## 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. **UT0020338**Biosolids Permit No. **UTL020338** 

In compliance with provisions of the Utah Water Quality Act, Title 19, Chapter 5, Utah Code (the "Act"),

### THE UNITED STATES BUREAU OF RECLAMATION (USBR)

is hereby authorized to discharge from

### USBR FLAMING GORGE DAM WASTEWATER TREATMENT PLANT

to receiving waters named GREEN RIVER,

to dispose biosolids,

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

This permit shall become effective on December 1, 2022

This permit expires at midnight on November 30, 2027.

Signed this Seventeenth day of November, 2022.

oh K. Mackey

John K. Mackey, P.E.

Director

DWQ-2022-027259

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### I. DISCHARGE LIMITATIONS AND REPORTING REQUIREMENTS

A. <u>Description of Discharge Points</u>. 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 01 Location of Discharge Outfall

Located at latitude 40° 54′ 30″ and longitude 109° 25′ 25″. The discharge is through a pipe leading from the chlorine contact basin to the Green 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:

	Effluent Limitations *a					
Parameter	Maximum	Maximum	Yearly	Daily	Daily	
	Monthly Avg	Weekly Avg	Average	Minimum	Maximum	
Total Flow	0.0064					
BOD <sub>5</sub> , mg/L	25	35				
BOD <sub>5</sub> Min. % Removal	85					
TSS, mg/L	25	35				
TSS Min. % Removal	85					
E. coli, No./100mL	126	157				
Oil & Grease, mg/L					10.0	
pH, Standard Units				6.5	9	
TDS, mg/L, *f	< 400 increase					

Self-Monitoring and Reporting Requirements *a							
Parameter Frequency Sample Type Units							
Total Flow *b, *c	Continuous	Recorder	MGD				
BOD <sub>5</sub> , Influent *d	Monthly	Composite	mg/L				
Effluent	Monthly	Composite	mg/L				

TSS, Influent *d	Monthly	Composite	mg/L
Effluent	Monthly	Composite	mg/L
E. coli	Monthly	Grab	No./100mL
pН	Monthly	Grab	SU
TRC, mg/L	Yearly	Grab	mg/L
Oil & Grease *e	When Sheen Observed	Grab	mg/L
Orthophosphate (as P), *g			
Effluent	Monthly	Composite	mg/L
Total Phosphorus (as P), *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	Monthly	Composite	mg/L
Nitrite, NO2 *g	Monthly	Composite	mg/L
TDS, mg/L, *f			
Effluent	Yearly	Grab	mg/L
Source Water	Yearly	Grab	mg/L

- \*a See Definitions, *Part VIII*, 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 Oil & Grease sampled when sheen is present or visible. If no sheen is present or visible, report NA.
- \*f The effluent shall not exceed the culinary source water intake by more than 400 mg/L of TDS (\*\*\*\*\*\*or the permittee could request 1 ton/day salt loading, or 366 tons/year\*\*\*\*\*\*).
- \*g These reflect changes required with the adoption of UCA R317-1-3.3, Technology-based Phosphorus Effluent Limits rule.

### 2. Acute/Chronic Whole Effluent Toxicity (WET) Testing.

As part of the nationwide effort to control toxics, biomonitoring requirements are being included in all major permits and in minor permits for facilities where effluent toxicity is an existing or potential concern. Authorization for requiring effluent biomonitoring is provided for in UAC R317-8-4.2 and R317-8-5.3. The Whole Effluent Toxicity (WET) Control Guidance Document, February 15, 1991, outlines guidance to be used by Utah Division of Water Quality staff and by permittee's for implementation of WET control through the UPDES discharge permit program.

### PART I DISCHARGE PERMIT NO. UT0020338 WASTEWATER

Flaming Gorge is a minor point source along the Green River. Comparison of the laboratory analysis performed on their effluent to the waste load analysis on the Green River, Flaming Gorge's discharge is not likely to be toxic. As a result, biomonitoring of the effluent will not be required. However, the permit will contain a WET reopener provision

### 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, 2022. 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

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

### II. PRETREATMENT REQUIREMENTS

- A. <u>Definitions</u>. 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 CWA.
  - 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 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 CWA, which is owned by a State or municipality (as defined by section 502(4) of the CWA). 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 CWA, 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 Monitoring and Reporting Requirements.

- 1. Because the design capacity of this municipal wastewater treatment facility is less than 5 MGD, the permittee will not be required to develop an Approved Pretreatment Program. However, in order to determine if development of an Approved 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.
- 2. Monitoring will not be required of the permittee for the pretreatment requirements at this time. If changes occur monitoring may be required for parameters not currently listed in the permit or current monitoring requirements may be required to be increased to determine the impact of an Industrial User or to investigate sources of pollutant loading. This could include but is not limited to sampling of the influent and effluent of the wastewater treatment plant and within the collection system.
- 3. For Local Limit parameters it is recommended that the most sensitive method be used for analysis. This will determine if the parameter is present and provide removal efficiencies based on actual data rather than literature values. If a parameter load is greater than the allowable head works load, for any pollutant of concern listed in the Local Limit development document or determined by the Director, the permittee must report this information to the Pretreatment Coordinator for the Division of Water Quality. If the loading exceeds the allowable headworks load, increase sampling must occur based on the requirements given by the Pretreatment Coordinator for the Division of Water Quality. If needed sampling may need to occur to find the source(s) of the increase. This may include sampling of the collection system. Notification regarding the exceedances of the allowable headworks loading can be provided via email.

### C. Industrial Wastes.

- 1. The "Industrial Waste Survey" or "IWS" as required by Part II.B.1. consists of;
  - a. Identifying each Industrial User (IU), including waste haulers, 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 or controlled at all times. Updates must be submitted to the Director sixty (60) days following a change to the IWS.
- 3. Notify all Significant Industrial Users (SIUs) of their obligation to comply with applicable requirements under *Subtitles C and D* of the *Resource* Conservation and Recovery Act (RCRA).

### PART II DISCHARGE PERMIT NO. UT0020338 PRETREATMENT

- 4. 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 permittee must ensure that no IU violates any of the general or specific standards. If an IU is found violating a general or specific standard the permittee must notify the Director within 24 hours of the event. 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. <u>General prohibition Standards.</u> A User may not introduce into a POTW any pollutant(s) which cause Pass Through or Interference.
  - 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 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.
    - j. Any prohibited standard which the permittee has adopted in an ordinance or rule to control IU discharge to 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. <u>Significant Industrial Users Discharging to the POTW</u>. The permittee shall provide adequate notice to the Director and the 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:
    - 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 POTW.
  - 4. Any IU that must comply with applicable requirements under Subtitles C and D of the Resource Conservation and Recovery Act (RCRA).
- F. <u>Change of Conditions.</u> 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. 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 POTW. Such requirement shall be imposed in a manner consistent with the requirements of an Approved Pretreatment Program or the permittee may request that the DWQ issue a permit to the Industrial User;
  - 2. Require the Industrial User to monitor its discharge for any pollutant, which may likely be discharged to the POTW, unless a permit has been issued by DWQ to the Industrial User;
  - 3. Amend the UPDES discharge permit to specify the additional pollutant(s) and corresponding effluent limitation(s) consistent with the applicable Pretreatment Standards and Requirements. This could include the monitoring of the influent as well to ensure that the Industrial User is properly treating its waste; or
  - 4. Require the permittee to develop an Approved Pretreatment Program.
- G. <u>Legal Action</u>. The Director retains, at all times, the right to take legal action against the Industrial User or the permittee, 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. <u>Local Limits</u>. 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). Local Limits should be developed in accordance with the latest revision of the EPA Local Limits Development Guidance and per R317-8-8.5.

### III. BIOSOLIDS REQUIREMENTS

A. <u>Biosolids Treatment and Disposal</u>. The authorization to dispose 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 designated below.

### 1. Treatment

a. Transfer - Biosolids produced at the Flaming Gorge facility are pumped from the clarifiers and hauled to the town of Dutch John and disposed of in the Dutch John wastewater lagoons.

### 2. <u>Description of Biosolids Disposal Method</u>

- 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 transferred to another facility for treatment and/or disposal.

### 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 Part 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 Part 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.

### IV. STORM WATER REQUIREMENTS.

A. <u>Construction Storm Water Permit.</u> Any construction at the facility that disturbs an acre or more of land, including less than an acre if it is part of a common plan of development or sale, is required to obtain coverage under the UPDES Construction General Storm Water Permit (UTRC00000). Permit coverage must be obtained prior to land disturbance. If the site qualifies, a Low Erosivity Waiver (LEW) Certification may be submitted instead of permit coverage.

### V. MONITORING, RECORDING & GENERAL REPORTING REQUIREMENTS

- A. <u>Representative Sampling.</u> 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, utilizing sufficiently sensitive test methods unless other test procedures have been specified in this permit.
- C. <u>Penalties for Tampering.</u> 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. <u>Compliance Schedules.</u> 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 Part* 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 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 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. <u>Inspection and Entry</u> 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.

### VI. COMPLIANCE RESPONSIBILITIES

- A. <u>Duty to Comply</u>. 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 The Act Section 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. <u>Need to Halt or Reduce Activity not a Defense</u>. 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. <u>Duty to Mitigate</u>. 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. <u>Proper Operation and Maintenance</u>. 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. <u>Removed Substances</u>. 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. <u>Bypass Not Exceeding Limitations</u>. 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. <u>Prohibition of Bypass</u>.

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

### 3. Notice.

- a. Anticipated bypass. Except as provided above in Part VI.G.2 and below in Part 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 soon as it becomes aware of the need to bypass and provide to the Director the information in *Part 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. <u>Effect of an upset</u>. 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. <u>Planned Changes</u>. 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. <u>Anticipated Noncompliance</u>. 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. <u>Permit Actions.</u> 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. <u>Duty to Reapply</u>. 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. <u>Duty to Provide Information</u>. 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. <u>Signatory Requirements</u>. All applications, reports or information submitted to the Director shall be signed and certified.
  - 1. All permit applications shall be signed by either a principal executive officer or ranking elected official.
  - 2. All reports required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
    - a. The authorization is made in writing by a person described above and submitted to the Director, and,
    - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position

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. <u>Changes to authorization</u>. 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. <u>Certification</u>. 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. <u>Availability of Reports</u>. 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. <u>Property Rights</u>. 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. <u>Severability</u>. 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. <u>Transfers</u>. 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 Sections 19-5-117 and 510 of the Act or any applicable Federal or State transportation regulations, such as but not limited to the Department of Transportation regulations.
- O. <u>Water Quality Reopener Provision</u>. This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations and compliance schedule, if necessary, if one or more of the following events occurs:
  - 1. Water Quality Standards for the receiving water(s) to which the permittee discharges are modified in such a manner as to require different effluent limits than contained in this permit.
  - 2. A final wasteload allocation is developed and approved by the State and/or EPA for incorporation in this permit.
  - 3. Revisions to the current CWA § 208 areawide treatment management plans or promulgations/revisions to TMDLs (40 CFR 130.7) approved by the EPA and adopted by DWQ which calls for different effluent limitations than contained in this permit.
- P. <u>Biosolids Reopener Provision</u>. 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. <u>Toxicity Limitation Reopener Provision</u>. 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.

### 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 "LC<sub>50</sub>").
- 5. "Bypass," means the diversion of waste streams from any portion of a treatment facility.
- 6. "Chronic toxicity" occurs when the  $IC_{25}$ < 0.0121% 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.
- 7. "IC<sub>25</sub>" 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.
- 8. "Composite Samples" shall be flow proportioned. The composite sample shall, as a minimum, contain at least four (4) samples collected over the compositing period. Unless otherwise specified, the time between the collection of the first sample and the last sample shall not be less than six (6) hours nor more than 24 hours. Acceptable methods for preparation of composite samples are as follows:
  - a. Constant time interval between samples, sample volume proportional to flow rate at time of sampling;

- b. Constant time interval between samples, sample volume proportional to total flow (volume) since last sample. For the first sample, the flow rate at the time the sample was collected may be used;
- c. Constant sample volume, time interval between samples proportional to flow (i.e., sample taken every "X" gallons of flow); and,
- d. Continuous sample volume, with sample collection rate proportional to flow rate.
- 9. "CWA" means *The Federal Water Pollution Control Act*, as amended, by *The Clean Water Act of 1987*.
- 10. "Daily Maximum" (Daily Max.) is the maximum value allowable in any single sample or instantaneous measurement.
- 11. "EPA," means the United States Environmental Protection Agency.
- 12. "Director," means Director of the Division of Water Quality.
- 13. A "grab" sample, for monitoring requirements, is defined as a single "dip and take" sample collected at a representative point in the discharge stream.
- 14. An "instantaneous" measurement, for monitoring requirements, is defined as a single reading, observation, or measurement.
- 15. "Severe Property Damage," means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- 16. "Upset," means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

### 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 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 mosquito's 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.
- 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 AND STATEMENT OF BASIS USBR FLAMING GORGE DAM WASTEWATER TREATMENT PLANT RENEWAL PERMIT: DISCHARGE & BIOSOLIDS UPDES PERMIT NUMBER: UT0020338 UPDES BIOSOLIDS PERMIT NUMBER: UTL-020338MINOR MUNICIPAL

### **FACILITY CONTACTS**

Person Name: C. Steven Hulet

Position: Manager Flaming Gorge Field Division

Person Name: Jared Marquis
Position: Plant Superintendent
Phone Number: (435) 885-3106

Permittee: The United States Bureau of Reclamation (USBR)

Facility Name: USBR – Flaming Gorge Dam Wastewater Treatment Plant

Mailing and Facility Address: 5995 Flaming Gorge Visitor Center

Dutch John, Utah 84023

Telephone: (801) 524-3620

### **DESCRIPTION OF FACILITY**

The USBR Flaming Gorge Dam Wastewater Treatment Plant (Flaming Gorge) is located at the Dam site in Daggett County. The facility serves the Flaming Gorge Dam Visitors Center and the United States Bureau of Reclamation personnel employed at the Dam. The flow varies from extremely low flows during the winter months to high flows during the summer months.

The treatment plant is located within the Dam and the discharge flows into the Green River via a 6" pipe. The raw wastewater is fed into a holding tank, which then pumps the wastewater as needed to the treatment plant. The treatment process consists of a screening basket, followed by an aerator, a settling tank, an airlift skimmer, and finally the chlorination chamber. The facility is located at latitude 40°54'30" and longitude 109°25'25", with an outfall STORET Number of 493850.

### SUMMARY OF CHANGES FROM PREVIOUS PERMIT

There have been no changes in the operation of the facility since the last permit cycle.

TRC:

Total Residual Chlorine (TRC) monitoring will now be required at a frequency of once a year.

### **DISCHARGE**

### **DESCRIPTION OF DISCHARGE**

The Flaming Gorge discharges directly into the Green River. USBR has been reporting self-monitoring results on Discharge Monitoring Reports (DMRs) on a monthly basis. There were total suspended solids (TSS) and biological oxygen demand (BOD) violations reported during the last permit cycle.

Outfall	Description of Discharge Point
001	Located at latitude 40° 54′ 30″ and longitude 109° 25′ 25″. The discharge is through a pipe leading from the chlorine
	contact hasin to the Green River.

### RECEIVING WATERS AND STREAM CLASSIFICATION

If a discharge were to occur, it would be pumped into an irrigation ditch, which is a Class 2B, 3A, and 4 according to *UAC R317-2-13*:

Class 2B	Protected for infrequent primary contact recreation. Also protected for secondary contact
	recreation where there is a low likelihood of ingestion of water or a low degree of bodily
	contact with the water. Examples include, but are not limited to, wading, hunting, and
	fishing.

Class 3A -- Protected for cold water species of game fish and other cold-water aquatic life, including the necessary aquatic organisms in their food chain.

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

### TOTAL MAXIMUM DAILY LOAD (TMDL) REQUIREMENTS

According to the Utah's 2022 303(d) Water Quality Assessment Report "Final 2022 Integrated Report on Water Quality", the receiving water for the discharge, Green River and tributaries, from Utah-Colorado state line to Flaming Gorge Dam except as listed, Green River-1, AU ID: UT14040106-019\_00, is listed as Fully Supporting.

### **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 is based on best professional judgment (BPJ). Dissolved oxygen (DO) land TRC limits were not included due to the effluent percent in the receiving water. 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.

Total dissolved solids (TDS) limitations are based upon Utah Water Quality Standards for concentration values and the Colorado River Basin Salinity Control Forum (CRBSCF) for mass loading values when applicable as authorized in *UAC R317-2-4*. CRBSCF has established a policy for the reasonable increase of salinity for municipal discharges to any portion of the Colorado River stream system that has an impact on the lower main stem. The CRBSCF Policy entitled "NPDES Permit Program Policy for Implementation of Colorado River Salinity Standards" (Policy), with the most current version dated October 2020, states that the incremental increase in salinity shall be 400 mg/L or less, which is considered to be a reasonable incremental increase above the flow weighted average salinity of the intake water supply.

### **Reasonable Potential Analysis**

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

Flaming Gorge has not monitored for metals in the past, and as a result there is no data to evaluate in a RP. Flaming Gorge has had minimal discharge during the life cycle of the permit and has limited to no industrial contributions to their waste stream. Therefore, it was determined that no RP was required, and that no metals monitoring is to be added to the permit.

The permit limitations are:

	Effluent Limitations *a						
Parameter	Maximum	Maximum	Yearly	Daily	Daily		
	Monthly Avg	Weekly Avg	Average	Minimum	Maximum		
Total Flow	0.0064						
BOD <sub>5</sub> , mg/L	25	35					
BOD <sub>5</sub> Min. % Removal	85						
TSS, mg/L	25	35					
TSS Min. % Removal	85						
E. coli, No./100mL	126	157					
Oil & Grease, mg/L					10.0		
pH, Standard Units				6.5	9		
TDS, mg/L, *f	< 400 increase						

### SELF-MONITORING AND REPORTING REQUIREMENTS

The following self-monitoring requirements are not the same as in the previous permit. A TRC monitoring requirement has been added. The permit will require reports to be submitted monthly and annually, as applicable, on Discharge Monitoring Report (DMR) forms due 28 days after the end of the monitoring period. Effective January 1, 2017, monitoring results must be submitted using NetDMR unless the permittee has successfully petitioned for an exception. Lab sheets for biomonitoring must be attached to the biomonitoring DMR. Lab sheets for metals and toxic organics must be attached to the DMRs.

Self-Monitoring and Reporting Requirements *a							
Parameter	Frequency	Sample Type	Units				
Total Flow *b, *c	Continuous	Recorder	MGD				
BOD <sub>5</sub> , Influent *d	Monthly	Composite	mg/L				
Effluent	Monthly	Composite	mg/L				
TSS, Influent *d	Monthly	Composite	mg/L				
Effluent	Monthly	Composite	mg/L				
E. coli	Monthly	Grab	No./100mL				
рН	Monthly	Grab	SU				
TRC, mg/L	Yearly	Grab	mg/L				
Oil & Grease *e	When Sheen Observed	Grab	mg/L				
Orthophosphate (as P), *g							
Effluent	Monthly	Composite	mg/L				
Total Phosphorus (as P), *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	Monthly	Composite	mg/L				
Nitrite, NO2 *g	Monthly	Composite	mg/L				
TDS, mg/L, *f							
Effluent	Yearly	Grab	mg/L				
Source Water	Yearly	Grab	mg/L				

- \*a See Definitions, *Part VIII*, 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 Oil & Grease sampled when sheen is present or visible. If no sheen is present or visible, report NA.
- \*f The effluent shall not exceed the culinary source water intake by more than 400 mg/L of TDS (\*\*\*\*\*\*or the permittee could request 1 ton/day salt loading, or 366 tons/year\*\*\*\*\*\*).
- \*g These reflect changes required with the adoption of UCA R317-1-3.3, Technology-based Phosphorus Effluent Limits rule.

### **BIOSOLIDS**

For clarification purposes, sewage sludge is considered solids, until treatment or testing shows that the solids are safe, and meet beneficial use standards. After the solids are tested or treated, the solids are then known as biosolids. Class A biosolids, may be used for high public contact sites, such as home lawns and gardens, parks, or playing fields, etc. Class B biosolids may be used for low public contact sites, such as farms, rangeland, or reclamation sites, etc.

### DESCRIPTION OF TREATMENT AND DISPOSAL

The only solids (sewage sludge) produced from Flaming Gorge is from the clarifiers. The solids are pumped twice a year from the clarifiers to a truck and hauled to the town of Dutch John and disposed of in their lagoons. Because there is no regular solids production the requirements of 40 CFR 503 (standards for the use or disposal of sewage sludge) do not apply unless the solids are removed from the Dutch John lagoon system and disposed of, therefore there are no monitoring requirements.

### **STORM WATER**

Separate storm water permits may be required based on the types of activities occurring on site.

Permit coverage under the Construction General Storm Water Permit (CGP) is required for any construction at the facility which disturb an acre or more, or is part of a common plan of development or sale that is an acre or greater. A Notice of Intent (NOI) is required to obtain a construction storm water permit prior to the period of construction.

Information on storm water permit requirements can be found at http://stormwater.utah.gov

### PRETREATMENT REQUIREMENTS

The permittee has not been designated to develop an Approved Pretreatment Program because the Publicly Owned Treatment Works (POTW) does not meet the necessary conditions. This determination is based on the following: the flow through the POTW is less than five (5) MGD, no Industrial Users are discharging to the POTW, and there is no indication of Pass Through or Interference with the operation of the POTW due to accepting wastewater from Industrial Users or waste haulers.

Additional monitoring for parameters of concern will not be required of the permittee. This is based on the facility not having industrial users discharging to the POTW. If the permittee accepts hauled waste, this requirement may be necessary to determine if the hauled waste is impacting the POTW.

Although the permittee does not have to develop an Approved Pretreatment Program, any wastewater discharges to the POTW 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.

As stated in Part II of the permit, an industrial waste survey (IWS) is a requirement for the permittee. The IWS is to assess the needs of the permittee regarding pretreatment assistance by DWQ. If Industrial Users or hauled wastewater is being discharged to the POTW, the permittee must notify DWQ of the discharge per the requirements of the permit. If an Industrial User or hauled waste is discharged to the POTW, 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 submits to DWQ for review any local limits that are developed to protect the POTW. If local limits are developed, the permittee must evaluate annually 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 potential for toxicity is not deemed sufficient to require biomonitoring or whole effluent toxicity (WET) limits because there are no present or anticipated industrial dischargers on the system nor are there any anticipated for the duration of this permit. The waste discharge is anticipated to be household waste only. Therefore, biomonitoring is not required in this permit; however, the permit will contain a WET reopener provision.

### **PERMIT DURATION**

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

Drafted and Reviewed by
Danielle Lenz, Discharge
Daniel Griffin, Biosolids
Jennifer Robinson, Pretreatment
Lonnie Shull, Biomonitoring
Carl Adams, Storm Water
Christopher Shope, Wasteload Analysis
Utah Division of Water Quality, (801) 536-4300

### **PUBLIC NOTICE**

Began: October 7, 2022 Ended: November 7, 2022

Comments will be received at: 195 North 1950 West

PO Box 144870

Salt Lake City, UT 84114-4870

The Public Noticed of the draft permit was published on our DWQ webpage.

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

### ADDENDUM TO FSSOB

During finalization of the Permit certain dates, spelling edits and minor language corrections were completed. Due to the nature of these changes they were not considered Major and the permit is not required to be re Public Noticed.

### **RESPONSIVENESS SUMMARY**

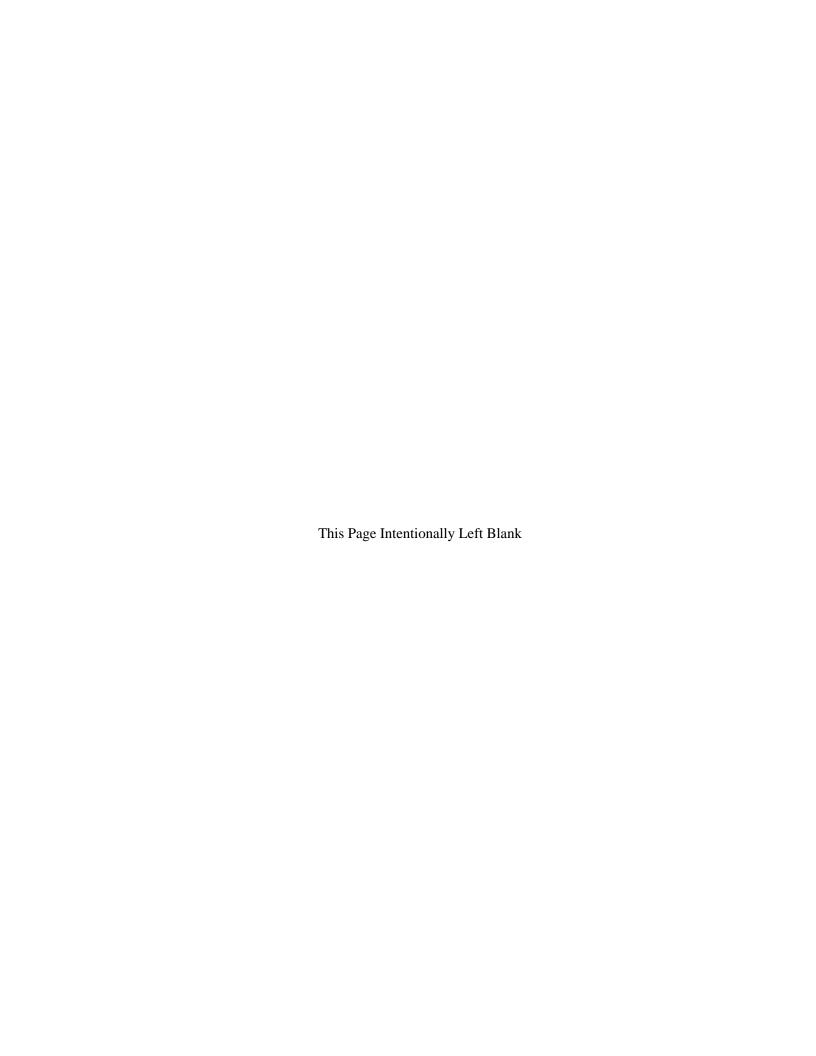
No comments were received during the Public Notice comment period.

DWQ-2022-027527



## **ATTACHMENT 1**

Effluent Monitoring Data



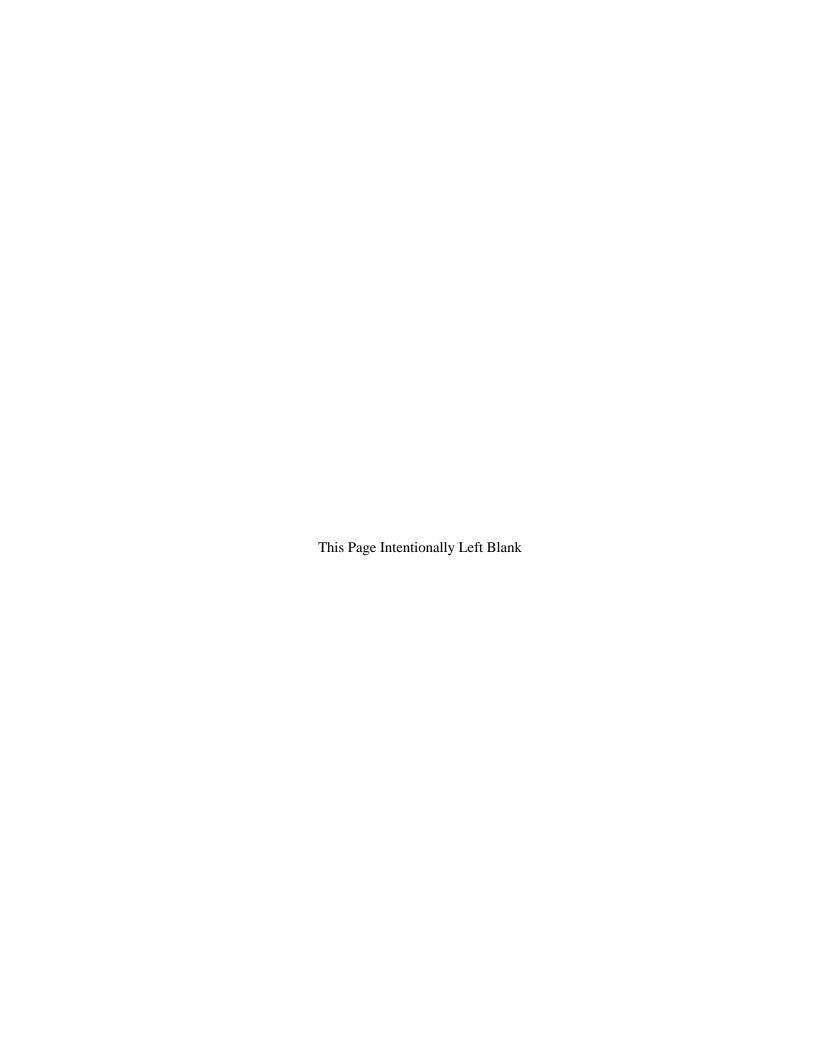
### **Effluent Monitoring Data Sample**

	Flow	рН		E. coli		BOD5	*	BOD 5 %	TSS %	TSS*	
Month	Ave	Min	Max	Acute	Chronic	Ave	Max	Removal	Removal	Ave	Max
Jan-20	0.00025	8.16	8.42	0	0	5	5	100	81	44.8	44.8
Feb-20	0.00105	7.65	8.22	0	0	5	5	100	84.3	18	18
Mar-20	0.0005	7.87	8.56	0	0	5	5	100	86.7	19.6	19.6
Apr-20	0.00035	7.86	8.25	0	0	5	5	100	90.2	10	10
May-20	0.00065	7.64	8.9	0	0	5	5	100	90.6	16.8	16.8
Jun-20	0.00075	7.32	8.99	0	0	5	5	100	89.3	24.4	24.4
Jul-20	0.0014	8.31	8.99	0	0	5	5	100	96.4	18.4	18.4
Aug-20	0.001	7.9	8.98	0	0	5	5	100	82.5	21.3	21.3
Sep-20	0.00115	6.58	8.28	0	0	5	5	100	89.2	18.4	18.4
Oct-20	0.00045	8.08	8.98	0	0	5	5	100	83.4	31.6	31.6
Nov-20	0.0012	7.38	7.83	0	0	18.7	18.7	90.2	89.6	21	21
Dec-20	0.0003	7.11	7.83	0	0	5	5	100	88.3	15.2	15.2
Jan-21	0.0009	7.31	7.78	0	0	9.67	9.67	87.8	92.5	9.2	9.2
Feb-21	0.0002	7.41	7.77	0	0	23.2	23.2	92.7	97.9	8.5	8.5
Mar-21	0.00035	7.5	7.69	0	0	5	5	100	90.1	24.8	24.8
Apr-21	0.0004	6.81	7.67	0	0	5	5	100	82	31.2	31.2
May-21	0.00185	7.01	7.53	0	0	5	5	100	94	22.8	22.8
Jun-21	0.001	7.66	7.84	0	0	5	5	100	86.3	29	29
Jul-21	0.0012	7.48	7.85	0	0	5.6	5.6	94	73.5	34.4	34.4
Aug-21	0.0009	7.39	8.01	0	0	12.7	12.7	91.8	82.4	32	32
Sep-21	0.0009	6.52	7.54	0	0	6	6	100	89	20	20
Oct-21	0.00045	7.15	7.54	0	0	5	5	100	94.2	19.6	19.6
Nov-21	0.00045	7.15	8.71	0	0	5	5	100	98.8	4	4
Dec-21	0.00025	7.32	7.72	0	0	5	5	100	97.5	4.8	4.8
Jan-22	0.00065	7.45	8.11	0	0	5	5	100	95.2	6	6
Feb-22	0.00035	7.41	8.42	0	0	5	5	95.1	95.5	8	8

<sup>\*</sup>Ave and Max values are the same because samples are only taken once a month.

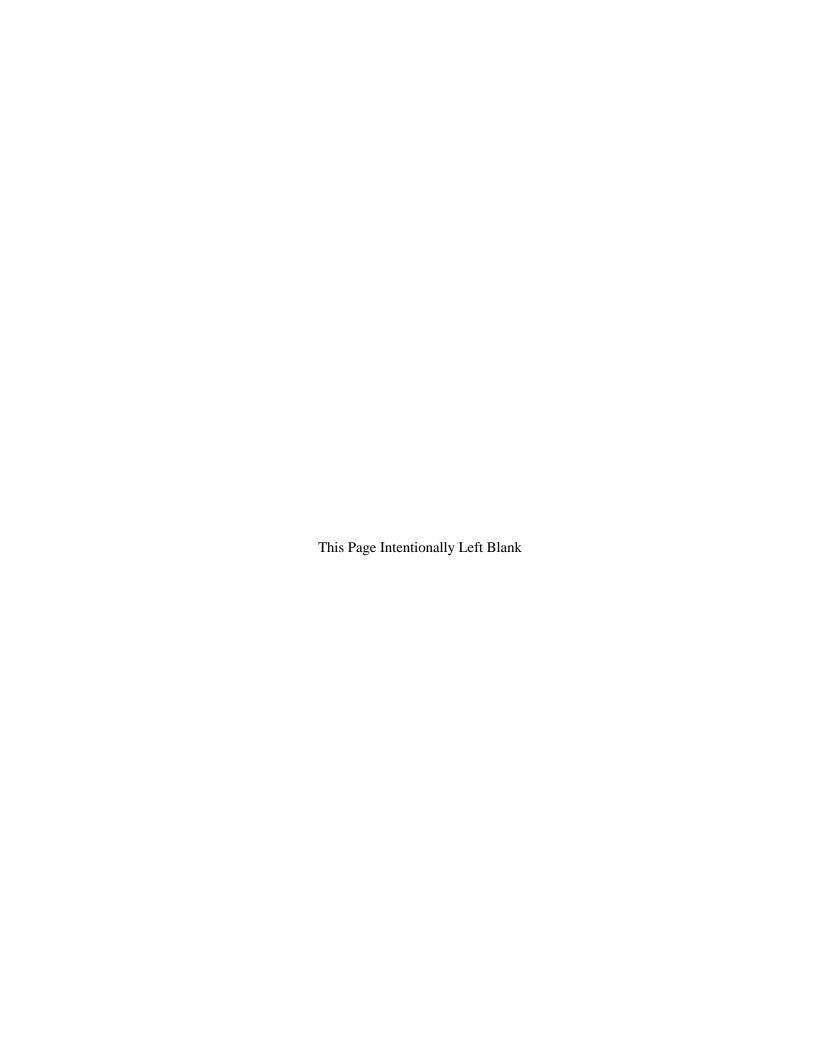
## **ATTACHMENT 2**

Wasteload Analysis



## **ATTACHMENT 3**

Reasonable Potential Analysis



### REASONABLE POTENTIAL ANALYSIS

Water Quality has worked to improve our reasonable potential analysis (RP) for the inclusion of limits for parameters in the permit by using an EPA provided model. As a result of the model, more parameters may be included in the renewal permit. A Copy of the Reasonable Potential Analysis Guidance (RP Guide) is available at water Quality. There are four outcomes for the RP Analysis<sup>1</sup>. They are;

Outcome A: A new effluent limitation will be placed in the permit.

Outcome B: No new effluent limitation. Routine monitoring requirements will be placed or

increased from what they are in the permit,

Outcome C: No new effluent limitation. Routine monitoring requirements maintained as they are

in the permit,

Outcome D: No limitation or routine monitoring requirements are in the permit.

Flaming Gorge has not monitored for metals in the past, and as a result there is no data to evaluate in a RP. Flaming Gorge has had minimal discharge during the life cycle of the permit and has limited to no industrial contributions to their waste stream. Therefore, it was determined that no RP was required, and that no metals monitoring is to be added to the permit.

<sup>&</sup>lt;sup>1</sup> See Reasonable Potential Analysis Guidance for definitions of terms

