

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. **UT0024601**

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

EUREKA WASTEWATER TREATMENT FACILITY

is hereby authorized to discharge from its wastewater treatment facility to receiving waters named

UNNAMED IRRIGATION DITCH TO EUREKA CREEK,

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

This permit shall become effective on February 1, 2020.

This permit expires at midnight on January 31, 2025.

Signed this 29th day of January, 2020.



Erica Brown Gaddis, PhD
Director

Table of Contents

Outline	Page Number
I. DISCHARGE LIMITATIONS AND REPORTING REQUIREMENTS	4
A. Description of Discharge Points	4
B. Narrative Standard	4
C. Specific Limitations and Self-Monitoring Requirements	4
D. Reporting of Monitoring Results	8
II. INDUSTRIAL PRETREATMENT PROGRAM	10
A. Definitions	10
B. Pretreatment Reporting Requirements.....	11
C. Industrial Wastes.....	11
D. General and Specific Prohibitions	11
E. Significant Industrial Users Discharging to the POTW	12
F. Change of Conditions.....	13
G. Legal Action	13
H. Local Limits.....	13
III. BIOSOLIDS REQUIREMENTS	14
IV. STORM WATER REQUIREMENTS	15
V. MONITORING, RECORDING & GENERAL REPORTING REQUIREMENTS	16
A. Representative Sampling	16
B. Monitoring Procedures.....	16
C. Penalties for Tampering.....	16
D. Compliance Schedules.....	16
E. Additional Monitoring by the Permittee	16
F. Records Contents.....	16
G. Retention of Records	16
H. Twenty-four Hour Notice of Noncompliance Reporting.....	16
I. Other Noncompliance Reporting.....	17
J. Inspection and Entry	17
VI. COMPLIANCE RESPONSIBILITIES	19
A. Duty to Comply	19
B. Penalties for Violations of Permit Conditions	19
C. Need to Halt or Reduce Activity not a Defense.....	19
D. Duty to Mitigate.....	19
E. Proper Operation and Maintenance.....	19
F. Removed Substances	19
G. Bypass of Treatment Facilities	19
H. Upset Conditions	21
VII. GENERAL REQUIREMENTS	22
A. Planned Changes.....	22
B. Anticipated Noncompliance.....	22
C. Permit Actions	22
D. Duty to Reapply.....	22
E. Duty to Provide Information	22
F. Other Information.....	22
G. Signatory Requirements.....	22
H. Penalties for Falsification of Reports.....	23
I. Availability of Reports	23
J. Oil and Hazardous Substance Liability.....	23
K. Property Rights	23

L. Severability	23
M. Transfers.....	24
N. State or Federal Laws	24
O. Water Quality - Reopener Provision.....	24
P. Biosolids – Reopener Provision	24
Q. Toxicity Limitation - Reopener Provision	25
R. Storm Water-Reopener Provision	25
VIII. DEFINITIONS	26
A. Wastewater	26

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	Description of Discharge Point
001	Located at latitude 39°56'26.58" and longitude 112°08'57.33". The discharge is pumped into an irrigation ditch which leads to Eureka Creek, an ephemeral wash and tributary to Tanner Creek.

Outfall	Description of Land Disposal Discharge Point
001D	Located at latitude 39° 57' 27.93" and longitude 112° 09' 04.73". The discharge flows a wildlife habitat area west of the lagoons during Spring, Summer and Fall.

- 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:

PART I
DISCHARGE PERMIT NO. UT0024601

Parameter	Outfall 001 Effluent Limitations ^a				
	Maximum Monthly Avg	Maximum Weekly Avg	Yearly Average	Daily Minimum	Daily Maximum
Total Flow, MGD	0.2	--	--	--	--
BOD ₅ , mg/L	45	65	--	--	--
BOD ₅ Min. % Removal	85	--	--	--	--
TSS, mg/L	45	65	--	--	--
TSS Min. % Removal	85	--	--	--	--
Dissolved Oxygen, mg/L	--	--	--	5.0	--
Total Residual Chlorine, mg/L	--	--	--	--	2.0
<i>E. coli</i> , No./100mL	126	157	--	--	--
Oil & Grease, mg/L	--	--	--	--	10.0
pH, Standard Units	--	--	--	6.5	9

PART I
DISCHARGE PERMIT NO. UT0024601

Outfall 001 and Outfall 001D Self-Monitoring and Reporting Requirements ^{a, i}			
Parameter	Frequency	Sample Type	Units
Total Flow ^{b, c}	Continuous	Recorder	MGD
BOD₅			
Influent ^d	Monthly	Composite	mg/L
Effluent	Monthly	Composite	mg/L
TSS			
Influent ^d	Monthly	Composite	mg/L
Effluent	Monthly	Composite	mg/L
Dissolved Oxygen, Effluent	Monthly	Grab	mg/L
Total Residual Chlorine ^e, Effluent	Monthly	Grab	mg/L
<i>E. coli</i>, Effluent only	Monthly	Grab	No./100mL
Oil & Grease ^f Effluent	When Sheen Observed	Grab	mg/L
pH, Effluent	Monthly	Grab	SU
Total Ammonia (as N) ^g, Effluent	Monthly	Grab	mg/L
Total Phosphorus ^g			
Influent	Monthly	Composite	mg/L
Effluent	Monthly	Composite	mg/L
Total Kjeldahl Nitrogen, TKN (as N) ^g			
Influent	Monthly	Composite	mg/L
Effluent	Monthly	Composite	mg/L
Nitrate, NO₃, ^g Effluent	Monthly	Composite	mg/L
Nitrite, NO₂, ^g Effluent	Monthly	Composite	mg/L
Metals ^h			
Influent	Yearly	Composite	mg/L
Effluent	Yearly	Composite	mg/L

- ^a. See Definitions, *Part VIII of the permit*, for definition of terms.
- ^b. Flow measurements of influent/effluent volume shall be made in such a manner that the permittee can affirmatively demonstrate that representative values are being obtained.
- ^c. If the rate of discharge is controlled, the rate and duration of discharge shall be reported.
- ^d. 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.
- ^e. The facility is required to disinfect to destroy, inactivate or remove pathogenic microorganisms by chemical, physical or biological means. Disinfection may be accomplished by chlorination, ozonation, or other chemical disinfectants, UV radiation. Or other approved processes. Chlorine residual is recommended but no longer required. Sampling not required if chlorination is not being used. The total residual chlorine shall be measured continuously and shall at no time be less than 1.0 mg/l after 30 minutes contact time at peak flow. If an alternative disinfection process is used, it must be demonstrated to the satisfaction of the Director that the alternative process is comparable to that achieved by chlorination with a 1 mg/l residual after 30 minutes contact time. If the effectiveness cannot be related to chlorination, then the effectiveness of the alternative disinfection process must be demonstrated by testing for pathogen destruction as determined by the Director. A 1 mg/l total chlorine residual is recommended after disinfection and before the treated effluent goes into the distribution system.
- ^f. Oil & Grease sampled when sheen is present or visible. If no sheen is present or visible, report NA.
- ^g. Monitoring only for total phosphorus (TP), orthophosphate as P (OP), total ammonia, nitrate, nitrite, and total Kjeldahl nitrogen as N (TKN) have all been included to comply with Utah Secondary Treatment Standards and the Technology-based Phosphorus Effluent limit rule in *UAC R317-1-3.3*.
- ^h. Metal parameters:
 - Arsenic
 - Boron
 - Cadmium
 - Chromium
 - Copper
 - Lead
 - Mercury
 - Molybdenum
 - Nickel
 - Selenium
 - Zinc
- ⁱ. Land Disposal monitoring results obtained during the previous month for land disposal discharges shall be summarized for each month and reported on a Monthly Operational Report, post-marked no later than the 28th day of the month following the completed reporting period.

Land Disposal System Requirements

Below are the land disposal system requirements as outlined in the March 31, 2011 letter from DWQ (DWQ-2011-010761) and are still in effect.

- 1) The disposal site is located west of Eureka City's existing lagoon system, in a buffer zone of City and Bureau of Land Management (BLM) ground. The disposal site is wholly located on land owned by Eureka City.
- 2) The disposal system will consist of a series of irrigation ditches with multiple flood gates to control water dispersal over controlled areas. The existing lagoon system already has pipes and valves within 50 feet of the proposal irrigation headworks.

- 3) Public access to this site is restricted by a five-foot stock-tight fence and will have signage posted "Restricted Access."
- 4) Tail water runoff will be prevented by a three-foot perimeter berm surrounding the entire site, right up to where the berm connects with the existing lagoon dike walls on the west side of the Lagoon.
- 5) Effluent will meet applicable discharge requirements prior to disposal on the land disposal site.
 - a. Effluent monitoring sampling must be performed.

Management Practices for Land Disposal of Treated Effluent:

- 1) The application of treated effluent to frozen, ice-covered, or snow covered land is prohibited.
- 2) No person shall apply treated effluent where the slope of the site exceeds 6 percent.
- 3) The use should not result in a surface water runoff.
- 4) The use must not result in the creation of an unhealthy or nuisance condition, as determined by the local health department.
- 5) Any irrigation with treated effluent must be at least 300 feet from a potable well.
- 6) Impoundments of treated effluent, if not sealed, must be at least 500 feet from any potable well.
- 7) Public access to effluent storage and irrigation or disposal sites shall be restricted by a stock-tight fence or other comparable means which shall be posted and controlled to exclude the public.

Lagoon Best Management Practices:

- 1) The permittee shall take such precautions as are necessary to maintain and operate the facility in a manner that will minimize upsets and ensure stable operating conditions.
- 2) The permittee shall visually inspect, at least weekly, the pond(s) to determine if there is adequate freeboard to minimize the likelihood of an accidental discharge occurring. If it is determined that a discharge is occurring and/or there is not adequate freeboard, the appropriate corrective measures shall be taken immediately.
- 3) The permittee shall take precautions and have erosion control measures in place that, in the event of a bypass of treatment, the discharge will not cause any erosion into the Waters of the State.

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 NetDMR no later than the 28th day of the month following the completed reporting period. If no discharge occurs during the reporting period, "no discharge" shall be reported. Legible copies of these, and all other reports including whole effluent toxicity (WET) test reports required herein, shall be signed and certified in accordance with the requirements of *Signatory Requirements (see Part 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

2. Annual Reporting of Wastewater Monitoring Results. Monitoring results obtained during the previous year shall be summarized and included in the Municipal Wastewater Planning Program (MWPP) submitted annually by April 1st. If no land disposal occurs during the reporting period, “no land disposal” shall be reported for those applicable effluent parameters. Legible copies of these, and all other reports required herein, shall be reported. Legible copies of these, and all other reports required herein, shall be signed and certified in accordance with the requirements of Signatory Requirements (see Part VII.G), and submitted 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

II. INDUSTRIAL PRETREATMENT PROGRAM

A. Definitions. For this section the following definitions shall apply:

1. *Indirect Discharge* means the introduction of pollutants into a publicly-owned treatment works (POTW) from any non-domestic source regulated under section 307 (b), (c) or (d) of the Act.
2. *Interference* means a discharge which, alone or in conjunction with a discharge or discharges from other sources, both:
 - a. Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and
 - b. Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.
3. *Local Limit* is defined as a limit designed to prevent pass through and/or interference. And is developed in accordance with 40 CFR 403.5(c).
4. *Pass Through means* a Discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).
5. *Publicly Owned Treatment Works* or *POTW* means a treatment works as defined by section 212 of the Act, which is owned by a State or municipality (as defined by section 502(4) of the Act). This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW Treatment Plant. The term also means the municipality as defined in section 502(4) of the Act, which has jurisdiction over the Indirect Discharges to and the discharges from such a treatment works.
6. *Significant industrial user (SIU)* is defined as an industrial user discharging to a POTW that satisfies any of the following:
 - a. Has a process wastewater flow of 25,000 gallons or more per average work day;
 - b. Has a flow greater than five percent of the flow carried by the municipal system receiving the waste;
 - c. Is subject to Categorical Pretreatment Standards, or

- d. Has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement.

7. *User or Industrial User (IU)* means a source of Indirect Discharge

B. Pretreatment Reporting Requirements. Because the design capacity of this municipal wastewater treatment facility is less than 5 MGD, the permittee will not be required to develop a State-approved industrial pretreatment program at this time. However, in order to determine if development of an industrial pretreatment program is warranted, the permittee shall conduct an **industrial waste survey**, as described in *Part II.C.1*, and submit it to the Division of Water Quality within **sixty (60) calendar days** of the effective date of this permit.

C. Industrial Wastes.

1. The "Industrial Waste Survey" as required by *Part II.B.* consists of;
 - a. Identifying each industrial user (IU) and determining if the IU is a significant industrial user (SIU),
 - b. Determination of the qualitative and quantitative characteristics of each discharge, and
 - c. Appropriate production data.
2. The IWS must be maintained and updated with IU information as necessary, to ensure that all IUs are properly permitted and/or controlled at all times. Updates must be submitted to the Director sixty (60) days following a change to the IWS.
3. Evaluate all significant industrial users at least once every two years to determine if they need to develop a slug prevention plan. If a slug prevention plan is required, the permittee shall notify the Director.
4. Notify all significant industrial users of their obligation to comply with applicable requirements under *Subtitles C and D* of the *Resource Conservation and Recovery Act (RCRA)*.
5. The permittee must notify the Director of any new introductions by new or existing SIUs or any substantial change in pollutants from any major industrial source. Such notice must contain the information described in 1. above, and be forwarded no later than sixty (60) days following the introduction or change.

D. General and Specific Prohibitions. The general prohibitions and the specific prohibitions apply to each User introducing pollutants into a POTW whether or not the User is subject to other Pretreatment Standards or any national, State or local Pretreatment Requirements.

1. General prohibition Standards. A User may not introduce into a POTW any pollutant(s) which cause Pass Through or Interference.

PART II
DISCHARGE PERMIT NO. UT0024601

2. Specific Prohibited Standards. Developed pursuant to *Section 307 of The Water Quality Act of 1987* require that under no circumstances shall the permittee allow introduction of the following pollutants into the waste treatment system from any User (*40 CFR 403.5*):
 - a. Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, waste-streams with a closed cup flashpoint of less than 140°F (60°C);
 - b. Pollutants, which will cause corrosive structural damage to the POTW, but in no case, discharges with a pH lower than 5.0;
 - c. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW resulting in interference;
 - d. Any pollutant, including oxygen demanding pollutants (BOD, etc.) released in a discharge at such volume or strength as to cause interference in the POTW;
 - e. Heat in amounts, which will inhibit biological activity in the POTW, resulting in interference, but in no case, heat in such quantities that the influent to the sewage treatment works exceeds 104°F (40°C);
 - f. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;
 - g. Pollutants which result in the presence of toxic gases, vapor, or fumes within the POTW in a quantity that may cause worker health or safety problems; or,
 - h. Any trucked or hauled pollutants, except at discharge points designated by the POTW.
 - i. Any pollutant that causes pass through or interference at the POTW.
 3. In addition to the general and specific limitations expressed above, more specific pretreatment limitations have been and will be promulgated for specific industrial categories under *Section 307 of the Water Quality Act of 1987 as amended (WQA)*. (See *40 CFR, Subchapter N, Parts 400 through 500*, for specific information).
- E. Significant Industrial Users Discharging to the POTW. The permittee shall provide adequate notice to the Director and the Division of Water Quality Industrial Pretreatment Coordinator of;
1. Any new introduction of pollutants into the treatment works from an indirect discharger (i.e., industrial user) which would be subject to *Sections 301 or 306* of the *WQA* if it were directly discharging those pollutants;
 2. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit; and
 3. For the purposes of this section, adequate notice shall include information on:

PART II
DISCHARGE PERMIT NO. UT0024601

- a. The quality and quantity of effluent to be introduced into such treatment works; and,
 - b. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from such publicly owned treatment works.
4. Any SIU that must comply with applicable requirements under Subtitles C and D of the Resource Conservation and Recovery Act (RCRA).
- F. Change of Conditions. At such time as a specific pretreatment limitation becomes applicable to an industrial user of the permittee, the Director may, as appropriate, do the following:
1. Amend the permittee's UPDES discharge permit to specify the additional pollutant(s) and corresponding effluent limitation(s) consistent with the applicable national pretreatment limitation;
 2. Require the permittee to specify, by ordinance, contract, or other enforceable means, the type of pollutant(s) and the maximum amount which may be discharged to the permittee's facility for treatment. Such requirement shall be imposed in a manner consistent with the POTW program development requirements of the *General Pretreatment Regulations* at *40 CFR 403*; and/or,
 3. Require the permittee to monitor its discharge for any pollutant, which may likely be discharged from the permittee's facility, should the industrial user fail to properly pretreat its waste.
 4. Require the permittee to develop an approved pretreatment program.
- G. Legal Action. The Director retains, at all times, the right to take legal action against the industrial user and/or the treatment works, in those cases where a permit violation has occurred because of the failure of an industrial user to discharge at an acceptable level. If the permittee has failed to properly delineate maximum acceptable industrial contributor levels, the Director will look primarily to the permittee as the responsible party.
- H. Local Limits. If local limits are developed per R317-8-8.5(4)(b) to protect the POTW from pass-through or interference, then the POTW must submit limits to DWQ for review and public notice, as required by R317-8-8.5(4)(c).

III. BIOSOLIDS REQUIREMENTS

The State of Utah has adopted the 40 CFR 503 federal regulations for the disposal of sewage sludge (biosolids) by reference. However, since this facility is a lagoon, there is not any regular sludge production. Therefore 40 CFR 503 does not apply at this time. In the future, if the sludge needs to be removed from the lagoons and is disposed in some way, the Division of Water Quality must be contacted prior to the removal of the sludge to ensure that all applicable state and federal regulations are met.

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.

1. Wastewater treatment facilities with a design flow of 1.0 MGD or greater, and/or,
2. Wastewater treatment facilities with an approved pretreatment program as described in *40CFR Part 403*,

The Eureka Wastewater Treatment Facility 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 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 disposal 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

PART V
DISCHARGE PERMIT NO. UT0024601

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 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.
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:

PART V
DISCHARGE PERMIT NO. UT0024601

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 disposal 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 disposal sites or biosolids, soils, or vegetation on the land disposal 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.

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 disposal 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.
- 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.

PART VI
DISCHARGE PERMIT NO. UT0024601

- 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;
 - (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

PART VI
DISCHARGE PERMIT NO. UT0024601

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 judiciously challenged by the permittee until such time as an action is initiated for noncompliance.
2. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The permittee submitted notice of the upset as required under *Part 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*.
3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

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.
 - 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,

**PART VII
DISCHARGE PERMIT NO. UT0024601**

- 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 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

PART VII
DISCHARGE PERMIT NO. UT0024601

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:
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 area wide 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.

PART VII
DISCHARGE PERMIT NO. UT0024601

- Q. Toxicity Limitation - Reopener Provision. This permit may be reopened and modified (following proper administrative procedures) to include 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".

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. “Acute toxicity” occurs when 50 percent or more mortality is observed for either test species at any effluent concentration (lethal concentration or “LC₅₀”).
5. "Annual Loading Cap" is the highest allowable phosphorus loading discharged over a calendar year, calculated as the sum of all the monthly loading discharges measured during a calendar year divided by the number of monthly discharges measured during that year.
6. “Bypass,” means the diversion of waste streams from any portion of a treatment facility.
7. “Chronic toxicity” occurs when the IC₂₅< XX% effluent. The XX% effluent is the concentration of the effluent in the receiving water, at the end of the mixing zone expressed as per cent effluent.
8. "IC₂₅" is the concentration of toxicant (given in % effluent) that would cause a 25% reduction in mean young per female, or a 25% reduction in overall growth for the test population.
9. “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:

PART VIII
DISCHARGE PERMIT NO. UT0024601

- a. Constant time interval between samples, sample volume proportional to flow rate at time of sampling;
 - b. Constant time interval between samples, sample volume proportional to total flow (volume) since last sample. For the first sample, the flow rate at the time the sample was collected may be used;
 - c. Constant sample volume, time interval between samples proportional to flow (i.e., sample taken every "X" gallons of flow); and,
 - d. Continuous sample volume, with sample collection rate proportional to flow rate.
10. "CWA," means *The Federal Water Pollution Control Act*, as amended, by *The Clean Water Act of 1987*.
 11. "Daily Maximum" (Daily Max.) is the maximum value allowable in any single sample or instantaneous measurement.
 12. "EPA," means the United States Environmental Protection Agency.
 13. "Director," means Director of the Division of Water Quality.
 14. A "grab" sample, for monitoring requirements, is defined as a single "dip and take" sample collected at a representative point in the discharge stream.
 15. An "instantaneous" measurement, for monitoring requirements, is defined as a single reading, observation, or measurement.
 16. "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.
 17. "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.

**FACT SHEET AND STATEMENT OF BASIS
EUREKA WASTEWATER TREATMENT FACILITY
RENEWAL PERMIT: DISCHARGE, BIOSOLIDS & STORM WATER
UPDES PERMIT NUMBER: UT0024601
MINOR**

FACILITY CONTACTS

Person Name: Lynn Elliot
Position: Operator
Phone Number: 435.433.6915

Facility Name: Eureka Wastewater Treatment Facility
Facility Mailing Address: PO Box 156
Eureka, Utah 84628

Facility Telephone: 435.433.6915
Facility Actual Address: 1940 West US36
Eureka, Utah 84628
The facility is located about 1.7 miles southwest of Eureka City just off Highway 6.

DESCRIPTION OF FACILITY

The Eureka Wastewater Treatment Facility (EWTF) is a discharging lagoon system. This facility was expanded and upgraded in 1986 to a total area of 360 feet by 720 feet. The headworks consist of a bar screen and comminutor and a six inch Parshall flume. The EQTF has three cells with a total of five aerators. The EQTF has an influent organic loading of 136 lbs per day for BOD. The summer weather flow is 0.16 million gallons per day (MGD) and the winter weather flow is 0.11 MGD and serves the City of Eureka which has a population of about 630 people. The average design flow is 0.20 MGD and has a design population equivalent of 800 people. Disinfection is accomplished through chlorination.

SUMMARY OF CHANGES FROM PREVIOUS PERMIT

A description of the land disposal site has been included. Requirements from the DWQ agreement dated March 31, 2011 (DWQ-2011-0101761), Management Practices for Land Disposal of Treated Effluent and Lagoon Best Management Practices have been included. Monitoring only for total phosphorus (TP), orthophosphate as P (OP), total ammonia, nitrate, nitrite, and total kjeldahl nitrogen as N (TKN) have all been included to comply with Utah Secondary Treatment Standards and the Technology-based Phosphorus Effluent limit rule in *UAC R317-1-3.3*.

DISCHARGE

DESCRIPTION OF DISCHARGE

EWTF has been discharging into a wildlife habitat west of the Lagoons. No sampling has been performed since March 2011 and discharge monitoring reports have been indicated as “No Discharge”. As per agreement dated March 31, 2011 (DWQ-2011-010761) sampling will need to be conducted prior to discharging.

The wastewater treatment plant has two discharge points, known as Outfall 001 and Outfall 001R. The 001 outfall has a latitude of 39° 56' 26.58” and a longitude of 122 ° 08' 57.33” and discharges to Eureka Creek, an ephemeral wash, which is tributary to Tanner Creek. The STORET number associated with the discharge is 492157.

Outfall Description of Discharge Point

001 Located at latitude 39°56'26.58” and longitude 112°08'57.33”. The discharge is pumped into an irrigation ditch which leads to Eureka Creek, an ephemeral wash and tributary to Tanner Creek.

Outfall Description of Land Disposal Discharge Point

001D Located at latitude 39° 57' 27.93” and longitude 112° 09' 04.73”. The discharge flows into a wildlife habitat area west of the lagoons during Spring, Summer and Fall.



RECEIVING WATERS AND STREAM CLASSIFICATION

If a discharge were to occur, it would be pumped into an irrigation ditch which leads to Eureka Creek, an ephemeral wash and tributary to Tanner Creek. The confluence of Tanner and Eureka Creek is approximately 9 miles south of where the effluent enters Eureka Creek. The waters of Tanner Creek are Class 2B, 3E, 4 according to *Utah Administrative Code (UAC) R317-2-13* and part of the Sevier River system.

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 3E -- Severely habitat-limited waters. Narrative standards will be applied to protect these waters for aquatic wildlife.
- Class 4 -- Protected for agricultural uses including irrigation of crops and stock watering.

BASIS FOR EFFLUENT LIMITATIONS

Limitations on total suspended solids (TSS), biochemical oxygen demand (BOD₅), *E. coli*, pH and percent removal for BOD₅ and TSS are based on current Utah Secondary Treatment Standards, UAC R317-1-3.2. The oil and grease and total residual chlorine limits are based on best professional judgment (BPJ). Attached is a Wasteload Analysis for this discharge into the unnamed irrigation ditch. It has been determined that this discharge will not cause a violation of water quality standards. An Antidegradation Level II review is not required since the Level I review shows that water quality impacts are minimal. The permittee is expected to be able to comply with these limitations.

Reasonable Potential Analysis

Since January 1, 2016, DWQ has conducted reasonable potential analysis (RP) on all new and renewal applications received after that date. RP for this permit renewal was not conducted due to unavailable sampling data.

The permit limitations are:

Parameter	Outfall 001 Effluent Limitations ^a				
	Maximum Monthly Avg	Maximum Weekly Avg	Yearly Average	Daily Minimum	Daily Maximum
Total Flow, MGD	0.2	--	--	--	--
BOD ₅ , mg/L	45	65	--	--	--
BOD ₅ Min. % Removal	85	--	--	--	--
TSS, mg/L	45	65	--	--	--
TSS Min. % Removal	85	--	--	--	--
Dissolved Oxygen, mg/L	--	--	--	5.0	--
Total Residual Chlorine, mg/L	--	--	--	--	2.0
<i>E. coli</i> , No./100mL	126	157	--	--	--
Oil & Grease, mg/L	--	--	--	--	10.0
pH, Standard Units	--	--	--	6.5	9.0

SELF-MONITORING AND REPORTING REQUIREMENTS

The self-monitoring requirements have had additional parameters added to the monitoring requirements due to lack of data available. Land disposal and best management practices have been included to document previous correspondences. The permit will require reports to be submitted monthly and annually, as applicable, on NetDMR due 28 days after the end of the monitoring period. Lab sheets for metals must be attached to the DMRs.

Outfall 001 and Outfall 001D Self-Monitoring and Reporting Requirements ^{a, i}			
Parameter	Frequency	Sample Type	Units
Total Flow ^{b, c}	Continuous	Recorder	MGD
BOD₅			
Influent ^d	Monthly	Composite	mg/L
Effluent	Monthly	Composite	mg/L
TSS			
Influent ^d	Monthly	Composite	mg/L
Effluent	Monthly	Composite	mg/L
Dissolved Oxygen	Monthly	Grab	mg/L
Total Residual Chlorine ^e	Monthly	Grab	mg/L
<i>E. coli</i>, Effluent only	Monthly	Grab	No./100mL
Oil & Grease ^f	When Sheen Observed	Grab	mg/L
pH, Effluent	Monthly	Grab	SU
Total Ammonia (as N) ^g, Effluent	Monthly	Grab	mg/L
Total Phosphorus ^g			
Influent	Monthly	Composite	mg/L
Effluent	Monthly	Composite	mg/L
Total Kjeldahl Nitrogen, TKN (as N) ^g			
Influent	Monthly	Composite	mg/L
Effluent	Monthly	Composite	mg/L
Nitrate, NO₃, ^g Effluent	Monthly	Composite	mg/L
Nitrite, NO₂, ^g Effluent	Monthly	Composite	mg/L
Metals ^h			
Influent	Yearly	Composite	mg/L
Effluent	Yearly	Composite	mg/L

- ^{a.} See Definitions, *Part VIII of the permit*, for definition of terms.
- ^{b.} Flow measurements of influent/effluent volume shall be made in such a manner that the permittee can affirmatively demonstrate that representative values are being obtained.
- ^{c.} If the rate of discharge is controlled, the rate and duration of discharge shall be reported.
- ^{d.} 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.
- ^{e.} The facility is required to disinfect to destroy, inactivate or remove pathogenic microorganisms by chemical, physical or biological means. Disinfection may be accomplished by chlorination, ozonation, or other chemical disinfectants, UV radiation. Or other approved processes. Chlorine residual is recommended but no longer required. Sampling is not required if chlorination is not being used. The total residual chlorine shall be measured continuously and shall at no time be less than 1.0 mg/l after 30 minutes contact time at peak flow. If an alternative disinfection process is used, it must be demonstrated to the satisfaction of the Director that the alternative process is comparable to that achieved by chlorination with a 1 mg/l residual after 30 minutes contact time. If the effectiveness cannot be related to chlorination, then the effectiveness of the alternative disinfection process must be demonstrated by testing for pathogen destruction as determined by the Director. A 1 mg/l total chlorine residual is recommended after disinfection and before the treated effluent goes into the distribution system.
- ^{f.} Oil & Grease sampled when sheen is present or visible. If no sheen is present or visible, report NA.
- ^{g.} Monitoring only for total phosphorus (TP), orthophosphate as P (OP), total ammonia, nitrate, nitrite, and total Kjeldahl nitrogen as N (TKN) have all been included to comply with Utah Secondary Treatment Standards and the Technology-based Phosphorus Effluent limit rule in *UAC R317-1-3.3*.
- ^{h.} Metal parameters:
- | | | |
|------------|--------------|------------|
| • Arsenic | • Copper | • Nickel |
| • Boron | • Lead | • Selenium |
| • Cadmium | • Mercury | • Zinc |
| • Chromium | • Molybdenum | |
- ^{i.} Land Disposal monitoring results obtained during the previous month for land disposal discharges shall be summarized for each month and reported on a Monthly Operational Report, post-marked no later than the 28th day of the month following the completed reporting period.

Land Disposal System Requirements

Below are the land disposal system requirements as outlined in the March 31, 2011 letter from DWQ (DWQ-2011-010761) and are still in effect.

- 1) The disposal site is located west of Eureka City's existing lagoon system, in a buffer zone of City and Bureau of Land Management (BLM) ground. The disposal site is wholly located on land owned by Eureka City.

- 2) The disposal system will consist of a series of irrigation ditches with multiple flood gates to control water dispersal over controlled areas. The existing lagoon system already has pipes and valves within 50 feet of the proposal irrigation headworks.
- 3) Public access to this site is restricted by a five-foot stock-tight fence and will have signage posted "Restricted Access."
- 4) Tail water runoff will be prevented by a three-foot perimeter berm surrounding the entire site, right up to where the berm connects with the existing lagoon dike walls on the west side of the Lagoon.
- 5) Effluent will meet applicable discharge requirements prior to disposal on the land disposal site. Effluent monitoring sampling must be performed.

Management Practices for Land Disposal of Treated Effluent:

- 1) The application of treated effluent to frozen, ice-covered, or snow covered land is prohibited.
- 2) No person shall apply treated effluent where the slope of the site exceeds 6 percent.
- 3) The use should not result in a surface water runoff.
- 4) The use must not result in the creation of an unhealthy or nuisance condition, as determined by the local health department.
- 5) Any irrigation with treated effluent must be at least 300 feet from a potable well.
- 6) Impoundments of treated effluent, if not sealed, must be at least 500 feet from any potable well.
- 7) Public access to effluent storage and irrigation or disposal sites shall be restricted by a stock-tight fence or other comparable means which shall be posted and controlled to exclude the public.

Lagoon Best Management Practices:

- 1) The permittee shall take such precautions as are necessary to maintain and operate the facility in a manner that will minimize upsets and ensure stable operating conditions.
- 2) The permittee shall visually inspect, at least weekly, the pond(s) to determine if there is adequate freeboard to minimize the likelihood of an accidental discharge occurring. If it is determined that a discharge is occurring and/or there is not adequate freeboard, the appropriate corrective measures shall be taken immediately.
- 3) The permittee shall take precautions and have erosion control measures in place that, in the event of a bypass of treatment, the discharge will not cause any erosion into the Waters of the State.

BIOSOLIDS

The State of Utah has adopted the 40 CFR 503 federal regulations for the disposal of sewage sludge (biosolids) by reference. However, since this facility is a lagoon, there is not any regular sludge production. Therefore 40 CFR 503 does not apply at this time. In the future, if the sludge needs to be removed from the lagoons and is disposed in some way, the Division of Water Quality must be contacted prior to the removal of the sludge to ensure that all applicable state and federal regulations are met.

STORM WATER

STORMWATER 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:

1. Wastewater treatment facilities with a design flow of 1.0 MGD or greater, and/or,
2. Wastewater treatment facilities with an approved pretreatment program as described in 40CFR Part 403,

The Eureka Wastewater Treatment Facility 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.

PRETREATMENT REQUIREMENTS

The permittee has not been designated for pretreatment program development because it does not meet conditions which necessitate a full program. The flow through the plant is less than five (5) MGD, there are no known categorical industries discharging to the treatment facility, industrial discharges comprise less than 5 percent of the flow through the treatment facility, and there is no indication of pass through or interference with the operation of the treatment facility such as upsets or violations of the POTW's UPDES permit limits.

Although the permittee does not have to develop a State-approved pretreatment program, any wastewater discharges to the sanitary sewer are subject to Federal, State and local regulations. Pursuant to Section 307 of the Clean Water Act, the permittee shall comply with all applicable Federal General Pretreatment Regulations promulgated, found in 40 CFR 403 and the State Pretreatment Requirements found in UAC R317-8-8.

An industrial waste survey (IWS) is required of the permittee as stated in Part II of the permit. The IWS is to assess the needs of the permittee regarding pretreatment assistance. The IWS is required to be submitted within sixty (60) days after the issuance of the permit. If an Industrial User begins to discharge or an existing Industrial User changes their discharge the permittee must resubmit an IWS no later than sixty days following the introduction or change as stated in Part II of the permit.

It is required that the permittee submit for review any local limits that are developed to the Division of Water Quality for review. If local limits are developed it is required that the permittee perform an annual evaluation of the need to revise or develop technically based local limits for pollutants of concern, to implement the general and specific prohibitions *40 CFR, Part 403.5(a)* and *Part 403.5(b)*. This evaluation may indicate that present local limits are sufficiently protective, need to be revised or should be developed.

BIOMONITORING REQUIREMENTS

A nationwide effort to control toxic discharges where effluent toxicity is an existing or potential concern is regulated in accordance with the Utah Pollutant Discharge Elimination System Permit and Enforcement Guidance Document for Whole Effluent Toxicity Control (biomonitoring), dated February 2018. Authority to require effluent biomonitoring is provided in Permit Conditions, UAC R317-8-4.2, Permit Provisions, UAC R317-8-5.3 and Water Quality Standards, UAC R317-2-5 and R317 -2-7.2.

The permittee is a minor municipal facility that will be discharging an infrequent amount of effluent, in which toxicity is neither an existing concern, nor likely to be present. Also, the receiving irrigation ditch is regularly dry; therefore there is not any available data to conclude that the irrigation ditch is impaired. Based on these considerations, and the absence of receiving stream water quality monitoring data, there is no reasonable potential for toxicity in the permittee's discharge (per State of Utah Permitting and Enforcement Guidance Document for WET Control). As such, there will be no numerical WET limitations or WET monitoring requirements in this permit. However, the permit will contain a toxicity limitation re-opener provision that allows for modification of the permit should additional information indicate the presence of toxicity in the discharge.

PERMIT DURATION

It is recommended that this permit be effective for a duration of five (5) years.

Drafted by
Sarah Leavitt, Discharge
Dan Griffin, Biosolids
Jennifer Robinson, Pretreatment
Lonnie Shull, Biomonitoring
Lisa Stevens, Storm Water
Sarah Leavitt, Reasonable Potential Analysis
Dave Wham, Wasteload Analysis
Utah Division of Water Quality, (801) 536-4300

PUBLIC NOTICE

Began: December 7, 2019
Ended: January 7, 2020

The Public Noticed of the draft permit was published in THE DAILY HERALD.

No comments were received.

DWQ-2019-011634

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ATTACHMENT 1

Industrial Waste Survey

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Industrial Pretreatment Wastewater Survey



Do you periodically experience any of the following treatment works problems:

- foam, floaties or unusual colors
- plugged collection lines caused by grease, sand, flour, etc.
- discharging excessive suspended solids, even in the winter
- smells unusually bad
- waste treatment facility doesn't seem to be treating the waste right

Perhaps the solution to a problem like one of these may lie in investigating the types and amounts of wastewater entering the sewer system from industrial users.

An industrial user (IU) is defined as a non-domestic user discharging to the waste treatment facility which meets any of the following criteria:

1. **has a lot of process wastewater (5% of the flow at the waste treatment facility or more than 25,000 gallons per work day.)**

Examples: Food processor, dairy, slaughterhouse, industrial laundry.

2. **is subject to Federal Categorical Pretreatment Standards;**

Examples: metal plating, cleaning or coating of metals, bluing of metals, aluminum extruding, circuit board manufacturing, tanning animal skins, pesticide formulating or packaging, and pharmaceutical manufacturing or packaging,

3. **is a concern to the POTW.**

Examples: septage hauler, restaurant and food service, car wash, hospital, photo lab, carpet cleaner, commercial laundry.

All users of the water treatment facility are **prohibited** from making the following types of discharges:

1. A discharge which creates a fire or explosion hazard in the collection system.
2. A discharge which creates toxic gases, vapor or fumes in the collection system.
3. A discharge of solids or thick liquids which creates flow obstructions in the collection system.
4. An acidic discharge (low pH) which causes corrosive damage to the collection system.
5. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause problems in the collection system or at the waste treatment facility.
6. Waste haulers are prohibited from discharging without permission. (No midnight dumping!)

When the solution to a sewer system problem may be found by investigating the types and amounts of wastewater entering the sewer system discharged from IUs, it's appropriate to conduct an Industrial Waste Survey.

An Industrial Waste Survey consists of:

Step 1: Identify Industrial Users

Make a list of all the commercial and industrial sewer connections.

Sources for the list:

business license, building permits, water and wastewater billing, Chamber of Commerce, newspaper, telephone book, yellow pages.

Split the list into two groups:

domestic wastewater only--no further information needed
everyone else (IUs)

Step 2: Preliminary Inspection

Go visit each IU identified on the "everybody else" list.

Fill out the **Preliminary Inspection Form** during the site visit.

Step 3: Informing the State

Please fax or send a copy of the Preliminary inspection form (both sides) to:

Jennifer Robinson

Division of Water Quality
288 North 1460 West
PO Box 144870
Salt Lake City, UT 84114-4870

Phone: (801) 536-4383
Fax: (801) 536-4301
E-mail: jenrobinson@utah.gov

PRELIMINARY INSPECTION FORM

INSPECTION DATE ___ / ___ /

Name of Business _____ Person Contacted _____
Address _____ Phone Number _____

Description of Business _____

Principal product or service: _____

Raw Materials used: _____

Production process is: Batch Continuous Both

Is production subject to seasonal variation? yes no

If yes, briefly describe seasonal production cycle.

This facility generates the following types of wastes (check all that apply):

- | | |
|--|--|
| 1. <input type="checkbox"/> Domestic wastes | (Restrooms, employee showers, etc.) |
| 2. <input type="checkbox"/> Cooling water, non-contact | 3. <input type="checkbox"/> Boiler/Tower blow down |
| 4. <input type="checkbox"/> Cooling water, contact | 5. <input type="checkbox"/> Process |
| 6. <input type="checkbox"/> Equipment/Facility wash-down | 7. <input type="checkbox"/> Air Pollution Control Unit |
| 8. <input type="checkbox"/> Storm water runoff to sewer | 9. <input type="checkbox"/> Other describe |

Wastes are discharged to (check all that apply):

- | | |
|---|---------------------------------------|
| <input type="checkbox"/> Sanitary sewer | <input type="checkbox"/> Storm sewer |
| <input type="checkbox"/> Surface water | <input type="checkbox"/> Ground water |
| <input type="checkbox"/> Waste haulers | <input type="checkbox"/> Evaporation |
| <input type="checkbox"/> Other (describe) | |

Name of waste hauler(s), if used

Is a grease trap installed? Yes No

Is it operational? Yes No

Does the business discharge a lot of process wastewater?

- | | | |
|---|-----|----|
| • More than 5% of the flow to the waste treatment facility? | Yes | No |
| • More than 25,000 gallons per work day? | Yes | No |

Does the business do any of the following:

- | | |
|---|--|
| <input type="checkbox"/> Adhesives | <input type="checkbox"/> Car Wash |
| <input type="checkbox"/> Aluminum Forming | <input type="checkbox"/> Carpet Cleaner |
| <input type="checkbox"/> Battery Manufacturing | <input type="checkbox"/> Dairy |
| <input type="checkbox"/> Copper Forming | <input type="checkbox"/> Food Processor |
| <input type="checkbox"/> Electric & Electronic Components | <input type="checkbox"/> Hospital |
| <input type="checkbox"/> Explosives Manufacturing | <input type="checkbox"/> Laundries |
| <input type="checkbox"/> Foundries | <input type="checkbox"/> Photo Lab |
| <input type="checkbox"/> Inorganic Chemicals Mfg. or Packaging | <input type="checkbox"/> Restaurant & Food Service |
| <input type="checkbox"/> Industrial Porcelain Ceramic Manufacturing | <input type="checkbox"/> Septage Hauler |
| <input type="checkbox"/> Iron & Steel | <input type="checkbox"/> Slaughter House |
| <input type="checkbox"/> Metal Finishing, Coating or Cleaning | |
| <input type="checkbox"/> Mining | |
| <input type="checkbox"/> Nonferrous Metals Manufacturing | |
| <input type="checkbox"/> Organic Chemicals Manufacturing or Packaging | |
| <input type="checkbox"/> Paint & Ink Manufacturing | |
| <input type="checkbox"/> Pesticides Formulating or Packaging | |
| <input type="checkbox"/> Petroleum Refining | |
| <input type="checkbox"/> Pharmaceuticals Manufacturing or Packaging | |
| <input type="checkbox"/> Plastics Manufacturing | |
| <input type="checkbox"/> Rubber Manufacturing | |
| <input type="checkbox"/> Soaps & Detergents Manufacturing | |
| <input type="checkbox"/> Steam Electric Generation | |
| <input type="checkbox"/> Tanning Animal Skins | |
| <input type="checkbox"/> Textile Mills | |

Are any process changes or expansions planned during the next three years? Yes No
If yes, attach a separate sheet to this form describing the nature of planned changes or expansions.

Inspector

Waste Treatment Facility

Please send a copy of the preliminary inspection form (both sides) to:

Jennifer Robinson
Division of Water Quality
PO Box 144870
Salt Lake City, Utah 84114-4870

Phone: (801) 536-4383
Fax: (801) 536-4301
E-Mail: jenrobinson@utah.gov

	Industrial User	Jurisdiction	SIC Codes	Categorical Standard Number	Total Average Process Flow (gpd)	Total Average Facility Flow (gpd)	Facility Description
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							

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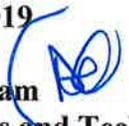
ATTACHMENT 2

Wasteload Analysis

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

Date: July 1, 2019

Prepared by: Dave Wham 
Standards and Technical Services Section

Facility: Eureka Wastewater Treatment Facility
UPDES No. UT0024601

Receiving water: Eureka Creek (2B, 3E, 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 effluent limitations necessary to maintain designated beneficial uses by evaluating projected effects of a discharge 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 secondary standards, categorical limits, narrative criteria and other conditions determined by staff of the Division of Water Quality.

Discharge

Outfall 001: Eureka Creek

The mean monthly design discharge for the facility is .2 MGD.

Receiving Water

EWTF discharges into Eureka Creek, an ephemeral wash, which is tributary to Tanner Creek. The confluence of Tanner and Eureka Creek is approximately 9 miles south of where the effluent enters Eureka Creek. The waters of Tanner Creek are classified as 2B, 3E, 4, as per UAC R317-2, and are part of the Sevier River system.

- *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 3E -- Severely habitat-limited waters. Narrative standards will be applied to protect these waters for aquatic wildlife.*
- *Class 4 - Protected for agricultural uses including irrigation of crops and stock watering.*

The critical low flow for the wasteload analysis is the lowest stream flow for seven consecutive days with a ten year return frequency (7Q10). Since Eureka Creek is an ephemeral wash, the 7Q10 is assumed to be zero. As a result, effluent limits revert to the applicable water quality standards at end-of-pipe.

Utah Division of Water Quality
Wasteload Analysis
Eureka Wastewater Treatment Facility
UPDES No. UT0024601

TMDL

Tanner Creek and its tributaries are not listed as impaired on the 2016 303(d) list.

Parameters of Concern

No additional parameters of concern were identified in addition to covered under secondary standards.

Water Quality Modeling

No modeling was required for this discharge because standards are assumed to be end-of pipe (no mixing).

Effluent Limitations

Effluent limitations applicable to Class 4 waters

TDS	1200.00	mg/l
Arsenic	100.00	ug/l
Boron	750	ug/l
Cadmium	10.00	ug/l
Chromium	100.00	ug/l
Copper	200.00	ug/l
Lead	100.00	ug/l
Selenium	50.00	ug/l
Gross Alpha	15.00	pCi/l

Effluent limitations applicable to Class 2B waters

E.Coli (30 day max)	206	No./100 ml
E.Coli (max)	668	No./100 ml
Turbidity increase	10	NTU

Antidegradation Level I Review

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

A Level II Antidegradation Review (ADR) is not required for this discharge since neither the design capacity or allowable effluent concentration has increased from the previous permit cycle.

ATTACHMENT 3

Reasonable Potential Analysis

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REASONABLE POTENTIAL ANALYSIS

Water Quality has worked to improve our reasonable potential analysis (RP) for the inclusion of limits for parameters in the permit by using an EPA provided model. As a result of the model, more parameters may be included in the renewal permit. A RP was not conducted for Eureka City for lack of available data.