Stormwater Management Plan

For:

Peabody Sage Creek Mining, LLC
Hayden Gulch Loadout
36600 Route County Road
Hayden, CO 81639
(970) 879-3800

SWMP Contact(s):

Miranda Kawcak
Manager of Environmental
29515 Routt County Rd #27
Oak Creek, CO 80467
(970) 870-2718
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SWMP Preparation Date:

10/31/2024

SWMP Permit Number:

CO0049071

Contents

SECTION 1: SWMP ADMINISTRATION

1.1 SWMP Team

Staff Names	Individual Responsibilities
Miranda Kawcak	Leader, trainer, and oversee all SWMP efforts including implementation, maintenance, and modification of the plan. Assist with event inspections. Complete reporting and recordkeeping.
Michael Howard	Perform event inspections and implementation support. Assist with recordkeeping.

SECTION 2: FACILITY DESCRIPTION

2.1 Activities at the Facility

The Hayden Gulch Loadout (HGL) is a former coal loadout located in Routt County, approximately 2 miles southeast of Hayden Colorado. The last active use of this facility was for temporary coal storage in 1992. Since that time the loadout facilities, rail spur, and offices have been removed and reclaimed and the former haul road has been transferred to Routt County for use as a public county road. The Hayden Gulch Terminal facility originally consisted of 391.2-acres. However, all but 6.8-acres of the facility, of which 2.3-acres were disturbed, have received complete Phase III Bond Release from the Colorado Division of Reclamation, Mining, and Safety (DRMS). The small 2.3-acre parcel is located within the interior of a grass hay agriculture field. The area was reclaimed in 2021 to meet the agriculture postmine landuse requirements of DRMS Permit No. C-92-081 and the reclaimed ground is indistinguishable from the undisturbed portions of the agriculture field.

No buildings or structures remain at the HGL facility and there are no ongoing industrial activities or storage or use of any chemicals or products at the site. The SWMP is only applicable to small 2.3-acre parcel that has yet to receive bond release and sediment is the only parameter of concern.

SECTION 3: FACILITY MAP

3.1 Area Delineation Map

The Hayden Gulch Area Delineation Map showing the extent of the former CDRMS facility and bond release status is Appendix A.

3.2 SWMP Site Map

The SWMP Site Map including the remaining 2.3-acre parcel that is relevant to the SWMP, outfalls, and receiving water bodies is provided in Appendix B.

SECTION 4: POTENTIAL POLLUTANT SOURCES

4.1 Inventory of Facility Activities and Equipment

The HGL is a former coal loadout located in Routt County, approximately 2 miles southeast of Hayden Colorado. The loadout facilities, rail spur, and offices have been removed and reclaimed and the former haul road has been transferred to Routt County for use as a public county road. All areas of the facility have received complete Phase III Bond Release from the Colorado Division of Reclamation, Mining, and Safety (DRMS) except for 6.8-acres, of which only 2.3-acre were disturbed. This small 2.3-acre parcel has been reclaimed to meet the agriculture postmine land use requirements of DRMS Permit No. C-92-081. This parcel has been incorporated into the existing grass hay agriculture field and is indistinguishable from the undisturbed portions of the field.

The HGL is fully reclaimed and no longer active. There is no ongoing loading or unloading of materials, outdoor storage of materials or products, outdoor processing or manufacturing, onsite waste treatment, storage, or disposal, or vehicle or equipment fueling, maintenance, or washing. There are no immediate access roads or rail lines that transport raw or manufactured materials running through this area and there are no buildings with roofs composed of galvanized metal or that are exposed to air emissions from manufacturing. The SWMP is only applicable to the 2.3-acre parcel that has yet to receive bond release and the only pollutant source associated with this parcel is sediment.

4.2 Inventory of Materials

The HGL is fully reclaimed and there are no ongoing industrial activities. No materials are handled, stored, or disposed of at the facility and there have been no spills or leaks of oil or other toxic or hazardous pollutants in the three years prior to the preparation date of this SWMP.

4.3 Assessment of Potential Pollutant Sources

Sediment is the only known potential pollutant that may be present in stormwater discharges from this facility. As described above, the area applicable to the SWMP has been fully reclaimed and revegetated. The reclamation area is located within an existing grass hay agriculture field and the parcel is indistinguishable from the remainder of this field. Sediment yields will not differ from the premined, undisturbed, conditions or those occurring in the undisturbed portions of this agriculture field.

SECTION 5: DESCRIPTION OF CONTROL MEASURES

5.1 Location and Type of Control Measure

The HGL has developed a plan to manage runoff from disturbed areas with Best Management Practices (BMPs). The 2.3-acre parcel that this SWMP applies to only represents about two percent of the overall agriculture field. This parcel has been reclaimed to meet the postmine land use requirements of DRMS Permit No. C-92-081 and blends seamlessly with the larger agriculture field. The reclaimed parcel is surrounded by a network of agriculture drainage ditches and the areas downstream of the outfalls are extremely limited and too small to install stormwater collection or infiltration devices, both of which would reduce the area available for production and would also prevent efficient harvesting by the farmer. Therefore, the stormwater runoff control measure implemented for the three outfalls is vegetation.

SECTION 6: ADDITIONAL CONTROL MEASURE REQUIREMENTS

6.1 Good Housekeeping

The HGL is fully reclaimed and no waste materials are, or will be, stored onsite. The site is closed, and no industrial activity will occur at the facility. A list of good housekeeping procedures and a schedule for regular pickup and disposal of waste materials is not applicable.

6.2 Maintenance

The HGL is fully reclaimed and closed. No industrial equipment or systems are located onsite. The area applicable to the SWMP is a small parcel within a larger agriculture field. Vegetation is the only practical control that aligns with the post mine land use of agriculture. Sediment yields will not exceed those of the undisturbed portions of the agricultural field.

6.3 Spill Prevention and Response Procedures

The HGL is fully reclaimed and closed. No industrial equipment or systems, vehicle and equipment maintenance, fueling, or cleaning, or chemical storage occurs onsite. The 2.3-acre area applicable to the SWMP is encompassed by a larger agricultural field. This area will not be accessible by passenger vehicle and there will be no potential for a release of petroleum products or chemicals from HGL staff vehicles. Therefore, Spill Prevention and Response Procedures are not necessary.

6.4 Employee Training

Members of the SWMP team will be trained annually on the site-specific control measures, maintenance of the control measures, components and goals of the SWMP, inspection procedures, and other applicable control measurement requirements of SWMP. The training log is located in Appendix C.

6.5 Non-Stormwater Discharges

- **Date of evaluation:** 10/31/2024
- **Description of the evaluation criteria used:** The 2.3-acre area and stormwater outfalls relevant to the SWMP were identified on a map. These areas were then visually inspected in the field for the presence of non-stormwater discharges.
- **List of the outfalls or onsite drainage points that were directly observed during the evaluation:** The outfalls that were directly observed are shown on the Site Map in Appendix B, and include 003A, 004A, and 005A.
- **Different types of non-stormwater discharge(s) and source locations:** No non-stormwater discharges were noted in these areas.
- **Corrective action(s):** No actions were needed at this time as no non-stormwater discharges were found.

SECTION 7: INSPECTION PROCEDURES AND DOCUMENTATION

The HGL is required to conduct Comprehensive Stormwater Inspections

7.1 Inspection Personnel

Comprehensive Stormwater Inspections will be completed by either Micheal Howard, Environmental Specialist or Miranda Kawcak, Manager of Environmental. Both are members of the SWMP Team.

7.2 Inspection Frequency

At least two Comprehensive Stormwater Inspections must be completed annually. One in the spring and one in the fall. Of these, a minimum of one must be completed during a runoff event. For a rain event, this means during or within 24-hours after the end of a measurable storm event. For a snowmelt event, this means at a time when measurable discharge occurs from the facility.

Note that if adverse weather conditions prevent field inspections from occurring at the required frequency, HGL must document the basis for the failure to inspect and maintain the documentation within the SWMP. Adverse conditions are those that are dangerous or create inaccessibility for personnel, such as local flooding, high winds, winter weather, or electrical storms. Evidence to support this basis may include the dates that monitoring attempts were made; photographs; field notes and official weather data from a scientifically recognized organization, such as NOAA or the NWS, that establish site inaccessibility, etc.

7.3 Inspection Scope

Each Inspection shall include:

- Inspection date and time
- Location Inspected

- Weather information and a description of discharge occurring at time of inspection
- Observations for the presence of floating materials, visible oil sheen, discoloration, turbidity, odor, in the stormwater discharge.
- Observations of the condition of and around the stormwater outfalls, including flow dissipation measures to prevent scouring.
- Observations of the presence of or lack thereof of illicit discharges or other non-permitted discharges such as domestic wastewater, noncontact cooling water, or process wastewater.
- An assessment of all control measures used to comply with the effluent limits contained in the permit including:
    - Effectiveness of control measures inspected
    - Locations of control measures that need maintenance, repair, or replacement
    - Reason maintenance or repair is needed
    - Schedule for maintenance or repair
    - Any additional or different control measures that are needed to comply with the permit and the rationale for additional or different control measures
- Is a Stormwater Corrective Action Required
- A verification that the description of potential pollutant sources required under this permit are accurate.
- A verification that the site map in the SWMP reflects current conditions

SECTION 8: STORMWATER CORRECTIVE ACTION

The HGL must document and retain records for all corrective actions taken to address the conditions in Part 1.F of the permit. A summary of these items are provided below:

8.1 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:

- An unauthorized release or discharge
- Facility control measures are not stringent enough for the discharge to meet applicable water quality standards
- Modifications to the facility control measures are necessary to meet the practice-based effluent limits in this permit; or
- The permittee finds in a facility inspection, that facility control measures are not properly selected, designed, installed, operated or maintained.

8.2 Conditions that Requires Review and Modification

If any of the following conditions occur, 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:

- 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.

8.3 Corrective Action Reports and Deadlines

If any condition listed in this section is discovered, it must be documented in a Corrective Action Report within **5 days**. The report will be included with the annual report submittal and a copy must be retained with the SWMP.

The Corrective Action Report must document the following information:

- Identification of the condition triggering the need for corrective action review
- Description of the problem identified
- Date the problem was identified
- 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)
- Identify if modifications to the SWMP are required as a result of this discovery or corrective action
- Date corrective action was initiated
- Date correction action was completed or is expected to be completed

SECTION 9: SWMP 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 gathered and evaluated 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.

Name: Pat Sollars Title: General Manager

Signature: Pat Sollars Date: 11/11/24

SWMP APPENDICES

Appendix A – Area Delineation Map

Appendix B – Site Map

Appendix C – Employee Training Log

Appendix D – Inspection Form & Records

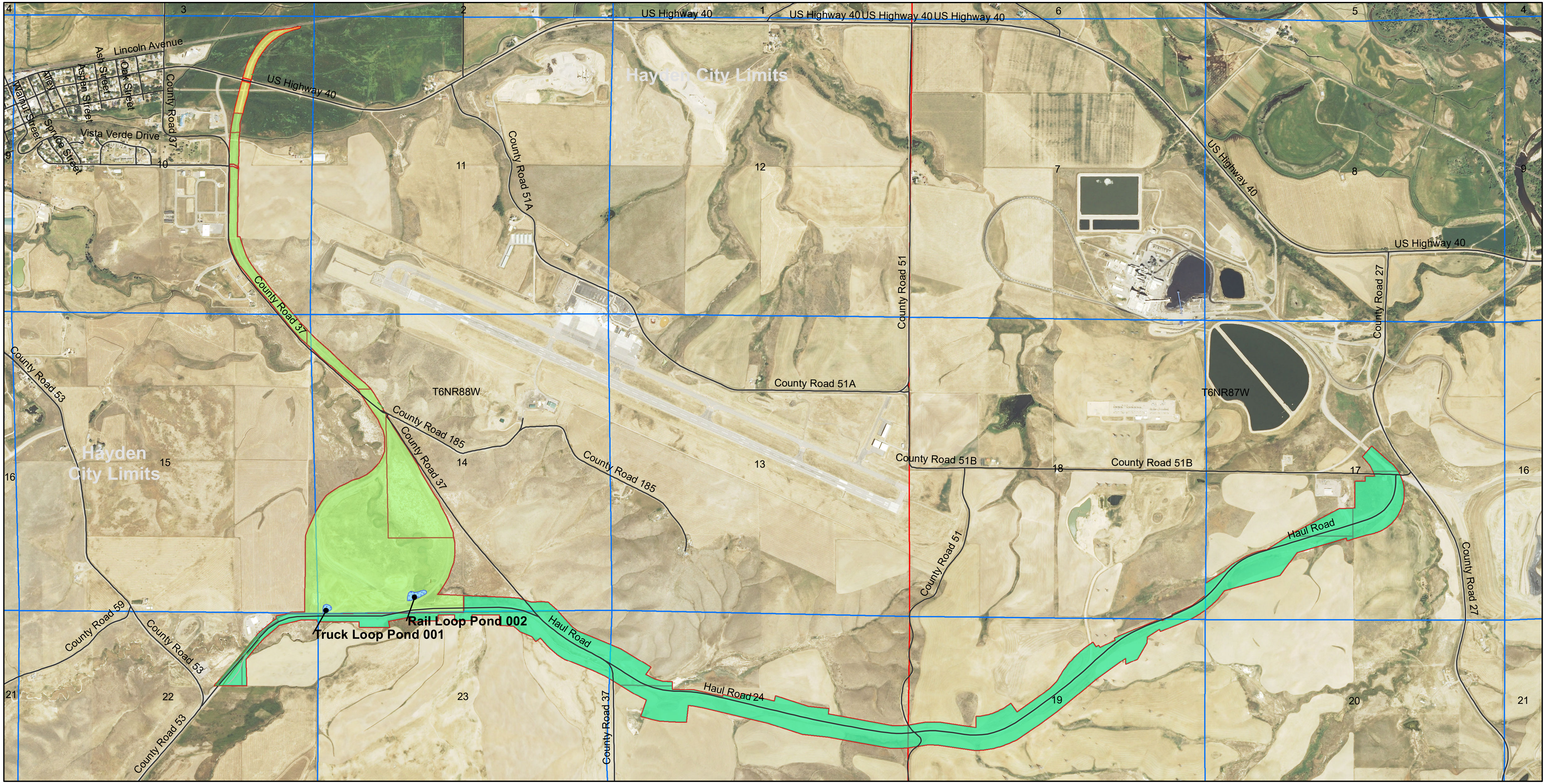
Appendix E – Corrective Action Reports

Appendix F – Annual Reports

Appendix G – Permit CO0049071

Appendix A

Area Delineation Map



	HGLO Permit Boundry 391.2 AC
	HGL Permanent Ponds

BOND RELEASE STATUS

	HAY FIELD (RECLAIMED, NO RELEASE) 6.8 AC /2.3 AC DIST
	SL2 FINAL PHASE III RELEASED 170.3AC/ 103.2 AC DIST
	SL3 FINAL PHASE III RELEASED 214.1 AC/ 96.6 AC DIST

0 900 1,800 3,600 5,400 7,200 Feet

N W E S

1:19,876

1 inch = 1,656 feet

Peabody

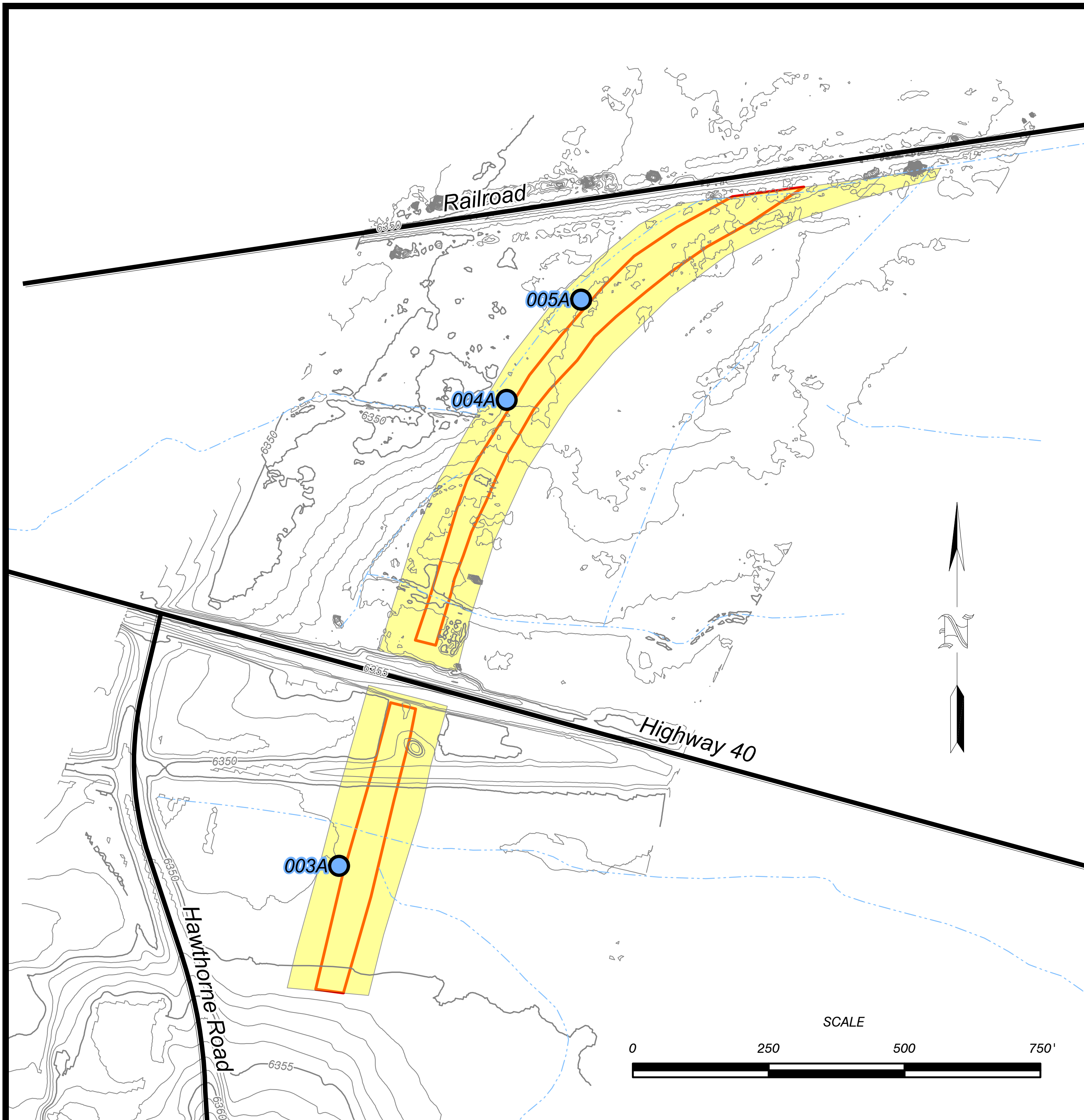
HAYDEN GULCH TERMINAL, LLC
29515 RCR #27
OAK CREEK, CO 80467

HAYDEN GULCH AREA DELINEATION MAP

DESIGNED BY: MLK DRAWN BY: MLK APPROVED BY:	COUNTRY: USA STATE/PROVINCE: COLORADO GSC: 6N 88W
DATE: 2024-03-12 SCALE:	DRAWING/SHEET: 1 of 1 C.I.: 0'

Appendix B

Site Map



Legend

- Outfalls
- 1' Intermediate Contour
- 5' Index Contour
- Permit Area
- Disturbance Boundary
- Drainages, Ditches, and Canals

HAYDEN GULCH LOADOUT

29515 RCR #27 Oak Creek, CO 80467

NORTHERN RAIL LOOP RECLAMATION

SITE MAP

Permit No. C-1992-081

Peabody

Designed By:	PAS	Scale:	1":250'
Drawn By:	PAS	C.I.:	1'
Checked By:	Env. Dept.	Sheet:	1 of 1
Date Drawn:	11/01/24	File:	Outfall Mapping

Appendix C

Employee Training Log

Stormwater Management Plan (SWMP)
Hayden Gulch Loadout CO0049071
Appendix C Employee Training Log

All members of the Hayden Gulch Loadout Stormwater Management Plan (SWMP) Team shall receive stormwater management training at least once per calendar year. The members and date of training shall be recorded in the Training Log. The topics to be covered during the training include:

- SWMP Goals
- Outfall Locations and Site-Specific Control Measures
- Maintenance of the Control Measures
- Inspection Procedures
- Corrective Action

TRAINING LOG			
Date	**Trainer**	**Attendee (Print)**	**Attendee (Signature)**

Appendix D

Inspection Form & Records

HAYDEN GULCH LOADOUT

Semi-Annual SWMP Inspection

Permit No. CO0049071

Instructions: Provide description of weather, including rainfall or snowmelt within last 24-hrs prior to the inspection
Include observations for Notes 1 - 6 below in the comment section of this form if a "yes" is denoted

Notes

1: Provide description of any floating materials, visible oil sheen, discoloration, unnatural turbidity, or odor in the discharge
2: Describe area of scouring or erosion
3: Describe any discharge of pollutants outside of sediment
4: Provide location, reason for maintenance or repair, and a proposed schedule for completing the activity
5: Provide recommendation and rational for an additional or different control measure
6: See Section 8 of the SWMP for list of conditions requiring a Corrective Action

Date	Time	Weather (Temp & Precip)	Location	Control Measure(s)	Discharge (Y/N)	Floating Materials, Visibile Oil Sheen, Discoloration, Unnatural Turbidity, or Odor in Discharge (Y/N)[1]	Is There Evidence of Scouring or Erosion at or Above the Stormwater Outfall (Y/N)[2]	Is There Evidence of Discharges of Previously Unidentified Pollutants (Y/N)[3]	Do Control Measure(s) Need Maintenance, Repair, or Replacement (Y/N)[4]	Are Additional Control Measures Needed to Comply (Y/N)[5]	Is a Stormwater Corrective Action Required (Y/N)[6]	Is the Description of the Potential Pollutant Source in the Permit Still Accurate (Y/N)	Does the SWMP Location Map Reflect Current Conditions (Y/N)
			003A										
			004A										
			005A										

Comments:

Inspector: ____________________

Signature: ____________________ **Date:** ____________________

Appendix E

Corrective Action Records

Appendix F

Annual Reports

Appendix G

Permit CO0049071

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 CO0049071

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

Peabody Sage Creek Mining, LLC

is authorized to discharge from the Hayden Gulch Loadout facility located at CR 53 2 mi S of Hayden,
Latitude: 40.476111, Longitude: - 107.224722

to Shelton Irrigation Return Ditch and Yampa River

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

This permit and the authorization to discharge shall expire at midnight July 31, 2029.

Issued and Signed this 28th day of June, 2024; effective August 1, 2024.

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Andrew Sayers-Fay, Permits Section Manager
Water Quality Control Division

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PART I

A. PERMITTED FEATURES

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

Outfall	Latitude Longitude	Wastewater Source	Receiving Water
003A	40.495556 -107.243333	Stormwater runoff from areas in reclamation	Shelton Irrigation Return Ditch, to the Yampa River (COUCYA02b)
004A	40.497778 -107.241944	Stormwater runoff from areas in reclamation	Shelton Irrigation Return Ditch, to the Yampa River (COUCYA02b)
005A	40.498333 -107.241389	Stormwater runoff from areas in reclamation	Shelton Irrigation Return Ditch, to the Yampa River (COUCYA02b)

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

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

B. PERMIT COMPLIANCE

In accordance with the 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. All discharges authorized under this permit shall comply with all the terms and conditions required by this permit. Violation of the terms and conditions specified in this permit may be subject to civil and criminal liability pursuant to sections 25-8-601 through 612, C.R.S. Failure to take any required corrective actions, as detailed in the CORRECTIVE ACTIONS section, constitutes an independent, additional violation of this permit and may be subject to civil and criminal liability.

1. Facilities Operation and Maintenance

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

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

C. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. Inspections - (Outfalls 003A, 004A, and 005A)

ICIS Code	Effluent Parameter	Effluent Limitations (Quantity)	Monitoring Requirements		Reporting Frequency
			Frequency	Sample Type	
84107	Area inspection – visual (Twice annual facility inspection)	Pass/Fail[1]	Twice annual	Visual	Twice annually
84107	Area inspection – visual (Rain or snow event facility inspection)	Pass/Fail[2]	1 rain or snow melt event per year	Visual	Annual

[1] Completing twice annual facility inspections is indicated as a '**Pass**'; not completing twice annual facility inspections is indicated as a '**Fail**'

[2] Completing facility inspections for one **rain or snow event** is indicated as a '**Pass**'; not completing facility inspections for one **rain or snow event** is indicated as a '**Fail**'.

2. Narrative Water Quality Based Effluent Limitation (Outfalls 003A, 004A, and 005A)

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.

D. Federal Effluent Limitation Guideline - Sediment Control Plan (Outfalls 003A, 004A, and 005A)

ICIS Code	Description	Due date	Frequency
00308	The permittee shall submit documentation 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, 2024	Annual

1. Stormwater Practice-based Effluent Limitations (Outfalls 003A, 004A, and 005A)

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

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

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

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

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

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

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

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

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

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

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

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

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

E. STORMWATER CONTROL MEASURES (Outfalls 003A, 004A, and 005A)

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.

F. STORMWATER INSPECTIONS (Outfalls 003A, 004A, and 005A)

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 (spring and fall seasons).

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 seasons 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. Permits that become effective between 7/1 and 9/30 of the year require only **one (1)** inspection the first calendar year; permits that become effective after 9/30 of the year require two inspections per year, commencing the following calendar year.

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

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

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

2. Inspection Scope

Each inspection shall include:

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

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

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

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

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

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

g. 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 and DMR reporting

The permittee must submit Discharge Monitoring Reports (DMRs) for facility inspections on a semi-annual basis (annual for the runoff event inspection) to the division (see Part I.C.1 of the permit).

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

a. The inspection date and time;

b. Locations inspected;

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

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

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

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

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

4. Non-Compliance discovered during inspection

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

G. STORMWATER CORRECTIVE ACTIONS (Outfalls 003A, 004A, and 005A)

1. Conditions that must be Eliminated

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

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

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

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

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

2. Condition that Requires Review and Modification

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

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

3. Corrective Action Reports and Deadlines

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

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

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

4. <u>**Control measure modification**</u>

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.

H. STORMWATER MANAGEMENT PLAN (SWMP) (Outfalls 003A, 004A, and 005A)

1. <u>**General SWMP Requirements**</u>

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

a. <u>SWMP requirement</u>: 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. <u>Submission</u>: The permittee must submit the SWMP to the division if requested.

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

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

e. <u>SWMP Retention</u>: 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. <u>Consistency with Other Plans</u>: 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. <u>Required SWMP Modifications</u>:

i. Division initiated:

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

ii. Permittee initiated:

a) The permittee must modify the SWMP whenever necessary to address any of the triggering conditions for corrective action in the CORRECTIVE ACTIONS section to ensure that they do not reoccur.
b) The permittee must modify the SWMP whenever there is a change in design, construction, operation, or maintenance at the facility that significantly changes the nature of pollutants discharged in stormwater from the facility, significantly increases the quantity of pollutants discharged, or that requires the permittee to implement new or modified control measures.
c) The SWMP modifications may include a schedule for control measure design and implementation, provided that interim control measures needed to comply with the permit are documented in the SWMP and implemented during the design period.

d) The permittee must make all SWMP modifications prior to changes in site conditions; or for changes in response to site conditions, as soon as practicable, but in no case more than 72 hours after the changes(s) in the field.

2. Specific SWMP Requirements

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

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

b. Facility Description: The facility description shall include:

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

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

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

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

i. Inventory of facility activities and equipment

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

a) Loading and unloading of materials, including solids and liquids.
b) Outdoor storage of materials or products, including solids and liquids, to include areas used for storage or disposal of overburden, materials, soils or wastes; and fertilizer or chemical storage areas.
c) Outdoor manufacturing and processing, to include areas used for milling and processing.
d) On-site dust or particulate generating processes, including dust collection devices and vents.

e) On-site waste treatment, storage, or disposal, including waste ponds and solid waste management units.
f) Vehicle and equipment fueling, maintenance, and/or cleaning (includes washing).
g) Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility.
h) Roofs or other surfaces exposed to air emissions from a manufacturing building or a process area, including vents and stacks from metal processing and similar operations.
i) Roofs and associated surfaces composed of galvanized materials that may be mobilized by stormwater (e.g., roofs, ducts, heating/air conditioning equipment, gutters and downspouts).

ii. Inventory of materials

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

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

iii. Assessment of potential pollutant sources

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

e. Description of Control Measures

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

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

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

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

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

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

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

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

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

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

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

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

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

h. 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.

I. PERMIT SPECIFIC REPORTING AND RECORDKEEPING

1. 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

a. The Annual Report shall include:

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

b. 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

2. <u>SWMP Records:</u>

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.

J. OTHER TERMS AND CONDITIONS

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

PART II

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

A. DUTY TO COMPLY

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

B. DUTY TO REAPPLY

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

C. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE

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

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

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

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

G. PROPERTY RIGHTS

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

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

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

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

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

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

J. MONITORING AND RECORDS

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

K. SIGNATORY REQUIREMENTS

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

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

b. For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or
c. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this subsection, a principal executive officer of a federal agency includes (i) the chief or principal executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency. (e.g., Regional Administrator of EPA). For purposes of this section, a principal executive officer has responsibility for the overall operation of the facility from which the discharge originates.
d. By a duly authorized representative in accordance with 40 C.F.R. 122.22(b), only if:
    i. the authorization is made in writing by a person described in Part II.K.1.a, b, or c above;
    ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and,
    iii. The written authorization is submitted to the Division.

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

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

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

L. REPORTING REQUIREMENTS

1. Planned Changes: The permittee shall give advance notice to the Division, in writing, of any planned physical alterations or additions to the permitted facility in accordance with 40 CFR §122.41(l) and Regulation 61.8(5)(a) and Part II.O. of this permit. Notice is required only when:
    a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR §122.29(b); or
    b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR §122.41(a)(1).
    c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. See 40 C.F.R. §122.41(l)(1)(iii).
2. Anticipated Non-Compliance: The permittee shall give advance notice to the Division, in writing, of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements. The timing of notification requirements differs based on the type of non-compliance as described below.

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

M. BYPASS

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

N. UPSET

1. Definition: "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.
   See 40 CFR §122.41(n) and Regulation 61.2(113),

2. Effect of an upset: An upset constitutes an affirmative defense to an action brought for noncompliance with permit effluent limitations if the requirements of section 3 are met. A determination made during administrative review of claims that noncompliance was caused by upset is final administrative action subject to judicial review.

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

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

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

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

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

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

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

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

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

R. NOTIFICATION REQUIREMENTS

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

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

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

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

b. Written notification shall be to:
Water Quality Protection Section – Compliance Program
Water Quality Control Division
Colorado Department of Public Health and Environment
WQCD-WQP-B2
4300 Cherry Creek Drive South
Denver, CO 80246-1530

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

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

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

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

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

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

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

PART III

APPENDIX A-Categorical Industries and Pollutants

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

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

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

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

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

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

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

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

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

Toxic Pollutants

Asbestos

Hazardous Substances

11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid [11CL-PF3OUDS]
2,2-Dichloropropionic acid
2,4,5-T (2,4,5-Trichlorophenoxy acetic acid)
2,4,5-TP [2-(2,4,5-Trichlorophenoxy) propanoic acid]
2,4-D (2,4-Dichlorophenoxy acetic acid)
2-[N-ethylperfluorooctanesulfonamido] acetic acid
2-[N-methylperfluorooctanesulfonamido] acetic acid
2H,2H,3H,3H-Perfluorooctanoic acid [5:3 FTCA]
3-Perfluoroheptyl propanoic acid [7:3 FTCA]
3-Perfluoropropyl propanoic acid 3:3 [FTCA]
4,8-Dioxa-3H-perfluorononanoic acid [ADONA]
4:2 Fluorotelomer sulfonic acid
6:2 Fluorotelomer sulfonic acid
8:2 Fluorotelomer sulfonic acid
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid [9CL-PF3ONS]
Acetaldehyde
Allyl alcohol
Allyl chloride
Amyl acetate
Aniline
Benzonitrile
Benzyl chloride
Butyl acetate
Butylamine
Captan
Carbaryl
Carbofuran
Carbon disulfide
Chlorpyrifos
Coumaphos
Cresol
Crotonaldehyde
Cyclohexane
Diazinon
Dicamba
Dichlobenil
Dichlone
Dichlorvos
Diethyl amine
Dimethyl amine
Dintrobenzene
Diquat
Disulfoton
Diuron
Epichlorohydrin
Ethion
Ethylene diamine
Ethylene dibromide
Formaldehyde
Furfural
Guthion
Hexafluoropropylene oxide dimer acid
Isoprene
Isopropanolamine Dodecylbenzenesulfonate
Methyl mercaptan
Methyl methacrylate
Methyl parathion
Mevinphos
Mexacarbate
Monoethyl amine
Monomethyl amine
Naled
Napthenic acid
N-ethyl perfluorooctanesulfonamide [NEtFOSA]
N-ethyl perfluorooctanesulfonamidoethanol
Nitrotoluene
N-methyl perfluorooctanesulfonamide [NMeFOSA]
N-methyl perfluorooctanesulfonamidoethanol
Nonafluoro-3,6-dioxaheptanoic acid [NFDHA]
Parathion
Perfluoro(2-ethoxyethane)sulfonic acid [PFEESA]
Perfluoro-3-methoxypropanoic acid [PFMPA]
Perfluoro-4-methoxybutanoic acid [PFMBA]
Perfluorobutanesulfonic acid
Perfluorobutanoic Acid
Perfluorobutanoic Acid
Perfluorodecanesulfonic acid
Perfluorodecanoic acid
Perfluorododecanesulfonic acid [PFDoS]
Perfluorododecanoic acid
Perfluoroheptanesulfonic acid
Perfluoroheptanoic acid
Perfluorohexanesulfonic acid
Perfluorohexanoic acid
Perfluorononanoic acid
Perfluorooctanesulfonamide
Perfluorooctanesulfonic acid
Perfluorooctanoic Acid
Perfluorooctanoic Acid
Perfluoropentanoic acid
Perfluorotetradecanoic acid
Perfluorotridecanoic acid
Perfluoroundecanoic acid
Phenolsulfanate
Phosgene
Propargite
Propylene oxide
Pyrethrins
Quinoline
Resorcinol
Strontium
Strychnine
Styrene
TDE (Tetrachlorodiphenylethane)
Trichlorofan
Triethanolamine dodecylbenzenesulfonate
Triethylamine
Trimethylamine

Kelthane	Uranium
Kepone	Vanadium
Malathion	Vinyl acetate
Mercaptodimethur	Xylene
Methoxychlor	Xylenol
	Zirconium

APPENDIX B-Definitions

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

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

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

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

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

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

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

6. "Composite" sample is a minimum of four (4) grab samples collected at equally spaced two (2) hour intervals and proportioned according to flow. For a SBR type treatment system, a composite sample is defined as sampling equal aliquots during the beginning, middle and end of a decant period, for two consecutive periods during a day (if possible). For low-level mercury, if a composite measurement is required by the permit, four (or more) samples should be collected. These samples should be composited in the laboratory or, alternatively, the grab samples may be analyzed individually, and the results mathematically composited.

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

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

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

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

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

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

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

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

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

    Method 1:

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

    Method 2:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

23. "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.

24. "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

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

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

27. "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.

28. "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.

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

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

31. "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.

32. "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.

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

34. "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.

35. "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.)

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

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

Where:

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

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

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

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

Na^+ = 23.0 mg/meq (atomic weight of 23, charge of 1)
Ca^{++} = 20.0 mg/meq (atomic weight of 40.078, charge of 2)
Mg^{++} = 12.15 mg/meq (atomic weight of 24.3, charge of 2)
HCO_3^- = 61 mg/mep (atomic weight of 61, charge of 1)

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

Table - Modified Calcium Determination for Adjusted Sodium Adsorption Ratio

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

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

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

The Division acknowledges that some effluents may have electrical conductivity levels that fall outside of this table, and others have bicarbonate to calcium ratios that fall outside this table. For example, some data reflect HCO_3^- /Ca^{++} ratios greater than 30 due to bicarbonate concentrations reported greater than 1000 mg/l versus calcium concentrations generally less than 10 mg/l (i.e., corresponding to HCO_3^- /Ca^{++} ratios greater than 100). Despite these high values exceeding the chart's boundaries, it is noted that the higher the HCO_3^- /Ca^{++} ratio, the greater the SAR-adj. Thus, using the Ca_x values corresponding to the final row containing bicarbonate/calcium ratios of 30, the permittee will actually calculate an SAR-adj that is less than the value calculated if additional rows reflecting HCO_3^- /Ca^{++} ratios of greater than 100 were added.

37. "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).**

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

39. "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.

40. "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).**

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

42. "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).**

43. "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 <u>Manual of Methods for Chemical Analysis of Water and Wastes</u>, U.S. Environmental Protection Agency, March 1979, or its equivalent.

44. “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.

45. 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.

46. "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.

47. "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.

48. “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.

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

50. "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.