# 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. UT0020231

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

#### LAKEPOINT IMPROVEMENT DISTRICT

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

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

This permit shall become effective on July 1, 2020

This permit expires at midnight on June 30. 2025.

Signed this 23<sup>rd</sup> day of June, 2020.

Erica Brown Gaddis, PhD

Enced And

Director

DWO-2020-008783

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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*.

<u>Outfall</u>	Description of Discharge Point
001	Located at latitude 40°40'30.86" and longitude 112°17'9.48" and a
	STORET Number of 496029. The discharge goes into an Unnamed ditch where the water either infiltrates into the soil or evaporated.

Located at approximately latitude 40°40'43.93" and longitude 112°17'2.49" with and elevation of 4234 feet. The discharge goes into a 49 acre impoundment pond between I-80 and the abandoned salt evaporation ponds.

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

#### C. Specific Limitations and Self-Monitoring Requirements.

1. Effective immediately, and lasting through the life of this permit, there shall be no acute or chronic toxicity in Outfall(s) 001 and 001D as defined in *Part VIII*, and determined by test procedures described in *Part I. C.4.a* of this permit.

2.

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:

# The permit limitations for Outfall 001 are:

Table 1					
	Outfall 001 Effluent Limitations <sup>a, b, c</sup>				
Parameter					
1 at afficter	Maximum	Maximum	Yearly	Daily	Daily
	Monthly Avg	Weekly Avg	Average	Minimum	Maximum
BOD <sub>5</sub> , mg/L	45	65			
TSS, mg/L	45	65			
TRC, mg/L					2.0
E. coli, No./100mL	126	158			
Oil & Grease, mg/L	-		-		10.0
pH, Standard Units				6.5	9

Table 2					
	Outfall 001				
	Self-Monitoring and Reporting Requirements a, b, c				
Parameter	Frequency Sample Type Units				
Total Flow d, e	Continuous	Recorder	MGD		
BOD <sub>5</sub> f					
Influent	Monthly	Grab	mg/L		
Effluent	Monthly	Grab	mg/L		
TSS, Influent <sup>f</sup>					
Influent	Monthly	Grab	mg/L		
Effluent	Monthly	Grab	mg/L		
E. coli	Monthly	Grab	No./100mL		
рН	Monthly	Grab	SU		
TRC, mg/L <sup>g</sup>	Monthly	Grab	mg/L		
Oil & Grease h	When Sheen Observed	Grab	mg/L		
Metals i, j, k					
Influent	Annually	Composite	mg/L		
Effluent	Annually	Composite	mg/L		
Total Ammonia (as N) <sup>1</sup> Effluent	Quarterly	Grab	mg/L		
Total Phosphorus <sup>1</sup>					
Influent	Quarterly	Composite	mg/L		
Effluent	Quarterly	Composite	mg/L		
Total Kjeldahl Nitrogen, TKN (as N) <sup>1</sup>					
Influent	Quarterly	Composite	mg/L		
Effluent	Quarterly	Composite	mg/L		
Nitrate, NO <sub>3</sub> <sup>1</sup> Effluent	Quarterly	Composite	mg/L		
Nitrite, NO <sub>2</sub> <sup>1</sup> Effluent	Quarterly	Composite	mg/L		
Ortho phosphate <sup>1</sup> Effluent	Quarterly	Composite	mg/L		

Table references on next page.

#### **Table References**

- a. See Definitions, *Part VIII*, for definition of terms.
- **b.** All parameters in this table will be reported on the monthly Discharge Monitoring Report.
- **c.** There shall be no visible sheen or floating solids or visible foam in other than trace amounts.
- d. Flow measurements of effluent volume shall be made in such a manner that the permittee can affirmatively demonstrate that representative values are being obtained.
- e. If the rate of discharge is controlled, the rate and duration of discharge shall be reported.
- f. 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.
- g. Analytical results less than 0.06 mg/l will not be considered out of compliance with the permit. For purposes of calculating averages and reporting on the Discharge Monitoring Report form, the following will apply:
  - Analytical values less than 0.02 mg/L shall be considered zero; and
  - Analytical values less than 0.06 mg/L and equal to or greater than 0.02 mg/L will be recorded as measured.
- **h.** Oil & Grease sampled when sheen is present or visible. If no sheen is present or visible, report 9 under "NODI" in NetDMR.
- i. Metals samples should be analyzed using a method that meets MDL requirements. If a test method is not available the permittee must submit documentation to the Director regarding the method that will be used. The sample type (composite or grab) should be performed according to the methods requirements.
- j. Metals are being sampled in support of the work being done for the Reasonable Potential Analysis. The Metal parameters will be monitored and reported on an annual basis by the facility on Discharge Monitoring Report, but will not have a limit associated with them. If LPID decides to sample more frequently for these parameters, the additional data shall be reported to DWQ per Part V. E of this permit.
- k. Metals

Aluminum	Cadmium	Copper	Mercury	Silver
Arsenic	Total	Cyanide	Nickel	Zinc
Barium	Chromium	Lead	Selenium	

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*.

# 3. <u>Lagoon Best Management Practices:</u>

- a. The permittee shall take such parameters as are necessary to maintain and operate the facility in a manner that will minimize upsets and ensure stable operating conditions.
- b. 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.

c. 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 erosion into the Waters of the State.

#### 4. Whole Effluent Toxicity (WET) Testing.

a. 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 2018, 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.

Lake Point is a minor facility that will be discharging a minor amount of effluent, and is not expected 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 and entered into NetDMR no later than the 28th day of the month following the completed reporting period. If no discharge occurs during the reporting period, "no discharge" shall be reported. Legible copies of these, and all other reports required herein, shall be signed and certified in accordance with the requirements of *Signatory Requirements* (see Part V.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. 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 V.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. <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 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

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- 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. <u>Pretreatment Reporting Requirements</u>. 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.1. consists of;
  - a. Identifying each industrial user (IU) and determining if the IU is a signification 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. <u>General and Specific Prohibitions</u>. 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):

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- 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. <u>Significant Industrial Users Discharging to the POTW.</u> 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:
    - 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.

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- 4. Any SIU 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. 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. <u>Legal Action</u>. 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. <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).

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

LPID 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. <u>Monitoring Procedures.</u> Monitoring must be conducted according to test procedures approved under *Utah Administrative Code* ("*UAC*") *R317-2-10 and 40 CFR Part 503*, 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 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 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 IV.G, Bypass of Treatment Facilities.*);
  - c. Any upset which exceeds any effluent limitation in the permit (See *Part IV.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 III.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;

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- 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 *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 IV.G*, *Bypass of Treatment Facilities* and *Part IV.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. Prohibition of Bypass.

a. Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

- (1) Bypass was unavoidable to prevent loss of human life, personal injury, or severe property damage;
- (2) There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment 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 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 III.G*, 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 III.G*, *Twenty-four Hour Notice of Noncompliance Reporting*; and,
  - d. The permittee complied with any remedial measures required under *Part IV.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

# PART VII DISCHARGE PERMIT NO. UT0020231

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 V.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 V.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. 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. <u>State or Federal Laws</u>. 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. <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 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. <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 or federal regulations.
- 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. <u>Storm Water-Reopener Provision</u>. 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".

# PART VII DISCHARGE PERMIT NO. UT0020231

# S. Reuse – Reopener Provision.

This permit may be reopened and modified (following the proper administrative procedures) to include Reuse limitations including testing, monitoring and best 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 the reuse disposal practices; applicable management practices or numerical limitations for pollutants in the reuse rule; and/or it has been determined that the permittees reuse disposal practices does not comply with existing applicable state regulations.

#### 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 selfmonitoring 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 " $LC_{50}$ ").
- 5. "Bypass," means the diversion of waste streams from any portion of a treatment facility.
- 6. "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;
  - 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.
- 7. "CWA," means *The Federal Water Pollution Control Act*, as amended, by *The Clean Water Act of 1987*.

# PART VIII DISCHARGE PERMIT NO. UT0020231

- 8. "Daily Maximum" (Daily Max.) is the maximum value allowable in any single sample or instantaneous measurement.
- 9. "EPA," means the United States Environmental Protection Agency.
- 10. "Director," means Director of the Division of Water Quality.
- 11. A "grab" sample, for monitoring requirements, is defined as a single "dip and take" sample collected at a representative point in the discharge stream.
- 12. An "instantaneous" measurement, for monitoring requirements, is defined as a single reading, observation, or measurement.
- 13. "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.
- 14. "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 LAKEPOINT IMPROVEMENT DISTRICT RENEWAL PERMIT: DISCHARGE

# **UPDES PERMIT NUMBER: UT0020231**

# UPDES MULTI-SECTOR STORM WATER GENERAL PERMIT PROVISIONS (UTR000000) MINOR MUNICIPAL

#### **FACILITY CONTACTS**

Person Name: Keith Fryer
Position: General Manager
Phone Number: 435-255-2099 office
Email: kfryer@lpid.ut

**Facility Name:** Lake Point Improvement District Wastewater Treatment Plant

**Facility Address:** 7851 North Highway 36

Lake Point, Utah 84074

Mailing Address: 7856 North Mountain View Road

Lake Point, Utah 84074

**Telephone:** 435-255-2099

#### **DESCRIPTION OF FACILITY**

Lake Point Improvement District (LPID) is located at 7851 North Highway 36, Lake Point, Utah. The facility is located south and west of the junction of the Tooele City exit off Interstate 80 and State Road 36. The facility serves the community of Lake Point with a population of 1,760. The outfall is located at latitude 40°40'30.86" and longitude 112°17'9.48". The design capacity is 0.392 MGD, over the last five years the annual average flow rate was 0.1975 MGD with a maximum daily flow rate of 0.219 MGD.

The facility is a facultative lagoon system and became operational in 1972 with a nine acre primary cell and a 7.4 acre secondary cell. A five acre third cell was added in 1987 for polishing the effluent. In April 2005, 8 Aeromix Tornado Aerators were installed in the primary cell of the existing lagoon system. Disinfection is accomplished with chlorination by using chlorine tablets (Sanurall System) with dosage adjustments based on flow. The influent flow is measure at the regional pump station with a magnetic flow meter and a Parshall flume with a recorder at a minor pump station. Effluent flow is measured with a V-notched weir.

Since 1972, LPID effluent flow has been disposed of in a 49 acre impoundment pond. The impoundment is located between I-80 and the abandoned salt evaporation ponds. Effluent wastewater is held in the impoundment pond during the winter months and evaporates and/or is absorbed into the soil during the summer months.

# SUMMARY OF CHANGES FROM PREVIOUS PERMIT

A description of the land disposal site has been included. Monitoring only for total phosphorus (TP), orthophosphate as P (OP), total ammonia, nitrate, nitrite, and total kieldahl nitrogen as N (TKN) have been included to comply with Utah Secondary Treatment Standards and the Technology-based Phosphorus Effluent limit rule in UAC R317-1-1.3. Annually monitoring only for metal parameters have been included to gathering data for reasonable potential analysis.

#### **DISCHARGE**

#### **DESCRIPTION OF DISCHARGE**

LPID has been reporting self-monitoring results on Discharge Monitoring Reports on a monthly basis. Over the past five years only minor TSS exceedances have been reported due to algae carry over in the Spring and Fall months.

Outfall 001	Description of Discharge Point Located at latitude 40°40'30.86" and longitude 112°17'9.48" and a STORET Number of 496029. The discharge goes into an Unnamed ditch where the water either infiltrates into the soil or evaporated.
001D	Located at approximately latitude 40°40'43.93" and longitude 112°17'2.49" with and elevation of 4234 feet. The discharge goes into a 49 acre impoundment pond between I-80 and the abandoned salt evaporation ponds.

#### RECEIVING WATERS AND STREAM CLASSIFICATION

If a discharge were to occur, it would be pumped into an irrigation ditch, which is a Class 3E according to *Utah Administrative Code (UAC) R317-2-13*:

Severely habitat-limited waters. Narrative standards will be applied to Class 3E protect these waters for aquatic wildlife.

#### **BASIS FOR EFFLUENT LIMITATIONS**

Limitations on total suspended solids (TSS), biochemical oxygen demand (BOD<sub>5</sub>), E. coli, pH and percent removal for BOD5 and TSS are based on current Utah Secondary Treatment Standards, UAC R317-1-3.2. The total residual chlorine (TRC) and oil and grease is based on best professional judgment (BPJ).

LPID applied to the Utah Water Quality Board (WQB) in May 2001 for alternate BOD5 and TSS discharge limitations under R317-1.3.2. The WQB granted with request for the alternate limitations of 45-65 mg/L for BOD5 and TSS. December 2003, WQB granted LPID 85% removal requirements for BOD5 and TSS due to excessive infiltration and inflow. The alternate limitations have been rolled into this permit.

The receiving water is an unnamed irrigation ditch and classified as 3E with no numeric criteria. A wasteload allocation analysis was not conducted based on that criterion. The beneficial uses will be protected if the discharge remains below the WQBELs presented in the wasteload. A Level II ADR is not required for this facility. The proposed permit is a renewal of the existing UPDES permit limitations. It has been determined that this discharge will not cause a violation of water quality standards. The permittee is expected to be able to comply with these limitations.

LPID wastewater is disposed of in a 49 acre impoundment pond. The impoundment is located within a fenced area restricted from public access between I-80 and the abandoned salt evaporation ponds. Effluent wastewater is held in the impoundment pond during the winter months and evaporates and/or is absorbed into the soil during the summer months. The effluent wastewater is not utilized for irrigation; therefore does not qualify for the limitation and monitoring requirements found in R317-11. However, any changes in the use of the effluent, this permit will be reopened and modified to address those conditions. LPID will continue to restrict public access to the area with a stock-tight fence or other comparable means and shall post signage to control and exclude the public.

#### **Parameters of Concern**

The potential parameters of concern for the LPID discharge to the receiving water way are BOD<sub>5</sub>, TSS, pH and total residual chlorine.

LPID does not have industrial users in their service area therefore, WET limitation and requirements are not required and have not been implemented.

The receiving water and downstream waterbodies are not listed as impaired on the State 303d list therefore a TMDL is not available for the receiving water.

#### **Reasonable Potential Analysis**

Beginning on January 1, 2016, DWQ has conducted reasonable potential analysis (RP) on all new and renewal applications received after that date. In order to complete a RP analysis, more than 10 data points per parameter are needed. LPID was not required to monitor metal parameters during the last permit cycle therefore; analysis data was not available to perform a RP analysis. For this permit cycle, LPID will be required to perform, at a minimum, annual metal sampling. If additional sampling is performed, it shall be reported to DWQ.

The permit limitations for Outfall 001 are:

Table 1					
	Outfall 001 Effluent Limitations <sup>a, b, c</sup>				
Parameter					
1 ai ailletei	Maximum	Maximum	Yearly	Daily	Daily
	Monthly Avg	Weekly Avg	Average	Minimum	Maximum
BOD <sub>5</sub> , mg/L	45	65			
TSS, mg/L	45	65			
TRC, mg/L					2.0
E. coli, No./100mL	126	158		-	
Oil & Grease, mg/L	-		1		10.0
pH, Standard Units				6.5	9

# SELF-MONITORING AND REPORTING REQUIREMENTS

The following self-monitoring requirements are the same as in the previous permit with the addition of annual metal sampling and Type II reuse requirements. The permit will require reports to be submitted monthly and annually, as applicable, on Discharge Monitoring Report (DMR) forms due 28 days after the end of the monitoring period. Effective January 1, 2017, monitoring results must be submitted using NetDMR unless the permittee has successfully petitioned for an exception. Lab sheets for biomonitoring must be attached to the biomonitoring DMR. Lab sheets for metals and toxic organics must be attached to the DMRs.

Table 2						
	Outfall 001					
	Self-Monitoring and Reporting Requirements a, b, c					
Parameter	Frequency Sample Type Units					
Total Flow <sup>d, e</sup>	Continuous	Recorder	MGD			
BOD <sub>5</sub> <sup>f</sup>						
Influent	Monthly	Grab	mg/L			
Effluent	Monthly	Grab	mg/L			
TSS, Influent <sup>f</sup>						
Influent	Monthly	Grab	mg/L			
Effluent	Monthly	Grab	mg/L			
E. coli	Monthly	Grab	No./100mL			
рН	Monthly	Grab	SU			
TRC, mg/L <sup>g</sup>	Monthly	Grab	mg/L			
Oil & Grease h	When Sheen Observed	Grab	mg/L			
Metals <sup>i, j, k</sup>						
Influent	Annually	Composite	mg/L			
Effluent	Annually	Composite	mg/L			
Total Ammonia (as N) <sup>1</sup> Effluent	Quarterly	Grab	mg/L			
Total Phosphorus <sup>1</sup>						
Influent	Quarterly	Composite	mg/L			
Effluent	Quarterly	Composite	mg/L			
Total Kjeldahl Nitrogen, TKN (as N) 1						
Influent	Quarterly	Composite	mg/L			
Effluent	Quarterly	Composite	mg/L			
Nitrate, NO <sub>3</sub> <sup>1</sup> Effluent	Quarterly	Composite	mg/L			
Nitrite, NO <sub>2</sub> Effluent	Quarterly	Composite	mg/L			
Ortho phosphate <sup>1</sup> Effluent	Quarterly	Composite	mg/L			

# **Table References**

- See Definitions, *Part VIII*, for definition of terms.
- **b.** All parameters in this table will be reported on the monthly Discharge Monitoring Report.
- c. There shall be no visible sheen or floating solids or visible foam in other than trace amounts.
- d. Flow measurements of effluent volume shall be made in such a manner that the permittee can affirmatively demonstrate that representative values are being obtained.
- If the rate of discharge is controlled, the rate and duration of discharge shall be reported.

- 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.
- Analytical results less than 0.06 mg/l will not be considered out of compliance with the permit. For purposes of calculating averages and reporting on the Discharge Monitoring Report form, the following will apply:
  - Analytical values less than 0.02 mg/L shall be considered zero; and
  - $\bullet$  Analytical values less than 0.06 mg/L and equal to or greater than 0.02 mg/L will be recorded as measured.
- h. Oil & Grease sampled when sheen is present or visible. If no sheen is present or visible, report 9 under "NODI" in NetDMR.
- Metals samples should be analyzed using a method that meets MDL requirements. If a test method is not available the permittee must submit documentation to the Director regarding the method that will be used. The sample type (composite or grab) should be performed according to the methods requirements.
- Metals are being sampled in support of the work being done for the Reasonable Potential Analysis. The Metal parameters will be monitored and reported on an annual basis by the facility on Discharge Monitoring Report, but will not have a limit associated with them. If LPID decides to sample more frequently for these parameters, the additional data shall be reported to DWQ per Part V. E of this permit.
- k. Metals

Aluminum Cadmium Cyanide Nickel Zinc
Arsenic Total Chromium Lead Selenium
Barium Copper Mercury Silver

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*.

#### **Table References End**

#### **Lagoon Best Management Practices:**

- 1) The permittee shall take such parameters 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 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. Waste water treatment facilities with a design flow of 1.0 MGD or greater, and/or,
- 2. Waste water treatment facilities with an approved pretreatment program as described in 40 CFR Part 403.

LPID 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 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.

A list of industrial users is required to be maintained by the permittee. 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

Facility Name FSSOB UT0020231 Page 7

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 Ward, Discharge
Daniel Griffin, Biosolids
Jennifer Robinson, Pretreatment
Lonnie Shull, Biomonitoring
Lisa Stevens, Storm Water
Sarah Ward, Reasonable Potential Analysis
Suzan Tahir, Wasteload Analysis
Utah Division of Water Quality, (801) 536-4300

#### **PUBLIC NOTICE**

Began: May 6, 2020 Ended: June 5, 2020

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 the Division of Water Quality website.

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.

DWQ-2020-008781

Facility Name FSSOB UT0020231 Page 9

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# **ATTACHMENT 1**

Industrial Waste Survey



## **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, blueing 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 Address	Person ContactedPhone Number
Description of Business	
Principal product or service:	
Raw Materials used:	
Production process is: [ ] Batch [ ] Co	ontinuous [ ] Both
Is production subject to seasonal variation? If yes, briefly describe seasonal production	
This facility generates the following types of	f wastes (check all that apply):
1. [ ] Domestic wastes	(Restrooms, employee showers, etc.)
2. [ ] Cooling water, non-contact	3. [ ] Boiler/Tower blowdown
4. [ ] Cooling water, contact	5. [ ] Process
6. [ ] Equipment/Facility wash-down	7. [ ] Air Pollution Control Unit
8. [ ] Storm water runoff to sewer	9. [ ] Other describe
Wastes are discharged to (check all that app	ply):
[ ] Sanitary sewer [	] Storm sewer
[ ] Surface water [	] Ground water
[ ] Waste haulers	] Evaporation
[ ] 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 was	te treatment facility? Yes No
• More than 25,000 gallons per work of	lay? Yes No

Adhesives	[ ] Car Wash
Aluminum Forming	[ ] Carpet Cleaner
Battery Manufacturing	Dairy
Copper Forming	[ ] Food Processor
Electric & Electronic Components	[ ] Hospital
] Explosives Manufacturing	[ ] Laundries
] Foundries	[ ] Photo Lab
Inorganic Chemicals Mfg. or Packaging	[ ] Restaurant & Food Service
Industrial Porcelain Ceramic Manufacturing	Septage Hauler
] Iron & Steel	[ ] Slaughter House
] Metal Finishing, Coating or Cleaning	
] Mining	
] Nonferrous Metals Manufacturing	
] Organic Chemicals Manufacturing or Packaging	
] Paint & Ink Manufacturing	
Pesticides Formulating or Packaging	
Petroleum Refining	
Pharmaceuticals Manufacturing or Packaging	
Plastics Manufacturing	
Rubber Manufacturing	
Soaps & Detergents Manufacturing	
Steam Electric Generation	
Tanning Animal Skins	
Textile Mills	
J Textile ivillis	
Are any process changes or expansions planned durin	ng the next three years? Yes No
f yes, attach a separate sheet to this form describing	•
• •	the nature of planned changes of
vnancione	
expansions.	

Waste Treatment Facility

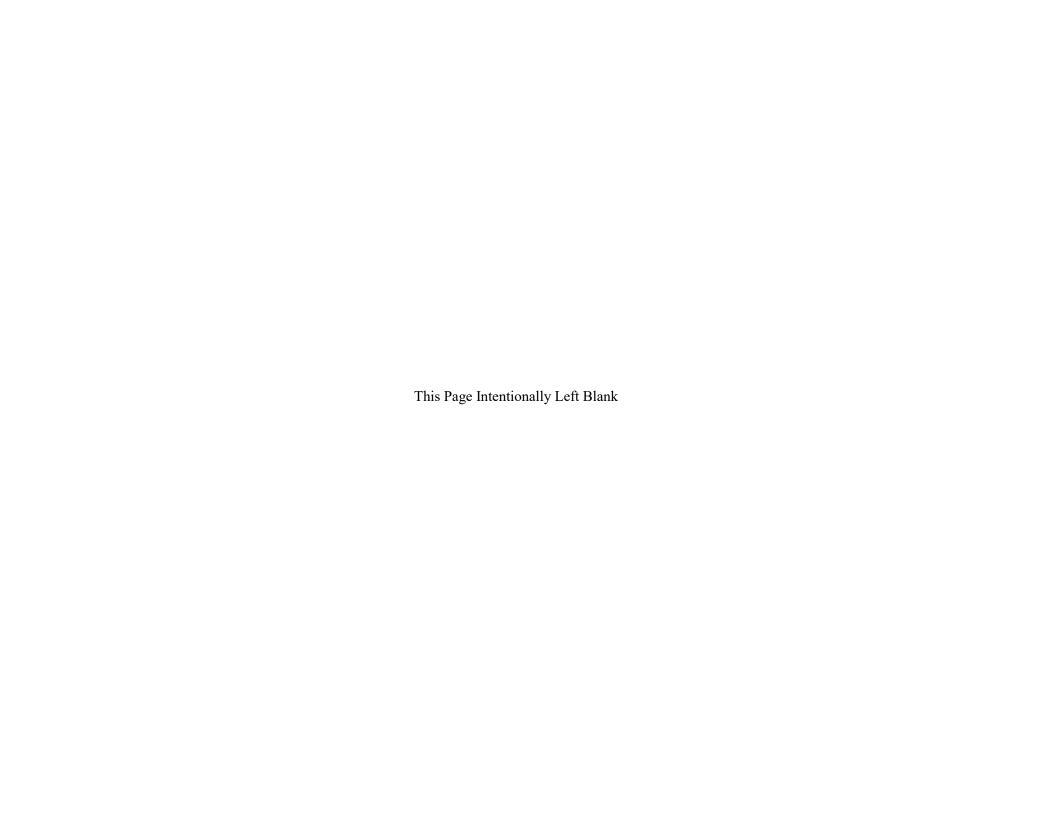
Please send a copy of the preliminary inspection form (both sides) to:

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

Phone: (801) 536-4383 Fax: (801) 536-4301

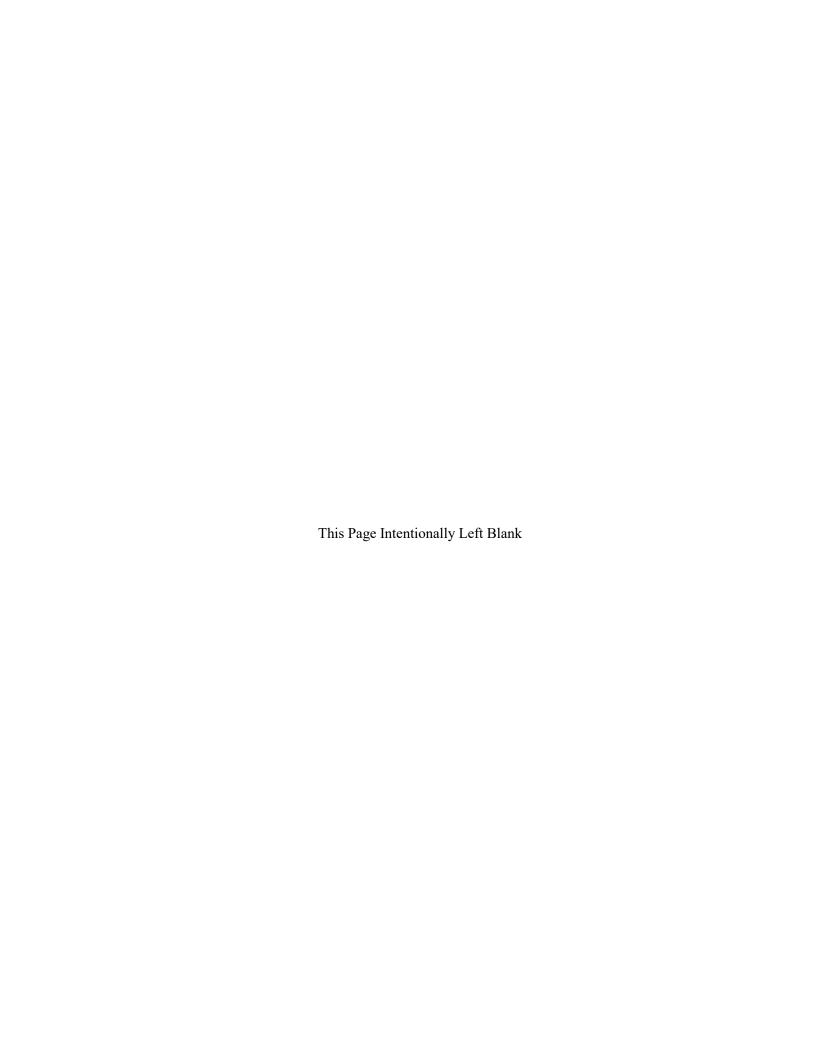
E-Mail: jenrobinson@utah.gov

	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							



# **ATTACHMENT 2**

Effluent Monitoring Data



### **Effluent Monitoring Data.**

Lake Point Improvement District

		Lake Point Improvement District										
			Flov	vs (mgd) Influ			Influer	Influent			Effluent	
		Influent		Effluent		mg/l		Lbs/day		mg/l		
		Avg	Max	Avg	<u>Max</u>	BOD	<u>TSS</u>	<u>BOD</u>	<u>TSS</u>	BOD	<u>TSS</u>	
2014	Jan	0.214	0 229	0 203	0 209	99	77	177	137	13	5	
	Feb	0.256	0.279	0 217	0 220	122	153	260	327	26	4	
	Mar	0.243	0 294	0 197	0 230	102	152	207	308	15	13	
	Apr	0 241	0 271	0.108	0 172	57	95	115	191	5	10	
	May	0.210	0 241	0 155	0 177	190	214	333	375	9	6	
	Jun	0.194	0 200	0.124	0.144	125	147	202	238	13	23	
	Jul	0.199	0.206	0 062	0.119	98	109	163	181	13	52	
	Aug	0.188	0.216	0.151	0.160	123	122	193	191	5	32	
	Sep	0 183	0.188	0 137	0.159	177	127	270	194	5	52	
	Oct	0 155	0.208	0 141	0.144	190	199	246	257	5	45	
	Nov	0 144	0.161	0 063	0 090	184	238	221	286	5	4	
	Dec	0 160	0.218	0.145	0 202	197	113	263	151	13	15	
	Avg	0.199	0.226	0.142	0 169	139	146	221	236	11	22	
	Max	0 256	0.294	0.217	0 230	197	238	333	375	26	52	
	Min	0 144	0 161	0.062	0 090	57	77	115	137	5	4	
	% Loading	50.7%						34%	36%			
	76										400000	
2015	Jan	0 162	0 181	0.168	0 197	109	135	147	204	16	23	
	Feb	0 178	0 208	0.099	0 108	173	170	257	295	15	18	
	Mar	0 207	0 216	0.037	0 038	119	131	205	236	7	37	
	Apr	0 191	0.199	0.042	0 124	107	138	170	229	16	22	
	May	0 213	0 270	0.153	0 173	108	100	192	225	5	11	
	Jun	0 200	0 219	0.059	0 088	195	286	325	522	11	21	
	Jul	0 174	0 190	0.018	0 029	185	220	268	349	5	14	
	Aug	0 158	0 209	0.040	0 042	191	201	252	350	5	11	
	Sep	0.171	0 174	0 042	0 069	188	271	268	393	15	32	
	Oct	0.151	0 177	0 082	0.102	88	173	111	255	8	12	
	Nov	0.154	0.154	0 110	0.173	94	170	121	218	7	45	
	Dec	0.160	0.177	0 160	0.207	157	234	210	345	5	8	
	Avg	0 177	0.198	0 084	0.113	143	186	211	302	10	21	
	Max	0.213	0.270	0 168	0.207	195	286	325	522	16	45	
	Min	0 151	0.154	0 018	0.029	88	100	111	204	5	8	
	% Loading	45 0%						32%	46%			
				W- 0015-0-E			465	141	255	5	11	
2016	3 Jan	0.160	0.165	0 153	0.202	106	185	256	203	10	16	
	Feb	0 166	0.176	0 170	0.202	185	138	170	396	12	22	
	Mar	0 192	0.208	0.164	0.166	106	228	214	411	12	7	
	Apr	0.194	0.243	0 135	0.209	132	203 150	161	276	11	24	
	May	0 207	0.221	0 114	0.122	93	75	180	122	20	18	
	Jun	0.184	0.195	0 036	0.079	117	188	312	293	0	0	
	Jul	0 154	0.187	0 000	0.000	243	159	196	207	Ö	Ö	
	Aug	0.147	0.156	0 000	0.000	160 179	151	237	219	ŏ	Ö	
	Sep	0 159	0.174	0.000	0.000	179	141	259	232	10	16	
	Oct	0.168	0.197	0.000	0 080 0.105	231	149	306	205	7	10	
	Nov	0 159	0 165	0.094	0.105	212	150	258	194	16	20	
	Dec	0.146	0.155	0 111 0.081	0.124	162	160	224	251	9	12	
	Avg	0 170	0 187 0 243	0.081	0.209	243	228	312	411	20	24	
	Max	0 207	0 243	0.170	0.209	93	75	141	122	0	0	
	Min	0 146 43 3%	0 135	0 000	0 000	33		34%	38%	-		
	% Loading	43 3%							0000			

Lake Point Improvement District (mgd) Influent

		Lake Point Improvement District									
		Flows (mgd)				Influent				Effluent	
		Influent Effluent		t	mg/l		Lbs/day		mg/l		
		Avg	Max	Avg	Max	BOD	<u>TSS</u>	BOD	<u>TSS</u>	BOD	<u>TSS</u>
2017	Jan	0 158	0 167	0.130	0 144	193	160	254	223	15	38
	Feb	0 165	0 170	0.131	0 137	171	144	235	204	17	36
	Mar	0 193	0.211	0.081	0 130	172	167	277	294	21	29
	Apr	0 256	0 266	0.182	0 216	100	74	214	164	26	42
	May	0.235	0.256	0.158	0 205	242	257	474	549	31	30
	Jun	0 209	0 243	0 066	0 109	145	179	253	363	19	18
	Jul	0 163	0 183	0.013	0 036	171	194	232	296	15	91
	Aug	0.157	0 160	0.000	0.000	290	332	380	443	0	0
	Sep	0 159	0 175	0.031	0 088	236	204	313	298	11	11
	Oct	0 178	0 178	0.038	0 046	186	180	276	267	15	45
	Nov	0.147	0.154	0.106	0 130	193	202	237	259	16	20
	Dec	0 180	0 277	0.125	0 130	125	90	188	208	15	16
	Avg	0 183	0 203	0.088	0 114	185	182	278	297	17	31
	Max	0.256	0.277	0.182	0 216	290	332	474	549	31	91
	Min	0 147	0 154	0.000	0 000	100	74	188	164	0	0
	% Loading	46 8%						42%	45%		
	,0oag										
2018	.lan	0 161	0 164	0.143	0 158	146	161	196	216	17	14
20,0	Feb	0 156	0 163	0.140	0.158	212	225	276	293	45	60
	Mar	0 190	0.213	0.139	0 151	255	220	404	349	33	24
	Apr	0 216	0.257	0 153	0 187	162	157	292	283	7	5
	May	0 216	0.230	0.144	0 151	312	339	562	611	10	14
	Jun	0 232	0.257	0.064	0 090	162	180	313	348	12	9
	Jul	0.216	0.236	0 038	0.047	193	191	348	344	9	4
	Aug	0 170	0.176	0.023	0.030	178	277	252	393	20	62
	Sep	0 154	0.174	0 019	0.022	198	205	254	263	27	44
	Oct	0.157	0.162	0 095	0.101	331	586	433	767	28	24
	Nov	0.155	0.158	0 107	0 129	180	153	233	198	12	23
	Dec	0.181	0.182	0.131	0.144	104	127	157	192	12	14
	Avg	0.184	0.198	0.100	0.114	203	235	310	355	19	25
	Max	0.232	0.257	0.153	0.187	331	586	562	767	45	62
	Min	0.154	0.158	0.019	0.022	104	127	157	192	7	4
	% Loading	46.9%						47%	54%		
2019	Jan	0.156	0.170	0 194	0 202	227	290	295	377	21	14
	Feb	0 214	0.217	0 206	0.230	156	202	278	361	14	32
	Mar	0 235	0.318	0.220	0 230	126	218	247	427	25	11
	Apr	0.400	0.431	0 429	0 432	96	98	320	327	14	16
	May	0.395	0 434	0 256	0.259	82	119	270	392	10	9
	Jun	0.334	0.386	0 228	0 252	78	94	217	262	15	29
	Jul	0.279	0.293	0 101	0 113	144	238	335	554	17	61
	Aug	0.225	0 245	0 074	0 076	162	168	304	315	11	4
	Sep	0.214	0 226	0.074	0 108	131	118	234	211	27	32
	Oct	0 244	0 249	0.091	0.128	114	136	232	277	24	61
	Nov	0 245	0 260	0.180	0.198	119	131	243	268	29	43
	Dec										
	Avg	0.267	0.294	0.187	0.203	130	165	271	343	19	28
	Max	0.400	0.434	0.429	0.432	227	290	335	554	29	61
	Min	0.156	0.170	0.074	0.076	78	94	217	211	10	4
	% Loading	68 2%						41%	52%		

# **ATTACHMENT 3**

Wasteload Analysis



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

**Date:** February 10, 2020

Prepared by: Suzan Tahir

**Standards and Technical Services** 

Facility: Lake Point Improvement District (Lagoons)

**UPDES No. UT0020231** 

**Receiving water:** Un-named ditch (3E)

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

#### **Discharge**

Outfall (Lagoon Discharge):Un-named ditch→abandoned evaporation ponds/salt playa. The mean monthly design discharge is 0.392 MGD (0.61cfs)

#### Receiving Water

The discharge is to an unnamed ditch which is classified as 3E according to *Utah Administrative Code (UAC) R317-2-13.3(a)*:

• Class 3E -- Severely habitat-limited waters. Narrative standards will be applied to protect these waters for aquatic wildlife.

The discharge flows into an unnamed ditch, and then enters what appears to be an old industrial canal. As the water flows through the ditch and canal, some of the water infiltrates into the soil. At the end of the canal, the water exits the dike and flows onto a flat playa-like area where the rest of the water dissipates into the soil. The discharge appears to only exit the dike-canal system during wet periods, such as spring runoff. According to the operator, during the summer months, the discharge rarely makes it to the end of the old canal because of the evaporation and infiltration. In our best professional judgment we believe it is highly unlikely the discharge could ever reach the surface waters of the Great Salt Lake. Discharge water would have to go up and over numerous dikes and roads, then through the old evaporation ponds before it could enter the surface waters of the Great Salt Lake.

#### Total Maximum Daily Load (TMDL)

The receiving water and downstream waterbodies are not listed as impaired for any parameters according to the 2016 303(d) list.

#### Mixing Zone

The maximum allowable mixing zone is 15 minutes of travel time for acute conditions, not to exceed 50% of stream width, and for chronic conditions is 2500 ft, per UAC R317-2-5. Water quality standards must be met at the end of the mixing zone.

In this case, because the receiving water is classified as 3E, no mixing zone analysis was considered.

#### Parameters of Concern

The potential parameters of concern identified for the discharge/receiving water were BOD5, TSS, pH, and total residual chlorine.

#### **WET Limits**

The percent of effluent in the receiving water in a fully mixed condition, and acute and chronic dilution in a not fully mixed condition are calculated in the WLA in order to generate WET limits.

The LC<sub>50</sub> (lethal concentration, 50%) percent effluent for acute toxicity and the IC<sub>25</sub> (inhibition concentration, 25%) percent effluent for chronic toxicity, as determined by the WET test, needs to be below the WET limits, as determined by the WLA. In this case, there is no dilution, and the percent effluent is assumed as 100%.

The WET limit for LC<sub>50</sub> is typically 100% effluent and does not need to be determined by the WLA.

#### Wasteload Allocation Methods

In this case, because the receiving water is classified as 3E (no numeric criteria), no wasteload allocation analysis was conducted. The previous permit included a 2.0 mg/L total residual chlorine (TRC) limit that was based on best professional judgment.

#### 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 facility. The proposed permit is a simple renewal of an existing UPDES permit. No increase in flow or concentration of pollutants over those authorized in the existing permit is being requested.

DWQ-2020-008779

# **ATTACHMENT 4**

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,

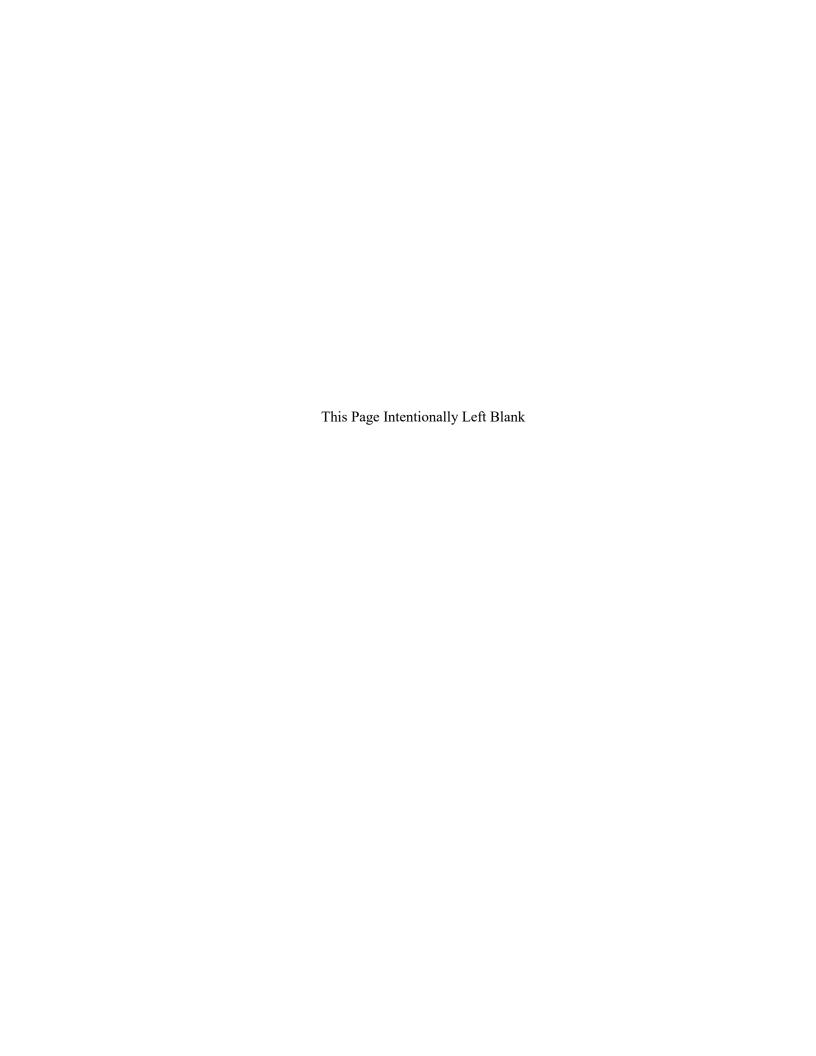
Outcome C: No new effluent limitation. Routine monitoring requirements maintained as they are

in the permit,

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

In order to complete a RP analysis, more than 10 data points per parameter are needed. LPID was not required to monitor metal parameters therefore; analysis data was not available to perform a RP analysis. For this permit cycle, LPID will be required to perform, at a minimum, annual metal sampling. If additional sampling is performed, it shall be reported to DWQ. Less than 10 data points may affect the RP outcomes which may require additional monitoring in the future.

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



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

**Date:** February 10, 2020

Prepared by: Suzan Tahir

**Standards and Technical Services** 

Facility: Lake Point Improvement District (Lagoons)

**UPDES No. UT0020231** 

**Receiving water:** Un-named ditch (3E)

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

#### **Discharge**

Outfall (Lagoon Discharge):Un-named ditch→abandoned evaporation ponds/salt playa. The mean monthly design discharge is 0.392 MGD (0.61cfs)

#### Receiving Water

The discharge is to an unnamed ditch which is classified as 3E according to *Utah Administrative Code (UAC) R317-2-13.3(a)*:

• Class 3E -- Severely habitat-limited waters. Narrative standards will be applied to protect these waters for aquatic wildlife.

The discharge flows into an unnamed ditch, and then enters what appears to be an old industrial canal. As the water flows through the ditch and canal, some of the water infiltrates into the soil. At the end of the canal, the water exits the dike and flows onto a flat playa-like area where the rest of the water dissipates into the soil. The discharge appears to only exit the dike-canal system during wet periods, such as spring runoff. According to the operator, during the summer months, the discharge rarely makes it to the end of the old canal because of the evaporation and infiltration. In our best professional judgment we believe it is highly unlikely the discharge could ever reach the surface waters of the Great Salt Lake. Discharge water would have to go up and over numerous dikes and roads, then through the old evaporation ponds before it could enter the surface waters of the Great Salt Lake.

#### Total Maximum Daily Load (TMDL)

The receiving water and downstream waterbodies are not listed as impaired for any parameters according to the 2016 303(d) list.

#### Mixing Zone

The maximum allowable mixing zone is 15 minutes of travel time for acute conditions, not to exceed 50% of stream width, and for chronic conditions is 2500 ft, per UAC R317-2-5. Water quality standards must be met at the end of the mixing zone.

In this case, because the receiving water is classified as 3E, no mixing zone analysis was considered.

#### Parameters of Concern

The potential parameters of concern identified for the discharge/receiving water were BOD5, TSS, pH, and total residual chlorine.

#### **WET Limits**

The percent of effluent in the receiving water in a fully mixed condition, and acute and chronic dilution in a not fully mixed condition are calculated in the WLA in order to generate WET limits.

The LC<sub>50</sub> (lethal concentration, 50%) percent effluent for acute toxicity and the IC<sub>25</sub> (inhibition concentration, 25%) percent effluent for chronic toxicity, as determined by the WET test, needs to be below the WET limits, as determined by the WLA. In this case, there is no dilution, and the percent effluent is assumed as 100%.

The WET limit for LC<sub>50</sub> is typically 100% effluent and does not need to be determined by the WLA.

#### Wasteload Allocation Methods

In this case, because the receiving water is classified as 3E (no numeric criteria), no wasteload allocation analysis was conducted. The previous permit included a 2.0 mg/L total residual chlorine (TRC) limit that was based on best professional judgment.

#### 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 facility. The proposed permit is a simple renewal of an existing UPDES permit. No increase in flow or concentration of pollutants over those authorized in the existing permit is being requested.

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