322	Ni, PD (µg/l)	Report		Report	Quarterly	Grab
01323	Se, PD (µg/l)	Report		Report	Quarterly	Grab
01303	Zn, PD (µg/l)	Report		Report	Quarterly	Grab
82057	B, Tot (mg/l)	Report			Quarterly	Grab
00940	Chloride (mg/l)	Report			Quarterly	Grab

81020	Sulfate (mg/l)	Report			Quarterly	Grab
51202	Sulfide as H2S (mg/l)	Report			Quarterly	Grab

Outfall 033A

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)	0.54		Report	Monthly	Instantaneous
00400	pH (su)			6.0-9.0	Monthly	Grab
00530	TSS, effluent (mg/l)	35		70	Monthly	Grab
00545	Settleable Solids (ml/l)	Report		Report	Monthly	Grab
00980	Fe, TR (µg/l)	3000		6000	Monthly	Grab

Outfall 034A

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)	0.39		Report	Monthly	Instantaneous
00400	pH (su)			6.5-9.0	Monthly	Grab
00978	As, TR (µg/l)	Report			Quarterly	Grab
01118	Cr, TR (µg/l)	Report		Report	Quarterly	Grab
04262	Cr+3, TR (µg/l)			Report	Quarterly	Grab
01314	Cr+3, PD (µg/l)	Report			Quarterly	Grab
01306	Cu, PD (µg/l)	Report		Report	Quarterly	Grab
00980	Fe, TR (µg/l), until 7/31/22	Report			Monthly	Grab
00980	Fe, TR (µg/l), beginning 8/1/22	1000			Monthly	Grab
01114	Pb, TR (µg/l)			Report	Quarterly	Grab
01318	Pb, PD (µg/l)	Report		Report	Quarterly	Grab
01056	Mn, Dis (µg/l)	Report			Quarterly	Grab
01319	Mn, PD (µg/l)	Report		Report	Quarterly	Grab
50286	Hg, Tot (µg/l)	Report			Quarterly	Grab
01074	Ni, TR (µg/l)	Report			Quarterly	Grab
01322	Ni, PD (µg/l)	Report		Report	Quarterly	Grab
01323	Se, PD (µg/l)	Report		Report	Quarterly	Grab
01303	Zn, PD (µg/l)	Report		Report	Quarterly	Grab
82057	B, Tot (mg/l)	Report			Quarterly	Grab
00940	Chloride (mg/l)	Report			Quarterly	Grab
81020	Sulfate (mg/l)	Report			Quarterly	Grab
51202	Sulfide as H2S (mg/l)	Report			Quarterly	Grab

Outfall 035A

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)	1.30		Report	Monthly	Instantaneous
00400	pH (su)			6.5-9.0	Monthly	Grab
00530	TSS, effluent (mg/l)	35		70	Monthly	Grab
00978	As, TR (µg/l)	Report			Quarterly	Grab
01118	Cr, TR (µg/l)	Report		Report	Quarterly	Grab
04262	Cr+3, TR (µg/l)			Report	Quarterly	Grab
01314	Cr+3, PD (µg/l)	Report			Quarterly	Grab
01306	Cu, PD (µg/l)	Report		Report	Quarterly	Grab
00980	Fe, TR (µg/l), until 7/31/22	Report		6000	Monthly	Grab
00980	Fe, TR (µg/l), beginning 8/1/22	1000		6000	Monthly	Grab
01114	Pb, TR (µg/l)			Report	Quarterly	Grab
01318	Pb, PD (µg/l)	Report		Report	Quarterly	Grab
01056	Mn, Dis (µg/l)	Report			Quarterly	Grab
01319	Mn, PD (µg/l)	Report		Report	Quarterly	Grab
50286	Hg, Tot (µg/l)	Report			Quarterly	Grab
01074	Ni, TR (µg/l)	Report			Quarterly	Grab
01322	Ni, PD (µg/l)	Report		Report	Quarterly	Grab
01323	Se, PD (µg/l)	Report		Report	Quarterly	Grab
01303	Zn, PD (µg/l)	Report		Report	Quarterly	Grab
82057	B, Tot (mg/l)	Report			Quarterly	Grab
00940	Chloride (mg/l)	Report			Quarterly	Grab
81020	Sulfate (mg/l)	Report			Quarterly	Grab
51202	Sulfide as H2S (mg/l)	Report			Quarterly	Grab

2. **Monitoring Frequency and Sample Type Influent Parameters**

Regardless of whether or not an effluent discharge occurs and in order to obtain an indication of the current influent loading as compared to the approved capacity specified in Part I.A.2; the permittee shall monitor influent parameters at the following required frequencies, the results to be reported on the Discharge Monitoring Report:

If the permittee monitors any parameter more frequently than required by the permit, using an approved test procedure or as specified in the permit, the result of this monitoring shall be included in the calculation and reporting of data to the Division.

Self-monitoring samples taken in compliance with the monitoring requirements specified below shall be taken at the following location(s): **300I, a representative point prior to treatment.**

Based on Site Approval **3536**, the design capacity of this domestic wastewater treatment works is **0.02 million gallons per day** (MGD) for hydraulic flow (30-day average) and **28 lbs. BOD_5 per day** for organic loading (30-day average).

Permitted Feature 300I

ICIS Code	Parameter	Discharge Limitations Maximum Concentrations			Monitoring Frequency	Sample Type
		30-Day Average	7-Day Average	Daily Max.		
00180 G	Plant Capacity (% of Capacity - Hydraulic) [1]	Report			Monthly	Calculated [1]
00310 G	BOD_5, mg/l	Report	Report		Monthly	Composite
00310 G	BOD_5, lbs/day	Report	Report		Monthly	Calculated
00180 G	Plant Capacity (% of Capacity - Organic) [1]	Report			Monthly	Calculated [1]
00530G	Total Suspended Solids, mg/l	Report	Report		Monthly	Composite

[1] The % capacity is to be reported against the listed capacities of 0.02 MGD for the hydraulic capacity and 28 lbs/ BOD5 per day for the organic capacities as noted in Site Approval 3536. The percentage should be calculated using the 30-day average values divided by the corresponding capacity, times 100.

3. Narrative Water Quality Based Effluent Limitation (Outfalls 014, 019-043, 046-048, 050-051, 053-054, 056-062, 065-069, 071-125)

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. 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.

4. Federal Effluent Limitation Guideline - Sediment Control Plan (Outfalls 019, 028, 036-043, 046-048, 050-051, 053-054, 056-062, 065-069, 071-125)

ICIS Code	Description	Due date	Frequency
00308	The permittee shall submit proof to the division that the Sediment Control Plan (SCP) required under Subpart H (40 CFR Part 434.82) has been approved by the Colorado Division of Reclamation, Mining, and Safety, and is implemented at the facility.	December 1, 2019	Annual

5. Stormwater Practice-based Effluent Limitations (Outfalls 014, 019-043, 046-048, 050-051, 053-054, 056-062, 065-069, 071-125)

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.

D. WHOLE EFFLUENT TOXICITY TESTING

1. Acute WET Testing (Outfalls 005, 008, 009, 011, 012, 015, 017)

a. General Acute WET Testing and Reporting Requirements

The permittee shall conduct an acute 48-hour WET test using *Daphnia magna*, 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.

E. SPECIAL STUDIES AND ADDITIONAL MONITORING REQUIREMENTS

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.A. 2.

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.	June 30, 2020

F. COMPLIANCE SCHEDULE(S)

1. Activities to Meet Total Recoverable Iron (Outfalls 012, 014, 015, 026, 027, 030, 032, 034)- – In order to meet Total Recoverable Iron limitations, the following schedule is included in the permit.

Code	Event	Description	Due Date
43699	Facility Evaluation Plan	Submit a report that identifies sources of iron to the facility and identify strategies to control these sources or treatment alternatives such that compliance with the final limitations may be attained.	7/31/20
00899	Implementation Schedule	Submit a progress report summarizing the progress in implementing the strategies to control sources or treatment alternatives such that compliance with the final limitations may be attained.	7/31/21
CS017	Achieve Final Compliance with Discharge Limits	Submit study results that show compliance has been attained with the final limitations.	7/31/22

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. 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.

2. Activities to Meet Total Ammonia, (Outfall 007)- In order to meet Total Ammonia limitations, the following schedule is included in the permit.

Code	Event	Description	Due Date
43699	Facility Evaluation Plan	Submit a report that identifies sources of ammonia, to the facility and identify strategies to control these sources or treatment alternatives such that compliance with the final limitations may be attained.	1/31/20
CS017	Achieve Final Compliance with Discharge Limits	Submit study results that show compliance has been attained with the final limitations.	7/31/20

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. 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.

3. Activities to Meet Boron (Outfall 017)- In order to meet boron limitations, the following schedule is included in the permit.

Code	Event	Description	Due Date
43699	Facility Evaluation Plan	Submit a report that identifies sources of boron to the facility and identify strategies to control these sources or treatment alternatives such that compliance with the final limitations may be attained.	7/31/20
00899	Implementation Schedule	Submit a progress report summarizing the progress in implementing the strategies to control sources or treatment alternatives such that compliance with the final limitations may be attained.	7/31/21
CS017	Achieve Final Compliance with Discharge Limits	Submit study results that show compliance has been attained with the final limitations.	7/31/22

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. 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.

4. Activities to Meet Total Recoverable Arsenic (Outfall 017)- In order to meet arsenic limitations, the following schedule is included in the permit.

Code	Event	Description	Due Date
43699	Facility Evaluation Plan	Submit a report that identifies sources of arsenic to the facility and identify strategies to control these sources or treatment alternatives such that compliance with the final limitations may be attained.	12/31/2025
00899	Implementation Schedule	Submit a progress report summarizing the progress in implementing the strategies to control sources or treatment alternatives such that compliance with the final limitations may be attained.	12/31/2026
CS017	Achieve Final Compliance with Discharge Limits	Submit study results that show compliance has been attained with the final limitations.	12/31/2027

5. Activities to Meet Total Inorganic Nitrogen (Outfall 009)- In order to meet Total Inorganic limitations, the following schedule is included in the permit.

Code	Event	Description	Due Date
43699	Facility Evaluation Plan	Submit a report that identifies sources of nitrogen to the facility and identify strategies to control these sources or treatment alternatives such that compliance with the final limitations may be attained.	1/31/20
CS017	Achieve Final Compliance with Discharge Limits	Submit study results that show compliance has been attained with the final limitations.	7/31/20

6. Activities to Meet *E. coli* (Outfall 009) - In order to meet *E. coli* limitations, the following schedule is included in the permit.

Code	Event	Description	Due Date
43699	Facility Evaluation Plan	Submit a report that identifies sources of *E. coli*, to the facility and identify strategies to control these sources or treatment alternatives such that compliance with the final limitations may be attained.	1/31/20
CS017	Achieve Final Compliance with Discharge Limits	Submit study results that show compliance has been attained with the final limitations.	10/31/20

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. 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.

G. STORMWATER CONTROL MEASURES (Outfalls 014, 019-043, 046-048, 050-051, 053-054, 056-062, 065-069, 071-125)

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. Control Measure exception – contributing area not disturbed

Control measures and maintenance of control measures are not required at outfalls subject to Subpart H of 40 CFR 434 that have not discharged 'stormwater associated with industrial activity' because the area contributing to the outfall has not yet been disturbed. The locations of such stormwater outfalls (and outline of areas draining to the outfall) must be identified on the Facility map at Part I.J.2.c. of this Permit. Control measures and all associated provisions consistent with the requirements at Part I.G of the Permit must start once the outfall and associated area is disturbed.

2. 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).

3. 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.

H. STORMWATER INSPECTIONS (Outfalls 014, 019-043, 046-048, 050-051, 053-054, 056-062, 065-069, 071-125)

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 **two** comprehensive stormwater inspections per year (in spring and fall).

b. conduct a minimum of **one** (1) of the **two** (2) inspections during a 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. For the remaining two quarters of the year (summer and winter), conduct corrective actions across the facility for deficiencies represented by each DRMS inspection finding in one of the monthly (or as appropriate, quarterly) SMCRA inspections.

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

e. 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. 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 Documentation

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. Runoff event inspection exception at Phase 1 reclamation areas

The requirement to conduct and document at least one (1) inspection per calendar year during a runoff event, does not apply at Phase 1 reclamation areas that meet all of the conditions below. Note that all other inspection provisions in this part remain applicable.

a. All industrial activities (such as mine vent bore hole activities; mining, regrading, and other land disturbing activities; processing; fueling; loading/unloading; etc.) are permanently complete in the specified area;

b. The permittee has implemented all Phase 1 reclamation measures to enable the specified area to successfully reclaim;

c. All reclamation measures are selected, designed, installed, implemented and maintained in accordance with good engineering hydrologic and pollution control practices such that they effectively reduce pollutant potential and the potential for control measure failure for the designated area; and

d. The permittee amended the SWMP to identify those areas for which this exception applies, including the date the areas met the exception conditions.

5. Inspection exception - contributing area not disturbed

Inspections are not required at outfalls subject to Subpart H of 40 CFR 434 that have not discharged 'stormwater associated with industrial activity' because the area contributing to the outfall has not yet been disturbed. The locations of such stormwater outfalls (and outline of areas draining to the outfall) must be identified on a Facility map at Part I.J.2.c. of this permit. Inspections consistent with the requirements at Part I.H must start once the outfall and associated area is disturbed.

6. 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.

I. STORMWATER CORRECTIVE ACTIONS (Outfalls 014, 019-043, 046-048, 050-051, 053-054, 056-062, 065-069, 071-125)

1. Corrective actions exception - contributing area not disturbed

Stormwater corrective actions are not required at outfalls subject to Subpart H of 40 CFR 434 that have not discharged 'stormwater associated with industrial activity' because the area contributing to the outfall has not yet been disturbed. The locations of such stormwater outfalls (and outline of areas draining to the outfall) must be identified on the Facility map at Part I.J 2.c. of this Permit. Stormwater corrective actions consistent with the requirements at Part I.I must start once the outfall and associated area is disturbed.

2. 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.

3. 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.

4. 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.

5. 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.

J. STORMWATER MANAGEMENT PLAN (SWMP) (Outfalls 014, 019-043, 046-048, 050-051, 053-054, 056-062, 065-069, 071-125)

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 a facility SWMP to comply with the requirements of this permit by January 1, 2020.**

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 mining 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. The locations of outfalls subject to Subpart H of 40 CFR 434 (and outline of areas draining to the outfall) that are identified in the Permit, but have not discharged 'stormwater associated with industrial activity' because the area contributing stormwater to the outfall has not been disturbed
   vii. Directions of stormwater flow indicated by arrows;
   viii. The areas where mining and processing 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.
   ix. 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;
   x. Location of all structural and applicable non-structural control measures used to meet the effluent limits required by this permit;
   xi. Locations where significant spills or leaks identified below have occurred;
   xii. Locations of all stormwater monitoring points applicable to the facility;

xiii. 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 achieve 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 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.

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;
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.

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.

K. 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 tables.
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 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.

4. <u>Flow Measuring Device</u>

If not already a part of the permitted facility, by October 1, 2020, a flow measuring device shall be installed or a flow measuring technique implemented 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.

L. 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 014, 019-043, 046-048, 050-051, 053-054, 056-062, 065-069, 071-125)

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 (5)

i. The Annual Report shall include:

- Name of permittee, address, phone number
- Permit certification number

- Facility name and physical address
- Contact person name, title, and phone number
- Summary of inspection dates
- 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.

M. 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 Regulation 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 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 Director or initial recipient, as defined in 40 CFR 127.2(b), in compliance with 40 CFR part 3 (including, in all cases, subpart D to part 3), § 122.22, and 40 CFR part 127. See 40 CFR 122.41(l)(6)(i).
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(114),
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(114). 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. Colorado's regulatory definition of bypass is less stringent than the requirements of the federal Clean Water Act.*

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.

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. "Inactive mining operations" – Regulation 61.3(2)(e)(iii)(C) identifies that "inactive mining operations" are mining sites that are not being actively mined, but which have an identifiable owner/operator; inactive mining sites do not include sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials, nor sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim).

    This term includes the following types of facilities that have an identifiable owner/operator:

    - mineral mining and/or milling occurred in the past but is not covered by an active mining permit issued by DRMS;
    - operations are limited seasonally (i.e., intermittent operations), consistent with DRMS requirements for notification, only during the portion of the year when the facility is not active; or
    - operations cease for 180-days or more for reasons not associated with intermittent status, and still has reserves (consistent with temporary cessation status as defined by DRMS), only during the time period the facility is not active; or
    - exploration or extraction activities have ceased permanently.

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

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

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

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

23. "Intermittent Discharges" for the purpose of the *Implementation of the Narrative Standard for Toxicity in Discharge Permits using Whole Effluent Toxicity (WET) Testing* policy, to be intermittent discharge and to qualify for acute testing, one of the following must apply:

    A) The maximum discharge frequency is less than 3 consecutive days (72 hours), and less than 3 days per 7 day period, and less than 10 days per month.
    B) The maximum discharge frequency is less than 5 consecutive days (120 hours) and less than 5 days per month.
    C) It can be shown that discharge frequency and duration is tied solely to precipitation events, where the discharge starts and stops shortly after the precipitation event starts/stops.

24. "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.

25. "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

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

27. "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.

28. "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.

29. "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.

30. "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).

31. "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).

32. "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.

33. "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.

34. "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.

35. "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.

36. "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.)

37. 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:

$$\text{meq/l} = \frac{Concentraton\ in\ mg/l}{Equivalentweight\ in\ mg/meq}$$

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.

38. "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).**

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

40. "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.

41. "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).**

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

43. "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).**

44. "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.

45. "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.

46. 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.

47. "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.

48. "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.

49. "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.

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

51. "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.