

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

OPERATING PERMIT FOR TREATMENT, REUSE, AND LAND DISPOSAL OF TREATED  
WASTEWATER

Operating Permit No. **UTOP9003**

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

**EAGLE MOUNTAIN WATER RECLAMATION FACILITY AND COOLING WATER EFFLUENT REUSE**

is hereby directed to have no discharge to Waters of the State except as allowed in accordance with the provisions of this permit from its facility located at 2513 Pony Express, Eagle Mountain, Utah, with the Outfalls 001 located at latitude 40° 16' 56" and longitude 112° 01' 24", 002 located at latitude 40° 16' 52" and longitude 112° 01' 24", 003R located at approximately latitude 40° 16' 58" and longitude 112° 01' 19", and 004R located at end of pipe of the storage lagoon at approximately latitude 40° 16' 50.30" N and longitude 112° 01' 01.57" W.

**RAPID INFILTRATION BASIN**

and to distribute Cooling Water effluent for reuse,

and dust control

in accordance with discharge points, effluent limitations, monitoring requirements and other conditions set forth herein.

**This permit shall become effective on July 1, 2021.**

**This permit expires at midnight on June 30, 2026.**

**Signed this 6<sup>th</sup> day of July, 2021.**



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Erica Brown Gaddis, PhD  
Director

DWQ-2021-012442

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**I. DISCHARGE LIMITATIONS AND REPORTING REQUIREMENTS**

- A. Description of Discharge Points. The authorization to discharge wastewater provided under this part is limited to those outfalls specifically designated below as discharge locations. Discharges at any location not authorized under this 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 Numbers</u>      | <u>Location of Discharge Outfalls</u>  |
|-----------------------------|--|
| 001                         | Located at latitude 40° 16' 56" and longitude 112° 01' 24". The discharge is to the North Rapid Infiltration Basin.  |
| 002                         | Located at latitude 40° 16' 52" and longitude 112° 01' 24". The discharge is to the South Rapid Infiltration Basin.  |
| <u>Reuse Outfall Number</u> | <u>Location of Effluent Reuse Discharge Outfall</u>  |
| 003R                        | Located at approximately latitude 40° 16' 58" and longitude 112° 01' 19". The discharge is to a 24" pipe north of the reuse storage reservoirs to the Eagle Mountain pressurized irrigation system for use throughout the irrigation system. |
| 004R                        | Located at end of pipe of the storage lagoon at approximately latitude 40° 16' 50.30" N and longitude 112° 01' 01.57" W. The discharge is to a truck for dust control at designated construction sites in Eagle Mountain.                    |

- 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 any of the Outfalls as defined in Part VII of this permit.
2. Effective immediately and lasting the duration of this permit, the permittee is authorized to discharge from Outfall 001 and Outfall 002. Such discharges shall be limited and monitored by the permittee as specified in Tables 1 through 7.

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a. Outfalls 001 and 002 (Rapid Infiltration Basins)

| <b>Table 1</b>   |  |                                       |                      |                      |
|--|--|---------------------------------------|----------------------|----------------------|
| <b>Outfall 001 &amp; 002</b>   |  |                                       |                      |                      |
| <b>Effluent Limitations <sup>1</sup></b>   |  |                                       |                      |                      |
| <b>Municipal Wastewater Treatment Plant Discharge to Rapid Infiltration Basins</b> |  |                                       |                      |                      |
| <b>Parameter</b>   | <b>Average Monthly Discharge Limit</b> | <b>Average Weekly Discharge Limit</b> | <b>Daily Minimum</b> | <b>Daily Maximum</b> |
| BOD <sub>5</sub> , mg/L  | 25                                     | 35                                    | --                   | --                   |
| BOD Min % Removal  | 85                                     | --                                    | --                   | --                   |
| TSS, mg/L  | 25                                     | 35                                    | --                   | --                   |
| TSS Min % Removal  | 85                                     | --                                    | --                   | --                   |
| <i>E. coli</i> , organisms/100 mL  | 126                                    | 158                                   | --                   | --                   |
| pH, Standard Units   | --                                     | --                                    | 6.5                  | 9.0                  |
| TDS, mg/L <sup>2</sup>   | --                                     | --                                    | --                   | 1000 <sup>2</sup>    |
| Total Inorganic Nitrogen, mg/L <sup>2</sup>  | --                                     | --                                    | --                   | 10 <sup>2</sup>      |

b. Municipal Wastewater Treatment Plant Influent Self-Monitoring and Reporting Requirements

| <b>Table 2</b>   |                  |                    |              |
|--|------------------|--------------------|--------------|
| <b>Influent</b>  |                  |                    |              |
| <b>Municipal Wastewater Treatment Plant</b>                    |                  |                    |              |
| <b>Self-Monitoring and Reporting Requirements <sup>1</sup></b> |                  |                    |              |
| <b>Parameter</b>   | <b>Frequency</b> | <b>Sample Type</b> | <b>Units</b> |
| Flow   | Continuous       | Recorder           | MGD          |
| BOD <sub>5</sub>   | Monthly          | Grab               | mg/L         |
| TSS  | Monthly          | Grab               | mg/L         |

c. Effluent Self-Monitoring and Reporting Requirements for Outfall 001 and 002

| <b>Table 3</b>   |                  |                    |              |
|--|------------------|--------------------|--------------|
| <b>Effluent 001 and 002</b>  |                  |                    |              |
| <b>Self-Monitoring and Reporting Requirements <sup>1</sup></b>                     |                  |                    |              |
| <b>Municipal Wastewater Treatment Plant Discharge to Rapid Infiltration Basins</b> |                  |                    |              |
| <b>Parameter</b>   | <b>Frequency</b> | <b>Sample Type</b> | <b>Units</b> |
| Total Flow <sup>3,4</sup>  | Continuous       | Recorder           | MGD          |
| TDS  | Monthly          | Grab               | mg/L         |
| Total Inorganic Nitrogen   | Monthly          | Grab               | mg/L         |
| pH   | Monthly          | Grab               | SU           |
| BOD <sub>5</sub>   | Monthly          | Grab               | mg/L         |
| TSS  | Monthly          | Grab               | mg/L         |
| <i>E. coli</i>   | Monthly          | Grab               | No./100 mL   |

<sup>1</sup> See Definitions, Part VIII, for definition of terms.

<sup>2</sup> Effluent limits will be set based on the results of the special study of the ground water aquifer by the permittee.

<sup>3</sup> 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.

<sup>4</sup> If the rate of discharge is controlled, the rate and duration of discharge shall be reported.

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| <b>Table 3</b>   |                  |                    |              |
|--|------------------|--------------------|--------------|
| <b>Effluent 001 and 002</b>  |                  |                    |              |
| <b>Self-Monitoring and Reporting Requirements <sup>1</sup></b>                     |                  |                    |              |
| <b>Municipal Wastewater Treatment Plant Discharge to Rapid Infiltration Basins</b> |                  |                    |              |
| <b>Parameter</b>   | <b>Frequency</b> | <b>Sample Type</b> | <b>Units</b> |
| Oil & Grease   | Annual           | Grab               | mg/L         |
| Metals   | Annual           | Grab               | mg/L         |

Effective immediately and lasting the duration of this permit, the permittee is authorized to discharge from Outfall 003R. Such discharges shall be limited and monitored by the permittee as specified below:

d. Outfall 003R (Reuse for Public Park Spray Irrigation)

| <b>Table 4</b>   |  |                      |                              |                              |
|--|--|----------------------|------------------------------|------------------------------|
| <b>Outfall 003R Effluent Limitations <sup>1, 5, 6</sup></b>            |  |                      |                              |                              |
| <b>Reuse of Industrial Wastewater for Public Park Spray Irrigation</b> |  |                      |                              |                              |
| <b>Parameter</b>   | <b>Average Monthly Discharge Limit</b> | <b>Weekly Median</b> | <b>Instantaneous Minimum</b> | <b>Instantaneous Maximum</b> |
| BOD, mg/L  | 10                                     | --                   | --                           | --                           |
| <i>E. coli</i> , organisms/100 mL                                      | --                                     | ND                   | --                           | 9                            |
| pH, Standard Units   | --                                     | --                   | 6.0                          | 9.0                          |

<sup>5</sup> There shall be no discharge of sanitary wastes.

<sup>6</sup> There shall be no visible sheen or floating solids or visible foam in other than trace amounts.

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(1) Self-Monitoring and Reporting Requirements for Outfall 003R (Reuse)

| <b>Table 5</b>   |                  |                    |              |
|--|------------------|--------------------|--------------|
| <b>Outfall 003R</b>  |                  |                    |              |
| <b>Self-Monitoring and Reporting Requirements <sup>1</sup></b>         |                  |                    |              |
| <b>Reuse of Industrial Wastewater for Public Park Spray Irrigation</b> |                  |                    |              |
| <b>Parameter</b>   | <b>Frequency</b> | <b>Sample Type</b> | <b>Units</b> |
| Total Flow <sup>7, 8</sup>   | Continuous       | Recorder           | MGD          |
| TDS  | Monthly          | Grab <sup>9</sup>  | mg/L         |
| pH   | Monthly          | Grab <sup>9</sup>  | SU           |
| BOD5   | Monthly          | Grab <sup>9</sup>  | mg/L         |
| TSS  | Monthly          | Grab <sup>9</sup>  | mg/L         |
| <i>E. coli</i>   | Monthly          | Grab <sup>9</sup>  | No./100 mL   |
| Oil & Grease   | Annual           | Grab <sup>9</sup>  | mg/L         |
| Metals   | Annual           | Grab <sup>9</sup>  | mg/L         |

| <b>Table 6</b>                            |            |
|---|------------|
| <b>Annual Metals Sampling<sup>1</sup></b> |            |
| Aluminum                                  | Iron       |
| Antimony                                  | Lead       |
| Arsenic                                   | Mercury    |
| Cadmium                                   | Molybdenum |
| Chromium (III)                            | Nickel     |
| Chromium (VI)                             | Selenium   |
| Copper                                    | Silver     |
| Cyanide                                   | Zinc       |

e. Outfall 004R (Dust Control on Designated Construction Sites)

| <b>Table 7</b>  |                            |                          |                          |                |                |                  |                    |
|---|----------------------------|--------------------------|--------------------------|----------------|----------------|------------------|--------------------|
| <b>Outfall 004R Type II</b>   |                            |                          |                          |                |                |                  |                    |
| <b>Reuse Effluent Limitations, Self-Monitoring and Reporting Requirements</b> |                            |                          |                          |                |                |                  |                    |
| <b>Parameter</b>  | <b>Max Monthly Average</b> | <b>Max Weekly Median</b> | <b>Max Daily Average</b> | <b>Minimum</b> | <b>Maximum</b> | <b>Frequency</b> | <b>Sample Type</b> |
| Total Flow  | --                         | --                       | --                       | --             | --             | Continuous       | Recorder           |
| BODs, mg/L  | 25                         | --                       | --                       | --             | --             | Weekly           | Composite          |
| TSS, mg/L   | 25                         | 35                       |                          |                |                | Daily            | Composite          |
| <i>E. coli</i> , No/100mL   | --                         | 126                      | --                       | --             | 500            | Daily            | Grab               |
| pH, Standard Units  | --                         | --                       | --                       | 6.0            | 9.0            | Daily            | Grab               |

7 Flow measurements of effluent volume shall be made in such a manner that the permittee can affirmatively demonstrate that representative values are being obtained.

8 If the rate of discharge is controlled, the rate and duration of discharge shall be reported.

9 Samples shall be collected after the industrial wastewater holding ponds prior to pressurization in the distribution lines.

**3. Compliance Schedule**

- a. Eagle Mountain must submit Engineering Plans and receive DWQ approval for land application of wastewater in accordance with UAC R317 on the 12-acre land application area (an area designated by Eagle Mountain, North of the current RIB and effluent storage ponds and west of the treatment plant). Also, Eagle Mountain shall have at least temporary disposal capacity for 1.2 MGD constructed and ready for use.

(1) Due August 1, 2021

- b. Eagle Mountain must submit a Reuse Project Plan and receive DWQ approval for application of treated wastewater as Dust Control at construction sites in accordance with UAC R317. All construction sites receiving treated wastewater from Eagle Mountain must be included in the Project Plan and be approved by DWQ. Eagle Mountain shall include a map in the Project Plan, showing all possible areas that could receive Eagle Mountain wastewater for dust control.

(1) Due August 1, 2021

- c. Eagle Mountain shall submit an Engineering Report and receive DWQ approval for long term legal wastewater disposal of 2.4 MGD of effluent wastewater flow from the Eagle Mountain WWTP. The report shall include supporting calculations for every disposal method selected including but not limited to agronomic uptake rates based on plant species, soil infiltration rates based on soil analysis, and evaporation rates based on established rates.

(1) Due August 1, 2021

- d. Eagle Mountain shall have long term wastewater disposal capacity for 2.4 MGD constructed and ready for use.

(1) Due November 1, 2021

4. Acute/Chronic Whole Effluent Toxicity (WET) Testing.

- a. There is no Toxicity Testing included in this permit.

**D. Management Practices for Land Application and Dust Control of Treated Effluent:**

1. The application of treated effluent to frozen, ice-covered, or snow-covered land is prohibited.
2. No person shall apply treated effluent where the slope of the site exceeds 6 percent.
3. The use should not result in a surface water runoff.
4. The use must not result in the creation of an unhealthy or nuisance condition, as determined by the local health department.
5. Any irrigation with treated effluent must be at least 300 feet from a potable well and must comply with R309-600 requirements.
6. For Type I reuse, any irrigation must be at least 50 feet from any potable water well and must comply with R309-600 requirements.
7. For Type II reuse, any irrigation must be at least 300 feet from any potable water well and must comply with R309-600 requirements.
8. For Type II reuse, spray irrigation must be at least 100 feet from areas intended for public access. This distance may be reduced or increased by the Director.
9. Impoundments of treated effluent must be sealed.
10. Public access to effluent storage and irrigation or disposal sites shall be restricted by a stock-tight fence or other comparable means which shall be posted and controlled to exclude the public.



E. 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.

F. RIB Best Management Practices:

*DWQ RIB Guidance* [https://deq.utah.gov/legacy/programs/water-quality/ground-water/docs/2011/04Apr/RIB\\_Guidance.pdf](https://deq.utah.gov/legacy/programs/water-quality/ground-water/docs/2011/04Apr/RIB_Guidance.pdf)

1. RIB drying cycle is typically 5 to 10 times longer than the hydraulic loading cycle.
2. RIB in areas with long term freezing temperatures in winter, shallow RIB systems are usually not operated during winter months (90 to 150 days)
3. Treated effluent must meet ground water quality limits prior to discharge to RIBs. A minimum of four feet of separation must be maintained between the bottom of a RIB and the top of the ground water mound. Piezometers may be required to verify that this four-foot separation distance is being met.
4. For each RIB, all standing water at the end of the hydraulic loading period must infiltrate within the first one third of the drying period.
5. Hydraulic loading must be uniform across the entire basin cross-sectional area. No springs, seeps or overland flow will be allowed hydraulically downgradient of the RIBs.
6. Clogging layer abatement must be included to maintain RIB performance.

G. Reporting of Monitoring Results.

1. Reporting of Wastewater Monitoring and Reuse Monitoring Results

Monitoring results obtained during the previous month shall be summarized for each month and filed on site on a Monthly Operational Report (MOR). MORs shall be available to DWQ on request. Monitoring results obtained during the previous calendar year shall be summarized and submitted in an Annual Report by May 1st. The report shall include a tabular summary of the monthly minimum, average, and maximum values. Legible copies of these, and all other reports required herein, shall be signed and certified in accordance with the requirements of Signatory Requirements (see Part VII.G), and submitted to the Division of Water Quality via the Division of Water Quality – Water Quality Electronic Submissions portal at:

<https://deq.utah.gov/water-quality/water-quality-electronic-submissions>

With e-Delivery Submittal Purpose of Submission: Eagle Mountain Annual Report – Operating Permit No. UTOP003

2. Eagle Mountain shall report any failures to meet the Lagoon and/or RIB Best Management Practices as per *Part V.H Twenty-four Hour Notification*. All maintenance records shall be maintained and available during inspections.

## **II. INDUSTRIAL PRETREATMENT PROGRAM**

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

1. *Indirect Discharge* means the introduction of pollutants into a publicly-owned treatment works (POTW) from any non-domestic source regulated under section 307 (b), (c) or (d) of the 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 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 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

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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. 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 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 **ninety (90) calendar days** of the effective date of this permit.
2. Monitoring will 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. Influent and Effluent Monitoring and Reporting Requirements. The permittee shall sample and analyze both the influent and effluent, for the parameters listed in the Monitoring for Pretreatment Program Table.

| Monitoring for Pretreatment Table |             |                  |       |                |  |  |
|-----------------------------------|-------------|------------------|-------|----------------|--|--|
| Parameter                         | Sample Type | Frequency        | Units |                |  |  |
| Total Arsenic                     | Composite   | See Part II B.4. | mg/L  |                |  |  |
| Total Cadmium                     |             |                  |       |                |  |  |
| Total Chromium                    |             |                  |       |                |  |  |
| Total Copper                      |             |                  |       |                |  |  |
| Total Lead                        |             |                  |       |                |  |  |
| Total Molybdenum                  |             |                  |       |                |  |  |
| Total Nickel                      |             |                  |       |                |  |  |
| Total Selenium                    |             |                  |       |                |  |  |
| Total Silver                      |             |                  |       |                |  |  |
| Total Zinc                        |             |                  |       |                |  |  |
| Total Cyanide                     |             |                  |       | Composite/Grab |  |  |
| Total Mercury                     |             |                  |       |                |  |  |
| TTOs                              |             |                  |       |                |  |  |

4. Influent and effluent samples must be taken for the parameters listed in the Monitoring for Pretreatment Table.
  - a. Samples must be taken with a method that is sensitive enough to determine if the parameter is present or absent, this must occur yearly for the metals and cyanide.
    - (1) Mercury must be sampled yearly utilizing the method 1631 for the influent and effluent.

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- (2) Other metals and cyanide listed in the Monitoring for Pretreatment Table must be sampled yearly unless the parameter is found present in the influent or effluent.
  - (a) If an SIU is known to be discharging the parameter sampling must occur quarterly.
  - (b) If the parameter is found present without a known SIU the parameter sampling must occur twice a year.
- b. Influent and effluent shall be analyzed by the permittee for total toxic pollutants (TTOs) listed in 40 CFR 122 Appendix D Table II (Organic Toxic Pollutants).
  - (1) The pesticides fraction of Appendix D, Table II is suspended unless pesticides are expected to be present.
  - (2) Sampling must be completed within the first year of the permit being issued.
    - (a) If sampling indicated the presents of organic toxic pollutants, sampling must occur again in the third and fifth year of the permit cycle.
    - (b) If sampling does not indicate the presents of organic toxic pollutants, sampling must only occur in the fifth year of the permit cycle as part of the renewal for the permit.
5. If no discharge occurs the permittee must sample the influent per the requirements in the Monitoring for Pretreatment Program Table. Discharge for this facility is from the rapid infiltration basin (RIB) therefore the monitoring for this section must occur prior to the RIB.
6. In accordance with the requirements of 40 CFR Part 403.5(c), the permittee shall determine if there is a need to develop or revise its local limits in order to implement the general and specific prohibitions of 40 CFR Part 403.5 (a) and Part 403.5 (b). A technical evaluation of the need to develop or revise local limits shall be submitted to the Division of Water Quality within 12 months of the effective date of this permit. This evaluation should be conducted in accordance with the latest revision of the EPA Local Limits Development Guidance. If a technical evaluation, reveals that development or revision of local limits is necessary, the permittee shall submit the proposed local limits revision to the Division of Water Quality for approval. Following approval by DWQ the permittee must implement the new local limits, based on the requirements indicated in the approval sent by the Director.
7. The results of the analyses of metals, cyanide and toxic organics shall be submitted along with the Discharge Monitoring Report (DMR) at the end of the earliest possible reporting period. Also, the permittee must submit a copy of the toxic organics data to the Pretreatment Coordinator for the DWQ via email.
8. 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 listed in Part II.B.3. or a pollutant of concern listed in the EPA Local Limit Development Guidance, the permittee must report the exceedances to the Pretreatment Coordinator for the Division of Water Quality. If the

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loading exceeds the allowable headworks load, increase sampling must occur based on the requirements given by the Pretreatment Coordinator. 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) and determining if the IU is a significant industrial user (SIU),
  - b. Determination of the qualitative and quantitative characteristics of each discharge, and
  - c. Appropriate production data.
2. The IWS must be maintained and updated with IU information as necessary, to ensure that all IUs are properly permitted and/or controlled at all times. Updates must be submitted to the Director sixty (60) days following a change to the IWS.
3. 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)*.
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. General prohibition Standards. 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 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;

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- 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. Significant Industrial Users Discharging to the POTW. The permittee shall provide adequate notice to the Director and the Division of Water Quality Industrial Pretreatment Coordinator of;
1. Any new introduction of pollutants into the treatment works from an indirect discharger (i.e., industrial user) which would be subject to *Sections 301 or 306* of the *WQA* if it were directly discharging those pollutants;
  2. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit; and
  3. For the purposes of this section, adequate notice shall include information on:
    - a. The quality and quantity of effluent to be introduced into such treatment works; and,
    - b. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from such publicly owned treatment works.
  4. Any IU that must comply with applicable requirements under Subtitles C and D of the Resource Conservation and Recovery Act (RCRA).
- F. Change of Conditions. At such time as a specific pretreatment limitation becomes applicable to an industrial user of the permittee, the Director may, as appropriate, do the following:
1. Amend the permittee's UPDES discharge permit to specify the additional pollutant(s) and corresponding effluent limitation(s) consistent with the applicable national pretreatment limitation;

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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;
  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; and/or
  4. Require the permittee to develop an approved pretreatment program.
- G. Legal Action. The Director retains, at all times, the right to take legal action against the industrial user and/or the treatment works, in those cases where a permit violation has occurred because of the failure of an industrial user to discharge at an acceptable level. If the permittee has failed to properly delineate maximum acceptable industrial contributor levels, the Director will look primarily to the permittee as the responsible party.
- H. Local Limits. If local limits are developed per R317-8-8.5(4)(b) to protect the POTW from pass-through or interference, then the POTW must submit limits to DWQ for review and public notice, as required by R317-8-8.5(4)(c). 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**

The State of Utah has adopted the 40 CFR 503 federal regulations for the disposal of sewage sludge (biosolids) by reference. This facility is covered by an individual biosolids permit (UTL-026093). The facility shall comply with all requirements of the biosolids permit.



**IV. STORM WATER REQUIREMENTS.**

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

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

Eagle Mountain does not meet either 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. Sample for reuse shall be collected after the storage reservoir prior to being pressurized in to the City irrigation system. Samples of biosolids shall be collected at a location representative of the quality of biosolids immediately prior to the use-disposal practice.
- B. Monitoring Procedures. Monitoring must be conducted according to test procedures approved under *Utah Administrative Code ("UAC") R317-2-10 and 40CFR Part 503*, unless other test procedures have been specified in this permit.
- C. Penalties for Tampering. The *Act* provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both.
- D. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any Compliance Schedule of this permit shall be submitted no later than 14 days following each schedule date.
- E. Additional Monitoring by the Permittee. If the permittee monitors any parameter more frequently than required by this permit, using test procedures approved under *UAC R317-2-10 and 40 CFR 503* or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or the Biosolids Report Form. Such increased frequency shall also be indicated. Only those parameters required by the permit need to be reported.
- F. Records Contents. Records of monitoring information shall include:
1. The date, exact place, and time of sampling or measurements;
  2. The individual(s) who performed the sampling or measurements;
  3. The date(s) and time(s) analyses were performed;
  4. The individual(s) who performed the analyses;
  5. The analytical techniques or methods used; and,
  6. The results of such analyses.
- G. Retention of Records. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least five years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time. A copy of this 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

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report shall be made to the Division of Water Quality, (801) 536-4300, or 24-hour answering service (801) 536-4123.

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

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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. Duty to Comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity, which may result in noncompliance with permit requirements.
- B. Penalties for Violations of Permit Conditions. The *Act* provides that any person who violates a permit condition implementing provisions of the *Act* is subject to a civil penalty not to exceed \$10,000 per day of such violation. Any person who willfully or negligently violates permit conditions or the Act is subject to a fine not exceeding \$25,000 per day of violation. Any person convicted under *UCA 19-5-115(2)* a second time shall be punished by a fine not exceeding \$50,000 per day. Except as provided at *Part VI.G, Bypass of Treatment Facilities* and *Part VI.H, Upset Conditions*, nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.
- C. Need to Halt or Reduce Activity not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- D. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit, which has a reasonable likelihood of adversely affecting human health or the environment. The permittee shall also take all reasonable steps to minimize or prevent any land application in violation of this permit.
- E. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
- F. Removed Substances. Collected screening, grit, solids, sludge, or other pollutants removed in the course of treatment shall be disposed of in such a manner so as to prevent any pollutant from entering any waters of the state or creating a health hazard. Sludge/digester supernatant and filter backwash shall not directly enter either the final effluent or waters of the state by any other direct route.
- G. Bypass of Treatment Facilities.
1. Bypass Not Exceeding Limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to paragraph 2 and 3 of this section.
  2. Prohibition of Bypass.
    - a. Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

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- (1) Bypass was unavoidable to prevent loss of human life, personal injury, or severe property damage;
  - (2) There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance, and
  - (3) The permittee submitted notices as required under *section 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 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.

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1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with technology-based permit effluent limitations if the requirements of paragraph 2 of this section are met. Director's administrative determination regarding a claim of upset cannot be judiciously challenged by the permittee until such time as an action is initiated for noncompliance.
  
2. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
  - b. The permitted facility was at the time being properly operated;
  - c. The permittee submitted notice of the upset as required under *Part V.H, Twenty-four Hour Notice of Noncompliance Reporting*; and,
  - d. The permittee complied with any remedial measures required under *Part VI.D, Duty to Mitigate*.
  
3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

**VII. GENERAL REQUIREMENTS**

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



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

3. Changes to authorization. If an authorization under *paragraph VII.G.2* is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of *paragraph VII.G.2* must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

4. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

H. Penalties for Falsification of Reports. The *Act* provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than \$10,000.00 per violation, or by imprisonment for not more than six months per violation, or by both.

I. Availability of Reports. Except for data determined to be confidential under *UAC R317-8-3.2*, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the office of Director. As required by the *Act*, permit applications, permits and effluent data shall not be considered confidential.

J. Oil and Hazardous Substance Liability. Nothing in this permit shall be construed to preclude the permittee of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under the *Act*.

K. Property Rights. The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

L. Severability. The provisions of this permit are severable, and if any provisions of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the 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:

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1. The current permittee notifies the Director at least 20 days in advance of the proposed transfer date;
  2. The notice includes a written agreement between the existing and new permittee's containing a specific date for transfer of permit responsibility, coverage, and liability between them; and,
  3. The Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify, or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph 2 above.
- N. State or Federal Laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by *UCA 19-5-117* and *Section 510* of the *Act* or any applicable Federal or State transportation regulations, such as but not limited to the Department of Transportation regulations.
- O. Water Quality - Reopener Provision. This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations and compliance schedule, if necessary, if one or more of the following events occurs:
1. Water Quality Standards for Waters of the State to which the permittee discharges or Reuse Standards are modified in such a manner as to require different effluent limits than contained in this permit.
  2. A final waste load allocation is developed and approved by the State and/or EPA for incorporation in this permit.
  3. Revisions to the current CWA § 208 areawide treatment management plans or promulgations/revisions to TMDLs (40 CFR 130.7) approved by the EPA and adopted by DWQ which calls for different effluent limitations than contained in this permit.
- P. Biosolids – Reopener Provision. This permit may be reopened and modified (following proper administrative procedures) to include the appropriate biosolids limitations (and compliance schedule, if necessary), management practices, other appropriate requirements to protect public health and the environment, or if there have been substantial changes (or such changes are planned) in biosolids use or disposal practices; applicable management practices or numerical limitations for pollutants in biosolids have been promulgated which are more stringent than the requirements in this permit; and/or it has been determined that the permittees biosolids use or land application practices do not comply with existing applicable state or federal regulations.
- Q. Storm Water-Reopener Provision. At any time during the duration (life) of this permit, this permit may be reopened and modified (following proper administrative procedures) as per *UAC R317-8*, to include, any applicable storm water provisions and requirements, a storm water pollution prevention plan, a compliance schedule, a compliance date, monitoring and/or reporting requirements, or any other conditions related to the control of storm water discharges to "waters-of-State".

**VIII. DEFINITIONS**

A. Wastewater.

1. The "7-day (and weekly) average", other than for *E. coli* bacteria, fecal coliform bacteria, and total coliform bacteria, is the arithmetic average of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. Geometric means shall be calculated for *E. coli* bacteria, fecal coliform bacteria, and total coliform bacteria. The 7-day and weekly averages are applicable only to those effluent characteristics for which there are 7-day average effluent limitations. The calendar week, which begins on Sunday and ends on Saturday, shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If a calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for that calendar week shall be included in the data for the month that contains Saturday.
2. The "30-day (and monthly) average," other than for *E. coli* bacteria, fecal coliform bacteria and total coliform bacteria, is the arithmetic average of all samples collected during a consecutive 30-day period or calendar month, whichever is applicable. Geometric means shall be calculated for *E. coli* bacteria, fecal coliform bacteria and total coliform bacteria. The calendar month shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms.
3. "Act," means the *Utah Water Quality Act*.
4. "Acute toxicity" occurs when 50 percent or more mortality is observed for either species at any effluent concentration. Mortality in the control must simultaneously be 10 percent or less for the effluent results to be considered valid.
5. "Bypass," means the diversion of waste streams from any portion of a treatment facility.
6. "Chronic toxicity" occurs when during a chronic toxicity test, the 25% inhibition concentration (IC25) calculated on the basis of test organism survival and growth, or survival and reproduction, is less than or equal to the effluent dilution designated as the receiving water concentration (RWC).
7. "IC<sub>25</sub>" is a point estimate of the toxicant concentration that would cause a 25% reduction in a biological measurement of the test organism, such as reproduction or growth.
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;

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- 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. Storm Water.
- 1. "Best Management Practices" ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control facility site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.
  - 2. "Coal pile runoff" means the rainfall runoff from or through any coal storage pile.
  - 3. "Co-located industrial activity" means when a facility has industrial activities being conducted onsite that are described under more than one of the coverage sections of

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*Appendix II* in the General Multi-Sector Permit for Storm Water Discharges Associated with Industrial Activity. Facilities with co-located industrial activities shall comply with all applicable monitoring and pollution prevention plan requirements of each section in which a co-located industrial activity is described.

4. “Commercial Treatment and Disposal Facilities” means facilities that receive, on a commercial basis, any produced hazardous waste (not their own) and treat or dispose of those wastes as a service to the generators. Such facilities treating and/or disposing exclusively residential hazardous wastes are not included in this definition.
5. “Landfill” means an area of land or an excavation in which wastes are placed for permanent disposal, and that is not a land application unit, surface impoundment, injection well, or waste pile.
6. “Land application unit” means an area where wastes are applied onto or incorporated into the soil surface (excluding manure spreading operations) for treatment or disposal.
7. “Municipal separate storm sewer system” (large and/or medium) means all municipal separate storm sewers that are either:
  - a. Located in an incorporated place (city) with a population of 100,000 or more as determined by the latest Decennial Census by the Bureau of Census (at the issuance date of this permit, Salt Lake City is the only city in Utah that falls in this category); or
  - b. Located in the counties with unincorporated urbanized populations of 100,000 or more, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties (at the issuance date of this permit Salt Lake County is the only county that falls in this category); or
  - c. Owned or operated by a municipality other than those described in paragraph *a.* or *b.* (above) and that are designated by the *Director* as part of the large or medium municipal separate storm sewer system.
8. “NOI” means “notice of intent”, it is an application form that is used to obtain coverage under the General Multi-Sector Permit for Storm Water Discharges Associated with Industrial Activity.
9. “NOT” means “notice of termination”, it is a form used to terminate coverage under the General Multi-Sector Permit for Storm Water Discharges Associated with Industrial Activity.
10. “Point source” means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.
11. “Section 313 water priority chemical” means a chemical or chemical categories that:

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- a. Are listed at *40 CFR 372.65* pursuant to *Section 313* of the *Emergency Planning and Community Right-to-Know Act (EPCRA)* (also known as *Title III of the Superfund Amendments and Reauthorization Act (SARA)* of 1986);
  - b. Are present at or above threshold levels at a facility subject to *EPCRA Section 313* reporting requirements; and
  - c. Meet at least one of the following criteria:
    - (1) Are listed in *Appendix D* of *40 CFR Part 122* on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table V (certain toxic pollutants and hazardous substances);
    - (2) Are listed as a hazardous substance pursuant to *Section 311(b)(2)(A)* of the *CWA* at *40 CFR 116.4*; or
    - (3) Are pollutants for which EPA has published acute or chronic water quality criteria. See *Appendix III* of this permit. This appendix was revised based on final rulemaking EPA published in the *Federal Register* November 30, 1994.
12. “Significant materials” includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under *Section 101(14)* of *CERCLA*; any chemical the facility is required to report pursuant to *EPCRA Section 313*; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.
13. “Significant spills” includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under *Section 311 of the Clean Water Act* (see *40 CFR 110.10* and *CFR 117.21*) or *Section 102* of *CERCLA* (see *40 CFR 302.4*).
14. “Storm water” means storm water runoff, snowmelt runoff, and surface runoff and drainage.
15. “SWDMR” means “storm water discharge monitoring report”, a report of the results of storm water monitoring required by the permit. The Division of Water Quality provides the storm water discharge monitoring report form.
16. “Storm water associated with industrial activity” (*UAC R317-8-3.8(6)(c) & (d)*) means the discharge from any conveyance that is used for collecting and conveying storm water and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the *UPDES* program. For the categories of industries identified in paragraphs (a) through (j) of this definition, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined in *40 CFR Part 401*); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas

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(including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the categories of industries identified in paragraph (k) of this definition, the term includes only storm water discharges from all areas (except access roads and rail lines) listed in the previous sentence where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water. For the purposes of this paragraph, material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are Federally, State, or municipally owned or operated that meet the description of the facilities listed in paragraphs (a) to (k) of this definition) include those facilities designated under *UAC R317-8-3.8(1)(a)5*. The following categories of facilities are considered to be engaging in "industrial activity" for purposes of this subsection:

- a. Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under *40 CFR Subchapter N* (except facilities with toxic pollutant effluent standards that are exempted under category (k) of this definition);
- b. Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 267), 28 (except 283 and 285), 29, 311, 32 (except 323), 33, 3441, 373;
- c. Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations no longer meeting the definition of a reclamation area under *40 CFR 434.11(l)* because the performance bond issued to the facility by the appropriate SMCRA authority has been released, or except for areas of non-coal mining operations that have been released from applicable State or Federal reclamation requirements after December 17, 1990) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; inactive mining operations are mining sites that are not being actively mined, but that have an identifiable owner/operator;
- d. Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of RCRA;
- e. Landfills, land application sites, and open dumps that have received any industrial wastes (waste that is received from any of the facilities described under this subsection) including those that are subject to regulation under *Subtitle D* of RCRA;
- f. Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but limited to those classified as Standard Industrial Classification 5015 and 5093;

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- g. Steam electric power generating facilities, including coal handling sites;
  - h. Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 4221-25), 43, 44, 45 and 5171 that have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or that are otherwise identified under paragraphs (a) to (g) or (I) to (k) of this subsection are associated with industrial activity;
  - i. Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under *40 CFR Part 403*. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and that are not physically located in the confines of the facility, or areas that are in compliance with *40 CFR Part 503*;
  - j. Construction activity including clearing, grading and excavation activities except: operations that result in the disturbance of less than 5 acres of total land area that are not part of a larger common plan of development or sale;
  - k. Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221-25, (and that are not otherwise included within categories (a) to (j))
17. "Waste pile" means any non-containerized accumulation of solid, non-flowing waste that is used for treatment or storage.



**FACT SHEET STATEMENT OF BASIS  
EAGLE MOUNTAIN  
OPERATING PERMIT FOR TREATMENT, REUSE, AND LAND DISPOSAL OF TREATED  
WASTEWATER  
PERMIT NUMBER: UTOP9003**

**FACILITY CONTACTS**

|                      |                       |                      |                       |
|----------------------|-----------------------|----------------------|-----------------------|
| <b>Person Name:</b>  | Mack Straw            | <b>Person Name:</b>  | Matt Goodrich         |
| <b>Position:</b>     | Public Works Director | <b>Position:</b>     | Wastewater Supervisor |
| <b>Phone Number:</b> | (801) 789-6678        | <b>Phone Number:</b> | (801) 789-6691        |

**Facility Name:** Eagle Mountain Wastewater Treatment Plant  
**Mailing Address:** 2545 North Pony Express Parkway  
Eagle Mountain, Utah 84005  
**Telephone:** (801) 789-6670  
**Actual Address:** 2565 North Pony Express Parkway  
Eagle Mountain, Utah 84005

**DESCRIPTION OF FACILITY**

Eagle Mountain City has two facilities located at their site: The Eagle Mountain Municipal Wastewater Treatment Plant (Treatment Plant) and the Eagle Mountain Industrial Wastewater Reuse Facility (Reuse Facility). These facilities are both covered under this permit. Finally, biosolids generated at the Treatment plant is permitted for disposal under UPDES Permit number UTL026093.

**Municipal Wastewater Treatment Plant Discharge to Rapid Infiltration Basins**

Eagle Mountain Wastewater Treatment Plant (Eagle Mountain) is an activated sludge wastewater treatment plant. Influent for the plant comes from the collection system and is first treated through screening and an anoxic zone, then to an oxidation ditch. Wastewater from the oxidation ditch goes to a clarifier before discharging to a rapid infiltration basin (RIB). The activated sludge from the clarifier goes through a drum screen and is returned to the ditch or wasted.

Currently, wasted biosolids sludge from the drum screen is sent to a fan press. The biosolids are dewatered and hauled to the Intermountain Regional Landfill (IRL) by Eagle Mountain City. Solids from the headworks and drum screen are hauled to the IRL by Ace Disposal. Eagle Mountain estimates they will produce and dispose of 158 dry metric tons of biosolids per year.

**Reuse of Industrial Wastewater for Public Park Spray Irrigation**

Eagle Mountain City is providing culinary water for use as non-contact cooling water in the climate control system at a data center located on property at Facebook Datacenter. The culinary water is used in the system and cycled through the system until the TDS reaches 1,500 mg/L and then discharged to Eagle Mountain Industrial Wastewater Reuse System. The Eagle Mountain City will be receiving approximately 3.1 million gallons per year of industrial wastewater from Facebook's Eagle Mountain data center. The industrial wastewater will flow into two 25.5 million gallon storage ponds. No sanitary waste or effluent of treated municipal wastewater will be stored in the industrial wastewater ponds. The industrial wastewater storage ponds will have an influent design capacity of 46 million gallons per year and a future effluent design capacity of 5.8 million gallons per day (MGD). When entering the industrial wastewater reuse holding

ponds, the industrial wastewater will be mixed with culinary water at an one to one ratio. The mixed reuse water will then be conveyed by pressurized 16 inch distribution pipeline to Cory Wride Park and used for spray irrigation of the park. The distribution system is being constructed for future compliance with DWQ Type I reuse requirements. Eagle Mountain has filed a Reuse Project Plan dated August 9, 2018.

## **DESCRIPTION OF DISCHARGE**

### **Municipal Wastewater Treatment Plant Discharge to Rapid Infiltration Basins**

| <u>Outfall No.</u> | <u>Description of Discharge Point</u>   |
|--------------------|---|
| 001                | Located at latitude 40° 16' 56" and longitude 112° 01' 24". The discharge is to the North Rapid Infiltration Basin. |

|     |   |
|-----|---|
| 002 | Located at latitude 40° 16' 51" and longitude 112° 01' 04". The discharge is to the South Rapid Infiltration Basin. |
|-----|---|

### **Reuse Outfall Number** **Reuse of Industrial Wastewater for Public Park Spray Irrigation**

|      |  |
|------|--|
| 003R | Located at approximately latitude 40° 16' 58" and longitude 112° 01' 19". The discharge is to a 24" pipe north of the reuse storage reservoirs to the Eagle Mountain pressurized irrigation system for use throughout the irrigation system. |
|------|--|

|      |  |
|------|--|
| 004R | <b><u>Reuse Effluent for Dust Control</u></b><br>Located at end of pipe of the storage lagoon at approximately latitude 40° 16' 50.30" N and longitude 112° 01' 01.57" W. The discharge is to a truck for dust control at designated construction sites in Eagle Mountain. |
|------|--|

## **RECEIVING WATERS AND CLASSIFICATION**

### **Municipal Wastewater Treatment Plant Discharge to Rapid Infiltration Basins**

The discharge to the RIBs will percolate to the underground aquifer. This aquifer has not been classified and this permit will require the permittee to evaluate the aquifer so appropriate effluent limitations can be set for ground water quality standards for any pollutants of concern (POC).

### **Reuse of Industrial Wastewater for Public Park Spray Irrigation**

Spray irrigation is not permitted to any Waters of the State. Spray irrigation will be applied at agronomic rates to minimize any percolation and shall be applied at rate as to only cause incidental runoff.

### **Reuse of Industrial Wastewater for Dust Control**

Dust Control is not permitted to any Waters of the State. Dust Control will be applied at agronomic rates to minimize any percolation and shall be applied at rate as to only cause incidental runoff.

**BASIS FOR EFFLUENT LIMITATIONS FOR THE MUNICIPAL WASTEWATER TREATMENT PLANT**

The inclusion of biological oxygen demand (BOD<sub>5</sub>), total suspended solids (TSS), *E. coli*, and pH as POC requiring effluent limits and the effluent limitations are based on current Utah Secondary Treatment Standards, *UAC R317-1-3.2*.

The inclusion of nitrate and total dissolved solids (TDS) effluent limits as POC were determined based on Best Professional Judgement (BPJ).

**Technology-Based Phosphorus Effluent Limit (TBPEL) Rule**

The Water Quality Board adopted *UAC R317-1-3.3*, Technology-Based Phosphorus Effluent Limit (TBPEL) Rule in 2014. The TBPEL rule as it relates to "non-lagoon" wastewater treatment plants establishes new regulations for the discharge of phosphorus to surface waters and is self-implementing. No discharges are permitted to surface water so the TBPEL rule does not apply.

| <b>Table 1<br/>Outfall 001 &amp; 002<br/>Effluent Limitations <sup>1</sup><br/>Municipal Wastewater Treatment Plant Discharge to Rapid Infiltration Basins</b> |  |                                       |                      |                      |
|--|--|---------------------------------------|----------------------|----------------------|
| <b>Parameter</b>   | <b>Average Monthly Discharge Limit</b> | <b>Average Weekly Discharge Limit</b> | <b>Daily Minimum</b> | <b>Daily Maximum</b> |
| BOD <sub>5</sub> , mg/L  | 25                                     | 35                                    | --                   | --                   |
| BOD Min % Removal  | 85                                     | --                                    | --                   | --                   |
| TSS, mg/L  | 25                                     | 35                                    | --                   | --                   |
| TSS Min % Removal  | 85                                     | --                                    | --                   | --                   |
| <i>E. coli</i> , organisms/100 mL  | 126                                    | 158                                   | --                   | --                   |
| pH, Standard Units   | --                                     | --                                    | 6.5                  | 9.0                  |
| TDS, mg/L <sup>2</sup>   | --                                     | --                                    | --                   | 1000 <sup>2</sup>    |
| Total Inorganic Nitrogen, mg/L <sup>2</sup>  | --                                     | --                                    | --                   | 10.0 <sup>2</sup>    |

**SELF-MONITORING AND REPORTING REQUIREMENTS FOR THE MUNICIPAL WASTEWATER TREATMENT PLANT**

The following self-monitoring requirements have been changed from the previous permit. Monitoring is required to demonstrate compliance with all effluent limitations.

The sampling frequency was set at monthly as long as flows do exceed 0.25 MGD for six consecutive months. If flows exceed 0.25 MGD the permittee will increase the minimum monitoring frequency to weekly without the need to modify the permit. This permit will require reports to be recorded monthly and submitted annually.

<sup>1</sup> See Definitions, Part VIII, for definition of terms.

<sup>2</sup> Effluent limits will be set based on the results of the special study of the ground water aquifer by the permittee.

| <b>Table 2<br/>Influent<br/>Municipal Wastewater Treatment Plant<br/>Self-Monitoring and Reporting Requirements <sup>1</sup></b> |                  |                    |              |
|--|------------------|--------------------|--------------|
| <b>Parameter</b>   | <b>Frequency</b> | <b>Sample Type</b> | <b>Units</b> |
| Flow   | Continuous       | Recorder           | MGD          |
| BOD <sub>5</sub>   | Monthly          | Grab               | mg/L         |
| TSS  | Monthly          | Grab               | mg/L         |

| <b>Table 3</b>   |                  |                    |              |
|--|------------------|--------------------|--------------|
| <b>Effluent 001 and 002</b>  |                  |                    |              |
| <b>Self-Monitoring and Reporting Requirements <sup>1</sup></b>                     |                  |                    |              |
| <b>Municipal Wastewater Treatment Plant Discharge to Rapid Infiltration Basins</b> |                  |                    |              |
| <b>Parameter</b>   | <b>Frequency</b> | <b>Sample Type</b> | <b>Units</b> |
| Total Flow <sup>3, 4</sup>   | Continuous       | Recorder           | MGD          |
| TDS  | Monthly          | Grab               | mg/L         |
| Total Inorganic Nitrogen   | Monthly          | Grab               | mg/L         |
| pH   | Monthly          | Grab               | SU           |
| BOD <sub>5</sub>   | Monthly          | Grab               | mg/L         |
| TSS  | Monthly          | Grab               | mg/L         |
| <i>E. coli</i>   | Monthly          | Grab               | No./100 mL   |
| Oil & Grease   | Annual           | Grab               | mg/L         |
| Metals   | Annual           | Grab               | mg/L         |

**BASIS FOR EFFLUENT LIMITATIONS FOR REUSE OF INDUSTRIAL WASTEWATER**

On a case by case basis the DWQ Director may consider approval of reuse of industrial wastewaters under *UAC R317-1-5*. However, *UAC R317-1-5* does not specify monitoring or effluent limitations so other regulations will be looked to for guidance. *UAC R317-3.11.4* governs treated domestic wastewater and spray irrigation at a public park is defined in *UAC R317-3.11.4.A.2* as a Type I use. Thus this permit will use the Type I requirements as guidelines for limitations and monitoring of the spray irrigation at a public park. The inclusion of biological oxygen demand (BOD<sub>5</sub>), *E. coli*, and pH as POC requiring effluent limits and the effluent limitations are based on current Use of Treated Domestic Wastewater Effluent where Human Exposure is Likely (Type I) Water Quality Limits, *UAC R317-3.11.4.C*.

| <b>Table 4</b>   |  |                      |                              |                              |
|--|--|----------------------|------------------------------|------------------------------|
| <b>Outfall 003R Effluent Limitations <sup>1, 5, 6</sup></b>            |  |                      |                              |                              |
| <b>Reuse of Industrial Wastewater for Public Park Spray Irrigation</b> |  |                      |                              |                              |
| <b>Parameter</b>   | <b>Average Monthly Discharge Limit</b> | <b>Weekly Median</b> | <b>Instantaneous Minimum</b> | <b>Instantaneous Maximum</b> |
| BOD, mg/L  | 10                                     | --                   | --                           | --                           |
| <i>E. coli</i> , organisms/100 mL                                      | --                                     | ND                   | --                           | 9                            |
| pH, Standard Units   | --                                     | --                   | 6.0                          | 9.0                          |

<sup>3</sup> 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.

<sup>4</sup> If the rate of discharge is controlled, the rate and duration of discharge shall be reported.

<sup>5</sup> There shall be no discharge of sanitary wastes.

<sup>6</sup> There shall be no visible sheen or floating solids or visible foam in other than trace amounts.

**SELF-MONITORING AND REPORTING REQUIREMENTS FOR REUSE OF INDUSTRIAL WASTEWATER**

This permit will require reports to be recorded monthly and submitted annually.

| <b>Table 5<br/>Outfall 003R<br/>Self-Monitoring and Reporting Requirements <sup>1</sup><br/>Reuse of Industrial Wastewater for Public Park Spray Irrigation</b> |                  |                    |              |
|---|------------------|--------------------|--------------|
| <b>Parameter</b>  | <b>Frequency</b> | <b>Sample Type</b> | <b>Units</b> |
| Total Flow <sup>7, 8</sup>  | Continuous       | Recorder           | MGD          |
| TDS   | Monthly          | Grab <sup>9</sup>  | mg/L         |
| pH  | Monthly          | Grab <sup>9</sup>  | SU           |
| BOD5  | Monthly          | Grab <sup>9</sup>  | mg/L         |
| TSS   | Monthly          | Grab <sup>9</sup>  | mg/L         |
| <i>E. coli</i>  | Monthly          | Grab <sup>9</sup>  | No./100 mL   |
| Oil & Grease  | Annual           | Grab <sup>9</sup>  | mg/L         |
| Metals  | Annual           | Grab <sup>9</sup>  | mg/L         |

| <b>Table 6<br/>Annual Metals Sampling<sup>1</sup></b> |            |
|---|------------|
| Aluminum  | Iron       |
| Antimony  | Lead       |
| Arsenic   | Mercury    |
| Cadmium   | Molybdenum |
| Chromium (III)  | Nickel     |
| Chromium (VI)   | Selenium   |
| Copper  | Silver     |
| Cyanide   | Zinc       |

**BASIS FOR EFFLUENT LIMITATIONS AND SELF-MONITORING REQUIREMENTS FOR REUSE FOR DUST CONTROL**

On a case by case basis the DWQ Director may consider approval of reuse for dust control under *UAC R317-1-5*. However, *UAC R317-1-5* does not specify monitoring or effluent limitations so other regulations will be looked to for guidance. *UAC R317-3.11.4* governs treated domestic wastewater and dust control is defined in *UAC R317-3.11.4.A.2* as a Type II use. Thus, this permit will use the Type II requirements as guidelines for limitations and monitoring of the dust control at designated construction sites in Eagle Mountain. The inclusion of biological oxygen demand (BOD<sub>5</sub>), *E. coli*, and pH as POC requiring effluent limits and the effluent limitations are based on current Use of Treated Domestic Wastewater Effluent where Human Exposure is Likely (Type I) Water Quality Limits, *UAC R317-3.11.4.C*.

<sup>7</sup> Flow measurements of effluent volume shall be made in such a manner that the permittee can affirmatively demonstrate that representative values are being obtained.

<sup>8</sup> If the rate of discharge is controlled, the rate and duration of discharge shall be reported.

<sup>9</sup> Samples shall be collected after the industrial wastewater holding ponds prior to pressurization in the distribution lines.

| <b>Table 7<br/>Outfall 004R Type II<br/>Reuse Effluent Limitations, Self-Monitoring and Reporting Requirements</b> |                                    |                                  |                                  |                |                |                  |                        |
|--|------------------------------------|----------------------------------|----------------------------------|----------------|----------------|------------------|------------------------|
| <b>Parameter</b>   | <b>Max<br/>Monthly<br/>Average</b> | <b>Max<br/>Weekly<br/>Median</b> | <b>Max<br/>Daily<br/>Average</b> | <b>Minimum</b> | <b>Maximum</b> | <b>Frequency</b> | <b>Sample<br/>Type</b> |
| <b>Total Flow</b>  | --                                 | --                               | --                               | --             | --             | Continuous       | Recorder               |
| <b>BOD<sub>5</sub>, mg/L</b>   | 25                                 | --                               | --                               | --             | --             | Weekly           | Composite              |
| <b>TSS, mg/L</b>   | 25                                 | 35                               |                                  |                |                | Daily            | Composite              |
| <b><i>E. coli</i>,<br/>No/100mL</b>  | ==                                 | 126                              | --                               | --             | 500            | Daily            | Grab                   |
| <b>pH, Standard<br/>Units</b>  | --                                 | --                               | --                               | 6.0            | 9.0            | Daily            | Grab                   |

**COMPLIANCE SCHEDULE**

- a. Eagle Mountain must submit Engineering Plans and receive DWQ approval for land application of wastewater in accordance with UAC R317 on the 12-acre land application area (an area designated by Eagle Mountain, North of the current RIB and effluent storage ponds and west of the treatment plant). Also, Eagle Mountain shall have at least temporary disposal capacity of 1.2 MGD for effluent wastewater constructed and ready for use.
  - (1) Due August 1, 2021
  
- b. Eagle Mountain must submit a Reuse Project Plan and receive DWQ approval for application of treated wastewater as Dust Control at construction sites in accordance with UAC R317. All construction sites receiving treated wastewater from Eagle Mountain must be included in the Project Plan and be approved by DWQ. Eagle Mountain shall include a map in the Project Plan, showing all possible areas that could receive Eagle Mountain wastewater for dust control.
  - (1) Due August 1, 2021
  
- c. Eagle Mountain shall submit an Engineering Report and receive DWQ approval for long term legal wastewater disposal of 2.4 MGD of effluent wastewater flow from the Eagle Mountain WWTP. The report shall include supporting calculations for every disposal method selected including but not limited to agronomic uptake rates based on plant species, soil infiltration rates based on soil analysis, and evaporation rates based on established rates.
  - (1) Due August 1, 2021
  
- d. Eagle Mountain shall have long term wastewater disposal capacity for 2.4 MGD constructed and ready for use.
  - (1) Due November 1, 2021

**Management Practices for Land Application and Dust Control of Treated Effluent**

- 1) The application of treated effluent to frozen, ice-covered, or snow-covered land is prohibited.
- 2) No person shall apply treated effluent where the slope of the site exceeds 6 percent.
- 3) The use should not result in a surface water runoff.
- 4) The use must not result in the creation of an unhealthy or nuisance condition, as determined by the local health department.
- 5) Any irrigation with treated effluent must be at least 300 feet from a potable well and must comply with R309-600 requirements.
- 6) For Type I reuse, any irrigation must be at least 50 feet from any potable water well and must comply with R309-600 requirements.
- 7) For Type II reuse, any irrigation must be at least 300 feet from any potable water well and must comply with R309-600 requirements.
- 8) For Type II reuse, spray irrigation must be at least 100 feet from areas intended for public access. This distance may be reduced or increased by the Director.
- 9) Impoundments of treated effluent must be sealed.
- 10) Public access to effluent storage and irrigation or disposal sites shall be restricted by a stock-tight fence or other comparable means which shall be posted and controlled to exclude the public.



**Lagoon Best Management Practices:**

- 1) The permittee shall take such 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.

**RIB Best Management Practices:**

*As per DWQ RIB Guidance [https://deq.utah.gov/legacy/programs/water-quality/ground-water/docs/2011/04Apr/RIB\\_Guidance.pdf](https://deq.utah.gov/legacy/programs/water-quality/ground-water/docs/2011/04Apr/RIB_Guidance.pdf)*

- 1) RIB drying cycle is typically 5 to 10 times longer than the hydraulic loading cycle.
- 2) RIB in areas with long term freezing temperatures in winter, shallow RIB systems are usually not operated during winter months (90 to 150 days)
- 3) Treated effluent must meet ground water quality limits prior to discharge to RIBs. A minimum of four feet of separation must be maintained between the bottom of a RIB and the top of the ground water mound. Piezometers may be required to verify that this four-foot separation distance is being met.
- 4) For each RIB, all standing water at the end of the hydraulic loading period must infiltrate within the first one third of the drying period.
- 5) Hydraulic loading must be uniform across the entire basin cross-sectional area. No springs, seeps or overland flow will be allowed hydraulically downgradient of the RIBs.
- 6) Clogging layer abatement must be included to maintain RIB performance.

**BIOSOLIDS**

Biosolids disposal is covered under UPDES Permit number UTL026093. Refer to the UPDES Permit and Fact Sheet for details on Biosolids treatment, disposal, monitoring, and reporting requirements.

**PRETREATMENT REQUIREMENTS**

A pretreatment program is not required to be developed by the permittee at this time. Conditions at the wastewater plant do warrant that industrial users be permitted by the Division of Water Quality (DWQ).

Tyson will be discharging process wastewater to the POTW. Conditions within the permit, for Tyson, indicated that discharge will not be allowed if capacity is not available at the POTW. This capacity includes the collection system, loading at the wastewater treatment plant and disposal of the wastewater.

DWQ is receiving one-time compliance forms for dental offices within the service area for the publicly owned treatment works (POTW). This is to meet the requirements of 40 CFR 441, the Dental Office Point Source Category. If a business license is request for a dental office information regarding the requirements of 40 CFR 441 must be provided to the dental office. Information regarding 40 CFR 441 can be found at

<https://www.epa.gov/eg/dental-effluent-guidelines>

DWQ must be made aware of the business license submitted by industrial users if the discharge will be to the Eagle Mountain POTW. If the discharge will be to the Timpanogos POTW the permittee must notify Timpanogos Special Service District.

If any suspected interference or passthrough occurs, the permittee must notify the DWQ immediately.

Although the permittee does not have to develop an approved pretreatment program, wastewater discharged to the POTW from industrial users is 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.

Industrial users are required to notify the POTW of discharges of hazardous waste. This notification should be provided to the DWQ by the permittee.

An industrial waste survey (IWS) is a required of the permittee as stated in Part II of the permit. The IWS is to assess the needs of the permittee regarding pretreatment assistance. 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 DWQ 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.

### **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,

Eagle Mountain does not meet either of the above criteria; therefore this permit does not include storm water provisions. The permit does however include a storm water re-opener provision.

### **BIOMONITORING REQUIREMENTS**

No biomonitoring is currently required for discharge to a rapid infiltration basin.

### **PERMIT DURATION**

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

Drafted by  
Ken Hoffman P.E., Discharge Permit  
Jen Robinson, Pretreatment  
Dan Griffin, Biosolids  
Lonnie Shull, Biomonitoring  
Carl Adams, Storm Water  
Utah Division of Water Quality, (801) 536-4300

### **PUBLIC NOTICE**

Began: May 26, 2021  
Ended: June 28, 2021

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 Department of Environmental Quality Division of Water Quality Public Notice 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 FACT SHEET**

During finalization of the Permit certain dates, spelling edits and minor language corrections may be completed. Due to the nature of these changes they are not considered major and the permit was not required to be Public Noticed again.

### **RESPONSIVENESS SUMMARY**

No Comments were submitted on the permit.