



State of Utah

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Department of
Environmental Quality

L. Scott Baird
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DIVISION OF WATER QUALITY
Erica Brown Gaddis, PhD
Director

September 23, 2020

Gregg Galecki, Sr. Environmental Engineer
Canyon Fuel Company, LLC - Skyline Mine
HC 35, Box 380
Helper, UT 84526

Via Email

Subject: Public Notice of Permit Renewal
Canyon Fuel Company, LLC - Skyline Mine
UPDES Permit No. UT0023540

Dear Mr. Galecki:

Enclosed for your records is a copy of the Draft UPDES Permit, Fact Sheet, supporting documents, and Public Notice information for the Skyline Mine facility referenced above. Thank you for your prior review and comments. This information will now be made available on-line at <https://deq.utah.gov/public-notice/water-quality-public-notice> during the 30-day public notice period as appropriate.

Thanks for your continued efforts in helping to protect Utah's Water Quality. If you have any questions with regards to this matter, please contact Jeff Studenka at (801) 536-4395 or jstudenka@utah.gov.

Sincerely,

A handwritten signature in blue ink that reads "Dan Hall".

Dan Hall, Acting Manager
UPDES Surface Water Section

DH/JAS/blj

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Public Notice of Permit Renewal
Canyon Fuel Company, LLC - Skyline Mine
UPDES Permit No. UT0023540

- Enclosures:
1. Draft Permit (DWQ-2020-008787)
 2. Draft Fact Sheet Statement of Basis (DWQ-2020-008785)
 3. Wasteload Analysis & ADR (DWQ-2020-015964 & DWQ-2020-016648)
 4. Public Notice (DWQ-2020-017395)

Cc: Via Email w/Enclosures

Amy Clark, US EPA Region VIII
Orion Rogers, Southeast Utah Health Department
Russell Seeley, DEQ SE District Engineer
Steve Christensen, DOGM Coal Program Manager
Chris Cline, US Fish & Wildlife Services
Mike Fowlks, Utah Division of Wildlife Resources
Jason Gipson, Chief, Utah Regulatory Office, US Corps of Engineers
Dennis Oakley, PacifiCorp

DWQ-2020-017398
FILE: UPDES Section 2

**FACT SHEET STATEMENT OF BASIS (FSSOB)
CANYON FUEL COMPANY, LLC - SKYLINE MINE
UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM (UPDES)
MAJOR INDUSTRIAL FACILITY RENEWAL DISCHARGE PERMIT
UTAH DIVISION OF WATER QUALITY (DWQ)
UPDES PERMIT NUMBER: UT0023540**

FACILITY CONTACTS

Person Name: Gregg Galecki
Position: Sr. Environmental Engineer
Phone Number: (435) 448-2636

Facility Name: Skyline Mine
Mailing Address: HC 35, Box 380
Helper, Utah 84526

DESCRIPTION OF FACILITY

The Canyon Fuel Company's Skyline Mine (Skyline Mine) is an active underground coal mine operation with *Standard Industrial Classification 1222*, for *bituminous underground coal mining operations*. The facility is located approximately 8 miles southwest of Scofield, Utah along State Route 264 in Carbon County. Skyline Mine currently has four permitted discharge points (Outfalls 001, 002, 003, & 004), but has requested a fifth discharge point (Outfall 005) for more efficient and safe managing of the mine water to be discharged in the future.

Outfall 001, which discharges to Eccles Creek, is comprised of both the continuous mine water discharges, as well as any surface water runoff directed to the sedimentation pond from the main facility. Outfall 002 is from a sedimentation pond, which collects surface water runoff from the separate coal load out facility located at the intersection of State Routes 264 & 96 and discharges intermittently to Eccles Creek during pond maintenance, precipitation and/or snow melting events. Outfall 003 is from a sedimentation pond located at the off-site waste rock disposal area near Scofield and has not discharged to date and is not expected to discharge into the foreseeable future due to its size. If discharge were to occur it would go to UP Canyon Creek, tributary to Mud Creek and Scofield Reservoir. Outfall 004 is configured to discharge both mine water, as well as any surface water runoff directed to the sedimentation pond from the Winter Quarters Canyon ventilation shaft facility. Outfall 004 first began discharging mine water in May 2020 to Winter Quarters Canyon Creek, which is also tributary to Mud Creek and Scofield Reservoir, to safely dewater and operate the active mining areas. Prior to May 2020, any and all mine water discharges were discharged via Outfall 001. Outfall 005 when completed will enable a portion of the mine water discharges, which would otherwise discharge via Outfall 001, to be discharged directly into Electric Lake, which is tributary to Huntington Creek.

SUMMARY OF CHANGES FROM PREVIOUS PERMIT

There are four significant changes being proposed in this UPDES renewal permit when compared to the previous permit as follows:

1. The inclusion of Outfall 005 and the applicable permit limitations as appropriate. As mentioned above, Outfall 005 is for proposed mine water discharging directly into Electric Lake.
2. Monthly monitoring of the mine water discharges for the following total and dissolved metals have been added; aluminum, arsenic, boron, cadmium, chromium, copper, lead, mercury, nickel, silver, selenium and zinc. The additional metals monitoring is described further in the Reasonable Potential section of this Fact Sheet.
3. The addition of turbidity monitoring at all outfalls has been included as described in the Self-Monitoring & Reporting Requirements section of this FSSOB; and,
4. The Storm Water permit provisions have been removed as part of a programmatic separation of the previously combined UPDES permits. Skyline Mine will now be required to apply for and obtain separate UPDES Industrial Storm Water Permit coverage under the MSGP No. UTR000000, as described further in the Storm Water section of this FSSOB.

DESCRIPTION OF DISCHARGE OUTFALLS

The permitted discharge outfalls are as follows:

<u>Outfall</u>	<u>Description of Discharge Point</u>
001	Located at Latitude 39°41'04", Longitude 111°12'04". Outfall from sedimentation pond and mine water discharges to Eccles Creek.
002	Located at Latitude 39°41'05", Longitude 111°09'23". Outfall from sedimentation pond at the load-out facility discharging to Eccles Creek.
003	Located at Latitude 39°43'13", Longitude 111°09'13". Outfall from sedimentation pond associated with the waste rock disposal site discharging to UP Canyon Creek.
004	Located at Latitude 39°43'13", Longitude 111°11'59". Outfall from sedimentation pond and mine water discharges to Winter Quarters Canyon Creek.
005	Located at Latitude 39°38'58", Longitude 111°14'22" as proposed. Proposed Outfall for mine water discharges into Electric Lake.

RECEIVING WATERS AND STREAM CLASSIFICATION

The receiving waters of Eccles Creek, UP Canyon Creek and Winter Quarters Canyon (Outfalls 001, 002, 003 & 004) are classified as follows according to *Utah Administrative Code (UAC) R317-2-13.1.b*:

- Class 1C -- Protected for domestic purposes with prior treatment by treatment processes as required by the Utah Division of Drinking Water
- Class 2B -- Protected for infrequent primary contact recreation. Also protected for secondary contact recreation where there is a low likelihood of ingestion of water or a low degree of bodily contact with the water. Examples include, but are not limited to, wading, hunting, and fishing.
- Class 3A -- Protected for cold water species of game fish and other cold water aquatic life, including the necessary aquatic organisms in their food chain.
- Class 4 -- Protected for agricultural uses including irrigation of crops and stock watering.

The receiving water for Outfall 005 is Electric Lake, which is classified as High Quality Waters – Category 2, as listed in *Utah Administrative Code (UAC) R317-2-12.2*. High Quality Waters – Category 2 is defined in *UAC R317-2-3.3* as follows:

“...designated surface water segments which are treated as High Quality Waters – Category 1 except that a point source discharge may be permitted provided that the discharge does not degrade existing water quality.”

The permit requirements and limitations for Outfall 005 have been developed so that the proposed discharge does not degrade the existing water quality of Electric Lake. A similar UPDES Permit (UT0025534) was issued by DWQ to PacifiCorp in 2000, in conjunction with Skyline Mine, for discharges from the nearby James Canyon wells and pipeline into Electric Lake.

BASIS FOR EFFLUENT LIMITATIONS

In accordance with regulations promulgated in *40 Code of Federal Regulations (CFR) Part 122.44* and in *UAC R317-8-4.2*, effluent limitations are derived from technology-based effluent limitations guidelines, Utah Secondary Treatment Standards (*UAC R317-1-3.2*) and Utah Water Quality Standards (*UAC R317-2*) as applicable. In cases where no limits have been developed, Best Professional Judgment (BPJ) may be used where applicable. “Best Professional Judgment” refers to a discretionary, best professional decision made by the permitting authority based upon precedent, prevailing regulatory standards or other relevant information.

Permit limits can also be derived from the Wasteload Analysis (WLA), which incorporates Secondary Treatment Standards, Water Quality Standards, including Total Maximum Daily Load (TMDL) impairments as appropriate, Antidegradation Reviews and designated uses into a water quality model that projects the effects of discharge concentrations on receiving water quality. Effluent limitations are those that the model demonstrates are sufficient to meet State water quality standards in the receiving waters. During this UPDES renewal permit development, a WLA and ADR were performed. An ADR Level I review was performed and concluded that an ADR Level II review was not required this time since there are no proposed increases in total flows or parameter concentrations from the previous permit. The WLA indicates that the effluent limitations will be sufficiently protective of water quality, in order to meet State water quality standards in the receiving waters. The WLA and ADR are attached as an addendum to this FSSOB.

The following list is the basis for the effluent limitations of **Outfalls 001 through 004**:

- 1) Since the Skyline discharge meets the EPA definition of “alkaline mine drainage,” the permittee is subject to the technology based effluent limitations in *40 CFR Part 434.45*. Applicable technology based limits included in the permit are as follows:
 - a. Total suspended solids (TSS) daily maximum limit of 70 mg/L.
 - b. For discharges composed of surface water or mine water commingled with surface water, *40 CFR Part 434.63* allows alternate effluent limits to be applied when discharges result from specific runoff events, detailed below and in the permit. Skyline has the burden of proof that the described runoff event occurred as described in the permit.
 - i. For runoff events (rainfall or snowmelt) less than or equal to a 10-year 24-hour precipitation event, settleable solids may be substituted for TSS and shall be limited to 0.5 milliliters per liter (ml/L). All other effluent limitations must be achieved concurrently, as described in the permit.
- 2) Daily minimum and daily maximum limitations on pH are derived from the Utah Secondary Treatment Standards and the Water Quality Standards as cited above.
- 3) The dissolved oxygen (DO) daily minimum limitation is based upon the State Water Quality Standard (*UAC R317-2 Table 2.14.2*) and the previous permit and WLA limitation of 5.0 mg/L. Although the attached WLA indicates a DO daily minimum of 4.0 mg/L and a monthly minimum of 6.5 mg/L, the current DO limitation will remain in place based upon BPJ of the permitting authority and the fact that one DO sample is being collected each month. Additionally, the current DO limitation of 5.0 mg/L is more protective of the receiving waters than the attached WLA proposed daily minimum limitation of 4.0 mg/L for DO.
- 4) Total dissolved solids (TDS) are limited by both mass loading and concentration requirements as described below:
 - a. Since discharges from Skyline eventually reach the Colorado River, TDS mass loading is limited according to policies established by the Colorado River Basin Salinity Control Forum (Forum), as authorized in *UAC R317-2-4* to further control salinity in the Utah portion of the Colorado River Basin. On February 28, 1977 the Forum produced the “*Policy For Implementation of Colorado River Salinity Standards Through the NPDES Permit Program*” (Policy), with the most current subsequent triennial revision dated October 2017. Based on Forum Policy, provisions have previously been made for salinity-offset projects to account for any TDS loading in excess of the permit requirement. Salinity-offset provisions have once again been included in Skyline’s permit as the facility remains current on the requirements included therein to account for all excess TDS loading. If the concentration of TDS at any Outfall is less than or equal to 500 mg/L as a thirty day average, then no loading limit applies for that Outfall. These provisions and requirements, as described further in both the permit and in a latter section of this FSSOB, will remain in Skyline’s renewal permit as appropriate.
 - b. The State Water Quality Standard for TDS is 1,200 mg/L, as found in *UAC R317-2-14 Table 2.14.1*, and shall apply to Outfalls 001 through 004 as appropriate.

- 5) The iron limitation is based upon the State Water Quality Standard of 1.0 mg/L for dissolved iron (*UAC R317-2 Table 2.14.2*) and the WLA limitation of 1.0 mg/L for total recoverable iron. Total recoverable iron is a more stringent limit than dissolved iron since the dissolved component is a part of the total recoverable component. Therefore, the existing permit limit of 1.0 mg/L for total recoverable iron will remain in the renewal permit and shall apply to each of the discharge points.
- 6) Oil and Grease concentrations are limited to 10 mg/L based upon BPJ of the permitting authority to be consistent with other industrial facilities statewide.

Basis for Outfall 005 Effluent Limitations

Since this proposed new outfall discharges into a Category 2 receiving water body, a separate WLA was conducted to ensure that no degradation of Electric Lake would occur as a result of the new discharge. The separate WLA is also attached as an addendum to this FSSOB and provides the data analysis summary for the parameters of concern. As expected, the effluent limitations for Outfall 005 are more restrictive than those of the other outfalls. This includes concentration limitations for TDS, TSS and total iron as appropriate. The Daily Maximum permit limits for TDS and Total Iron are derived from the 80th percentile of the Upper lake tributaries data set as presented in the WLA data Tables 1 & 2, while the permit limits for Maximum Annual Averages are initially based upon the arithmetic mean of the Upper lake tributaries data rather than the Lake only data set as recommended in the WLA. This is based upon several factors, including the limited or absent Lake data that is proximal in location to the proposed outfall near the Upper lake input data points, as well as to be consistent with the Upper lake input data set that was utilized for the aforementioned Daily Maximum permit limits. Since the existing Lake data samples have only been collected near the middle and lower portions of Electric Lake, Skyline Mine has committed to sampling the upper reaches of Electric Lake so that a more extensive Lake analysis can be conducted of the proposed additional input into the Upper reaches. This will be reevaluated after one year of new monitoring as described in the next paragraph. For comparative purposes, the previously mentioned similar UPDES Permit #UT0025534 included only the Daily Maximum permit limits of 255 mg/L for TDS and 0.5 mg/L for Total Iron and did not include Maximum Annual Average limitations.

Permit limits for pH, dissolved oxygen, and oil & grease are included to be consistent with the other outfalls based upon BPJ of the permitting authority. Additionally within the first year of the renewal permit, Skyline Mine will be required to complete a geochemical analysis as detailed in the permit regarding the new outfall mine water discharges into Electric Lake as furtherance of no degradation to the Category 2 receiving waters. Once the study has been submitted to DWQ, the permit may be reopened and modified at any time to include more protective effluent limits based upon the study itself, the WLA, or a subsequent reasonable potential analysis which is described further in the section below. This includes the parameter dissolved iron, which historically is not a parameter of concern from Skyline Mine discharges, but is identified in the WLA due to the uniqueness of the receiving water. Therefore all metals monitoring data from the first year of discharge sampling will be reevaluated as detailed in the permit.

Impaired Waters and TMDL

Scofield Reservoir tributaries, Assessment Unit UT14060007-002, are listed as impaired for dissolved oxygen in Utah's 2016 Integrated Report. Scofield Reservoir is listed as impaired for dissolved oxygen, pH and total phosphorus in Utah's 2016 Integrated Report. The Scofield Reservoir TMDL was completed to address the impairment for dissolved oxygen and total phosphorus. Skyline Mine has previously monitored for pH, dissolved oxygen and total phosphorus and will continue to monitor for pH and dissolved oxygen as appropriate. However, total phosphorus was removed during the last permit renewal as a result of five years of monitoring that resulted in no measurable concentrations as expected. This will continue in the permit renewal based upon the permitting authority's BPJ as Skyline Mine is not considered a contributing source of phosphorus or other nutrient parameters. Electric Lake is not listed as impaired for any water quality parameters.

Reasonable Potential Analysis

Since January 1, 2016, DWQ has conducted reasonable potential analysis (RP) on all new and renewal applications received after that date. RP for this permit renewal was conducted following DWQ's September 10, 2015 Reasonable Potential Analysis Guidance (RP Guidance). There are four outcomes defined in the RP Guidance: Outcome A, B, C, or D. These Outcomes provide a frame work for what routine monitoring or effluent limitations are required

A qualitative RP analysis was performed on the parameters of concern, as derived from the current permit, TMDL, and WLA, to determine if there was reasonable potential for the mine water discharges to exceed the applicable water quality standards. Based on the RP analysis, only Total Iron for Outfall 001 exceeded the most stringent chronic water quality standard or was determined to have a reasonable potential to exceed the standard. However, an RP analysis could not be completed on any other metals because historically metals monitoring has not been included in previous permits (except for iron which is already in the permit with a limit). Therefore, this renewal permit will require that the permittee obtain more metals data by monitoring the mine water discharges on a monthly basis for total recoverable and dissolved concentrations of aluminum, arsenic, boron, cadmium, chromium, copper, lead, mercury, nickel, silver, selenium and zinc, so that a more thorough RP analyses can be performed in the future. A copy of the RP analysis is included as an attachment at the end of this Fact Sheet.

The permittee is expected to be able to comply with the permit limitations as follows:

OUTFALLS 001, 002, 003, & 004

Parameter, Units	Effluent Limitations *a			
	Maximum Monthly Average	Maximum Weekly Average	Daily Minimum	Daily Maximum
Total Effluent Flow, MGD, *b	Report	--	--	Report
Total Iron, mg/L	--	--	--	1.0
Total Suspended Solids (TSS), mg/L	Report	Report	--	70
Total Dissolved Solids (TDS), mg/L, *c	Report	--	--	1,200
Total Dissolved Solids (TDS), tons/day, *c	Report	--	--	--
Dissolved Oxygen, mg/L	--	--	5.0	--
pH, Standard Units(SU)	--	--	6.5	9.0

Oil & Grease, mg/L, *d	--	--	--	10
Whole Effluent Toxicity (WET), Chronic Biomonitoring (Outfalls 001 & 004 only)	--	--	--	IC ₂₅ > 100% effluent

OUTFALL 005

Parameter, Units	Effluent Limitations *a			
	Maximum Monthly Average	Maximum Annual Average	Daily Minimum	Daily Maximum
Total Effluent Flow, MGD, *b	Report	--	--	Report
Total Iron, mg/L	--	0.38	--	0.45
Total Suspended Solids (TSS), mg/L	Report	Report	--	31
Total Dissolved Solids (TDS), mg/L, *c	Report	202	--	235
Total Dissolved Solids (TDS), tons/day, *c	Report	--	--	--
Dissolved Oxygen, mg/L	--	--	5.0	--
pH, Standard Units(SU)	--	--	6.5	9.0
Oil & Grease, mg/L, *d	--	--	--	10
Whole Effluent Toxicity (WET), Chronic Biomonitoring	--	--	--	IC ₂₅ > 100% effluent
Total & Dissolved Metals, mg/L, *e	--	Report	--	Report

MGD - million gallons per day;

mg/L - milligrams per liter

SELF-MONITORING AND REPORTING REQUIREMENTS

The following self-monitoring requirements are the same as in the previous permit with the inclusion of Outfall 005 and the applicable self-monitoring requirements. The permit will require reports to be submitted monthly and annually, as applicable, on Discharge Monitoring Report (DMR) forms due 28 days after the end of the monitoring period. Effective January 1, 2017, monitoring results must be submitted using NetDMR unless the permittee has successfully petitioned for an exception. Lab reports for biomonitoring, as well as lab reports for metals and toxic organics, must be submitted with the applicable DMRs. A review of the past 5 years of DMR data reveals that Skyline Mine has had no significant permit exceedances of any parameter, except for total iron as described previously, and should be able to continue complying with the permit provisions as included.

ALL OUTFALLS (Unless stated otherwise)

Self-Monitoring and Reporting Requirements *a			
Parameter	Frequency	Sample Type	Units
Total Flow, *b	Continuous/Monthly	Recorder/Measured	MGD

Total Iron	Twice Monthly	Grab	mg/L
TSS	Weekly	Grab	mg/L
TDS, *c	Twice Monthly	Grab	mg/L & tons/day
pH	Weekly	Grab	SU
Oil & Grease, *d	Weekly, Twice Monthly	Grab, Visual	mg/L, Yes/No
Turbidity, *f	Monthly	Grab	NTU
Dissolved Oxygen	Monthly	Grab	mg/L
Chronic WET Biomonitoring (Outfalls 001, 004 & 005)	Quarterly	Composite	Pass/Fail
Total & Dissolved Metals, *e (Outfalls 001, 004 & 005)	Monthly	Grab	mg/L

There shall be no visible sheen or floating solids or visible foam in other than trace amounts upon any discharges and there shall be no discharge of any sanitary wastes at any time.

*a See Permit *Part VI* for definition of terms.

*b Mine water discharges via Outfalls 001, 004 & 005 shall be continuously measured. If the rate of discharge is controlled, such as from intermittent discharging outfalls, the rate and duration of discharge shall be reported. Flow measurements of effluent volumes from all outfalls shall be made in such a manner that the permittee can affirmatively demonstrate that representative values are being obtained.

*c The TDS concentration from each of the outfalls shall not exceed the daily maximum limit. No tons per day loading limit will be applied if the concentration of TDS from each outfall is equal to or less than 500 mg/L as a thirty-day average. However, if the 30-day average concentration exceeds 500 mg/L, then the permittee cannot discharge more than 7.1 tons per day as a sum from all discharge points. Upon previous determinations by the Director, if the permittee is not able to meet the 500 mg/L 30-day average or the 7.1 tons per day loading limit, then the permittee is required to continue to participate in and/or fund a salinity offset project to include the TDS offset credits as appropriate.

The salinity-offset project shall include TDS credits on a ton-for-ton basis for which the permittee is over the 7.1 tons per day loading limit. The tonnage reduction from the offset project must be calculated by a method similar to one used by the NRCS, Colorado River Basin Salinity Control Forum, and/or other applicable agency.

A monitoring and adjustment plan to track the TDS credits shall continue to be submitted to the Director for each monthly monitoring period during the life of this permit. Any changes to the monitoring and adjustment plan must be approved by the Director and shall be appended to this permit.

- *d Weekly oil & grease sample analyses shall be conducted at outfalls 001, 004 & 005 when discharging. At outfalls 002 & 003, oil & grease monitoring shall initially be a visual test conducted at least twice per month. If any oil and/or grease sheens are observed visually, or there is any other reason to believe that oil and/or grease may be present in the discharge, then a grab sample of the effluent must be immediately taken and this sample shall not exceed 10 mg/L.
- *e Total Recoverable and Dissolved Metals includes; aluminum, arsenic, cadmium, chromium, copper, iron, lead, mercury, nickel, selenium, silver, and zinc. After the first year of metals monitoring, the permit may be reopened at any time and modified to include more protective effluent limits based upon a subsequent Reasonable Potential Analysis of all new data sets as provided.
- *f Turbidity monitoring shall be conducted monthly whenever possible from all discharging Outfalls to ensure that there is not an increase of more than 10 NTU over the receiving waters, if applicable.

STORM WATER REQUIREMENTS

As mentioned previously, the Storm water provisions have been omitted from this UPDES permit. However, based on the type of industrial activities occurring at the facility, the permittee is required to maintain separate permit coverage, or an appropriate exclusion, under the Multi-Sector General Permit (MSGP) for Storm Water Discharges Associated with Industrial Activities (UTR000000). If the facility has not already done so, it has 30 days from when this permit is issued to submit the appropriate Notice of Intent (NOI) for the MSGP or exclusion documentation. This can be accomplished online at: <https://deq.utah.gov/water-quality/general-multi-sector-industrial-storm-water-permit-updes-permits>.

In addition, separate permit coverage under the Construction General Storm Water Permit (CGP) may be required for any non-mining related construction at the facility which disturb an acre or more, or is part of a common plan of development or sale that is an acre or greater. A Notice of Intent (NOI) is required to obtain a construction storm water permit prior to the period of construction. This can be accomplished online at: <https://deq.utah.gov/water-quality/general-construction-storm-water-updes-permits>.

PRETREATMENT REQUIREMENTS

This facility does not discharge process wastewater to a sanitary sewer system. Any process wastewater that the facility may discharge to the sanitary sewer, either as a direct discharge or as a hauled waste, is subject to federal, state, and local pretreatment regulations. Pursuant to section 307 of the Clean Water Act, the permittee shall comply with all applicable federal general pretreatment regulations promulgated, found in 40 CFR 403, the state's pretreatment requirements found in UAC R317-8-8, and any specific local discharge limitations developed by the Publicly Owned Treatment Works (POTW) accepting the waste. In addition, in accordance with *40 CFR 403.12(p)(1)*, the permittee must notify the POTW, the EPA Regional Waste Management Director, and the State hazardous waste authorities, in writing, if they discharge any substance into a POTW which if otherwise disposed of would be considered a hazardous waste under *40 CFR 261*. This notification must include the name of the hazardous waste, the EPA hazardous waste number, and the type of discharge (continuous or batch).

BIOMONITORING REQUIREMENTS

A nationwide effort to control toxic discharges where effluent toxicity is an existing or potential concern is regulated in accordance with the Utah Pollutant Discharge Elimination System Permit and Enforcement Guidance Document for Whole Effluent Toxicity Control (biomonitoring) dated February 2018. Authority to require effluent biomonitoring is provided in Permit Conditions, UAC R317-8-4.2, Permit Provisions, UAC R317-8-5.3 and Water Quality Standards, UAC R317-2-5 and UAC R317-2-7.2. Since Skyline Mine is classified as a major industrial discharger, the renewal permit will again require quarterly whole effluent toxicity (WET) testing for the mine water discharges as appropriate based upon the aforementioned biomonitoring guidance document.

During the past five years, Skyline Mine has been conducting quarterly chronic WET testing of their mine water discharge via Outfall 001 utilizing the test species, *Ceriodaphnia dubia* (water flea) and *Pimephales promelas* (fathead minnow) as detailed in the permit. A review of past WET testing reports reveals that Skyline Mine has had no chronic WET failures for many years including during the past five year permit cycle. Based upon past performance and due to the outfalls discharging to either a category Class 1C water (Outfalls 001 & 004), or a Category 2 High Quality Water (Outfall 005), Skyline Mine shall continue quarterly chronic WET testing, alternating the test species as appropriate from all mine water discharging outfalls. A CO₂ atmosphere may be used (in conjunction with an unmodified test) in order to account for artificial pH drift, as previously authorized by the Director. The permit will contain the standard requirements for accelerated testing upon failure of a WET test, and a Preliminary Toxicity Investigation (PTI) and Toxicity Reduction Evaluation (TRE) as necessary.

PERMIT DURATION

It is recommended that this permit be effective for a duration of five (5) years, as authorized in *UAC R317-8-5.1(1)*.

Drafted and reviewed by

Jeff Studenka, Discharge & Colorado River Basin Salinity Control
Lonnie Shull, Biomonitoring
Lisa Stevens, Storm Water
Jen Robinson, Pretreatment
Amy Dickey, Watershed/TMDL
Nick Von Stackleberg & Chris Shope, Wasteload Analysis & ADR

Utah Division of Water Quality, (801) 536-4300
September 15, 2020

PUBLIC NOTICE INFORMATION (to be updated later)

Began:

Ended:

Comments will be received at: 195 North 1950 West
PO Box 144870
Salt Lake City, UT 84114-4870

The Public Notice of the draft permit will be published on DWQ's website for at least 30 days as per *Utah Administrative Code (UAC) R317-8-6.5*.

During the public comment period provided under *UAC R317-8-6.5*, any interested person may submit written comments on the draft permit and may request a public hearing, if no hearing has already been scheduled. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. All comments will be considered in making the final decision and shall be answered as provided in *UAC R317-8-6.12*.

ADDENDUM TO FSSOB

ATTACHMENTS (2): I. Wasteload Analysis and Antidegradation Reviews
II. Reasonable Potential Analysis Summary

DWQ-2020-008785

PND Draft

PND Draft

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ATTACHMENT 1

Wasteload Analysis and Antidegradation Reviews

PVNDraft

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ATTACHMENT 2

Reasonable Potential Analysis

REASONABLE POTENTIAL ANALYSIS

Water Quality has worked to improve our reasonable potential analysis (RP) for the inclusion of limits for parameters in the permit by utilizing an EPA approved method and guidance document. As a result, more parameters may be included in the renewal permit. A Copy of the Reasonable Potential Analysis Guidance (RP Guide) is available online. There are four resulting outcomes for the RP Analyses¹. They are;

- Outcome A: A new effluent limitation will be placed in the permit.
- Outcome B: No new effluent limitation. Routine monitoring requirements will be placed or increased from what they are in the permit,
- Outcome C: No new effluent limitation. Routine monitoring requirements maintained as they are in the permit,
- Outcome D: No limitation or routine monitoring requirements are in the permit.

The Initial RP Screening Table is included below for the parameters of concern (POCs), as derived from the current permit, TMDL and WLA. Note that the full RP analysis model could not be utilized at this time due to the lack of metals data.

RP Initial Screening Table for Skyline Mine (UT0023540) 2014-2019 Data Summary Results & RP Analysis for Outfall 001 (main discharge) (Outfalls 003, 004, & 005 did not discharge during this time)

Parameter	No. of Samples	MEC* mg/L	Water Quality Standards MAC**			Result
			WLA mg/L	Acute mg/L	Chronic mg/L	
Total Iron	148	1.46	1.0	NA	NA	MEC > MAC = RP
Total Phosphorous	17	<0.05	0.05	NA	NA	MEC < MAC
Total Dissolved Solids	148	1052	1200	NA	NA	MEC < MAC
pH	287	7.0-8.83	6.5-9.0 (min/max)	NA	NA	MEC < MAC
Dissolved Oxygen	60	5.7-8.99	5.0 (min)	4.0 (min)	5.0 (min)	MEC < MAC

Notes: NA = not applicable.

Phosphorus monitoring was from 2009-2015.

Dissolved Oxygen minimum is from the current permit requirement and previous WLA.

*MEC – Maximum expected effluent concentration as determined from existing data set.

**MAC – Maximum allowable concentration from Water Quality Standards and/or Wasteload Analysis.

MEC > (greater than) MAC = Reasonable Potential identified.

MEC < (less than) MAC. No Acute or Chronic limit required.

Result:

Outfall 001 (main discharge) the above result of the RP analysis is **MEC > MAC = Reasonable Potential identified** for total iron, which already has a specific effluent limit. This equates to *RP Outcome B: No new effluent limitation. Routine monitoring requirements will be placed or increased from what they are in the permit.* Additional metals monitoring has been added in the permit however, so that a complete RP analysis model can be completed in the future.

Outfalls 002 & 003 (sedimentation ponds), since they are either infrequent or non- discharging outfalls, the result of the RP analysis by default is MEC less than (<) to MAC with No Acute or Chronic limits required, which equates to *RP Outcome C: No new effluent limitation. Routine monitoring requirements maintained as they are in the permit.*

¹ See Reasonable Potential Analysis Guidance for further definition of terms

Outfall 004 (current/future mine water discharges with little to no discharge data to evaluate) the result of the RP analysis by default to be consistent with Outfall 001, since it is essentially the same discharge water, is **MEC > MAC = Reasonable Potential identified** for total iron, which already has a specific effluent limit. This equates to *RP Outcome B: No new effluent limitation. Routine monitoring requirements will be placed or increased from what they are in the permit.* Additional metals monitoring has been added in the permit however, so that a complete RP analysis model can be completed in the future.

Outfall 005 (pending), new effluent limitations will be placed in the permit as appropriate (Outcome A).

Summary:

Based upon the policy “Reasonable Potential Analysis Guidance” developed by the Utah Division of Water Quality on September 10, 2015 and subsequently implemented beginning January 1, 2016 for all new and renewal permits; it was determined not to include any new metals or other POCs effluent limits in the 2020 renewal permit. This is because all the data points reviewed were below the applicable Water Standards and/or method detection limits, excepting for total iron which already has specific effluent limitations as derived from the WLA and permit development to be most protective of the receiving waters (see table above). Therefore, no RP currently exists at the mine for metals or other identified POCs except for total iron at Outfalls 001 & 004 and a more quantitative RP analysis was not applicable at this time. Monitoring for the remaining metals (Aluminum, Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, and Zinc), although believed to be absent in the mine water discharges, will be included as detailed in the permit for mine water discharging Outfalls 001, 004, and 005, so that a more thorough RP analysis can be conducted in the future. This will be re-evaluated in subsequent years as appropriate.

Official Draft Public Notice Version **September 24, 2020**

The findings, determinations, and assertions contained in this document are not final and subject to change following the public comment period.

STATE OF UTAH
DIVISION OF WATER QUALITY
DEPARTMENT OF ENVIRONMENTAL QUALITY
SALT LAKE CITY, UTAH

UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM (UPDES) PERMITS

Major Industrial Permit No. **UT0023540**

In compliance with provisions of the *Utah Water Quality Act, Title 19, Chapter 5, Utah Code Annotated ("UCA") 1953, as amended* (the "Act"),

CANYON FUEL COMPANY, LLC – SKYLINE MINE

is hereby authorized to discharge from its facility to receiving waters named **Eccles Creek, UP Canyon Creek, Winter Quarters Canyon Creek, and Electric Lake** (tributaries to the Colorado River),

in accordance with specific limitations, outfalls, and other conditions set forth herein.

This permit shall become effective on **DATE/MONTH**, 2020.

This permit expires at midnight on **DATE/MONTH**, 2025.

Signed this **DATE** day of **MONTH**, 2020.

Erica Brown Gaddis, PhD
Director

DWQ-2020-008787

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DISCHARGE LIMITATIONS AND REPORTING REQUIREMENTS

- A. Description of Discharge Points. The authorization to discharge wastewater provided under this part is limited to those outfalls specifically designated below as discharge locations. Discharges at any location not authorized under a UPDES permit are violations of the *Act* and may be subject to penalties under the *Act*. Knowingly discharging from an unauthorized location or failing to report an unauthorized discharge may be subject to criminal penalties as provided under the *Act*.

<u>Outfall Number(s)</u>	<u>Location of Discharge Outfall(s)</u>
001	Located at Latitude 39°41'04", Longitude 111°12'04". Outfall from sedimentation pond and mine water discharges to Eccles Creek.
002	Located at Latitude 39°41'05", Longitude 111°09'23". Outfall from sedimentation pond at the load-out facility discharging to Eccles Creek.
003	Located at Latitude 39°43'13", Longitude 111°09'13". Outfall from sedimentation pond associated with the waste rock disposal site discharging to UP Canyon Creek.
004	Located at Latitude 39°43'13", Longitude 111°11'59". Outfall from sedimentation pond and mine water discharges to Winter Quarters Canyon Creek.
005	Located at Latitude 39°38'58", Longitude 111°14'22" as proposed. Proposed Outfall for mine water discharges into Electric Lake.

- B. Narrative Standard. It shall be unlawful, and a violation of this permit, for the permittee to discharge or place any waste or other substance in such a way as will be or may become offensive such as unnatural deposits, floating debris, oil, scum, or other nuisances such as color, odor or taste, or cause conditions which produce undesirable aquatic life or which produce objectionable tastes in edible aquatic organisms; or result in concentrations or combinations of substances which produce undesirable physiological responses in desirable resident fish, or other desirable aquatic life, or undesirable human health effects, as determined by a bioassay or other tests performed in accordance with standard procedures.

- C. Specific Limitations and Self-Monitoring Requirements.

1. Effective upon permit issuance, and lasting through the life of this permit, there shall be no chronic toxicity in Outfall(s) 001, 004 and 005 as defined in *Part VI*, and determined by test procedures described in *Part I. C.7* of this permit.

PART I
DISCHARGE PERMIT NO. UT0023540

2. Effective immediately and lasting the duration of this permit, the permittee is authorized to discharge from Outfalls 001, 002, 003, 004, and 005 as described above. Such discharges shall be limited and monitored by the permittee as specified below:

OUTFALLS 001, 002, 003, & 004

Parameter, Units	Effluent Limitations *a			
	Maximum Monthly Average	Maximum Weekly Average	Daily Minimum	Daily Maximum
Total Effluent Flow, MGD, *b	Report	--	--	Report
Total Iron, mg/L	--	--	--	1.0
Total Suspended Solids (TSS), mg/L	Report	Report	--	70
Total Dissolved Solids (TDS), mg/L, *c	Report	--	--	1,200
Total Dissolved Solids (TDS), tons/day, *c	Report	--	--	--
Dissolved Oxygen, mg/L	--	--	5.0	--
pH, Standard Units(SU)	--	--	6.5	9.0
Oil & Grease, mg/L, *d	--	--	--	10
Whole Effluent Toxicity (WET), Chronic Biomonitoring (Outfalls 001 & 004 only)	--	--	--	IC ₂₅ > 100% effluent

OUTFALL 005

Parameter, Units	Effluent Limitations *a			
	Maximum Monthly Average	Maximum Annual Average	Daily Minimum	Daily Maximum
Total Effluent Flow, MGD, *b	Report	--	--	Report
Total Iron, mg/L	--	0.38	--	0.45
Total Suspended Solids (TSS), mg/L	Report	Report	--	31
Total Dissolved Solids (TDS), mg/L, *c	Report	202	--	235
Total Dissolved Solids (TDS), tons/day, *c	Report	--	--	--
Dissolved Oxygen, mg/L	--	--	5.0	--
pH, Standard Units(SU)	--	--	6.5	9.0
Oil & Grease, mg/L, *d	--	--	--	10
Whole Effluent Toxicity (WET), Chronic Biomonitoring	--	--	--	IC ₂₅ > 100% effluent
Total & Dissolved Metals, mg/L, *e	--	Report	--	Report

MGD - million gallons per day;

mg/L - milligrams per liter

ALL OUTFALLS (Unless stated otherwise)

Self-Monitoring and Reporting Requirements *a			
Parameter	Frequency	Sample Type	Units
Total Flow, *b	Continuous/Monthly	Recorder/Measured	MGD
Total Iron	Twice Monthly	Grab	mg/L
TSS	Weekly	Grab	mg/L
TDS, *c	Twice Monthly	Grab	mg/L & tons/day
pH	Weekly	Grab	SU
Oil & Grease, *d	Weekly, Twice Monthly	Grab, Visual	mg/L, Yes/No
Turbidity, *f	Monthly	Grab	NTU
Dissolved Oxygen	Monthly	Grab	mg/L
Chronic WET Biomonitoring (Outfalls 001, 004 & 005)	Quarterly	Composite	Pass/Fail
Total & Dissolved Metals, *e (Outfalls 001, 004 & 005)	Monthly	Grab	mg/L

There shall be no visible sheen or floating solids or visible foam in other than trace amounts upon any discharges and there shall be no discharge of any sanitary wastes at any time.

*a See Permit *Part VI* for definition of terms.

*b Mine water discharges via Outfalls 001, 004 & 005 shall be continuously measured. If the rate of discharge is controlled, such as from intermittent discharging outfalls, the rate and duration of discharge shall be reported. Flow measurements of effluent volumes from all outfalls shall be made in such a manner that the permittee can affirmatively demonstrate that representative values are being obtained.

*c The TDS concentration from each of the outfalls shall not exceed the daily maximum limit. No tons per day loading limit will be applied if the concentration of TDS from each outfall is equal to or less than 500 mg/L as a thirty-day average. However, if the 30-day average concentration exceeds 500 mg/L, then the permittee cannot discharge more than 7.1 tons per day as a sum from all discharge points. Upon previous determinations by the Director, if the permittee is not able to meet the 500 mg/L 30-day average or the 7.1 tons per day loading limit, then the permittee is required to continue to participate in and/or fund a salinity offset project to include the TDS offset credits as appropriate.

The salinity-offset project shall include TDS credits on a ton-for-ton basis for which the permittee is over the 7.1 tons per day loading limit. The tonnage reduction from the offset project must be calculated by a method similar to one used by the NRCS, Colorado River Basin Salinity Control Forum, and/or other applicable agency.

A monitoring and adjustment plan to track the TDS credits shall continue to be submitted to the Director for each monthly monitoring period during the life of this permit. Any changes to the monitoring and adjustment plan must be approved by the Director and upon approval shall be appended to this permit.

- *d Weekly oil & grease sample analyses shall be conducted at outfalls 001, 004 & 005 when discharging. At outfalls 002 & 003, oil & grease monitoring shall initially be a visual test conducted at least twice per month. If any oil and/or grease sheens are observed visually, or there is any other reason to believe that oil and/or grease may be present in the discharge, then a grab sample of the effluent must be immediately taken and this sample shall not exceed 10 mg/L.
- *e Total Recoverable and Dissolved Metals includes; aluminum, arsenic, cadmium, chromium, copper, iron, lead, mercury, nickel, selenium, silver, and zinc. After the first year of metals monitoring, the permit may be reopened at any time and modified to include more protective effluent limits based upon a subsequent Reasonable Potential Analysis of all new data sets as provided.
- *f Turbidity monitoring shall be conducted monthly whenever possible from all discharging Outfalls to ensure that there is not an increase of more than 10 NTU over the receiving waters, if applicable.

3. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations: at all outfalls prior to mixing with the receiving water.
4. Any overflow, increase in volume of a discharge or discharge from a bypass system caused by precipitation within a 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snow-melt of equivalent volume) at surface water runoff pond outfalls only may comply with the following limitation instead of the otherwise applicable limitation (for TSS) contained in Part I.C:

<u>Effluent Characteristic</u>	<u>Daily Maximum</u>
Settleable Solids	0.5 mL/L

In addition to the monitoring requirements specified under Part I.C, all effluent samples collected during storm water discharge events may also be analyzed for settleable solids. Such analyses shall be conducted by grab samples.

5. The operator shall have the burden of proof that the discharge or increase in discharge was caused by the applicable precipitation event described in Part I.D.3. The alternate limitations in Parts I.C.3 shall not apply to treatment systems that treat underground mine water only.
6. The permittee shall complete a geochemical mixing model that will be used to predict potential hydrogeochemical changes at the discharge point in Electric Lake (Outfall 005) and verify that water quality degradation will not occur. A static model that incorporates the range in individual monitoring constituents is recommended; however, a rate-kinetic model may also be utilized. The modeling results and a report describing the geochemical modeling shall be provided to the Director within one year from the date of permit issuance. Once the study has been submitted to the Director, the permit may be reopened and modified to include more protective effluent limits based upon both the study itself, as well a subsequent Reasonable Potential Analysis of all new data sets, or other relevant information as provided.

7. Chronic Whole Effluent Toxicity (WET) Testing.

1. *Whole Effluent Testing – Chronic Toxicity.*

Starting on the effective date of this permit, the permittee shall quarterly, conduct chronic static renewal toxicity tests on a composite sample of the final effluent at Outfall(s) 001, 004 & 005 when discharging. The sample shall be collected at the point of compliance before mixing with the receiving water.

Three samples are required and samples shall be collected on Monday, Wednesday and Friday of each sampling period or collected on a two day progression for each sampling period. This may be changed with Director approval.

The chronic toxicity tests shall be conducted in general accordance with the procedures set out in the latest revision of *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms, Fourth Edition*, October 2002, EPA—821-R-02-013 as per 40 CFR 136.3(a) TABLE IA-LIST OF APPROVED BIOLOGICAL METHODS . Test species, alternating quarterly, shall consist of *Ceriodaphnia dubia* and *Pimephales promelas* (fathead minnow). A CO₂ atmosphere may be used (in conjunction with an unmodified test) in order to account for artificial pH drift, as previously authorized by the Director.

If test acceptability criteria are not met for control survival, growth, or reproduction, the test shall be considered invalid. A valid replacement test is required within the specified sampling period to remain in compliance with this permit. Chronic toxicity occurs when, during a chronic toxicity test, the 25% inhibition concentration (IC25) calculated on the basis of test organism survival and growth or survival and reproduction, is less than or equal to 100% effluent concentration. If a sample is found to be chronically toxic during a routine test, the monitoring frequency shall become biweekly (see *Accelerated Testing*). If possible, dilution water should be obtained from the receiving stream.

Quarterly test results shall be reported along with the Discharge Monitoring Report (DMR) submitted for the end of the required reporting period (e.g., biomonitoring results for the calendar quarter ending March 31 shall be reported with the DMR due April 28, with the remaining biomonitoring reports submitted with DMRs due each July 28, October 28, and January 28). Quarterly test results shall be reported along with the DMR submitted for that month. The format for the report shall be consistent with Appendix C of “Utah Pollutant Discharge Elimination System (UPDES) Permitting and Enforcement Guidance Document for Whole Effluent Toxicity, Utah Division of Water Quality, February, 2018.

If the results for ten consecutive tests indicate no chronic toxicity, the permittee may submit a request to the Director to allow a reduction in chronic toxicity testing by alternating species, or using only the most sensitive species. The permit issuing authority may approve or deny the request based on the results and other available information without public notice. If the request is approved, the test procedures are to be the same as specified above for the test species. Under no circumstances shall monitoring for WET at major facilities be reduced less than quarterly. Minor facilities may be less than quarterly at the discretion of the Director.

2. *Accelerated Testing.* When whole effluent toxicity is indicated during routine WET testing as specified in this permit, the permittee shall notify the Director in writing within 5 days after becoming aware of the test result. The permittee shall

perform an accelerated schedule of WET testing to establish whether a pattern of toxicity exists unless the permittee notifies the Director and commences a PTI, TIE, or a TRE. Accelerated testing or the PTI, TIE, or TRE will begin within fourteen days after the permittee becomes aware of the test result. Accelerated testing shall be conducted as specified under Part I. Pattern of Toxicity. If the accelerated testing demonstrates no pattern of toxicity, routine monitoring shall be resumed.

3. *Pattern of Toxicity.* A pattern of toxicity is defined by the results of a series of up to five biomonitoring tests pursuant to the accelerated testing requirements using a full set of dilutions for acute (five plus the control) and five effluent dilutions for chronic (five plus the control), on the species found to be more sensitive, once every week for up to five consecutive weeks for acute and once every two weeks up to ten consecutive weeks for chronic.

If two (2) consecutive tests (not including the scheduled test which triggered the search for a pattern of toxicity) do not result in an exceedance of the acute or chronic toxicity criteria, no further accelerated testing will be required and no pattern of toxicity will be found to exist. The permittee will provide written verification to the Director within 5 days of determining no pattern of toxicity exists, and resume routine monitoring.

A pattern of toxicity may or may not be established based on the following:

WET tests should be run at least weekly (acute) or every two weeks (chronic) (note that only one test should be run at a time), for up to 5 tests, until either:

- 1) 2 consecutive tests fail, or 3 out of 5 tests fail, at which point a pattern of toxicity will have been identified, or
- 2) 2 consecutive tests pass, or 3 out of 5 tests pass, in which case no pattern of toxicity is identified.

4. *Preliminary Toxicity Investigation.*

- a. When a pattern of toxicity is detected the permittee will notify the Director in writing within 5 days and begin an evaluation of the possible causes of the toxicity. The permittee will have 15 working days from demonstration of the pattern of toxicity to complete an optional Preliminary Toxicity Investigation (PTI) and submit a written report of the results to the Director. The PTI may include, but is not limited to: additional chemical and biological monitoring, examination of pretreatment program records, examination of discharge monitoring reports, a thorough review of the testing protocol, evaluation of treatment processes and chemical use, inspection of material storage and transfer areas to determine if any spill may have occurred.
- b. If the PTI identifies a probable toxicant and/or a probable source of toxicity, the permittee shall submit, as part of its final results, written notification of that effect to the Director. Within thirty days of completing the PTI the permittee shall submit to the Director for approval a control program to control effluent toxicity and shall proceed to implement such plan in accordance with the Director's approval. The control program, as submitted to or revised by the Director, will be incorporated into the permit. After final implementation, the permittee must demonstrate successful removal of toxicity by passing a two species WET test as outlined in this permit. With adequate justification, the Director may extend these deadlines.

- c. If no probable explanation for toxicity is identified in the PTI, the permittee shall notify the Director as part of its final report, along with a schedule for conducting a Phase I Toxicity Reduction Evaluation (TRE) (see Part I.C.3.e, Toxicity Reduction Evaluation).
 - d. If toxicity spontaneously disappears during the PTI, the permittee shall submit written notification to that effect to the Director, with supporting testing evidence.
5. *Toxicity Reduction Evaluation (TRE)*. If a pattern of toxicity is detected the permittee shall initiate a TIE/TRE within 7 days unless the Director has accepted the decision to complete a PTI. With adequate justification, the Director may extend the 7-day deadline. The purpose of the TIE portion of a TRE will be to establish the cause of the toxicity, locate the source(s) of the toxicity, and the TRE will control or provide treatment for the toxicity. A TRE may include but is not limited to one, all, or a combination of the following:
- a. Phase I – Toxicity Characterization
 - b. Phase II – Toxicity Identification Procedures
 - c. Phase III – Toxicity Control Procedures
 - d. Any other appropriate procedures for toxicity source elimination and control.

If the TRE establishes that the toxicity cannot be immediately eliminated, the permittee shall submit a proposed compliance plan to the Director. The plan shall include the proposed approach to control toxicity and a proposed compliance schedule for achieving control. If the approach and schedule are acceptable to the Director, this permit may be reopened and modified.

If toxicity spontaneously disappears during the TIE/TRE, the permittee shall submit written notification to that effect to the Director.

If the TRE shows that the toxicity is caused by a toxicant(s) that may be controlled with specific numerical limitations, the permittee shall submit the following:

- i. An alternative control program for compliance with the numerical requirements.
- ii. If necessary, as determined by the Director, provide a modified biomonitoring protocol which compensates for the pollutant(s) being controlled numerically.

This permit may be reopened and modified to incorporate any additional numerical limitations, a modified compliance schedule if judged necessary by the Director, and/or modified WET testing requirements without public notice.

Failure to conduct an adequate TIE/TRE plan or program as described above, or the submittal of a plan or program judged inadequate by the Director, shall be considered a violation of this permit. After implementation of TIE/TRE plan, the permittee must demonstrate successful removal of toxicity by passing a two species WET test as outlined in this permit.

- D. Reporting of Monitoring Results. Monitoring results obtained during the previous month shall be summarized for each month and reported on a Discharge Monitoring Report Form (EPA No. 3320-1)* or by NetDMR, post-marked or entered into NetDMR no later than the 28th day of the month following the completed reporting period. If no discharge occurs during the reporting period, “no discharge” shall be reported. Legible copies of these, and all other reports including whole effluent toxicity (WET) test reports required herein, shall be signed and certified in accordance with the requirements of *Signatory Requirements (see Part IV.G)*, and submitted by NetDMR, or to the Division of Water Quality at the following address:

Department of Environmental Quality
Division of Water Quality
PO Box 144870
Salt Lake City, Utah 84114-4870

- E. Storm Water Requirements.

1. Industrial Storm Water Permit. Based on the type of industrial activities occurring at the facility, the permittee is required to maintain separate coverage or an appropriate exclusion under the Multi-Sector General Permit (MSGP) for Storm Water Discharges Associated with Industrial Activities (UTR000000). If the facility is not already covered, it has 30 days from when this permit is issued to submit the appropriate Notice of Intent (NOI) for the MSGP or exclusion documentation.
2. Construction Storm Water Permit. Any non-mining construction at the facility that disturbs an acre or more of land, including less than an acre if it is part of a common plan of development or sale, is required to obtain coverage under the UPDES Construction General Storm Water Permit (UTRC00000). Non-mining construction is not related to the excavation of material for the purposes of mining, and typically includes construction of parking lots, buildings, paved or permanent roads, utilities, etc. Permit coverage must be obtained prior to land disturbance. If the site qualifies, a Low Erosivity Waiver (LEW) Certification may be submitted instead of permit coverage.

* Starting January 1, 2017 monitoring results must be submitted using NetDMR unless the permittee has successfully petitioned for an exception.

II. MONITORING, RECORDING & GENERAL REPORTING REQUIREMENTS

- A. Representative Sampling. Samples taken in compliance with the monitoring requirements established under *Part I* shall be collected from the effluent stream prior to discharge into the receiving waters. Samples and measurements shall be representative of the volume and nature of the monitored discharge.
- B. Monitoring Procedures. Monitoring must be conducted according to test procedures approved under *Utah Administrative Code ("UAC") R317-2-10 and 40CFR Part 503*, unless other test procedures have been specified in this permit.
- C. Penalties for Tampering. The *Act* 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 per violation, or by imprisonment for not more than six months per violation, or by both.
- D. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any Compliance Schedule of this permit shall be submitted no later than 14 days following each schedule date.
- E. Additional Monitoring by the Permittee. If the permittee monitors any parameter more frequently than required by this permit, using test procedures approved under *UAC R317-2-10 and 40 CFR 503* or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR. Such increased frequency shall also be indicated. Only those parameters required by the permit need to be reported.
- F. Records Contents. Records of monitoring information shall include:
1. The date, exact place, and time of sampling or measurements;
 2. The individual(s) who performed the sampling or measurements;
 3. The date(s) and time(s) analyses were performed;
 4. The individual(s) who performed the analyses;
 5. The analytical techniques or methods used; and,
 6. The results of such analyses.
- G. Retention of Records. 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 five years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time. A copy of this UPDES permit must be maintained on site during the duration of activity at the permitted location
- H. Twenty-four Hour Notice of Noncompliance Reporting.
1. The permittee shall (orally) report any noncompliance including transportation accidents, spills, and uncontrolled runoff from biosolids transfer or land application sites which may seriously endanger health or environment, as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of circumstances. The report shall be made to the Division of Water Quality, (801) 536-4300, or 24-hour answering service (801) 536-4123.

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2. The following occurrences of noncompliance shall be reported by telephone (801) 536-4300 as soon as possible but no later than 24 hours from the time the permittee becomes aware of the circumstances:
 - a. Any noncompliance which may endanger health or the environment;
 - b. Any unanticipated bypass, which exceeds any effluent limitation in the permit (See *Part III.G, Bypass of Treatment Facilities.*);
 - c. Any upset which exceeds any effluent limitation in the permit (See *Part III.H, Upset Conditions.*); or,
 - d. Violation of a daily discharge limitation for any of the pollutants listed in the permit.
3. A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:
 - a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times;
 - c. The estimated time noncompliance is expected to continue if it has not been corrected;
 - d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; and,
 - e. Steps taken, if any, to mitigate the adverse impacts on the environment and human health during the noncompliance period.
4. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Division of Water Quality, (801) 536-4300.
5. Reports shall be submitted to the addresses in *Part I.D, Reporting of Monitoring Results.*
- I. Other Noncompliance Reporting. Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports for *Part I.D* are submitted. The reports shall contain the information listed in *Part II.H.3*
- J. Inspection and Entry The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:
 1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;
 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit, including but not limited to, biosolids treatment, collection, storage facilities or area, transport vehicles and containers, and land application sites;

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4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the *Act*, any substances or parameters at any location, including, but not limited to, any ground or surface waters at the permitted sites; and,
5. The permittee shall make the necessary arrangements with the landowner or leaseholder to obtain permission or clearance so that the Director, or authorized representative, upon the presentation of credentials and other documents as may be required by law will be permitted to enter without delay for the purposes of performing their responsibilities.

PND DRAFT

III. COMPLIANCE RESPONSIBILITIES

- A. Duty to Comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity, which may result in noncompliance with permit requirements.
- B. Penalties for Violations of Permit Conditions. The Act provides that any person who violates a permit condition implementing provisions of the Act is subject to a civil penalty not to exceed \$10,000 per day of such violation. Any person who willfully or negligently violates permit conditions or the Act is subject to a fine not exceeding \$25,000 per day of violation. Any person convicted under *UCA 19-5-115(2)* a second time shall be punished by a fine not exceeding \$50,000 per day. Except as provided at *Part III.G, Bypass of Treatment Facilities* and *Part III.H, Upset Conditions*, nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.
- 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 shall take all reasonable steps to minimize or prevent any discharge in violation of this permit, which has a reasonable likelihood of adversely affecting human health or the environment. The permittee shall also take all reasonable steps to minimize or prevent any land application in violation of this permit.
- E. Proper 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 to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and quality assurance procedures. This provision requires the operation of back-up 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 the permit.
- F. Removed Substances. Collected screening, grit, solids, sludge, or other pollutants removed in the course of treatment shall be disposed of in such a manner so as to prevent any pollutant from entering any waters of the state or creating a health hazard.
- G. Bypass of Treatment Facilities.
1. 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 paragraph 2 and 3 of this section.
 2. Prohibition of Bypass.
 - a. Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

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- (1) Bypass was unavoidable to prevent loss of human life, personal injury, or severe property damage;
 - (2) There were no feasible alternatives to 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 judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance, and
 - (3) The permittee submitted notices as required under *section III.G.3*.
- b. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed in *sections III.G.2.a (1), (2) and (3)*.
3. Notice.
- a. *Anticipated bypass.* Except as provided above in *section III.G.2* and below in *section III.G.3.b*, if the permittee knows in advance of the need for a bypass, it shall submit prior notice, at least ninety days before the date of bypass. The prior notice shall include the following unless otherwise waived by the Director:
 - (1) Evaluation of alternative to bypass, including cost-benefit analysis containing an assessment of anticipated resource damages;
 - (2) A specific bypass plan describing the work to be performed including scheduled dates and times. The permittee must notify the Director in advance of any changes to the bypass schedule;
 - (3) Description of specific measures to be taken to minimize environmental and public health impacts;
 - (4) A notification plan sufficient to alert all downstream users, the public and others reasonably expected to be impacted by the bypass;
 - (5) A water quality assessment plan to include sufficient monitoring of the receiving water before, during and following the bypass to enable evaluation of public health risks and environmental impacts; and,
 - (6) Any additional information requested by the Director.
 - b. *Emergency Bypass.* Where ninety days advance notice is not possible, the permittee must notify the Director, and the Director of the Department of Natural Resources, as soon as it becomes aware of the need to bypass and provide to the Director the information in *section III.G.3.a.(1) through (6)* to the extent practicable.
 - c. *Unanticipated bypass.* The permittee shall submit notice of an unanticipated bypass to the Director as required under *Part II.H*, Twenty Four Hour Reporting. The permittee shall also immediately notify the Director of the Department of Natural

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Resources, the public and downstream users and shall implement measures to minimize impacts to public health and environment to the extent practicable.

H. Upset Conditions.

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of paragraph 2 of this section are met. Director's administrative determination regarding a claim of upset cannot be judiciously challenged by the permittee until such time as an action is initiated for noncompliance.
 2. Conditions necessary for a demonstration of 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 that the permittee can identify the cause(s) of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The permittee submitted notice of the upset as required under *Part II.H, Twenty-four Hour Notice of Noncompliance Reporting*; and,
 - d. The permittee complied with any remedial measures required under *Part III.D, Duty to Mitigate*.
 3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.
- I. Toxic Pollutants. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of *The Water Quality Act of 1987* for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
- J. Changes in Discharge of Toxic Substances. Notification shall be provided to the Director as soon as the permittee knows of, or has reason to believe:
1. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - a. One hundred micrograms per liter (100 ug/L);
 - b. Two hundred micrograms per liter (200 ug/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/L) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - c. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with *UAC R317-8-3.4(7)* or (10); or,
 - d. The level established by the Director in accordance with *UAC R317-8-4.2(6)*.

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2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - a. Five hundred micrograms per liter (500 ug/L);
 - b. One milligram per liter (1 mg/L) for antimony;
 - c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with *UAC R317-8-3.4(9)*; or,
 - d. The level established by the Director in accordance with *UAC R317-8-4.2(6)*.
- K. Industrial Pretreatment Requirements.
1. Definition

POTW or publicly owned treatment works means a treatment works as defined by section 212 of the Act, which is owned by a State or municipality (as defined by section 502(4) of the Act). This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW Treatment Plant. The term also means the municipality as defined in section 502(4) of the Act, which has jurisdiction over the Indirect Discharges to and the discharges from such a treatment works.
 2. Discharges to a POTW

Any process wastewater that the facility may discharge to the sanitary sewer, either as direct discharge or as a hauled waste, is subject to federal, state and local pretreatment regulations. Pursuant to Section 307 of the Clean Water Act, the permittee shall comply with all applicable Federal General Pretreatment Regulations promulgated, found in *40 CFR Part 403*, the State Pretreatment Requirements found in *UAC R317-8-8*, and any specific local discharge limitations developed by the Publicly Owned Treatment Works (POTW) accepting the waste.
 3. Hazardous Waste Requirements.

In accordance with *40 CFR Part 403.12(p)(1)*, the permittee must notify the POTW, the EPA Regional Waste Management Director, and the State hazardous waste authorities, in writing, if they discharge any substance into a POTW which if otherwise disposed of would be considered a hazardous waste under *40 CFR Part 261*. This notification must include the name of the hazardous waste, the EPA hazardous waste number, and the type of discharge (continuous or batch).
 4. Hauled Hazardous Waste.

Hauled hazardous waste shall not be discharged to a POTW without notification to the Division of Water Quality.

IV. GENERAL REQUIREMENTS

- A. Planned Changes. The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when the alteration or addition could significantly change the nature or increase the quantity of parameters discharged or pollutant sold or given away. This notification applies to pollutants, which are not subject to effluent limitations in the permit. In addition, if there are any planned substantial changes to the permittee's existing sludge facilities or their manner of operation or to current sludge management practices of storage and disposal, the permittee shall give notice to the Director of any planned changes at least 30 days prior to their implementation.
- B. Anticipated Noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity, which may result in noncompliance with permit requirements.
- C. Permit Actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- D. Duty to Reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. The application shall be submitted at least 180 days before the expiration date of this permit.
- E. Duty to Provide Information. The permittee shall furnish to the Director, within a reasonable time, any information which the Director 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 Director, upon request, copies of records required to be kept by this permit.
- F. 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 any report to the Director, it shall promptly submit such facts or information.
- G. Signatory Requirements. All applications, reports or information submitted to the Director shall be signed and certified.
1. All permit applications shall be signed by either a principal executive officer or ranking elected official.
 2. All reports required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described above and submitted to the Director, and,
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position

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having overall responsibility for environmental matters. A duly authorized representative may thus be either a named individual or any individual occupying a named position.

3. Changes to authorization. If an authorization under *paragraph IV.G.2* is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of *paragraph IV.G.2* must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. Certification. Any person signing a document under this section shall 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."
- H. Penalties for Falsification of Reports. The *Act* 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 noncompliance shall, upon conviction be punished by a fine of not more than \$10,000.00 per violation, or by imprisonment for not more than six months per violation, or by both.
- I. Availability of Reports. Except for data determined to be confidential under *UAC R317-8-3.2*, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the office of Director. As required by the *Act*, permit applications, permits and effluent data shall not be considered confidential.
- J. Oil and Hazardous Substance Liability. Nothing in this permit shall be construed to preclude the permittee of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under the *Act*.
- K. Property Rights. The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.
- L. Severability. The provisions of this permit are severable, and if any provisions of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
- M. Transfers. This permit may be automatically transferred to a new permittee if:
 1. The current permittee notifies the Director at least 20 days in advance of the proposed transfer date;

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2. The notice includes a written agreement between the existing and new permittee's containing a specific date for transfer of permit responsibility, coverage, and liability between them; and,
 3. The Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify, or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph 2 above.
- N. State or Federal Laws. 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 preserved by *UCA 19-5-117* and *Section 510* of the *Act* or any applicable Federal or State transportation regulations, such as but not limited to the Department of Transportation regulations.
- O. Water Quality - Reopener Provision. This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations and compliance schedule, if necessary, if one or more of the following events occurs:
1. Water Quality Standards for 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. A final wasteload allocation is developed and approved by the State and/or EPA for incorporation in this permit.
 3. Revisions to the current CWA § 208 areawide treatment management plans or promulgations/revisions to TMDLs (40 CFR 130.7) approved by the EPA and adopted by DWQ which calls for different effluent limitations than contained in this permit.
- P. Toxicity Limitation - Reopener Provision. This permit may be reopened and modified (following proper administrative procedures) to include, whole effluent toxicity (WET) limitations, a compliance date, a compliance schedule, a change in the whole effluent toxicity (biomonitoring) protocol, additional or modified numerical limitations, or any other conditions related to the control of toxicants if one or more of the following events occur;
4. Toxicity is detected, as per *Part I.C.* of this permit, during the duration of this permit.
 5. The TRE results indicate that the toxicant(s) represent pollutant(s) or pollutant parameter(s) that may be controlled with specific numerical limits and the Director concludes that numerical controls are appropriate.
 6. Following the implementation of numerical control(s) of toxicant(s), the Director agrees that a modified biomonitoring protocol is necessary to compensate for those toxicants that are controlled numerically.
 7. The TRE reveals other unique conditions or characteristics, which in the opinion of the permit issuing authority justify the incorporation of unanticipated special conditions in the permit.

V. DEFINITIONS

A. Wastewater.

1. The "7-day (and weekly) average" is the arithmetic average of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. The 7-day and weekly averages are applicable only to those effluent characteristics for which there are 7-day average effluent limitations. The calendar week, which begins on Sunday and ends on Saturday, shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If a calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for that calendar week shall be included in the data for the month that contains Saturday.
2. The "30-day (and monthly) average" is the arithmetic average of all samples collected during a consecutive 30-day period or calendar month, whichever is applicable. The calendar month shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms.
3. "Act," means the *Utah Water Quality Act*.
4. "Bypass," means the diversion of waste streams from any portion of a treatment facility.
5. "Chronic toxicity" occurs when the $IC_{25} > 100\%$ effluent. The 100% effluent is the concentration of the effluent in the receiving water, at the end of the mixing zone expressed as percent effluent.
6. " IC_{25} " is the concentration of toxicant (given in % effluent) that would cause a 25% reduction in mean young per female, or a 25% reduction in overall growth for the test population.
7. "Composite Samples" shall be flow proportioned. The composite sample shall, as a minimum, contain at least four (4) samples collected over the compositing period. Unless otherwise specified, the time between the collection of the first sample and the last sample shall not be less than six (6) hours nor more than 24 hours. Acceptable methods for preparation of composite samples are as follows:
 - a. Constant time interval between samples, sample volume proportional to flow rate at time of sampling;
 - b. Constant time interval between samples, sample volume proportional to total flow (volume) since last sample. For the first sample, the flow rate at the time the sample was collected may be used;
 - c. Constant sample volume, time interval between samples proportional to flow (i.e., sample taken every "X" gallons of flow); and,
 - d. Continuous sample volume, with sample collection rate proportional to flow rate.

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8. "CWA," means *The Federal Water Pollution Control Act*, as amended, by *The Clean Water Act of 1987*.
9. "Daily Maximum" (Daily Max.) is the maximum value allowable in any single sample or instantaneous measurement.
10. "Daily Minimum" ("Daily Min.") is the minimum value allowable in any single sample or instantaneous measurement.
11. "EPA," means the United States Environmental Protection Agency.
12. "Director," means Director of the Division of Water Quality.
13. A "grab" sample, for monitoring requirements, is defined as a single "dip and take" sample collected at a representative point in the discharge stream.
14. An "instantaneous" measurement, for monitoring requirements, is defined as a single reading, observation, or measurement.
15. "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.
16. "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.

**Utah Division of Water Quality
Statement of Basis
ADDENDUM
Wasteload Analysis and Antidegradation Level I Review**

Date: July 30, 2020

**Prepared by: Nicholas von Stackelberg, P.E.
Watershed Protection Section**

**Facility: Skyline Mine
UPDES No. UT0023540**

Outfalls: 001, 002, 003, and 004

Receiving Water: Schofield Reservoir Tributaries (1C, 2B, 3A, and 4)

This addendum summarizes the wasteload analysis that was performed to determine water quality based effluent limits (WQBEL) for this discharge. Wasteload analyses are performed to determine point source effluent limitations necessary to maintain designated beneficial uses by evaluating projected effects of discharge concentrations on in-stream water quality. The wasteload analysis also takes into account downstream designated uses (UAC R317-2-8). Projected concentrations are compared to numeric water quality standards to determine acceptability. The numeric criteria in this wasteload analysis may be modified by narrative criteria and other conditions determined by staff of the Division of Water Quality.

Discharge

Outfall 001: Discharge of mine water, stormwater, and washdown water; 16.848 MGD

Outfall 002: Discharge of stormwater and washdown water; 0.000017 MGD

Outfall 003: Discharge of stormwater; 0.0 MGD

Outfall 004: Discharge of mine water and stormwater; 0.0 MGD

All outfalls include water from sediment ponds.

Receiving Water

Outfall 001: Eccles Creek → Mud Creek → Scofield Reservoir

Outfall 002: Eccles Creek → Mud Creek → Scofield Reservoir

Outfall 003: UP Canyon Creek → Mud Creek → Scofield Reservoir

Outfall 004: Winter Quarters Canyon Creek → Mud Creek → Schofield Reservoir

Per UAC R317-2-13.12(d), the designated beneficial uses for Scofield Reservoir and tributaries are 1A, 2B, 3A, and 4:

- *Class 1C: Protected for domestic purposes with prior treatment by treatment processes as required by the Utah Division of Drinking Water.*
- *Class 2B: Protected for infrequent primary contact recreation. Also protected for secondary contact recreation where there is a low likelihood of ingestion of water or a*

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low degree of bodily contact with the water. Examples include, but are not limited to, wading, hunting, and fishing.

- *Class 3A: Protected for cold water species of game fish and other cold water aquatic life, including the necessary aquatic organisms in their food chain.*
- *Class 4: Protected for agricultural uses including irrigation of crops and stock watering.*

Typically, the critical flow for the wasteload analysis is considered the lowest stream flow for seven consecutive days with a ten year return frequency (7Q10). Due to a lack of flow records for Eccles Creek, the 20th percentile of flow measurements was calculated on an annual basis. The source of flow data for Eccles Creek was from a summation of Utah Division of Oil, Gas and Mining (DOG M) sampling sites CS-3, CS-9, and CS-11 for 2010-2018.

Table 1: Annual critical low flow(cfs)

Receiving Water	Critical Low Flow (cfs)
Eccles Creek	0.079

Eccles Creek ambient water quality was characterized based on samples collected from DOGM sampling sites CS-3, CS-9, and CS-11 for 2010-2018.

Impaired Waters and TMDL

Scofield Reservoir tributaries, Assessment Unit UT14060007-002, are listed as impaired for dissolved oxygen in *Utah's 2016 Integrated Report*. Scofield Reservoir is listed as impaired for dissolved oxygen, pH and total phosphorus in *Utah's 2016 Integrated Report*. The *Scofield Reservoir TMDL* was completed to address the impairment for dissolved oxygen and total phosphorus. Skyline Mine did not receive a waste load allocation.

Mixing Zone

Per UAC R317-2-5, streams with a flow equal to or less than twice the flow of a point source discharge may be considered to be totally mixed. Therefore, no mixing zones are allowed for these discharges.

Parameters of Concern

The potential parameters of concern identified for the discharge and receiving waters were total dissolved solids (TDS) and metals as determined in consultation with the UPDES Permit Writer.

Wasteload Allocation Methods

Effluent limits were determined for conservative constituents using a mass balance mixing analysis (UDWQ 2012). No background flow was assumed for each of the outfalls; therefore, discharge limits were set to water quality criteria in the tributaries. The mass balance analysis is summarized in Appendix A. Models and supporting documentation are available for review upon request.

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WET Limits

The percent of effluent in the receiving water in a fully mixed condition, and acute and chronic dilution in a not fully mixed condition are calculated in the WLA in order to generate WET limits. The LC₅₀ (lethal concentration, 50%) percent effluent for acute toxicity and the IC₂₅ (inhibition concentration, 25%) percent effluent for chronic toxicity, as determined by the WET test, needs to be below the WET limits, as determined by the WLA. The WET limit for LC₅₀ is typically 100% effluent and does not need to be determined by the WLA.

Table 2: WET Limits for IC₂₅

Outfall	Percent Effluent
Outfall 001-004	100%

Effluent Limits

Selected water quality based effluent limits for Outfalls 001-004 are summarized in Table 3. The complete list of WQBELs is attached in Appendix A.

Table 3: Selected Water Quality Based Effluent Limits for Outfalls 001-004

Effluent Constituent	Acute			Chronic		
	Standard	Limit	Averaging Period	Standard	Limit	Averaging Period
Dissolved Oxygen, Min. (mg/L)	4.0	4.0	Minimum	6.5	6.5	30 days
Turbidity Increase (NTU)	10	10	Maximum			

Antidegradation Level I Review

The objective of the Level I ADR is to ensure the protection of existing uses, defined as the beneficial uses attained in the receiving water on or after November 28, 1975. No evidence is known that the existing uses deviate from the designated beneficial uses for the receiving water. Therefore, the beneficial uses will be protected if the discharge remains below the WQBELs presented in this wasteload.

A Level II Antidegradation Review (ADR) is not required for Outfalls 001, 002, 003 and 004, as an increase in pollutant concentration and/or load is not proposed.

Documents:

WLA Document: *SkylineMineWLADoc_2020-07-30.docx*
Wasteload Analysis: *SkylineMineWLA_2020.xlsm*

References:

Utah Division of Water Quality. 2012. *Utah Wasteload Analysis Procedures Version 1.0.*

Utah Division of Water Quality. 2016. *Utah's 2016 Integrated Report.*

WASTELOAD ANALYSIS [WLA]

Date: 7/30/2020

Appendix A: Mass Balance Mixing Analysis for Conservative Constituents

Discharging Facility:	Skyline Mine		
UPDES No:	UT-0023540		
Outfall No:	001, 002, 003, 004		
Permit Flow [MGD]:	Varies	Annual	Max. Daily
	Varies	Annual	Max. Monthly
Receiving Water:	Schofield Reservoir Tributaries		
Stream Classification:	1C, 2B, 3A, 4		
Stream Flows [cfs]:	0.000	All Seasons	Critical Low Flow
Fully Mixed:	YES		
Acute River Width:	100%		
Chronic River Width:	100%		
Mixed Flow [cfs]:	Varies		
Mixed Hardness [mg/L]:	318.3		

Modeling Information

A mass balance mixing analysis was used to determine the effluent limits.

All model numerical inputs, intermediate calculations, outputs and graphs are available for discussion, inspection and copy at the Division of Water Quality.

Effluent Limitations

Current State water quality standards are required to be met under a variety of conditions including in-stream flows targeted to the 7-day, 10-year low flow (R317-2-9).

Other conditions used in the modeling effort reflect the environmental conditions expected at low stream flows.

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Effluent Limitations for Protection of Drinking Water Sources (Class 1C Waters)

	Maximum Concentration		
	Standard	Background	Limit
Dissolved Metals (µg/L)			
Arsenic	10.0		10.0
Barium	1000		1000
Beryllium	4.0		4.0
Cadmium	10.0		10.0
Chromium	50.0		50.0
Lead	15.0		15.0
Mercury	2.0		2.0
Selenium	50.0		50.0
Silver	50.0		50.0
Inorganics			
Bromate (mg/L)	0.0		0.0
Chlorite (mg/L)	1.0		1.0
Fluoride (mg/L)	4.0		4.0
Nitrates as N (mg/L)	10.0		10.0
Radiological			
Gross Alpha (pCi/L)	15.0		15.0
Gross Beta (mrem/yr)	4.0		4.0
Radium 226, 228 (pCi/L)	5.0		5.0
Strontium 90 (pCi/L)	8.0		8.0
Tritium (pCi/L)	20000		20000
Uranium (pCi/L)	30.0		30.0

Effluent Limitations for Protection of Aquatic Wildlife (Class 3A Waters)

Physical Parameter	Concentration	
	Minimum	Maximum
pH	6.5	9.0
Turbidity Increase (NTU)		10.0
Temperature (deg C)		
	Maximum	
Instantaneous	20.0	
Change	2.0	
Dissolved Oxygen (mg/L)		
	Minimum Concentration	
Instantaneous	4.0	
7-day Average	5.0	
30-day Average	6.5	

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Metals-Total Recoverable

Parameter	Chronic (4-day ave)			Acute (1-hour ave)		
	Standard ¹	Background	Limit	Standard ¹	Background	Limit
Aluminum (µg/L)	87.0		N/A	750.0		750.0
Arsenic (µg/L)	150.0		150.0	340.0		340.0
Cadmium (µg/L)	0.5		0.5	6.2		6.2
Chromium VI (µg/L)	11.0		11.0	16.0		16.0
Chromium III (µg/L)	191.3		191.3	1470.6		1470.6
Copper (µg/L)	24.1		24.1	40.0		40.0
Cyanide (µg/L) ²	5.2		5.2	22.0		22.0
Iron (µg/L)				1000.0		1000.0
Lead (µg/L)	8.6		8.6	221.8		221.8
Mercury (µg/L) ²	0.012		0.012	2.4		2.4
Nickel (µg/L)	138.5		138.5	1246.9		1246.9
Selenium (µg/L)	4.6		4.6	18.4		18.4
Silver (µg/L)				23.6		23.6
Tributyltin (µg/L) ²	0.072		0.072	0.46		0.46
Zinc (µg/L)	315.1		315.1	312.5		312.5

1: Based upon a Hardness of 318.3 mg/l as CaCO₃

2: Background concentration assumed 67% of chronic standard

3: Where the pH is equal to or greater than 7.0 and the hardness is equal to or greater than 50 ppm as CaCO₃ in the receiving water after mixing, the 87 ug/1 chronic criterion (expressed as total recoverable) will not apply, and aluminum will be regulated based on compliance with the 750 ug/1 acute aluminum criterion (expressed as total recoverable).

Effluent Limitation for Protection of Agriculture (Class 4 Waters)

Parameter	Maximum Concentration		
	Standard	Background	Limit
Total Dissolved Solids (mg/L)	1200		1200
Boron (mg/L)	0.75		0.75
Arsenic, Dissolved (µg/L)	100		100
Cadmium, Dissolved (µg/L)	10		10.0
Chromium, Dissolved (µg/L)	100		100
Copper, Dissolved (µg/L)	200		200
Lead, Dissolved (µg/L)	100		100
Selenium, Dissolved (µg/L)	50		50
Gross Alpha (pCi/L)	15		15

Utah Division of Water Quality
Statement of Basis
ADDENDUM
Wasteload Analysis and Antidegradation Level I Review

Date: August 12, 2020

Prepared by: Christopher L. Shope, PhD
Standards and Technical Services Section

Facility: Skyline **Mine**
UPDES No. UT0023540

This addendum summarizes the wasteload analysis that was performed to determine water quality based effluent limits (WQBEL) for this discharge. Wasteload analyses are performed to determine point source effluent limitations necessary to maintain designated beneficial uses by evaluating projected effects of discharge concentrations on in-stream water quality. The wasteload analysis also takes into account downstream designated uses (UAC R317-2-8). Projected concentrations are compared to numeric water quality standards to determine acceptability. The numeric criteria in this wasteload analysis may be modified by narrative criteria and other conditions determined by staff of the Division of Water Quality.

Discharge

Outfall 005: Discharge of mine water to Electric Lake; 1,000-5,000 gpm design flow as provided with the Skyline Mine UPDES application information.

Receiving Water

Outfall 005: Electric Lake

Per UAC R317-2-3.3, Electric Lake is a Category 2 anti-degradation water body:

- *A point source discharge may be permitted provided that the discharge does not degrade existing water quality.*
- *Waters of the state designated as Category 2 Waters are listed in R317-2-12.2.*

Antidegradation Level I Review

The objective of the Level I ADR is to ensure the protection of existing uses, defined as the beneficial uses attained in the receiving water on or after November 28, 1975. No evidence is known that the existing uses deviate from the designated beneficial uses for the receiving water. Therefore, the beneficial uses will be protected if the discharge remains below the WQBELs presented in this analysis.

A Level II Antidegradation Review (ADR) is required if new discharge points requested in the permit renewal have higher concentration and loading limits. The purpose of the Level II ADR is to minimize degradation. The proposed discharge location is Electric Lake. A Level II ADR is not required for this facility because the proposed discharge will not have higher concentration or loading limits than the previous permit and is not allowed to degrade water quality.

Parameters of Concern

Based upon previous and current UPDES permit development, the parameters of concern identified for the discharge/receiving water were total dissolved solids (TDS) and iron. Additional metals, nutrients, and in-situ parameters, such as dissolved oxygen, were also evaluated as determined in consultation with the UPDES Permit Writer.

Anti-Degradation Analysis Methods

Water quality data were supplied by Skyline Mine and PacifiCorp as well as Division of Water Quality (DWQ) database sources. Sixteen water quality sampling locations were used in this analysis. These monitoring locations included: UPL-1, UPL-2, UPL-3, UPL-4, UPL-10, UPL-11, and PG-1 in Upper Huntington Creek; UPL-EL-1 and UPL-EL-3 (at multiple depths), JC-1, MLID 4931190, and MLID 4931200 for Electric Lake; and H-1, H-2, UPL9, and UPL-9A in Lower Huntington Creek. To provide increased precision in the distribution of specific analyte concentrations, all of the monitoring locations were grouped as Upper Huntington Creek, Electric Lake, and Lower Huntington Creek samples. Statistical analysis of the three groups was performed to evaluate reasonable representative background conditions corresponding to these regions.

In consultation with the UPDES Permit Writer, it was evaluated that a daily maximum concentration limit consistent with the 80th percentile of the Upper Huntington Creek sample will be implemented. Furthermore it is recommended that the arithmetic mean of the Lake sample is to be used for an annual average concentration limit through the annual running average of bi-monthly sampling results.

Table 1: TDS (mg/l) background statistical description by region

region	count	min	20%	mean	median	80%	max	std	var	skew
Lake	1266	108	151	167.34	164	183	451	23	529.16	3.4
Lower	1242	26	230	303.18	292	369	763	83.53	6977.37	0.94
Upper	1392	105	175	202.36	201	235	301	34.12	1164.08	0.08

Table 2: Total Iron (mg/l) background statistical description by region

region	count	min	20%	mean	median	80%	max	std	var	skew
Lake	1258	0	0.05	0.08	0.05	0.08	3.11	0.18	0.03	14.66
Lower	1240	0.03	0.11	0.95	0.2	0.72	48.22	4.71	22.18	9.64
Upper	1392	0	0.08	0.38	0.21	0.45	12.01	0.84	0.71	8.24

Table 3: Dissolved Iron (mg/l) background statistical description by region

region	count	min	20%	mean	median	80%	max	std	var	skew
Lake	1262	0	0.03	0.03	0.03	0.03	0.34	0.01	0	9.52
Lower	1240	0	0.03	0.04	0.03	0.03	1.69	0.11	0.01	13.02
Upper	1392	0	0.03	0.03	0.03	0.03	0.43	0.03	0	7.38

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The Upper Huntington Creek region displays some seasonal variability, particularly in TDS. Total iron concentration concentrations also display multi-annual trends, suggestive of variable groundwater flowpaths and associated geochemical influence. Furthermore, total iron in Electric Lake typically increases between two and ten-fold through the fall and winter, while dissolved iron remains near detection limit. Therefore, the dissolved iron fraction drops from a high of 60 percent to between 6 and 20 percent through the fall, winter, and spring with the lowest concentration in May or June.

Dissolved iron in Electric Lake was generally at the detection limit of 0.03 mg/l. The dissolved iron fraction ranges between 9 and 14 percent of total iron in the Upper Huntington Creek but is relatively stable in Electric Lake at 60 percent. This indicates that iron is predominately in the particulate fraction for the Upper region, while the dissolved fraction dominates Electric Lake.

Effluent Limits

The water quality based effluent limits for the proposed Outfall 005 are summarized in Table 4.

Table 4: Water Quality Based Effluent Limits Summary for Outfall 005

Effluent Constituent	Water Quality Limit (WQBEL)	
	Daily Maximum	Recommended Annual Average
Total Dissolved Solids (TDS mg/l)	235	167
Total Iron (mg/l)	0.45	0.08
Dissolved Iron (mg/l)	0.03	0.03

Additional analytes reviewed for background conditions in each of the regions include total and dissolved: aluminum, arsenic, boron, cadmium, calcium, chromium, copper, lead, magnesium, mercury, nickel, phosphorous, potassium, selenium, silver, zinc. Furthermore, pH, temperature, dissolved oxygen, total suspended solids, nitrate, nitrite, ammonia,

Analytes reviewed solely in Electric Lake include: dissolved barium, dissolved beryllium, dissolved manganese, dissolved sodium, the carbonate sequence (i.e.: hardness, alkalinity), conductance, turbidity, chloride, and sulfate.

Based on the 80th percentile of the distribution for each water quality parameter, Table 5 presents the current background conditions.

Table 5: Water Quality additional analyte background conditions for Outfall 005

Background Constituent	Upper	Lake
Total Aluminum (mg/l)	0.35	0.06
Dissolved Aluminum (mg/l)	0.03	0.03
Total Arsenic (mg/l)	0.01	0.01
Dissolved Arsenic (mg/l)	0.01	0.01
Total Boron (mg/l)	0.01	0.02
Dissolved Boron (mg/l)	0.01	0.01
Total Cadmium (mg/l)	< 0.01	< 0.01
Dissolved Cadmium (mg/l)	< 0.01	< 0.01
Total Calcium (mg/l)	60.0	44.0
Dissolved Calcium (mg/l)	57.0	43.0

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Total Chromium (mg/l)	< 0.01	< 0.01
Dissolved Chromium (mg/l)	< 0.01	< 0.01
Total Copper (mg/l)	0.01	0.01
Dissolved Copper (mg/l)	0.01	0.01
Total Lead (mg/l)	0.01	0.01
Dissolved Lead (mg/l)	0.01	0.01
Total Magnesium (mg/l)	20.0	10.0
Dissolved Magnesium (mg/l)	19.0	10.0
Total Mercury (mg/l)	0.0002	0.0002
Dissolved Mercury (mg/l)	0.0002	0.0002
Total Nickel (mg/l)	< 0.01	< 0.01
Dissolved Nickel (mg/l)	< 0.01	< 0.01
Total Phosphorous (mg/l)	0.06	0.05
Dissolved Phosphorous (mg/l)	0.05	0.05
Total Potassium (mg/l)	1.2	1.2
Dissolved Potassium (mg/l)	1.1	1.1
Total Selenium (mg/l)	0.02	0.02
Dissolved Selenium (mg/l)	0.02	0.02
Total Silver (mg/l)	< 0.01	< 0.01
Dissolved Silver (mg/l)	< 0.01	< 0.01
Total Zinc (mg/l)	< 0.01	< 0.01
Dissolved Zinc (mg/l)	< 0.01	< 0.01
pH	8.3 – 8.6	8.0 – 8.6
Temperature (deg C)	11.9 – 17.2	14.0 – 18.7
Dissolved Oxygen (mg/l)	8.0 – 10.4	7.4 – 9.0
Total Suspended Solids (mg/l)	31.0	5.0
Nitrate (mg/l)	0.36	0.54
Nitrite (mg/l)	0.05	0.05
Ammonia (mg/l)	0.1	0.1
Hardness (mg/l)	NA	152.0
Alkalinity (mg/l)	NA	122.0
Turbidity (mg/l)	NA	1.28
Chloride (mg/l)	NA	9.1
Sulfate (mg/l)	NA	20

Analysis Caveats

- No effluent discharge or water quality information was provided for this analysis to determine the load-based influence of individual constituents on Electric Lake.
- The Upper Huntington Creek grouped sampling locations are generally weighted heavier on one specific tributary. Therefore, the analyte distribution for grouped sites is more heavily weighted on a specific tributary.
- While the background analysis statistically robust and well justified, the WQBEL and background concentrations are based on available data results, which may not fully represent water quality under all flow conditions. No paired flow data measurements, hydrogeologic flowpaths, or soil and bedrock-based geochemical boundary conditions were used during this analysis.
- The Division recommends that the Permittee acquire a consulting agency to construct a geochemical mixing model that will be used to predict potential hydrogeochemical changes at the discharge point in Electric Lake and verify that water quality degradation

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will not occur. A static model that incorporates the range in individual monitoring constituents is recommended; however, a rate-kinetic model may also be utilized. Benefits of this hydro-geochemical modeling approach include: paired water quality sampling with in-stream flow for loading calculations; understand spatial and temporal variability in Electric Lake flow inputs; predict geochemical processes that occur with mixing of mine water into the system; identify the Electric Lake hydrologic balance and the lake retention time; and define uncertainties in source contributions and hydro-geochemical reactions that would prevent lake degradation. The Division recommends that the modeling results and a report describing the geochemical modeling be provided to the Director within one year.

Documents:

Background Anti-Degradation Document: *SkylineMineWLA_2020-CLS-Outfall005.docx*

Background Anti-Degradation Analysis: *SkylineMine-ElectricLake.ipynb*

References:

Utah Division of Water Quality. 2012. *Utah Wasteload Analysis Procedures Version 1.0.*

DWQ-2020-016648



State of Utah

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Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

L. Scott Baird
Executive Director

DIVISION OF WATER QUALITY
Erica Brown Gaddis, PhD
Director

September 24, 2020

DIVISION OF WATER QUALITY
UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY
PUBLIC NOTICE OF RENEWAL OF UPDES PERMIT

PURPOSE OF PUBLIC NOTICE

The purpose of this public notice is to declare the state of Utah's intention to renew a Utah Pollutant Discharge Elimination System (UDPES) Permit under authority of the Utah Water Quality Act, Section 19-5-104 and 107, Utah Code Annotated 1953, as amended. Said "permit" refers to UPDES Permit and the Fact Sheet and Statement of Basis (including the total maximum daily loads (TMDL's)) if applicable, as per Section 303 (d) of the Federal Clean Water Act (CWA).

PERMIT INFORMATION

PERMITTEE NAME: Canyon Fuel Company, LLC – Skyline Mine
MAILING ADDRESS: HC 35, Box 380, Helper, UT 84526
TELEPHONE NUMBER: 435-636-2887
FACILITY LOCATION: ~8 miles southwest of Scofield, Utah along SR 264
UPDES PERMIT NO.: UT0023540
PERMITTED OUTFALLS: 001, 002, 003, 004, & 005
RECEIVING WATERS: Eccles Creek, UP Canyon Creek, Winter Quarters Canyon Creek, & Electric Lake

BACKGROUND INFORMATION

The Canyon Fuel Company's Skyline Mine (Skyline Mine) is an active underground coal mine operation with Standard Industrial Classification 1222, for bituminous underground coal mining operations. The draft UPDES Permit has a total of five permitted discharge points (Outfalls 001 through 005). Outfall 001, which discharges to Eccles Creek, is comprised of both the continuous mine water discharges, as well as any surface water runoff directed to the sedimentation pond from the main facility. Outfall 002 is from a sedimentation pond, which collects surface water runoff from the separate coal load out facility located at the intersection of State Routes 264 & 96 and discharges intermittently to Eccles Creek during pond maintenance, precipitation and/or snow melting events. Outfall 003 is from a sedimentation pond located at the off-site waste rock disposal area near Scofield and has not discharged to date and is not expected to discharge into the foreseeable future due to its size. If discharge were to occur it would go to UP Canyon Creek, tributary to Mud Creek and Scofield Reservoir. Outfall 004 is configured to discharge both mine water, as well as any surface water runoff directed to the sedimentation pond from the off-site Winter Quarters Canyon ventilation shaft facility. Outfall 004 first began discharging mine water in May 2020 to Winter Quarters Canyon Creek, which is also tributary to Mud Creek and Scofield Reservoir, to safely dewater and operate the active mining areas. Prior to May 2020, any and all mine water discharges were discharged via Outfall 001. Skyline Mine has requested, as part of their UPDES Permit renewal, an additional Outfall location (005) to safely dewater and operate new active mining areas. Outfall 005 when completed will enable a portion of the mine water discharges, which would otherwise discharge via Outfall 001, to be discharged directly into Electric Lake, which is tributary to Huntington Creek. This

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UPDES renewal permit will once again authorize discharges from Skyline Mine during the next five years.

PUBLIC COMMENTS

Public comments are invited any time prior to the deadline of the close of business on **October 26, 2020**. Written public comments can be submitted to: Jeff Studenka, UPDES Surface Water Section, Utah Division of Water Quality, PO Box 144870, Salt Lake City, Utah 84114-4870 or by email at: jstudenka@utah.gov. After considering public comment the Director may execute the permit issuance, revise it or abandon it. The permit is available for public review at <https://deq.utah.gov/public-notices-archive/water-quality-public-notices>. If internet access is not available, a copy may be obtained by calling Jeff Studenka at 801-536-4395.

DWQ-2020-017395