

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

UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM (UPDES) PERMITS

Minor Municipal Permit No. **UT0026018**
Biosolids Permit No. **UTL0000000**

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

UTAH AMERICAN ENERGY, LILA CANYON MINE (Sanitary)

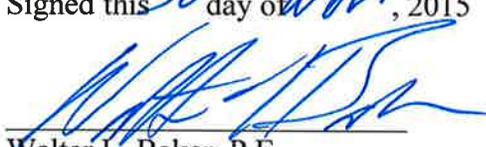
is hereby authorized to discharge from its wastewater treatment facility to receiving waters named drainage ditch to Lila Canyon Wash to Grassy Wash to Marsh Flats Wash to the Price River, to the Green River,

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

This permit shall become effective on December 1, 2015.

This permit expires at midnight on November 30, 2020.

Signed this 30 day of Nov., 2015



Walter L. Baker, P.E.
Director

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PART I
DISCHARGE PERMIT NO. UT0026018
WASTEWATER

I. 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*.

Outfall Number

001

Location of Discharge Outfall

Located at latitude 39 °25.0 '37.0 " N and longitude 110 ° 21.0'1.00 " W. Discharge from a package plant to an unnamed ditch to Lila Canyon Wash an ephemeral channel which would discharge, if flowing, through several washes to the Price River.

- 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.

- a. Effective immediately and lasting the duration of this permit, the permittee is authorized to discharge from Outfall 001. Such discharges shall be limited and monitored by the permittee as specified below:

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Parameter	Effluent Limitations a/				
	Maximum Monthly Avg	Minimum Monthly Avg	Maximum Weekly Avg	Daily Minimum	Daily Maximum
BOD ₅ , mg/L	25	NA	35	NA	NA
BOD ₅ Min. % Removal c/	85	NA	NA	NA	NA
TSS, mg/L	25	NA	35	NA	NA
TSS Min. % Removal c/	85	NA	NA	NA	NA
E-Coli, No./100mL	126	NA	158	NA	NA
NH ₃ -N, mg/L					
Summer (July – Sept.)	4.1	NA	NA	NA	8.4
Fall (Oct. – Dec.)	5.1	NA	NA	NA	8.4
Winter (Jan. – March)	5.8	NA	NA	NA	8.4
Spring (April – June)	5.1	NA	NA	NA	8.4
TDS, mg/L d/	NA	NA	NA	NA	1500
TDS, lbs/day	NA	NA	NA	NA	2000
Oil & Grease, mg/L e/	NA	NA	NA	NA	10
DO, mg/L	NA	5.0	NA	3.0	NA
pH, Standard Units	NA	NA	NA	6.5	9
Total flow, MGD b/	0.004375	NA	NA	NA	0.00875

NA – Not Applicable

Self-Monitoring and Reporting Requirements a/			
Parameter	Frequency	Sample Type	Units
Total Flow b/	Continuous	Recorder	MGD
BOD ₅ , Influent c/ Effluent	Monthly	Composite	mg/L
	Monthly	Composite	mg/L
TSS, Influent c/ Effluent	Monthly	Composite	mg/L
	Monthly	Composite	mg/L
E. Coli	Monthly	Grab	No./100mL
pH	Monthly	Grab	SU
TDS d/	Monthly	Composite	mg/L & lbs/day
DO	Monthly	Grab	mg/L
NH ₃ -N	Monthly	Composite	mg/L
Oil and Grease e/	Monthly	Grab	Visual

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- a/ See Part VIII for definition of terms.
- b/ Flow measurements of effluent volume shall be made in such a manner that the permittee can affirmatively demonstrate that representative values are being obtained.
- c/ In addition to monitoring the final discharge, influent samples shall be taken and analyzed for this constituent at the same frequency as required for this constituent in the discharge.
- d/ The TDS concentration shall not exceed 1500 mg/L as a daily maximum limit. The permittee must not discharge more than one ton per day (2000 lbs/day) from Outfall 001.
- e/ Oil and grease shall be a visual test. If any oil and /or grease sheens are observed visually, then a sample of the effluent must be taken and this sample shall not exceed 10 mg/L.

D. Reporting of Monitoring Results.

1. Reporting of Wastewater 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. The first report is due on January 28, 2016. 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 VII.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

PART II
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PRETREATMENT

II. INDUSTRIAL PRETREATMENT

Any wastewaters discharged to the sanitary sewer, either as a direct discharge or as a hauled waste, are subject to Federal, State and local pretreatment regulations. Pursuant to Section 307 of *The Water Quality Act of 1987*, the permittee shall comply with all applicable federal General Pretreatment Regulations promulgated at *40 CFR 403*, the State Pretreatment Requirements at *UAC R317-8-8*, and any specific local discharge limitations developed by the Publicly Owned Treatment Works (POTW) accepting the wastewaters.

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).

III. BIOSOLIDS REQUIREMENTS

A. Biosolids Treatment and Disposal. The authorization to dispose of biosolids provided under this permit is limited to those biosolids produced from the treatment works owned and operated by the permittee. The treatment methods and disposal practices are specifically designated below.

1. Treatment. Biosolids produced at the permittee are will not be stabilized at the facility. The proposed facility does not have the ability to treat biosolids. The system will collect the solids for later removal and disposal or further treatment at another facility.

2. Description of Biosolids Disposal Method.

- a. Class A biosolids may be sold or given away to the public for lawn and garden use or land application.
- b. Class B biosolids may be land applied for agriculture use or at reclamation sites at agronomic rates.
- c. Biosolids may be disposed of in a landfill or at another wastewater treatment plant.

3. Changes in Treatment Systems and Disposal Practices.

- a. Should the permittee change their disposal methods or the biosolids generation and handling processes of the plant, the permittee must notify the Director at least 30 days in advance if the process/method is specified in 40 CFR 503. This includes, but is not limited to, the permanent addition or removal of any biosolids treatment units (i.e., digesters, drying beds, belt presses, etc.) and/or any other change.
- b. Should the permittee change their disposal methods or the biosolids generation and handling processes of the plant, the permittee must notify the Director at least 180 days in advance if the process/method is not specified in 40 CFR 503. This includes, but is not limited to, the permanent addition or removal of any biosolids treatment units (i.e., digesters, drying beds, belt presses, etc.) and/or any other change.

For any biosolids that are land filled, the requirements in *Section 2.12* of the latest version of the *EPA Region VIII Biosolids Management Handbook* must be followed.

B. Specific Limitations and Monitoring Requirements. All biosolids generated by this facility to be sold or given away to the public shall meet the requirements of *Part III.B.1, 2, 3 and 4* listed below.

1. Metals Limitations. All biosolids sold or given away in a bag or similar container for application to lawns and home gardens must meet the metals limitations as

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described below. If these metals limitations are not met, the biosolids must be landfilled.

Pollutant Limits, (40 CFR Part 503.13(b)) Dry Mass Basis				
Heavy Metals	Table 1	Table 2	Table 3	Table 4
	Ceiling Conc. Limits, (mg/kg)	CPLR, (mg/ha)	Pollutant Conc. Limits, (mg/kg)	APLR, (mg/ha-yr)
Total Arsenic	75	41	41	41
Total Cadmium	85	39	39	39
Total Copper	4300	1500	1500	1500
Total Lead	840	300	300	300
Total Mercury	57	17	17	17
Total Molybdenum	75	N/A	N/A	N/A
Total Nickel	420	420	420	420
Total Selenium	100	100	100	100
Total Zinc	7500	2800	2800	2800

2. **Pathogen Limitations.** All biosolids sold or given away in a bag or a similar container for application to lawns and home gardens must meet the pathogen limitations for Class A. Land applied biosolids must meet the pathogen limitations for Class B as described below. If the pathogen limitations are not met, the biosolids must be landfilled.
 - a. Class A biosolids shall meet one of the pathogen measurement requirements in the following Pathogen Control Class table or shall meet the requirements for a Process to Further Reduce Pathogens as defined in 40 CFR Part 503.32(a) Sewage Sludge – Class A.
 - b. Class B biosolids shall meet the pathogen measurement requirements in the following Pathogen Control Class table or shall meet the requirements for a Process to Significantly Reduce Pathogens as defined in 40 CFR Part 503.32(b) Sewage Sludge – Class B. In addition, the permittee shall comply with all applicable site restrictions listed below (40 CFR Part 503.32,(b),(5):
 - (1) Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after application.
 - (2) Food crops with harvested parts below the land surface shall not be harvested for 20 months after application if the biosolids remains on the land surface for four months or more prior to incorporation into the soil.
 - (3) Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of sewage sludge when the

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sewage sludge remains on the land surface for less than four months prior to incorporation into the soil.

- (4) Food crops, feed crops, and fiber crops shall not be harvested from the land for 30 days after application.
- (5) Animals shall not be allowed to graze on the land for 30 days after application.
- (6) Turf grown on land where biosolids is applied shall not be harvested for one year after application if the harvested turf is placed on either land with a high potential for public exposure or a lawn.
- (7) Public access to land with a high potential for public exposure shall be restricted for one year after application.
- (8) Public access to land with a low potential for public exposure shall be restricted for 30 days after application.
- (9) The sludge or the application of the sludge shall not cause or contribute to the harm of a threatened or endangered species or result in the destruction or adverse modification of critical habitat of a threatened or endangered species after application.

Pathogen Control Class	
Class A	Class B
Salmonella species –less than three (3) MPN ¹ per four (4) grams total solids (or less than 1,000 fecal coliforms per gram total solids) or	Fecal Coliforms –less than 2,000,000 colony forming units (CFU) per gram total solids
Enteric viruses –less than one (1) MPN (or plaque forming unit) per four (4) grams total solids or	
Viable helminth ova –less than one (1) MPN per four (4) grams total solids	

3. Vector Attraction Reduction Requirements.

- a. The permittee will meet vector attraction reduction through transfer to another wastewater treatment plant.

If the permittee intends to use one of these alternatives, the Director and the EPA must be informed at least thirty (30) days prior to its use. This change may be made without additional public notice.

4. Self-Monitoring Requirements.

¹ MPN –Most Probable Number

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- a. At a minimum, upon the effective date of this permit, all chemical pollutants, pathogens and applicable vector attraction reduction requirements shall be monitored according to *40 CFR 503.16(1)(a)*.

Minimum Frequency of Monitoring (40 CFR Part 503.16, 503.26. and 503.46)		
Amount of Biosolids Disposed Per Year		Monitoring Frequency ²
Dry US Tons	Dry Metric Tons	Per Year or Batch
> 0 to < 320	> 0 to < 290	Once Per Year or Batch
> 320 to < 1650	> 290 to < 1,500	Once a Quarter or Four Times
> 1,650 to < 16,500	> 1,500 to < 15,000	Bi-Monthly or Six Times
> 16,500	> 15,000	Monthly or Twelve Times

- b. Sample collection, preservation and analysis shall be performed in a manner consistent with the requirements of *40 CRF 503* and/or other criteria specific to this permit. A metals analysis is to be performed using *Method SW 846* with *Method 3050* used for digestion. For the digestion procedure, an amount of biosolids equivalent to a dry weight of one gram shall be used. The methods are also described in the latest version of the *Region VIII Biosolids Management Handbook*.
- c. The Director may request additional monitoring for specific pollutants derived from biosolids if the data shows a potential for concern.
- d. After two (2) years of monitoring at the frequency specified, the permittee may request that the Director reduce the sampling frequency for the heavy metals. The frequency cannot be reduced to less than once per year for biosolids that are sold or given away to the public for any parameter. The frequency also cannot be reduced for any of the pathogen or vector attraction reduction requirements listed in this permit.
- C. Management Practices of Biosolids. For biosolids that are sold or given away, an information sheet shall be provided to the person who receives the biosolids. The label or information sheet shall contain:
1. The name and address of the person who prepared the biosolids for a sale or to be given away.
 2. A statement that prohibits the application of the biosolids to the land except in accordance with the instructions on the label or information sheet.

For biosolids or material derived from biosolids that are stored in piles for one year or longer, measures shall be taken to ensure that erosion (whether by wind or water) does not occur. However, best management practices should also be used for piles used for biosolids treatment. If a treatment pile is considered to have caused a problem, best management practices could be added as a requirement in the next permit renewal.

² Lila Canyon intends to transfer the biosolids to another facility. Accordingly, they will not qualify to sample.

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- D. Special Conditions on Biosolids Storage. Permanent storage of biosolids is prohibited. Biosolids shall not be temporarily stored for more than two (2) years. Written permission to store biosolids for more than two years must be obtained from the Director. Storage of biosolids for more than two years will be allowed only if it is determined that significant treatment is occurring.
- E. Representative Sampling. Biosolids samples used to measure compliance with Part III of this Permit shall be collected at locations representative of the quality of biosolids generated at the treatment works and immediately prior to land application.
- F. Reporting of Monitoring Results.

1. Biosolids. The permittee shall provide the results of all monitoring performed in accordance with *Part III.B*, and information on management practices, biosolids treatment, site restrictions and certifications shall be provided no later than February 19 of each year. Each report is for the previous calendar year. If no biosolids were sold or given away during the reporting period, "no biosolids were sold or given away" shall be reported. Legible copies of these, and all other reports required herein, shall be signed and certified in accordance with the *Signatory Requirements (see Part VII.G)*, and submitted to the Utah Division of Water Quality and the EPA at the following addresses:

Original to: Biosolids Coordinator
Utah Division of Water Quality
P. O. Box 144870
Salt Lake City Utah, 84114-4870

G. Additional Record Keeping Requirements Specific to Biosolids.

1. Unless otherwise required by the Director, **the permittee is not required to keep records** on compost products if the permittee prepared them from biosolids that meet the limits in Table 3 (*Part III.B.1*), the Class A pathogen requirements in *Part III.B.2* and the vector attraction reduction requirements in *Part III.B.3*. The Director may notify the permittee that additional record keeping is required if it is determined to be significant to protecting public health and the environment.
2. **The permittee is required** to keep the following information for at least 5 years:
 - a. Concentration of each heavy metal in Table 3 (*Part III.B.1*).
 - b. A description of how the pathogen reduction requirements in *Part III.B.2* were met.
 - c. A description of how the vector attraction reduction requirements in *Part III.B.3* were met.
 - d. A description of how the management practices in *Part III.C* were met (if necessary).

- e. The following certification statement:

"I certify under the penalty of law, that the heavy metals requirements in *Part III.B.1*, the pathogen requirements in *Part III.B.2*, the vector attraction requirements in *Part III.B.3*, the management practices in *Part III.C*. This determination has been made under my direction and supervision in accordance with the system designed to assure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements, the vector attraction reduction requirements and the management practices have been met. I am aware that there are significant penalties for false certification including the possibility of imprisonment."

3. 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 the life of the permit. Data collected on site, copies of Biosolids Report forms, and a copy of this UPDES biosolids-only permit must be maintained on site during the duration of activity at the permitted location.

PART IV
STORM WATER PERMIT NO. UT000000

IV. STORM WATER REQUIREMENTS.

The *Utah Administrative Code (UAC) R-317-8-3.9* requires storm water permit provisions to include the development of a storm water pollution prevention plan for waste water treatment facilities if the facility meets one or both of the following criteria.

- waste water treatment facilities with a design flow of 1.0 MGD or greater, and/or,
- waste water treatment facilities with an approved pretreatment program as described in *40CFR Part 403*,

The Lila Canyon Mine does not meet one of the above criteria; therefore this permit does not include storm water provisions. The permit does however include a storm water re-opener provision.

V. 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. Samples of biosolids shall be collected at a location representative of the quality of biosolids immediately prior to the use-disposal practice.
- 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 or the Biosolids Report Form. 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

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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.
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 VI.G, Bypass of Treatment Facilities.*);
 - c. Any upset which exceeds any effluent limitation in the permit (See *Part VI.H, Upset Conditions.*);
 - d. Violation of a maximum daily discharge limitation for any of the pollutants listed in the permit; or,
 - e. Violation of any of the Table 3 metals limits, the pathogen limits, the vector attraction reduction limits or the management practices for biosolids that have been sold or given away.
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.

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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 V.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;
 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, digested biosolids before dewatering, dewatered biosolids, biosolids transfer or staging areas, any ground or surface waters at the land application sites or biosolids, soils, or vegetation on the land application sites; and,
 5. The permittee shall make the necessary arrangements with the landowner or leaseholder to obtain permission or clearance, 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.

PART VI
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STORM WATER PERMIT NO. UTR0000000

VI. 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 VI.G, *Bypass of Treatment Facilities* and Part VI.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. Sludge/digester supernatant and filter backwash shall not directly enter either the final effluent or waters of the state by any other direct route.

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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:

(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 VI.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 VI.G.2.a (1), (2) and (3).*

3. Notice.

a. *Anticipated bypass.* Except as provided above in *section VI.G.2* and below in *section VI.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;

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- (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 VI.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 V.H, Twenty Four Hour Reporting*. The permittee shall also immediately notify the Director of the Department of Natural 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 judicially 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 V.H, Twenty-four Hour Notice of Noncompliance Reporting*; and,
 - d. The permittee complied with any remedial measures required under *Part VI.D, Duty to Mitigate*.

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3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

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VII. 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.

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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 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 VII.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 VII.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

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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;
 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:

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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. Biosolids – Reopener Provision. This permit may be reopened and modified (following proper administrative procedures) to include the appropriate biosolids limitations (and compliance schedule, if necessary), management practices, other appropriate requirements to protect public health and the environment, or if there have been substantial changes (or such changes are planned) in biosolids use or disposal practices; applicable management practices or numerical limitations for pollutants in biosolids have been promulgated which are more stringent than the requirements in this permit; and/or it has been determined that the permittees biosolids use or land application practices do not comply with existing applicable state of federal regulations.
- Q. Toxicity Limitation-Reopener Provision. This permit may be reopened and modified (following proper administrative procedures) to include whole effluent toxicity (WET) testing, a WET limitation, a compliance schedule, a compliance date, additional or modified numerical limitations or any other conditions related to the control of toxicants if toxicity is detected during the life of this permit.
- R. Storm Water-Reopener Provision. At any time during the duration (life) of this permit, this permit may be reopened and modified (following proper administrative procedures) as per *UAC R317.8*, to include, any applicable storm water provisions and requirements, a storm water pollution prevention plan, a compliance schedule, a compliance date, monitoring and/or reporting requirements, or any other conditions related to the control of storm water discharges to "waters-of-State".

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VIII. DEFINITIONS

A. Wastewater.

1. The "7-day (and weekly) average", other than for e-coli bacteria, fecal coliform bacteria, and total coliform bacteria, is the arithmetic average of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. Geometric means shall be calculated for e-coli bacteria, fecal coliform bacteria, and total coliform bacteria. 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," other than for e-coli bacteria, fecal coliform bacteria and total coliform bacteria, is the arithmetic average of all samples collected during a consecutive 30-day period or calendar month, whichever is applicable. Geometric means shall be calculated for e-coli bacteria, fecal coliform bacteria and total coliform bacteria. 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. "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;

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

B. Biosolids.

- 1. "Biosolids," means any material or material derived from sewage solids that have been biologically treated.
- 2. "Dry Weight-Basis," means 100 percent solids (i.e. zero percent moisture).
- 3. "Land Application" is the spraying or spreading of biosolids onto the land surface; the injection of biosolids below the land surface; or the incorporation of biosolids into the land so that the biosolids can either condition the soil or fertilize

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crops or vegetation grown in the soil. Land application includes distribution and marketing (i.e. the selling or giving away of the biosolids).

4. "Pathogen," means an organism that is capable of producing an infection or disease in a susceptible host.
5. "Pollutant" for the purposes of this permit is an organic substance, an inorganic substance, a combination of organic and inorganic substances, or pathogenic organisms that after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism either directly from the environment or indirectly by ingestion through the food-chain, could on the basis of information available to the Administrator of EPA, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunction in reproduction), or physical deformations in either organisms or offspring of the organisms.
6. "Runoff" is rainwater, leachate, or other liquid that drains over any part of a land surface and runs off the land surface.
7. "Similar Container" is either an open or closed receptacle. This includes, but is not limited to, a bucket, a box, a carton, and a vehicle or trailer with a load capacity of one metric ton or less.
8. "Total Solids" are the materials in the biosolids that remain as a residue if the biosolids are dried at 103° or 105° Celsius.
9. "Treatment Works" are either Federally owned, publicly owned, or privately owned devices or systems used to treat (including recycling and reclamation) either domestic sewage or a combination of domestic sewage and industrial waste or liquid manure.
10. "Vector Attraction" is the characteristic of biosolids that attracts rodents, flies, mosquitos or other organisms capable of transporting infectious agents.
11. "Animals" for the purpose of this permit are domestic livestock.
12. "Annual Whole Sludge Application Rate" is the amount of sewage sludge (dry-weight basis) that can be applied to a unit area of land during a cropping cycle.
13. "Agronomic Rate" is the whole sludge application rate (dry-weight basis) designed to: (1) provide the amount of nitrogen needed by the crop or vegetation grown on the land; and (2) minimize the amount of nitrogen in the sewage sludge that passes below the root zone of the crop or vegetation grown on the land to the ground water.

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14. "Annual Pollutant Loading Rate" is the maximum amount of a pollutant (dry-weight basis) that can be applied to a unit area of land during a 365-day period.
15. "Application Site or Land Application Site" means all contiguous areas of a users' property intended for sludge application.
16. "Cumulative Pollutant Loading Rate" is the maximum amount of an inorganic pollutant (dry-weight basis) that can be applied to a unit area of land.
17. "Grit and Screenings" are sand, gravel, cinders, other materials with a high specific gravity and relatively large materials such as rags generated during preliminary treatment of domestic sewage at a treatment works and shall be disposed of according to *40 CFR 258*.
18. "High Potential for Public Contact Site" is land with a high potential for contact by the public. This includes, but is not limited to, public parks, ball fields, cemeteries, plant nurseries, turf farms, and golf courses.
19. "Low Potential for Public Contact Site" is the land with a low potential for contact by the public. This includes, but is not limited to, farms, ranches, reclamation areas, and other lands which are private lands, restricted public lands, or lands which are not generally accessible to or used by the public.
20. "Monthly Average" is the arithmetic mean of all measurements taken during the month.
21. "Volatile Solids" is the amount of the total solids in sewage sludge lost when the sludge is combusted at 550 degrees Celsius for 15-20 minutes in the presence of excess air.

**FACT SHEET STATEMENT OF BASIS (FSSOB)
UTAH AMERICAN ENERGY, LILA CANYON MINE
UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM (UPDES)
PERMIT NUMBER: UT0026018
NEW MINOR INDUSTRIAL**

FACILITY CONTACTS

Facility Contacts:	Karin Odendahl	Responsible Official:	David Hibbs
Position:	Eng. Technician	Position:	President, Utah American Energy
Phone:	(435) 888-4026	Phone:	(435) 888-4000
	PJ Jensen		
	Eng. Technician		
	(435) 888-4018		

DESCRIPTION OF FACILITY

Facility Name: Utah American Energy, Lila Canyon Mine
Mailing Address: P.O. Box 910
East Carbon, Utah 84520
Physical Location: 23415 N. Lila Canyon Road
Green River, Utah 84525
Coordinates: Latitude: 39°25'37", Longitude: 110°21'1.00".
Classification (SIC): 4952 – *Collection and Disposal of Wastes Transported through a Sewer System. (NAICS 221320)*

The permitted facility is a package plant treating sanitary sewage and grey water from a newly constructed bath house at the Lila Canyon Coal Mine. The number of employees working at the mine has increased from 40 to 250, which necessitated the addition of a large bath house and associated treatment system. The land area is not conducive to any type of drain field, which is why a package plant will be used to treat the liquid waste.

Effluent will be treated in a septic tank for removal of solids followed by an anoxic stage with flow equalization into the package plant treatment system (Orenco System). Treated effluent is then pumped through duplex UV disinfection units before discharge. The process has the ability to complete enhanced nutrient reduction in the future if required. The maximum daily flow as indicated in the permit application is 8,750 gallons per day or 0.008750 million gallons per day, and the average daily flow rate is 4,375 gallons per day or 0.004375 million gallons per day.

DESCRIPTION OF DISCHARGE

<u>Outfall</u>	<u>Description</u>
001	Discharge is from a package plant to a drainage ditch to Lila Canyon Wash an ephemeral channel which would discharge, if flowing, through several washes to the Price River. The Outfall is located at latitude 39°25'37" and longitude 110°21'1.00.

RECEIVING WATERS AND STREAM CLASSIFICATION

The discharge from the package plant goes to Lila Canyon Wash which is a tributary of the Price River. The Price River is estimated to be between six and ten miles downstream of Lila Canyon Wash. Per *Utah Administrative Code (UAC) R317-2-13.1b*, the beneficial uses for the Price River and tributaries, from confluence with the Green River to Carbon Canal Diversion at Price City Golf Course are 2B, 3C and 4.

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 3C -- Protected for nongame fish and other aquatic life, including the necessary aquatic organisms in their food chain.

Class 4 -- Protected for agricultural uses including irrigation of crops and stock watering.

BASIS FOR EFFLUENT LIMITATIONS

Water from the Lila Canyon mine will be treated with reverse osmosis for use in the bath house. Bath house water must meet drinking water standards and therefore will be of high quality. Based on this information, and in consultation with the wasteload analyst, the parameters of concern are biochemical oxygen demand (5-day BOD), total suspended solids (TSS), pH, E. coli, dissolved oxygen, total dissolved solids (TDS) and total ammonia.

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*) or Utah Water Quality Standards (*UAC R317-2*). In cases where multiple limits have been or could be developed, those that are more stringent apply. In cases where no limits are applicable, Best Professional Judgment (BPJ) may be used. "Best Professional Judgment" refers to a discretionary, best professional decision made by the permit writer based upon precedent, prevailing regulatory

standards or other relevant information. A waste load analysis was completed and is included as Appendix I of this FSSOB. Because this is a new facility, a Level II Antidegradation Review is required. This analysis was completed and submitted by email on July 17, 2015 and was approved on August 5, 2015. A copy of the approved Level II Antidegradation Review is included in Appendix II.

- 1) BOD and TSS 30-day and 7-day averages are based on Utah Secondary Treatment Standards.
- 2) Daily minimum and daily maximum limitations on pH are derived from Utah Secondary Treatment Standards and Water Quality Standards.
- 3) Thirty (30) day and seven (7) day geometric averages for E. coli are taken from Utah Secondary Treatment Standards.
- 4) Dissolved oxygen and seasonal ammonia nitrogen limits are taken from the wasteload allocation which is based on water quality standards.
- 5) As mentioned above, discharge is to an unnamed drainage ditch which is a tributary to Lila Canyon Wash. Lila Canyon Wash joins up with many other washes before reaching the Price River. The distance from the mine site sanitary treatment system to the Price River through Lila Canyon Wash is many miles. The unnamed drainage ditch and Lila Canyon Wash are ephemeral in nature, and have no flow that would routinely reach the Price River. Flow would reach the Price River only due to a substantial rainfall or snow melt runoff, such as greater than the 100 year flood flow. Based on the information above, Lila Canyon requested a variance to the TBPEL rule and monitoring because application of the rule at this facility is unnecessary to protect downstream water of the Price River. This variance was granted by the DWQ. Therefore, no total phosphorous limitation will be required in this permit, nor monitoring for nutrients as required in the TBPEL rule in UAC R317-1-3.3D.
- 6) The Colorado River Basin Salinity Control Forum (CRBSCF) implemented on February 28, 1977 and revised on October 30, 2002 a "Policy for Implementation of Colorado River Salinity Standards Through the NPDES Permit Program". A portion of this policy deals with municipal or sanitary discharges, and is applicable to the package plant sanitary discharge at Lila Canyon Mine. This policy requires that the incremental increase in TDS/salinity shall be 400 mg/L or less above the flow weighted average salinity of the intake water supply. This requirement can be waived in cases where the incremental salt load reaching the main stem of the Colorado River is less than one ton per day or 366 tons per year. Therefore the permittee will be limited to one ton per day or 2000 pounds per day. The permittee will be discharging less than one ton per day with the effluent limits required on concentration of TDS and effluent flow.

- a. In the stretch of the Price River which the Lila Canyon Sanitary system would discharge into (assuming that there was enough flow to make it to the Price River) there is a site specific standard for TDS of 3000 mg/L. Because the water supplied to the bathhouse is treated by reverse osmosis and meets drinking water standards, it is unlikely that the TDS in the effluent will ever exceed 1500 mg/L. Therefore, the TDS for Outfall 001 shall not exceed 1500 mg/L as a daily maximum value. This is a BPJ number developed by the permit writer in conjunction with facility personnel.
- 7) Effluent flow is taken from the application submitted. The average daily value for flow is 0.004375 Million Gallons per Day (MGD) and the Daily Maximum Value is 0.008750 MGD.

EFFLUENT LIMITATIONS, SELF-MONITORING, AND REPORTING REQUIREMENTS

The effluent limitations and monitoring requirements for Outfall 001 shall be completed as outlined below. Effluent self-monitoring requirements are based on BPJ. Reports shall be made via NetDMR or on Discharge Monitoring Report (DMR) forms and are due 28 days after the end of the monthly monitoring period.

Parameter	Effluent Limitations a/				
	Maximum Monthly Avg	Minimum Monthly Avg	Maximum Weekly Avg	Daily Minimum	Daily Maximum
BOD ₅ , mg/L	25	NA	35	NA	NA
BOD ₅ Min. % Removal c/	85	NA	NA	NA	NA
TSS, mg/L	25	NA	35	NA	NA
TSS Min. % Removal c/	85	NA	NA	NA	NA
E-Coli, No./100mL	126	NA	158	NA	NA
NH ₃ -N, mg/L					
Summer (July – Sept.)	4.1	NA	NA	NA	8.4
Fall (Oct. – Dec.)	5.1	NA	NA	NA	8.4
Winter (Jan. – March)	5.8	NA	NA	NA	8.4
Spring (April – June)	5.1	NA	NA	NA	8.4
TDS, mg/L d/	NA	NA	NA	NA	1500
TDS, lbs/day	NA	NA	NA	NA	2000
Oil & Grease, mg/L e/	NA	NA	NA	NA	10
DO, mg/L	NA	5.0	NA	3.0	NA
pH, Standard Units	NA	NA	NA	6.5	9
Total flow, MGD b/	0.004375	NA	NA	NA	0.00875

NA – Not Applicable

Self-Monitoring and Reporting Requirements a/			
Parameter	Frequency	Sample Type	Units
Total Flow b/	Continuous	Recorder	MGD
BOD ₅ , Influent c/ Effluent	Monthly	Composite	mg/L
	Monthly	Composite	mg/L
TSS, Influent c/ Effluent	Monthly	Composite	mg/L
	Monthly	Composite	mg/L
E. Coli	Monthly	Grab	No./100mL
pH	Monthly	Grab	SU
TDS d/	Monthly	Composite	mg/L & lbs/day
DO	Monthly	Grab	mg/L
NH ₃ -N	Monthly	Composite	mg/L
Oil and Grease e/	Monthly	Grab	Visual

- a/ See Part VIII for definition of terms.
- b/ Flow measurements of effluent volume shall be made in such a manner that the permittee can affirmatively demonstrate that representative values are being obtained.
- c/ In addition to monitoring the final discharge, influent samples shall be taken and analyzed for this constituent at the same frequency as required for this constituent in the discharge.
- d/ The TDS concentration shall not exceed 1500 mg/L as a daily maximum limit. The permittee must not discharge more than one ton per day (2000 lbs/day) from Outfall 001.
- e/ Oil and grease shall be a visual test. If any oil and /or grease sheens are observed visually, then a sample of the effluent must be taken and this sample shall not exceed 10 mg/L.

SIGNIFICANT CHANGES FROM PREVIOUS PERMIT

Since this is the first permit for this facility, this section does not apply.

STORM WATER REQUIREMENTS

Wastewater treatment facilities, which includes treatment lagoons, are required to comply with storm water permit requirements if they meet one or both of the following criteria,

1. The facility has an approved pretreatment program as described in *40 CFR Part 403*.
2. The facility has a design flow of 1.0 MGD or greater.

The Lila Canyon sanitary treatment system does not meet either of the criteria; therefore a storm water permit is not required at this time. However, a storm water re-opener provision is included in the permit should a storm water permit be needed in the future, following proper administrative procedures as per *UAC R317-8*, to include any applicable storm water provisions and requirements if appropriate.

PRETREATMENT REQUIREMENTS

The permittee does not discharge to another wastewater treatment facility, but rather treats and discharges wastewater from the bath house for the mine employees. Although any wastewaters discharged to the sanitary sewer, either as a direct discharge or as a hauled waste, are subject to Federal, State and local pretreatment regulations. Pursuant to Section 307 of *The Water Quality Act of 1987*, the permittee shall comply with all applicable federal General Pretreatment Regulations promulgated at *40 CFR 403*, the State Pretreatment Requirements at *UAC R317-8-8*, and any specific local discharge limitations developed by the Publicly Owned Treatment Works (POTW) accepting the wastewaters

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

As part of a nationwide effort to control toxic discharges, biomonitoring requirements are being included in permits for facilities where effluent toxicity is an existing or potential concern. In Utah, this is done in accordance with the *State of Utah Permitting and Enforcement Guidance Document for Whole Effluent Toxicity Control (Biomonitoring (2/1991))*. Authority to require effluent biomonitoring is provided in *UAC R317-8*, *Utah Pollutant Discharge Elimination System* and *UAC R317-2*, *Water Quality Standards*.

This system is a sanitary waste package plant that will receive toilet, shower room and sink wastes from a bath house associated with Lila Canyon Mine. It will not contain any industrial wastes. A clause in the permit will require that there be no discharge of hazardous materials into the sanitary sewer. Therefore, a reasonable potential for toxicity does not exist and biomonitoring of the effluent will not be required. However, a toxicity reopener provision is included in the permit so that WET testing and WET limitation requirements can be incorporated at any time if determined to be appropriate in the future.

BIOSOLIDS MANAGEMENT PROGRAM

The State of Utah has adopted the 40 CFR 503 federal regulations for the disposal of sewage sludge (biosolids) by reference. The sanitary treatment system at Lila Canyon is a small package

plant, known as an Orenco system. Sewage will be sent from the bath house to a septic tank (approx. 18000 gallons) where most of the solids will be retained and the liquid pumped to the Orenco System. Solids will have to be disposed of as required by the 503 requirements.

The Lila Canyon Mine plans to have the septic tank pumped out when needed and the solids disposed of as septage at a treatment plant for disposal.

PERMIT DURATION

As stated in *UAC R317-8-5.1(1)*, UPDES permits shall be effective for a fixed term not to exceed five (5) years.

Drafted by Mike Herkimer
Environmental Scientist
Utah Division of Water Quality
July 20, 2015
Also review and comments by:
Dan Griffin –Biosolids
Jennifer Robinson – Pretreatment
Mike George – Industrial Storm Water
Nick von Stackelberg – WLA/Antideg.
Amy Dickey - TMDL

Permit was public noticed in the Sun Advocate from September 10, 2015 until October 13, 2015. One comment was received from the permittee and then retracted. See attached emails.

ADDENDUMS

- I. Waste Load Analysis
- II. ADR II application and review and certification by DWQ personnel

Addendum I: Wasteload Allocation

Addendum II: Level II Antidegradation Review

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

Date: June 18, 2015

Facility: Lila Canyon Wastewater Treatment Facility
UPDES No. UT0026018

Receiving water: Lila Canyon Wash (2B, 3C, 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: Drainage Ditch → Lila Canyon Wash → Grassy Wash → Marsh Flats Wash → Price River → Green River

The maximum daily design discharge is 0.00875 MGD and the maximum monthly design discharge is 0.004375 MGD for the facility.

Receiving Water

The receiving water for Outfall 001 is Lila Canyon Wash, which is a tributary to the Price River.

Per UAC R317-2-13.1b, the beneficial uses for Price River and tributaries, from confluence with Green River to Carbon Canal Diversion at Price City Golf Course are 2B, 3C and 4.

- *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 3C - Protected for nongame fish and other 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 average flow for seven consecutive days with a ten year return frequency (7Q10). Lila Canyon Wash is an

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Wasteload Analysis
Lila Canyon Mine Wastewater Treatment Plant
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ephemeral dry wash which only has flow during rain events; therefore, there is no flow during critical conditions.

TMDL

The receiving water and Price River downstream are not listed as impaired for any parameters according to the 2010 303(d) list.

The Price River and tributaries from confluence with Green River to confluence with Soldier Creek has a site specific standard for TDS of 3,000 mg/l.

Mixing Zone

The maximum allowable mixing zone is 15 minutes of travel time for acute conditions, not to exceed 50% of stream width, and 2,500 feet for chronic conditions, per UAC R317-2-5. Water quality standards must be met at the end of the mixing zone. Due to the lack of dilution in Lila Canyon Wash during critical conditions, no mixing zone is allowed.

Parameters of Concern

The potential parameters of concern identified for the discharge/receiving water were total suspended solids (TSS), dissolved oxygen (DO), BOD₅, total ammonia (TAN), E. coli, and pH as determined in consultation with the UPDES Permit Writer.

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 1: WET Limits for IC₂₅

Season	Percent Effluent
Annual	100%

Effluent Limits

Effluent limits were determined using a mass balance mixing analysis (UDWQ 2012). The mass balance analysis is summarized in Appendix A. Some of the dissolved metals standards and resulting total recoverable metals effluent limits are dependent on the hardness of the effluent. As no data was available on the hardness of the source water, the water treatment system, or the proposed wastewater treatment system, the hardness was assumed to be 100 mg/L (as CaCO₃).

The water quality standard for chronic ammonia toxicity is dependent on temperature and pH, and the water quality standard for acute ammonia toxicity is dependent on pH. The water quality standards for ammonia are summarized in Appendix B. Based on other installations of the

**Utah Division of Water Quality
Wasteload Analysis
Lila Canyon Mine Wastewater Treatment Plant
UPDES No. UT0026018**

proposed treatment system in Utah, the Engineer projected the pH of the effluent will range from 6.8 to 7.5 and the temperature from 10 to 15.5 degrees Celsius.

Since the receiving water is an ephemeral wash and not a perennial stream, the effects of TP, TN, DO and BOD₅ in the effluent on the DO in the downstream receiving waters was not assessed. It is presumed that secondary standards for BOD₅ and water quality criteria for DO are sufficiently protective of the receiving water. If the effluent from the treatment system results in the formation of a perennial stream, these limits will be revisited.

Table 3: Water Quality Based Effluent Limits Summary

Effluent Constituent	Acute			Chronic		
	Standard	Limit	Averaging Period	Standard	Limit	Averaging Period
Flow (MGD)		0.00875	1 day		0.004375	30 days
Dissolved Oxygen, Min. (mg/L)	3.0	3.0	Instantaneous	5.0	5.0	30 days
Ammonia (mg/L) ¹	Varies		1 hour	Varies		30 days
Summer (Jul-Sep)		8.4			4.1	
Fall (Oct-Dec)		8.4			5.1	
Winter (Jan-Mar)		8.4			5.8	
Spring (Apr-Jun)		8.4			5.1	
pH Minimum	6.5	6.5	Instantaneous	6.5	6.5	30 days
pH Maximum	9.0	8.0	Instantaneous	9.0	7.5	30 days

¹: Ammonia limit due to toxicity requirements. For chronic standards, fish early life stages were assumed to be absent.

Models and supporting documentation are available for review upon request.

**Utah Division of Water Quality
Wasteload Analysis
Lila Canyon Mine Wastewater Treatment Plant
UPDES No. UT0026018**

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.

As the proposal is for a new discharge, a Level II Antidegradation Review (ADR) is required for this discharge since the allowable pollutant load will increase under this permit.

**Prepared by: Nicholas von Stackelberg, P.E.
Standards and Technical Services Section**

Documents:

WLA Document: *lila_canyon_wla_2015_preliminary.docx*
Wasteload Analysis: *lila_canyon_wla_2015.xlsm*

References:

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

Utah Division of Water Quality

WASTELOAD ANALYSIS [WLA]

Date: 6/18/2015

Appendix A: Mass Balance Mixing Analysis for Conservative Constituents

Discharging Facility: Lila Canyon Mine Wastewater Treatment Facility
 UPDES No: UT-0026018
 Permit Flow [MGD]: 0.00875 Annual Max. Daily
 0.004375 Annual Max. Monthly

Receiving Water: Lila Canyon Wash
 Stream Classification: 2B, 3C, 4
 Stream Flows [cfs]: 0.0 All Seasons Critical Low Flow

Fully Mixed: YES
 Acute River Width: 100%
 Chronic River Width: 100%

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.

Effluent Limitations for Protection of Recreation (Class 2B Waters)

Physical Parameter	Concentration	
	Minimum	Maximum
pH	6.5	9.0
Turbidity Increase (NTU)		10.0

Bacteriological

E. coli (30 Day Geometric Mean)	206 (#/100 mL)
E. coli (Maximum)	668 (#/100 mL)

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

Temperature (deg C)	Maximum
Instantaneous	27.0
Change	4.0

Dissolved Oxygen (mg/L)	Minimum Concentration
Instantaneous	3.0
30-day Average	5.0

Inorganics	Parameter	Acute Standard (1 Hour Average) Standard
	Phenol (mg/L)	0.010
	Hydrogen Sulfide (Undissociated) [mg/L]	0.002

Ammonia-Total (mg/L)	Season	Chronic (30-day ave)			Acute (1-hour ave)		
		Standard	Background	Limit	Standard	Background	Limit
	Summer	4.1		4.1	8.4		8.4
	Fall	5.1		5.1	8.4		8.4
	Winter	5.8		5.8	8.4		8.4
	Spring	5.1		5.1	8.4		8.4

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		87.0	750.0		750.0
	Arsenic (µg/L)	150.0		150.0	340.0		340.0
	Cadmium (µg/L)	0.2		0.2	2.0		2.0
	Chromium VI (µg/L)	11.0		11.0	16.0		16.0
	Chromium III (µg/L)	74.1		74.1	569.8		569.8
	Copper (µg/L)	9.0		9.0	13.4		13.4
	Cyanide (µg/L) ²	5.2		5.2	22.0		22.0
	Iron (µg/L)				1000.0		1000.0
	Lead (µg/L)	2.5		2.5	64.6		64.6
	Mercury (µg/L) ²	0.012		0.012	2.4		2.4
	Nickel (µg/L)	52.0		52.0	468.2		468.2
	Selenium (µg/L)	4.6		4.6	18.4		18.4
	Silver (µg/L)				3.2		3.2
	Tributyltin (µg/L) ²	0.072		0.072	0.46		0.46
	Zinc (µg/L)	118.1		118.1	117.2		117.2

1: Based upon a Hardness of 100 mg/l as CaCO₃

2: Background concentration assumed 67% of chronic standard

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Organics [Pesticides]

Parameter	Chronic (4-day ave)		Acute (1-hour ave)	
	Standard	Limit	Standard	Limit
Aldrin (µg/L)			1.5	1.5
Chlordane (µg/L)	0.0043	0.0043	1.2	1.2
DDT, DDE (µg/L)	0.001	0.001	0.55	0.55
Diazinon (µg/L)	0.17	0.17	0.17	0.17
Dieldrin (µg/L)	0.0056	0.0056	0.24	0.24
Endosulfan, a & b (µg/L)	0.056	0.056	0.11	0.11
Endrin (µg/L)	0.036	0.036	0.086	0.086
Heptachlor & H. epoxide (µg/L)	0.0038	0.0038	0.26	0.26
Lindane (µg/L)	0.08	0.08	1.0	1.0
Methoxychlor (µg/L)			0.03	0.03
Mirex (µg/L)			0.001	0.001
Nonylphenol (µg/L)	6.6	6.6	28.0	28.0
Parathion (µg/L)	0.0130	0.0130	0.066	0.066
PCB's (µg/L)	0.014	0.014		
Pentachlorophenol (µg/L)	15.0	15.0	19.0	19.0
Toxephene (µg/L)	0.0002	0.0002	0.73	0.73

Radiological

Parameter	Maximum Concentration	
	Standard	Limit
Gross Alpha (pCi/L)	15	

Effluent Limitation for Protection of Agriculture (Class 4 Waters)

Parameter	Maximum Concentration			Site specific standard
	Standard	Background	Limit	
Total Dissolved Solids (mg/L)	3000		3000	
Boron (mg/L)	0.75		0.8	
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		15.0	

**Freshwater total ammonia criteria based on Title R317-2-14 Utah Administrative Code
Acute**

INPUT				
	Summer	Fall	Winter	Spring
pH:	8.00	8.00	8.00	8.00
Beneficial use classification:	3C	3C	3C	3C
OUTPUT				
Acute:	Total ammonia nitrogen criteria (mg N/L):	8.408	8.408	8.408
		8.408	8.408	8.408

**Freshwater total ammonia criteria based on Title R317-2-14 Utah Administrative Code
Chronic**

INPUT				
	Summer	Fall	Winter	Spring
Temperature (deg C):	15.5	12.0	10.0	12.0
pH:	7.50	7.50	7.50	7.50
Are fish early life stages present?	No	No	No	No
OUTPUT				
Total ammonia nitrogen criteria (mg N/L):				
Chronic - Fish Early Life Stages Present:	4.096	4.364	4.364	4.364
Chronic - Fish Early Life Stages Absent:	4.096	5.133	5.840	5.133

ANTIDEGRADATION REVIEW FORM UTAH DIVISION OF WATER QUALITY



Instructions

The objective of antidegradation rules and policies is to protect existing high quality waters and set forth a process for determining where and how much degradation is allowable for socially and/or economically important reasons. In accordance with Utah Administrative Code (UAC R317-2-3), an antidegradation review (ADR) is a permit requirement for any project that will increase the level of pollutants in waters of the state. The rule outlines requirements for both Level I and Level II ADRs, as well as public comment procedures. This review form is intended to assist the applicant and Division of Water Quality (DWQ) staff in complying with the rule but is not a substitute for the complete rule in R317-2-3.5. Additional details can be found in the *Utah Antidegradation Implementation Guidance* and relevant sections of the guidance are cited in this review form.

ADRs should be among the first steps of an application for a UPDES permit because the review helps establish treatment expectations. The level of effort and amount of information required for the ADR depends on the nature of the project and the characteristics of the receiving water. To avoid unnecessary delays in permit issuance, the Division of Water Quality (DWQ) recommends that the process be initiated at least one year prior to the date a final approved permit is required.

DWQ will determine if the project will impair beneficial uses (Level I ADR) using information provided by the applicant and whether a Level II ADR is required. The applicant is responsible for conducting the Level II ADR. For the permit to be approved, the Level II ADR must document that all feasible measures have been undertaken to minimize pollution for socially, environmentally or economically beneficial projects resulting in an increase in pollution to waters of the state.

For permits requiring a Level II ADR, this antidegradation form must be completed and approved by DWQ before any UPDES permit can be issued. Typically, the ADR form is completed in an iterative manner in consultation with DWQ. The applicant should first complete the statement of social, environmental and economic importance (SEEI) in Part C and determine the parameters of concern (POC) in Part D. Once the POCs are agreed upon by DWQ, the alternatives analysis and selection of preferred alternative in Part E can be conducted based on minimizing degradation resulting from discharge of the POCs. Once the applicant and DWQ agree upon the preferred alternative, the review is considered complete, and the form must be signed, dated, and submitted to DWQ.

For additional clarification on the antidegradation review process and procedures, please contact Nicholas von Stackelberg (801-536-4374) or Jeff Ostermiller (801-536-4370).

Document Date 8/5/2015



DWQ-2015-009030

AL

REVISED: 6/14/2012

Antidegradation Review Form

Part A: Applicant Information

Facility Name: Lila Canyon Mine

Facility Owner: UtahAmerican Energy, Inc. (UEI)

Facility Location: Lila Canyon, Emery County, Utah

Form Prepared By: J. T. Paluso, P.E.

Outfall Number: 001

Receiving Water: Lila Canyon (Dry Wash) Price River

What Are the Designated Uses of the Receiving Water (R317-2-6)?

Domestic Water Supply: None
Recreation: None ^{2B}
Aquatic Life: None ^{3C}
Agricultural Water Supply: None ⁴
Great Salt Lake: None

Category of Receiving Water (R317-2-3.2, -3.3, and -3.4): Category 3

UPDES Permit Number (if applicable): UT0026018

Effluent Flow Reviewed: 8750gpd, 4,375gpd average

Typically, this should be the maximum daily discharge at the design capacity of the facility. Exceptions should be noted.

What is the application for? (check all that apply)

- A UPDES permit for a new facility, project, or outfall.
- A UPDES permit renewal with an expansion or modification of an existing wastewater treatment works.
- A UPDES permit renewal requiring limits for a pollutant not covered by the previous permit and/or an increase to existing permit limits.
- A UPDES permit renewal with no changes in facility operations.

Part B. Is a Level II ADR required?

This section of the form is intended to help applicants determine if a Level II ADR is required for specific permitted activities. In addition, the Executive Secretary may require a Level II ADR for an activity with the potential for major impact on the quality of waters of the state (R317-2-3.5a.1).

B1. The receiving water or downstream water is a Class 1C drinking water source.

Yes A Level II ADR is required (Proceed to Part C of the Form)

No (Proceed to Part B2 of the Form)

B2. The UPDES permit is new or is being renewed and the proposed effluent concentration and loading limits are higher than the concentration and loading limits in the previous permit and any previous antidegradation review(s).

Yes (Proceed to Part B3 of the Form)

No No Level II ADR is required and there is no need to proceed further with review questions.

B3. Will any pollutants use assimilative capacity of the receiving water, i.e. do the pollutant concentrations in the effluent exceed those in the receiving waters at critical conditions? For most pollutants, effluent concentrations that are higher than the ambient concentrations require an antidegradation review? For a few pollutants such as dissolved oxygen, an antidegradation review is required if the effluent concentrations are less than the ambient concentrations in the receiving water. (Section 3.3.3 of Implementation Guidance)

Yes (Proceed to Part B4 of the Form)

No No Level II ADR is required and there is no need to proceed further with review questions.

B4. Are water quality impacts of the proposed project temporary and limited (Section 3.3.4 of Implementation Guidance)? Proposed projects that will have temporary and limited effects on water quality can be exempted from a Level II ADR.

- Yes** Identify the reasons used to justify this determination in Part B4.1 and proceed to Part G. No Level II ADR is required.
- No** A Level II ADR is required (Proceed to Part C)

B4.1 Complete this question only if the applicant is requesting a Level II review exclusion for temporary and limited projects (see R317-2-3.5(b)(3) and R317-2-3.5(b)(4)). For projects requesting a temporary and limited exclusion please indicate the factor(s) used to justify this determination (check all that apply and provide details as appropriate) (Section 3.3.4 of Implementation Guidance):

- Water quality impacts will be temporary and related exclusively to sediment or turbidity and fish spawning will not be impaired.

Factors to be considered in determining whether water quality impacts will be temporary and limited:

- a) The length of time during which water quality will be lowered:
- b) The percent change in ambient concentrations of pollutants:
- c) Pollutants affected:
- d) Likelihood for long-term water quality benefits:
- e) Potential for any residual long-term influences on existing uses:
- f) Impairment of fish spawning, survival and development of aquatic fauna excluding fish removal efforts:

Additional justification, as needed:

Level II ADR

Part C, D, E, and F of the form constitute the Level II ADR Review. The applicant must provide as much detail as necessary for DWQ to perform the antidegradation review. Questions are provided for the convenience of applicants; however, for more complex permits it may be more effective to provide the required information in a separate report. Applicants that prefer a separate report should record the report name here and proceed to Part G of the form.

Optional Report Name:

Part C. Is the degradation from the project socially and economically necessary to accommodate important social or economic development in the area in which the waters are located? *The applicant must provide as much detail as necessary for DWQ to concur that the project is socially and economically necessary when answering the questions in this section. More information is available in Section 6.2 of the Implementation Guidance.*

C1. Describe the social and economic benefits that would be realized through the proposed project, including the number and nature of jobs created and anticipated tax revenues.

New treatment facility will allow employment of approximately 200 additional workers at the Lila Canyon Mine.

C2. Describe any environmental benefits to be realized through implementation of the proposed project.

New treatment facility will improve quality of water being discharged from Lila Canyon Mine.

C3. Describe any social and economic losses that may result from the project, including impacts to recreation or commercial development.

None

C4. Summarize any supporting information from the affected communities on preserving assimilative capacity to support future growth and development.

Not applicable

C5. Please describe any structures or equipment associated with the project that will be placed within or adjacent to the receiving water.

None, all treatment equipment will be located on mine property.

Part D. Identify and rank (from increasing to decreasing potential threat to designated uses) the parameters of concern. *Parameters of concern are parameters in the effluent at concentrations greater than ambient concentrations in the receiving water. The applicant is responsible for identifying parameter concentrations in the effluent and DWQ will provide parameter concentrations for the receiving water. More information is available in Section 3.3.3 of the Implementation Guidance.*

Parameters of Concern:

Rank	Pollutant	Ambient Concentration	Effluent Concentration
1	Ammonia	None	<5 mg/L
2	Temperature	None	50-60 Degree F
3	BOD	None	<25 mg/L
4	E. Coli	None	<126 MPN/100 mL
5	COD	None	<75 mg/L

Pollutants Evaluated that are not Considered Parameters of Concern:

Pollutant	Ambient Concentration	Effluent Concentration	Justification
TSS	None	<25 mg/L	

Part E. Alternative Analysis Requirements of a Level II

Antidegradation Review. *Level II ADRs require the applicant to determine whether there are feasible less-degrading alternatives to the proposed project. More information is available in Section 5.5 and 5.6 of the Implementation Guidance.*

E1. The UPDES permit is being renewed without any changes to flow or concentrations. Alternative treatment and discharge options including changes to operations and maintenance were considered and compared to the current processes. No economically feasible treatment or discharge alternatives were identified that were not previously considered for any previous antidegradation review(s).

Yes (Proceed to Part F)

No or Does Not Apply (Proceed to E2)

E2. Attach as an appendix to this form a report that describes the following factors for all alternative treatment options (see 1) a technical description of the treatment process, including construction costs and continued operation and maintenance expenses, 2) the mass and concentration of discharge constituents, and 3) a description of the reliability of the system, including the frequency where recurring operation and maintenance may lead to temporary increases in discharged pollutants. Most of this information is typically available from a Facility Plan, if available.

Report Name: June 24, 2014, Letter to David Ariotti "Lila Canyon Mine Wastewater System Expansion". Letter is attached.

E3. Describe the proposed method and cost of the baseline treatment alternative. The baseline treatment alternative is the minimum treatment required to meet water quality based effluent limits (WQBEL) as determined by the preliminary or final wasteload analysis (WLA) and any secondary or categorical effluent limits.

E4. Were any of the following alternatives feasible and affordable?

Alternative	Feasible	Reason Not Feasible/Affordable
Pollutant Trading	No	No other facilities located nearby
Water Recycling/Reuse	No	Not feasible or practical
Land Application	No	No farming located near mine
Connection to Other Facilities	No	No other facilities located nearby
Upgrade to Existing Facility	Yes	Upgrading existing facilities
Total Containment	No	Limited area for containment
Improved O&M of Existing Systems	Yes	Approved alternative, new treatment system
Seasonal or Controlled Discharge	No	Not practicle, year round operation
New Construction	Yes	Mine expansion
No Discharge	No	Not feasible

E5. From the applicant's perspective, what is the preferred treatment option?

AdvanTex System as proposed. See attached October 9, 2014, DWQ approval letter.

E6. Is the preferred option also the least polluting feasible alternative?

Yes

No

If no, what were less degrading feasible alternative(s)?

If no, provide a summary of the justification for not selecting the least polluting feasible alternative and if appropriate, provide a more detailed justification as an attachment.

Part F. Optional Information

F1. Does the applicant want to conduct optional public review(s) in addition to the mandatory public review? Level II ADRs are public noticed for a thirty day comment period. More information is available in Section 3.7.1 of the Implementation Guidance.

No

Yes

F2. Does the project include an optional mitigation plan to compensate for the proposed water quality degradation?

No

Yes

Report Name:

Part G. Certification of Antidegradation Review

G1. Applicant Certification

The form should be signed by the same responsible person who signed the accompanying permit application or certification.

Based on my inquiry of the person(s) who manage the system or those persons directly responsible for gathering the information, the information in this form and associated documents is, to the best of my knowledge and belief, true, accurate, and complete.

Print Name: KARIN ODENDAH

Signature: 

Date: 6-30-15

G2. DWO Approval

To the best of my knowledge, the ADR was conducted in accordance with the rules and regulations outlined in UAC R-317-2-3.

Water Quality Management Section

Print Name: DAVID WHAM

Signature: 

Date: 6-5-15