



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 CO0045161

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

Colowyo Coal Company L.P.

is authorized to discharge from the Colowyo Coal Mine located at **5731 State Highway 13 in Meeker, Colorado at 40.265648° latitude North and 107.808334° longitude West**

to **Wilson Creek, Taylor Creek, Good Spring Creek, and Collom Gulch**

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, 2023.

Issued and Signed this 31st day of July, 2019.

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Meg Parish

Meg Parish, Permits Section Manager
Water Quality Control Division

Permit History

Modification 1 - Minor Amendment: Issued 7/31/2019, Effective 9/1/2019 (Parts I.B., I.C., I.D., APPENDIX B)
Originally Issued August 31, 2018; Effective October 1, 2018.

TABLE OF CONTENTS

PART I.....4

A. PERMITTED FEATURES4

B. PERMIT COMPLIANCE.....5

 1. Facilities Operation and Maintenance.....5

 2. Discharge(s) from Outfalls 003 and 006.....5

C. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS5

 1. Numeric Effluent Limitations and Site-specific Monitoring (Outfalls 003, 006, 010, 013, 014, 021-025).....5

 2. Narrative Water Quality Based Effluent Limitation (Outfalls 001, 002, 004, 005, 007, 008, 009, 011, 012, 013, 014, 015, 016, 017, 018, 019, 020, 021, 022, 023, 024, 025, 026).....22

 3. Federal Effluent Limitation Guideline - Sediment Control Plan (Outfalls 001, 002, 004, 005, 007, 008, 009, 011, 012, 015, 016, 017, 018, 019, 020, 026)23

 4. Practice-based Effluent Limitations (Outfalls 001, 002, 004, 005, 007, 008, 009, 011, 012, 013, 014, 015, 016, 017, 018, 019, 020, 021, 022, 023, 024, 025, 026)23

D. SPECIFIC MONITORING REQUIREMENTS.....24

 1. Acute WET Testing (Outfalls 003, 006).....24

 2. Chronic WET Testing - Outfall 010.....26

E. COMPLIANCE SCHEDULES30

F. CONTROL MEASURES (Outfalls 001, 002, 004, 005, 007-009, 011-026)30

 1. Installation and implementation specifications30

 2. Maintenance of Control Measures and Associated Documentation30

G. INSPECTIONS (Outfalls 001, 002, 004, 005, 007-009, 011-026).....30

 1. Inspection Frequency and Personnel.....30

 2. Inspection Scope31

 3. Inspection Documentation31

 4. Non-Compliance discovered during inspection.....32

H. CORRECTIVE ACTIONS (Outfalls 001, 002, 004, 005, 007-009, 011-026)32

 1. Conditions that must be Eliminated.....32

 2. Condition that Requires Review and Modification32

 3. Corrective Action Reports and Deadlines32

 4. Control measure modification33

I. STORMWATER MANAGEMENT PLAN (SWMP) (Outfalls 001, 002, 004, 005, 007-009, 011-026).....33

 1. General SWMP Requirements.....33

 2. Specific SWMP Requirements.....34

J. PERMIT SPECIFIC MONITORING AND SAMPLING REQUIREMENTS36

 1. Representative Sampling.....36

 2. Alternative Analytical and Sampling Methods for Monitoring and Reporting36

 3. Flow Measuring Device.....38

 4. Extra Monitoring.....38

 5. Adverse Weather Conditions.....38

K. PERMIT SPECIFIC REPORTING AND RECORDKEEPING38

 1. Routine Reporting of Data- Discharge Monitoring Report.....38

 2. Additional Reporting39

 3. Additional Stormwater- specific requirements (Outfalls 001, 002, 004, 005, 007-009, 011-026)39

L. OTHER TERMS AND CONDITIONS40

PART II.....41

A. DUTY TO COMPLY41

B. DUTY TO REAPPLY41

C. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE41

D. DUTY TO MITIGATE.....42

E. PROPER OPERATION AND MAINTENANCE42

F. PERMIT ACTIONS42

G. PROPERTY RIGHTS42

H. DUTY TO PROVIDE INFORMATION42

I. INSPECTION AND ENTRY42

J. MONITORING AND RECORD RETENTION43

K. SIGNATORY REQUIREMENTS44

L. REPORTING REQUIREMENTS44

M. BYPASS	46
N. UPSET	46
O. REOPENER CLAUSE	47
P. OTHER INFORMATION	47
Q. SEVERABILITY	47
R. NOTIFICATION REQUIREMENTS	47
S. RESPONSIBILITIES.....	48
T. OIL AND HAZARDOUS SUBSTANCES LIABILITY	48
U. EMERGENCY POWERS	48
V. CONFIDENTIALITY	48
W. FEES	48
X. DURATION OF PERMIT	48
Y. SECTION 307 TOXICS.....	49
PART III.....	50
APPENDIX A-Categorical Industries and Pollutants	50
APPENDIX B-Definitions	54

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):

- 001- Stormwater runoff from reclamation areas, shallow springs (not associated with current or former mining areas), and groundwater (natural springs) from toe drain
- 002- Stormwater runoff from reclamation areas
- 003- Stormwater runoff from coal storage area, coal crushing facility, and crushing facility wash water
- 004- Stormwater runoff from reclamation areas
- 005- Stormwater runoff from reclamation areas
- 006- Stormwater runoff from coal storage area, railroad tunnel wash water, and runoff from pond outslope of Gossard Pond 003A
- 007- Stormwater runoff from reclamation areas
- 008- Stormwater runoff from reclamation areas and groundwater from toe drain (contains spoil springs)
- 009- Stormwater runoff from reclamation areas
- 010- Stormwater runoff from reclamation areas and natural springs (not associated with current or former mining areas)
- 011- Stormwater runoff from reclamation areas, three natural springs (not associated with current or former mining areas) and groundwater (natural springs) from toe drain (no spoil springs)
- 012- Stormwater runoff from reclamation areas, natural springs (not associated with current or former mining areas)
- 013- Stormwater runoff from overburden storage area and facilities area and natural springs managed through the underdrain system
- 014- Stormwater runoff from overburden storage area
- 015- Streeter pond outslope runoff (sheet flow)
- 016- Stoker siding pond outslope runoff (sheet flow)
- 017- Prospect pond outslope runoff (sheet flow)
- 018- West Taylor pond outslope runoff (sheet flow)
- 019- Stormwater runoff from topsoil stock piles
- 020- Stormwater runoff from S-Curve topsoil stockpile
- 021- Stormwater discharge from haul road (between coal preparation facilities) Sump 1
- 022- Stormwater discharge from haul road (between coal preparation facilities) Sump 2
- 023- Stormwater discharge from haul road (between coal preparation facilities) Sump 3
- 024- Stormwater discharge from haul road (between coal preparation facilities) Sump 4
- 025- Stormwater discharge from haul road (between coal preparation facilities) Sump 5
- 026- Stormwater runoff from Haul Road topsoil stockpile

Outfall	Latitude, Longitude	Receiving Water
001A	40.261111° N, 107.788611° W	Good Spring Creek
002A	40.268889° N, 107.821944° W	Taylor Creek
003A	40.308333° N, 107.806111° W	Wilson Creek
004A	40.253333° N, 107.788333° W	Good Spring Creek
005A	40.311944° N, 107.802778° W	Wilson Creek
006A	40.308333° N, 107.806389° W	Wilson Creek
007A	40.233056° N, 107.795556° W	Good Spring Creek
008A	40.269444° N, 107.828889° W	Taylor Creek
009A	40.221667° N, 107.825556° W	Good Spring Creek
010A	40.261111° N, 107.83389° W	Taylor Creek
011A	40.236944° N, 107.849167° W	Taylor Creek
012A	40.205833° N, 107.838056° W	Good Spring Creek
013A	40.288452° N, 107.889254° W	Little Collom Gulch
014A	40.286903° N, 107.904508° W	Collom Gulch
015A	40.261246° N, 107.788364° W	Good Spring Creek
016A	40.311846° N, 107.802578° W	Wilson Creek
017A	40.232876° N, 107.795576° W	Good Spring Creek

Outfall	Latitude, Longitude	Receiving Water
018A	40.237098° N, 107.848571° W	Taylor Creek
019A	40.241262° N, 107.793634° W	Good Spring Creek
020A	40.276482° N, 107.814472° W	Taylor Creek
021A	40.297476° N, 107.809681° W	Taylor Creek
022A	40.288033° N, 107.815753° W	Taylor Creek
023A	40.287368° N, 107.816071° W	Taylor Creek
024A	40.283029° N, 107.818751° W	Taylor Creek
025A	40.281440° N, 107.820013° W	Taylor Creek
026A	40.270948° N, 107.817353° W	Taylor 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 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.

B. PERMIT COMPLIANCE

In accordance with the Water Quality Control Commission Regulations for Effluent Limitations (Section 62.4), 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.

1. Facilities Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control 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.

2. Discharge(s) from Outfalls 003 and 006

This permit does not authorize any discharges from outfalls 003 and 006 that are not solely caused by precipitation events, where the discharge starts and stops shortly after the precipitation event starts/stops.

C. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. Numeric Effluent Limitations and Site-specific Monitoring (Outfalls 003, 006, 010, 013, 014, 021-025)

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 REPORTING AND RECORDKEEPING section).

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 the PERMITTED FEATURES section above.

- 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, the permittee shall take immediate action to mitigate the discharge of oil and grease. A description of the action(s) taken must be included with the DMR.
- b. **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 003, 006, 010, 013, 014, 021, 022, 023, 024, and 025.

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. 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).

- c. **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 above shall be taken at those locations listed in Part I.A.

The following Limitations, Monitoring Frequencies and Sample Types apply to the outfalls identified in this Part:

Outfall 003

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations		Monitoring Requirements	
		30-Day Average	Daily Maximum	Frequency	Sample Type
50050	Effluent Flow (MGD)	0.82	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		Quarterly	Grab
00978	As, TR (µg/l)	Report		2 Days/Month	Grab
01313	Cd, PD (µg/l)	Report	Report	2 Days/Month	Grab
04262	Cr+3, TR (µg/l)	Report	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	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
01323	Se, PD (µg/l)	Report	Report	2 Days/Month	Grab
01304	Ag, PD (µg/l)	Report	Report	2 Days/Month	Grab
01303	Zn, PD (µg/l)	Report	Report	2 Days/Month	Grab
81020	Sulfate (mg/l)	Report		Quarterly	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 ¹	Report	Report	2 Days/Month	Calculated
00931	Adjusted SAR effluent ²	Report	Report	2 Days/Month	Calculated
00094	EC (dS/m)	Report		2 Days/Month	Grab
WET, acute until June 30, 2020					
TAN6C	LC50 Statore 96 Hr Acute* <i>Pimephales promelas</i>		LC50 ≥ Report (daily min)	Quarterly	Grab
TAM3B	LC50 Statore 48 Hr Acute* <i>Ceriodaphnia dubia</i>		LC50 ≥ Report (daily min)	Quarterly	Grab
WET, acute beginning July 1, 2020					
TAN6C	LC50 Statore 96 Hr Acute* <i>Pimephales promelas</i>		LC50 ≥ 100% (daily min)	Quarterly	Grab
TAM3B	LC50 Statore 48 Hr Acute* <i>Ceriodaphnia dubia</i>		LC50 ≥ 100% (daily min)	Quarterly	Grab

84165	Discharge event observation [Visual Monitoring] (Discharge due to rain/snow melt)	# of Occurrences (Discharges per Month)	Pass/Fail**	Monthly	Calculated
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*ACUTE WET BASED ON INTERMITTENT DISCHARGE. SEE DEFINITIONS

**Rainfall: a discharge that occurred during the precipitation event, or within 48 hours after measurable precipitation has stopped is indicated as a 'pass'. Snowmelt: a discharge that occurred during pond inflow from the snow melt event, or within 48 hours after pond inflow has stopped is indicated as a 'pass'. Discharges due to other conditions is indicated as a 'fail'.

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 003 (less than or equal to the 10-year, 24-hour precipitation event)

<u>ICIS Code</u>	<u>Effluent Parameter</u>	<u>Effluent Limitations Maximum Concentrations</u>			<u>Monitoring Requirements</u>	
		<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
00980	Fe, TR (µg/l)	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 003 (greater than the 10-year, 24-hour precipitation event)

<u>ICIS Code</u>	<u>Effluent Parameter</u>	<u>Effluent Limitations Maximum Concentrations</u>			<u>Monitoring Requirements</u>	
		<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
00980	Fe, TR (µg/l)	1000		Report	Monthly	Grab

Outfall 006

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations		Monitoring Requirements	
		30-Day Average	Daily Maximum	Frequency	Sample Type
50050	Effluent Flow (MGD)	0.32	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		Quarterly	Grab
00978	As, TR (µg/l)	Report		2 Days/Month	Grab
01313	Cd, PD (µg/l)	Report	Report	2 Days/Month	Grab
04262	Cr+3, TR (µg/l)	Report	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	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
01323	Se, PD (µg/l)	Report	Report	2 Days/Month	Grab
01304	Ag, PD (µg/l)	Report	Report	2 Days/Month	Grab
01303	Zn, PD (µg/l)	Report	Report	2 Days/Month	Grab
81020	Sulfate (mg/l)	Report		Quarterly	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 ¹	Report	Report	2 Days/Month	Calculated
00931	Adjusted SAR effluent ²	Report	Report	2 Days/Month	Calculated
00094	EC (dS/m)	Report		2 Days/Month	Grab
WET, acute until June 30, 2020					
TAN6C	LC50 Statore 96 Hr Acute* <i>Pimephales promelas</i>		LC50 ≥ Report (daily min)	Quarterly	Grab
TAM3B	LC50 Statore 48 Hr Acute* <i>Ceriodaphnia dubia</i>		LC50 ≥ Report (daily min)	Quarterly	Grab
WET, acute beginning July 1, 2020					
TAN6C	LC50 Statore 96 Hr Acute* <i>Pimephales promelas</i>		LC50 ≥ 100% (daily min)	Quarterly	Grab
TAM3B	LC50 Statore 48 Hr Acute* <i>Ceriodaphnia dubia</i>		LC50 ≥ 100% (daily min)	Quarterly	Grab

84165	Discharge event observation [Visual Monitoring] (Discharge due to rain/snow melt)	# of Occurrences (Discharges per Month)	Pass/Fail**	Monthly	Calculated
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*ACUTE WET BASED ON INTERMITTENT DISCHARGE. SEE DEFINITIONS

**Rainfall: a discharge that occurred during the precipitation event, or within 48 hours after measurable precipitation has stopped is indicated as a 'pass'. Snowmelt: a discharge that occurred during pond inflow from the snow melt event, or within 48 hours after pond inflow has stopped is indicated as a 'pass'. Discharges due to other conditions is indicated as a 'fail'.

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 006 (less than or equal to the 10-year, 24-hour precipitation event)

<u>ICIS Code</u>	<u>Effluent Parameter</u>	<u>Effluent Limitations Maximum Concentrations</u>			<u>Monitoring Requirements</u>	
		<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
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 006 (greater than the 10-year, 24-hour precipitation event)

<u>ICIS Code</u>	<u>Effluent Parameter</u>	<u>Effluent Limitations Maximum Concentrations</u>			<u>Monitoring Requirements</u>	
		<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
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 010

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations		Monitoring Requirements	
		30-Day Average	Daily Maximum	Frequency	Sample Type
50050	Effluent Flow (MGD)	1.5	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		Quarterly	Grab
00978	As, TR (µg/l)	Report		2 Days/Month	Grab
01313	Cd, PD (µg/l)	Report	Report	2 Days/Month	Grab
04262	Cr+3, TR (µg/l)	Report	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	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
01323	Se, PD (µg/l)	Report	Report	2 Days/Month	Grab
01304	Ag, PD (µg/l)	Report	Report	2 Days/Month	Grab
01303	Zn, PD (µg/l)	Report	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 ¹	Report	Report	2 Days/Month	Calculated
00931	Adjusted SAR effluent ²	Report	Report	2 Days/Month	Calculated
00094	EC (dS/m)	Report		2 Days/Month	Grab
WET, chronic until July 31, 2020					
TKP6C	Static Renewal 7 Day Chronic <i>Pimephales promelas</i>		NOEC or IC25 ≥ Report	Quarterly	3 Grabs/ Test
TKP3B	Static Renewal 7 Day Chronic <i>Ceriodaphnia dubia</i>		NOEC or IC25 ≥ Report	Quarterly	3 Grabs/ Test
WET, chronic beginning August 1, 2020					
TKP6C	Static Renewal 7 Day Chronic <i>Pimephales promelas</i>		NOEC or IC25 ≥ IWC	Quarterly	3 Grabs/ Test

TKP3B	Static Renewal 7 Day Chronic <i>Ceriodaphnia dubia</i>		NOEC or IC25 ≥ IWC	Quarterly	3 Grabs/ Test
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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 010 (less than or equal to the 10-year, 24-hour precipitation event)

<u>ICIS Code</u>	<u>Effluent Parameter</u>	<u>Effluent Limitations Maximum Concentrations</u>			<u>Monitoring Requirements</u>	
		<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
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 010 (greater than the 10-year, 24-hour precipitation event)

<u>ICIS Code</u>	<u>Effluent Parameter</u>	<u>Effluent Limitations Maximum Concentrations</u>			<u>Monitoring Requirements</u>	
		<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
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

Footnotes to effluent tables for Outfalls 003, 006, 010

¹ 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: $SAR = (7.1 * EC) - 2.48$.

² 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 013

<u>ICIS Code</u>	<u>Effluent Parameter</u>	<u>Effluent Limitations Maximum Concentrations</u>		<u>Monitoring Requirements</u>	
		<u>30-Day Average</u>	<u>Daily Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
50050	Effluent Flow (MGD)	0.61	Report	Monthly	Instantaneous
00400	pH (su)		6.5-9.0	2 Days/Month	Grab
00530	TSS, effluent (mg/l)	35	70	2 Days/Month	Grab
00978	As, TR (µg/l)	Report		Quarterly	Grab
01113	Cd, TR (µg/l)	Report		Quarterly	Grab
01313	Cd, PD (µg/l)	Report	Report	Quarterly	Grab
01118	Cr, TR (µg/l)	Report	Report	Quarterly	Grab
04262	Cr+3, TR (µg/l)	Report	Report	Quarterly	Grab
01314	Cr+3, PD (µg/l)	Report		Quarterly	Grab
01119	Cu, TR (µg/l)	Report		Quarterly	Grab
01306	Cu, PD (µg/l)	Report	Report	Quarterly	Grab
00980	Fe, TR (µg/l)	1000	6000	2 Days/Month	Grab
11123	Mn, TR (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
00981	Se, TR (µg/l)	Report		Quarterly	Grab
01323	Se, PD (µg/l)	Report	Report	Quarterly	Grab
01094	Zn, TR (µg/l)	Report		Quarterly	Grab
01303	Zn, PD (µg/l)	Report	Report	Quarterly	Grab

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 013 (less than or equal to the 10-year, 24-hour precipitation event)

<u>ICIS Code</u>	<u>Effluent Parameter</u>	<u>Effluent Limitations Maximum Concentrations</u>			<u>Monitoring Requirements</u>	
		<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
00980	Fe, TR (µg/l)	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 013 (greater than the 10-year, 24-hour precipitation event)

<u>ICIS Code</u>	<u>Effluent Parameter</u>	<u>Effluent Limitations Maximum Concentrations</u>			<u>Monitoring Requirements</u>	
		<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
00980	Fe, TR (µg/l)	1000		Report	Monthly	Grab

Outfall 014

<u>ICIS Code</u>	<u>Effluent Parameter</u>	<u>Effluent Limitations Maximum Concentrations</u>		<u>Monitoring Requirements</u>	
		<u>30-Day Average</u>	<u>Daily Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
50050	Effluent Flow (MGD)	0.43	Report	Monthly	Instantaneous
00400	pH (su)		6.5-9.0	2 Days/Month	Grab
00530	TSS, effluent (mg/l)	35	70	2 Days/Month	Grab
00978	As, TR (µg/l)	Report		Quarterly	Grab
01113	Cd, TR (µg/l)	Report		Quarterly	Grab
01313	Cd, PD (µg/l)	Report	Report	Quarterly	Grab
01118	Cr, TR (µg/l)	Report	Report	Quarterly	Grab
04262	Cr+3, TR (µg/l)	Report	Report	Quarterly	Grab
01314	Cr+3, PD (µg/l)	Report		Quarterly	Grab
01119	Cu, TR (µg/l)	Report		Quarterly	Grab
01306	Cu, PD (µg/l)	Report	Report	Quarterly	Grab
00980	Fe, TR (µg/l)	1000	6000	2 Days/Month	Grab
11123	Mn, TR (µg/l)	Report		Quarterly	Grab
01319	Mn, PD (µg/l)	Report	Report	Quarterly	Grab
50286	Hg, Tot (µg/l)	Report		Quarterly	Grab
00981	Se, TR (µg/l)	Report		Quarterly	Grab
01323	Se, PD (µg/l)	Report	Report	Quarterly	Grab
01094	Zn, TR (µg/l)	Report		Quarterly	Grab
01303	Zn, PD (µg/l)	Report	Report	Quarterly	Grab

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)

<u>ICIS Code</u>	<u>Effluent Parameter</u>	<u>Effluent Limitations Maximum Concentrations</u>			<u>Monitoring Requirements</u>	
		<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
00980	Fe, TR (µg/l)	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)

<u>ICIS Code</u>	<u>Effluent Parameter</u>	<u>Effluent Limitations Maximum Concentrations</u>			<u>Monitoring Requirements</u>	
		<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
00980	Fe, TR (µg/l)	1000		Report	Monthly	Grab

Outfall 021

<u>ICIS Code</u>	<u>Effluent Parameter</u>	<u>Effluent Limitations Maximum Concentrations</u>		<u>Monitoring Requirements</u>	
		<u>30-Day Average</u>	<u>Daily Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
50050	Effluent Flow (MGD)	1.3	Report	Monthly	Instantaneous
00400	pH (su)		6.5-9.0	2 Days/Month	Grab
00530	TSS, effluent (mg/l)	35	70	2 Days/Month	Grab
00978	As, TR (µg/l)	Report		Quarterly	Grab
01313	Cd, PD (µg/l)	Report	Report	Quarterly	Grab
04262	Cr+3, TR (µg/l)	Report	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	3000	6000	2 Days/Month	Grab
00980	Fe, TR (µg/l), beginning 8/1/22	1000	6000	2 Days/Month	Grab
01319	Mn, PD (µg/l)	Report	Report	Quarterly	Grab
50286	Hg, Tot (µg/l)	Report		Quarterly	Grab
01323	Se, PD (µg/l)	Report	Report	Quarterly	Grab
01303	Zn, PD (µg/l)	Report	Report	Quarterly	Grab

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 021 (less than or equal to the 10-year, 24-hour precipitation event)

<u>ICIS Code</u>	<u>Effluent Parameter</u>	<u>Effluent Limitations Maximum Concentrations</u>			<u>Monitoring Requirements</u>	
		<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
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 021 (greater than the 10-year, 24-hour precipitation event)

<u>ICIS Code</u>	<u>Effluent Parameter</u>	<u>Effluent Limitations Maximum Concentrations</u>			<u>Monitoring Requirements</u>	
		<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
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 022

<u>ICIS Code</u>	<u>Effluent Parameter</u>	<u>Effluent Limitations Maximum Concentrations</u>		<u>Monitoring Requirements</u>	
		<u>30-Day Average</u>	<u>Daily Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
50050	Effluent Flow (MGD)	0.63	Report	Monthly	Instantaneous
00400	pH (su)		6.5-9.0	2 Days/Month	Grab
00530	TSS, effluent (mg/l)	35	70	2 Days/Month	Grab
00978	As, TR (µg/l)	Report		Quarterly	Grab
01313	Cd, PD (µg/l)	Report	Report	Quarterly	Grab
04262	Cr+3, TR (µg/l)	Report	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	3000	6000	2 Days/Month	Grab
00980	Fe, TR (µg/l), beginning 8/1/22	1000	6000	2 Days/Month	Grab
01319	Mn, PD (µg/l)	Report	Report	Quarterly	Grab
50286	Hg, Tot (µg/l)	Report		Quarterly	Grab
01323	Se, PD (µg/l)	Report	Report	Quarterly	Grab
01303	Zn, PD (µg/l)	Report	Report	Quarterly	Grab

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 022 (less than or equal to the 10-year, 24-hour precipitation event)

<u>ICIS Code</u>	<u>Effluent Parameter</u>	<u>Effluent Limitations Maximum Concentrations</u>			<u>Monitoring Requirements</u>	
		<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
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 022 (greater than the 10-year, 24-hour precipitation event)

<u>ICIS Code</u>	<u>Effluent Parameter</u>	<u>Effluent Limitations Maximum Concentrations</u>			<u>Monitoring Requirements</u>	
		<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
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 023

ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations		Monitoring Requirements	
		30-Day Average	Daily Maximum	Frequency	Sample Type
50050	Effluent Flow (MGD)	1.14	Report	Monthly	Instantaneous
00400	pH (su)		6.5-9.0	2 Days/Month	Grab
00530	TSS, effluent (mg/l)	35	70	2 Days/Month	Grab
00978	As, TR (µg/l)	Report		Quarterly	Grab
01313	Cd, PD (µg/l)	Report	Report	Quarterly	Grab
04262	Cr+3, TR (µg/l)	Report	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	3000	6000	2 Days/Month	Grab
00980	Fe, TR (µg/l), beginning 8/1/22	1000	6000	2 Days/Month	Grab
01319	Mn, PD (µg/l)	Report	Report	Quarterly	Grab
50286	Hg, Tot (µg/l)	Report		Quarterly	Grab
01323	Se, PD (µg/l)	Report	Report	Quarterly	Grab
01303	Zn, PD (µg/l)	Report	Report	Quarterly	Grab

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 023 (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 023 (greater than the 10-year, 24-hour precipitation event)

<u>ICIS Code</u>	<u>Effluent Parameter</u>	<u>Effluent Limitations Maximum Concentrations</u>			<u>Monitoring Requirements</u>	
		<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
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 024

<u>ICIS Code</u>	<u>Effluent Parameter</u>	<u>Effluent Limitations Maximum Concentrations</u>		<u>Monitoring Requirements</u>	
		<u>30-Day Average</u>	<u>Daily Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
50050	Effluent Flow (MGD)	0.12	Report	Monthly	Instantaneous
00400	pH (su)		6.5-9.0	2 Days/Month	Grab
00530	TSS, effluent (mg/l)	35	70	2 Days/Month	Grab
00978	As, TR (µg/l)	Report		Quarterly	Grab
01313	Cd, PD (µg/l)	Report	Report	Quarterly	Grab
04262	Cr+3, TR (µg/l)	Report	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	3000	6000	2 Days/Month	Grab
00980	Fe, TR (µg/l), beginning 8/1/22	1000	6000	2 Days/Month	Grab
01319	Mn, PD (µg/l)	Report	Report	Quarterly	Grab
50286	Hg, Tot (µg/l)	Report		Quarterly	Grab
01323	Se, PD (µg/l)	Report	Report	Quarterly	Grab
01303	Zn, PD (µg/l)	Report	Report	Quarterly	Grab

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 024 (less than or equal to the 10-year, 24-hour precipitation event)

<u>ICIS Code</u>	<u>Effluent Parameter</u>	<u>Effluent Limitations Maximum Concentrations</u>			<u>Monitoring Requirements</u>	
		<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
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 024 (greater than the 10-year, 24-hour precipitation event)

<u>ICIS Code</u>	<u>Effluent Parameter</u>	<u>Effluent Limitations Maximum Concentrations</u>			<u>Monitoring Requirements</u>	
		<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
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 025

<u>ICIS Code</u>	<u>Effluent Parameter</u>	<u>Effluent Limitations Maximum Concentrations</u>		<u>Monitoring Requirements</u>	
		<u>30-Day Average</u>	<u>Daily Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
50050	Effluent Flow (MGD)	2.16	Report	Monthly	Instantaneous
00400	pH (su)		6.5-9.0	2 Days/Month	Grab
00530	TSS, effluent (mg/l)	35	70	2 Days/Month	Grab
00978	As, TR (µg/l)	Report		Quarterly	Grab
01313	Cd, PD (µg/l)	Report	Report	Quarterly	Grab
04262	Cr+3, TR (µg/l)	Report	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 7/31/21	3000	6000	2 Days/Month	Grab
00980	Fe, TR (µg/l), beginning 8/1/21	1000	6000	2 Days/Month	Grab
01319	Mn, PD (µg/l)	Report	Report	Quarterly	Grab
50286	Hg, Tot (µg/l)	Report		Quarterly	Grab
01323	Se, PD (µg/l)	Report	Report	Quarterly	Grab
01303	Zn, PD (µg/l)	Report	Report	Quarterly	Grab

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 025 (less than or equal to the 10-year, 24-hour precipitation event)

<u>ICIS Code</u>	<u>Effluent Parameter</u>	<u>Effluent Limitations Maximum Concentrations</u>			<u>Monitoring Requirements</u>	
		<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
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 025 (greater than the 10-year, 24-hour precipitation event)

<u>ICIS Code</u>	<u>Effluent Parameter</u>	<u>Effluent Limitations Maximum Concentrations</u>			<u>Monitoring Requirements</u>	
		<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
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

2. Narrative Water Quality Based Effluent Limitation (Outfalls 001, 002, 004, 005, 007, 008, 009, 011, 012, 013, 014, 015, 016, 017, 018, 019, 020, 021, 022, 023, 024, 025, 026)

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.

3. Federal Effluent Limitation Guideline - Sediment Control Plan (Outfalls 001, 002, 004, 005, 007, 008, 009, 011, 012, 015, 016, 017, 018, 019, 020, 026)

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, 2018	Annual

4. Practice-based Effluent Limitations (Outfalls 001, 002, 004, 005, 007, 008, 009, 011, 012, 013, 014, 015, 016, 017, 018, 019, 020, 021, 022, 023, 024, 025, 026)

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).

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. SPECIFIC MONITORING REQUIREMENTS

1. Acute WET Testing (Outfalls 003, 006)

a. General Acute WET Testing and Reporting Requirements

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

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

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

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

b. Violations of the Permit Limit and Division Notification

An acute WET test is failed whenever the LC50, which represents an estimate of the effluent concentration which is lethal to 50% of the test organisms in the time period prescribed by the test, is found to be less than or equal to 100% effluent. The permittee must provide written notification of the failure of a WET test to the Division, along with a statement as to whether accelerated testing or a Toxicity Identification Evaluation (TIE)

is being performed, unless otherwise exempted, in writing, by the Division. **Notification must be received by the Division within 14 calendar days of the permittee receiving notice of the WET testing results.**

c. Automatic Compliance Response

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

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

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

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

i. Accelerated Testing

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

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

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

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

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

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

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

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

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

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

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

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

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

d. Toxicity Reopener

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

2. Chronic WET Testing - Outfall 010

a. General Chronic WET Testing and Reporting Requirements

The permittee shall conduct the chronic WET test using *Ceriodaphnia dubia* and *Pimephales promelas*, as a static renewal 7-day test using three separate composite samples. The permittee shall conduct each chronic WET test in accordance with the 40 CFR Part 136 methods described in Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms, Fourth Edition, October 2002 (EPA-821-R-02-013) or the 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 (if applicable) as was initially used in the failed test.

Tests shall be done at the frequency listed in Part I.A.2. Test results shall be reported along with the Discharge Monitoring Report (DMR) submitted for the end of the reporting period when the sample was taken. (i.e., WET testing results for the calendar quarter ending March 31 shall be reported with the DMR due April 28, etc.) The permittee shall submit all laboratory statistical summary sheets, summaries of the determination of a valid, invalid or inconclusive test, and copies of the chain of custody forms, along with the DMR for the reporting period.

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

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

A chronic WET test is considered a violation of a permit limitation when both the NOEC and the IC₂₅, for the same sub-lethal endpoint are at any effluent concentration less than the IWC. This determination is made independently for each test species. The IWC for this permit has been determined to be **100%** effluent.

A chronic WET test is considered to have failed one of the two statistical endpoints when either the NOEC or the IC₂₅ are at any effluent concentration less than the IWC. Simultaneous failure of both the NOEC and IC₂₅ for both sub-lethal endpoints, when tests are performed on identical split samples, constitutes only a single violation of the Daily Maximum Effluent Limitation for Chronic WET specified in Part I, §A-2 of this permit. The IWC for this permit has been determined to be **100%** effluent.

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

c. Automatic Compliance Response

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

1. there is a violation of the permit limit (both the NOEC and the IC₂₅ endpoints are less than the applicable IWC)
2. during a report only period when both the NOEC and the IC₂₅ are at any effluent concentration less than the IWC
3. two consecutive monitoring periods have resulted in failure of one of the two statistical endpoints (either the IC₂₅ or the NOEC), including during a report-only period. This determination is made independently for each test species.
4. 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:

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

i. Accelerated Testing

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

d. Toxicity Reopener

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

E. COMPLIANCE SCHEDULES

1. Activities to Meet Final Limits (outfalls 006 (AEL only), 010 (AEL only), 021, 022, 023, 024, 025,) - In order to meet the total recoverable iron limit, the following schedule is included in the permit.

Code	Event	Description	Due Date
CS010	Status/Progress Report	Submit a progress report summarizing the progress to meet the final effluent limitations.	July 31, 2019
CS010	Status/Progress Report	Submit a progress report summarizing the progress to meet the final effluent limitations.	July 31, 2020
CS010	Status/Progress Report	Submit a progress report summarizing the progress to meet the final effluent limitations.	July 31, 2021
CS017	Achieve Final compliance with discharge limits	Achieve final compliance with limitations.	July 31, 2022

Regulation 61.8(3)(n)(i) states that a report should 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.

F. CONTROL MEASURES (Outfalls 001, 002, 004, 005, 007-009, 011-026)

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

1. Installation and implementation specifications

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

2. Maintenance of Control Measures and Associated Documentation

- a. The permittee must maintain all control measures used to achieve the effluent limits required by this permit in effective operating condition. For this permit, maintenance includes preventative and routine maintenance, modification, repair, replacement, or installation of new control measures. Observations resulting in maintenance activities can be made during a site inspection, or during general observations of site conditions.
- b. Corrective actions associated with maintaining control measures must be conducted with due diligence, as soon as possible after the need is discovered, to achieve the effluent limits required by this permit. The permittee must implement interim control measures to achieve the effluent limits required by this permit while performing maintenance of the primary control measure.
- c. The permittee shall document corrective actions associated with maintaining control measures, in accordance with the CORRECTIVE ACTIONS section of this permit, and shall revise the facility SWMP to reflect replacement or installation of new control measures in accordance with the STORMWATER MANAGEMENT PLAN section requirements.

G. INSPECTIONS (Outfalls 001, 002, 004, 005, 007-009, 011-026)

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.

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. **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.

H. **CORRECTIVE ACTIONS (Outfalls 001, 002, 004, 005, 007-009, 011-026)**

1. **Conditions that must be Eliminated**

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

- a. an unauthorized release or discharge (e.g., spill, leak, or discharge of non-stormwater not authorized by a CDPS permit) occurs;
- b. facility control measures are not stringent enough for the discharge to meet applicable water quality standards;
- c. modifications to the facility control measures are necessary to meet the practice-based effluent limits in this permit; or
- d. the permittee finds in a facility inspection, that facility control measures are not properly selected, designed, installed, operated or maintained.

2. **Condition that Requires Review and Modification**

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

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

3. **Corrective Action Reports and Deadlines**

The permittee must document discovery of any condition listed in the INSPECTIONS section above, within 24 hours and 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 as required in the STORMWATER MANAGEMENT PLAN section.

- a. **24 hour documentation requirement:**
Within 24 hours of discovery of any condition listed in the INSPECTIONS section, the permittee must document the following information:
 - i. Identification of the condition triggering the need for corrective action review;
 - ii. Description of the problem identified; and
 - iii. Date the problem was identified.
- b. **Five (5) day documentation requirement:**
Within five (5) days of discovery of any condition listed in this section, the permittee must document the

following information:

- i. 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);
- ii. Notice of whether SWMP modifications are required as a result of this discovery or corrective action;
- iii. Date corrective action initiated; and
- iv. Date corrective action completed or expected to be completed.

4. Control measure modification

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

I. **STORMWATER MANAGEMENT PLAN (SWMP) (Outfalls 001, 002, 004, 005, 007-009, 011-026)**

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 develop a facility SWMP to comply with the requirements of this permit within 90 days of the permit effective date.**

- 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 REPORTING AND RECORDKEEPING section; 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 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;
 - ii. Location of significant impervious surfaces within the facility property boundaries, including paved areas and buildings;
 - iii. The locations of all facility stormwater conveyances including ditches, pipes, and swales;
 - iv. 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;
 - v. Directions of stormwater flow indicated by arrows;
 - vi. The areas where industrial activities are conducted, where such activities are exposed to precipitation;
 - vii. Locations of all pollutant sources (actual or potential) associated with specific industrial activities as identified below;
 - viii. Location of all structural and applicable non-structural control measures used to meet the effluent limits required by this permit;
 - ix. Locations where significant spills or leaks identified below have occurred;
 - x. Locations of all stormwater monitoring points applicable to the facility.
 - xi. 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.
 - c) Outdoor manufacturing 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.

J. 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. Alternative Analytical and Sampling Methods for Monitoring and Reporting

The permittee has an obligation to comply with the general monitoring requirements in Part II.J.5. 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, Amperimetric	mg/L	0.05
Iron	µg/L	20 ³	Cyanide	µg/L	10 ³
Lead	µg/L	0.5	Fluoride	mg/L	0.5

Parameter	Reporting Units	PQL	Parameter	Reporting Units	PQL
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 ₂ S	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.

3. Flow Measuring Device

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

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

4. Extra Monitoring

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.

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.

K. 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 Part I.J and/or Part II. J of this permit. The permittee shall

summarize monitoring results for each month and report on Division approved discharge monitoring report (DMR) forms (EPA form 3320-1).

The permittee must submit these forms either by mail, or by using the Division's Net-DMR service. If mailed, one form shall be mailed to the Division, as indicated below, so that the DMR is received no later than the 28th day of the following month (for example, the DMR for the first calendar month must be received by the Division by February 28th). If no discharge occurs during the reporting period, "No Discharge" shall be reported on the DMR.

The signed copy of each discharge monitoring report (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 forms shall be filled out accurately and completely in accordance with requirements of this permit and the instructions on the forms. They shall be signed by an authorized person as identified in this section.

2. Additional Reporting

In addition to the reporting requirements stipulated in this Part, the permittee is also subject to the standard permit reporting provisions of Part II of this permit.

3. Additional Stormwater- specific requirements (Outfalls 001, 002, 004, 005, 007-009, 011-026)

a. Annual Report:

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

i. The Annual Report shall include:

- Name of permittee, address, phone number
- Permit 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 ACTION 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.

L. 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

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 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

A 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

A 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 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.

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 RECORD RETENTION

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)(B).
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 may be extended by request of the Division at any time.
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. 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 National ATP Coordinator in the absence of a method specified in or approved pursuant to 40 C.F.R. Part 136.
6. The permittee shall retain for a minimum of three (3) years records of all monitoring information, including all original strip chart recordings for continuous monitoring instrumentation, all calibration and maintenance records, copies of all reports required by this permit and records of all data used to complete the application for this permit. 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.
7. 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 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).
 - 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)(ii).
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.A.1 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.
 - 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. 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.
 6. 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.

7. 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.
8. Other information: Where a 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 it has a duty to promptly submit such facts or information.

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. You 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 Appendix I, Subsections I.13.3 and I.13.4. 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.6. See 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 in accordance with 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 technology based permit effluent limitations if the requirements of paragraph 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).

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 specific cause(s) of the upset;
 - b. the permitted facility was at the time being properly operated and maintained; and
 - c. the permittee submitted proper notice of the upset as required in Part II.L.6 (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 40 C.F.R. 122.41(n)(3)(i)-(iv).
3. 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.
4. 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

	<u>Industry Category</u>
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 fluroanthene	
		32B fluorene	
		33B hexachlorobenzene	
		34B hexachlorobutadiene	
		35B hexachlorocyclopentadiene	
		36B hexachloroethane	
		37B indeno(1,2,3-cd)pyrene	
		38B isophorone	
		39B naphthalene	
		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

Acetaldehyde	Isopropanolamine Dodecylbenzenesulfonate
Allyl alcohol	Kelthane
Allyl chloride	Kepone
Amyl acetate	Malathion
Aniline	Mercaptodimethur
Benzonitrile	Methoxychlor
Benzyl chloride	Methyl mercaptan
Butyl acetate	Methyl methacrylate
Butylamine	Methyl parathion
Captan	Mevinphos
Carbaryl	Mexacarbate
Carbofuran	Monoethyl amine
Carbon disulfide	Monomethyl amine
Chlorpyrifos	Naled
Coumaphos	Napthenic acid
Cresol	Nitrotoluene
Crotonaldehyde	Parathion
Cyclohexane	Phenolsulfanate
2,4-D (2,4-Dichlorophenoxy acetic acid)	Phosgene
Diazinon	Propargite
Dicamba	Propylene oxide
Dichlobenil	Pyrethrins
Dichlone	Quinoline
2,2-Dichloropropionic acid	Resorcinol
Dichlorvos	Strontium
Diethyl amine	Strychnine
Dimethyl amine	Styrene
Dinitrobenzene	2,4,5-T (2,4,5-Trichlorophenoxy acetic acid)
Diquat	TDE (Tetrachlorodiphenylethane)
Disulfoton	2,4,5-TP [2-(2,4,5-Trichlorophenoxy) propanoic acid]
Diuron	Trichlorofan
Epichlorohydrin	Triethanolamine dodecylbenzenesulfonate
Ethion	Triethylamine
Ethylene diamine	Trimethylamine
Ethylene dibromide	Uranium
Formaldehyde	Vanadium
Furfural	Vinyl acetate
Guthion	Xylene
Isoprene	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. "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.
5. "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).
6. "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.
7. "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.B.5.
8. "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.

9. "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.

10. "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.

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.

11. "Grab" sample, is a single "dip and take" sample so as to be representative of the parameter being monitored.
12. "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.
13. "In-situ" measurement is defined as a single reading, observation or measurement taken in the field at the point of discharge.
14. "Instantaneous" measurement is a single reading, observation, or measurement performed on site using existing monitoring facilities.
15. "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 precipitations event starts/stops.

16. "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.
17. "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

18. "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.
19. "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.
20. "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.
21. "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.
22. "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.

23. "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.)
24. SAR and Adjusted SAR - The equation for calculation of SAR-adj is:

$$SAR-adj = \frac{Na^+}{\sqrt{\frac{Ca_x + Mg^{++}}{2}}}$$

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 (HCO₃⁻) 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:

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

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

Na⁺ = 23.0 mg/meq (atomic weight of 23, charge of 1)
Ca⁺⁺ = 20.0 mg/meq (atomic weight of 40.078, charge of 2)
Mg⁺⁺ = 12.15 mg/meq (atomic weight of 24.3, charge of 2)
HCO₃⁻ = 61 mg/mep (atomic weight of 61, charge of 1)

The EC and the HCO₃⁻/Ca⁺⁺ ratio in the effluent (calculated by dividing the HCO₃⁻ 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 (CaCO₃) or silicates; no precipitation of magnesium, and partial pressure of CO₂ near the soil surface (P_{CO2}) is 0.0007 atmospheres.

³ Ca_x, HCO₃⁻, 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 HCO₃⁻/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 HCO₃⁻/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 HCO₃⁻/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 HCO₃⁻/Ca⁺⁺ ratios greater than 100). Despite these high values exceeding the chart's boundaries, it is noted that the higher the HCO₃⁻/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 HCO₃⁻/Ca⁺⁺ ratios of greater than 100 were added.

25. "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).**

26. "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.

27. "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).

28. Toxicity Identification Evaluation (TIE) is a set of site-specific procedures used to identify the specific chemical(s) causing effluent toxicity.
29. “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).
30. "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.
31. “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.
32. 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.
33. "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.
34. "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.
35. “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.
36. "Visual" observation is observing the discharge to check for the presence of a visible sheen or floating oil.
37. "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.