**FACT SHEET STATEMENT OF BASIS**

**TREMONTON WASTEWATER TREATMENT PLANT**

**RENEWAL PERMIT: DISCHARGE, BIOSOLIDS & STORM WATER**

**UPDES DISCHARGE PERMIT NUMBER: UT0020303**

**UPDES BIOSOLIDS PERMIT NUMBER: UTL-020303**

**MAJOR MUNICIPAL FACILITY**

# FACILITY CONTACTS

Person Name: Paul Fulgham

Position: Public Works Director

Phone Number: (435) 257-9471

Facility Name: City of Tremonton

Mailing and Facility Address: 102 South Tremont Street

Tremonton, Utah 84337

Telephone: (435) 257-2674

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Tremonton, Utah 84337

###### DESCRIPTION OF FACILITY

Tremonton Wastewater Treatment Plant (TWWTP) has an average design flow rate of 2.0 million gallons per day (MGD) and serves the cities of Tremonton and Garland in Box Elder County, Utah. The TWWTP facility domestic waste water flow process is as follows: influent flow and head works with micro-screen and grit filter, a primary clarifier, two aerator basins containing four aerators each, two secondary clarifiers operated in parallel, and ultra-violet (UV) disinfection. The discharging outfall into the Malad River is located on site at latitude 40° 41’ 57” and longitude 112° 09’ 36”.

###### SUMMARY OF CHANGES FROM PREVIOUS PERMIT

All limitations will remain the same as those in the previous permit. Based on effluent monitoring data and the capacity of the existing treatment facility, TWWTP is expected to be able to comply with the limitations.

Water Quality 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. The TBPEL rule includes the following requirements for non-lagoon wastewater treatment plants:

The TBPEL requires that all non-lagoon wastewater treatment works discharging wastewater to surface waters of the state shall provide treatment processes which will produce effluent less than or equal to an annual mean of 1.0 mg/L for total phosphorus. This TBPEL shall be achieved by January 1, 2020.

The TBPEL discharging treatment works are required to implement, at a minimum, monthly monitoring of the following beginning July 1, 2015:

R317-1-3.3, D, 1 Influent for total phosphorus (as P) and total Kjeldahl nitrogen (as N) concentrations;

R317-1-3.3, D, 2. Effluent for total phosphorus and orthophosphate (as P), ammonia, nitrate-nitrite and total Kjeldahl nitrogen (an N);

In R317-1-3.3, D, 3 the rule states that all monitoring shall be based on 24-hour composite samples by use of an automatic sampler or a minimum of four grab samples collected a minimum of two hours apart.

###### DISCHARGE

DESCRIPTION OF DISCHARGE

Outfall Description of Discharge Point

001 Located at latitude 40° 41’ 57” and longitude 112° 09’ 36”. The discharge is through a 200-foot long 16-inch diameter gravity flow concrete pipe leading from the UV basin to the Malad River.

RECEIVING WATERS AND STREAM CLASSIFICATION

The final discharge flows into the Malad River approximately 10½ miles upstream from its confluence with the Bear River. The Malad River is classified as 2B and 3C according to *Utah Administrative Code (UAC) R317-2-12.7.*

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

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

BASIS FOR EFFLUENT LIMITATIONS

Limitations on total suspended solids (TSS), biochemical oxygen demand (BOD5), *E. coli*, pH and percent removal for BOD5 and TSS are based on current Utah Secondary Treatment Standards, UAC R317-1-3.2. Limitations for ammonia are based on the waste load analysis. The oil and grease is based on best professional judgment (BPJ). Attached is a Wasteload Analysis for this discharge into the Malad River. It has been determined that this discharge will not cause a violation of water quality standards. An Antidegradation Level II review is not required since the Level I review shows that water quality impacts are minimal.

DWQ is currently revising the Lower Bear River Total Maximum Daily Load (TMDL). At this point in time, there is some level of uncertainty as to what the ultimate TMDL total phosphorous (TP) allocations will be for the identified point source facilities, including TWWTP. Therefore, the total phosphorous TP monitoring requirements included in the permit primarily addresses the TBPEL Rule in UAC R317-1-3.3.

Reasonable Potential Analysis

Since January 1, 2016, DWQ has conducted reasonable potential analysis (RP) on all new and renewal applications received after that date. RP for this permit renewal was conducted following DWQ’s September 10, 2015 Reasonable Potential Analysis Guidance (RP Guidance). There are four outcomes defined in the RP Guidance as follows;

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

Outcome B: No new effluent limitation. Routine monitoring requirements will be placed or increased from what they are in the permit,

Outcome C: No new effluent limitation. Routine monitoring requirements maintained as they are in the permit,

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

These Outcomes provide a frame work for what routine monitoring or effluent limitations are required.

A qualitative RP analysis was performed on the applicable metals constituents from TWWTP discharge data over the past five years. Initial screening for metals values that were submitted through the discharge monitoring reports showed that a closer look at any of the metals is not needed since all of the semi-annual metals results were either below detection limits and/or below water quality standards. Therefore no RP currently exists at TWWTP and a qualitative RP analysis was not necessary at this time. The results of the RP analysis was Outcome C: No new effluent limitation, Routine monitoring requirements maintained as they are in the permit.

The permittee is expected to be able to comply with these limitations as follows:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Effluent Limitations** \*a | | | | |
|  |  | Maximum |  |  |
|  | Monthly | Weekly | Daily | Daily |
| Parameter | Average | Average | Minimum | Maximum |
| Total Flow, MGD | 2.0 | NA | NA | 3.0 |
| BOD5, mg/L | 25 | 35 | NA | NA |
| BOD5, Minimum % Removal | 85 | NA | NA | NA |
| TSS, mg/L | 25 | 35 | NA | NA |
| TSS, Minimum % Removal | 85 | NA | NA | NA |
| E. Coli, no./100mL | 126 | 157 | NA | NA |
| Ammonia (mg/L) Winter (Jan-March) | 15 | NA | NA | 25 |
| Ammonia (mg/L) Spring (April-Jun) | 15 | NA | NA | 30 |
| Ammonia (mg/L) Summer (July- Sep) | 2.5 | NA | NA | 12 |
| Ammonia (mg/L) Fall (Oct-Dec) | 5 | NA | NA | 17 |
| Dissolved Oxygen, mg/L | NA | NA | 5.0 | NA |
| Oil & Grease, mg/L | NA | NA | NA | 10.0 |
| pH, Standard Units | NA | NA | 6.5 | 9.0 |

NA – Not Applicable; MGD – million gallons per day; mg/L – milligrams per liter

SELF-MONITORING AND REPORTING REQUIREMENTS

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Self-Monitoring and Reporting Requirements** \*a | | | |
| Parameter | Frequency | Sample Type | Units |
| Total Flow \*b \*c | Continuous | Recorder | MGD |
| BOD5, Influent \*d | 2 x Week | Composite | mg/L |
| BOD5, Effluent | 2 x Week | Composite | mg/L |
| BOD5, Minimum % Removal | Monthly | Calculation | % |
| TSS, Influent \*d | 2 x Week | Composite | mg/L |
| TSS, Effluent | 2 x Week | Composite | mg/L |
| TSS, Minimum % Removal | Monthly | Calculation | % |
| E. Coli | 2 x Week | Grab | mg/L |
| Ammonia, effluent | 2 x Week | Composite | mg/L |
| Total Phosphorus, Influent \*d | Monthly | Grab | mg/L |
| Total Phosphorus, Effluent \*e | Monthly | Grab | mg/L |
| Orthophosphate (as P), Effluent only | Monthly | Grab | mg/L |
| Total Kjeldahl Nitrogen (as N), Influent \*d | Monthly | Grab | mg/L |
| Total Kjeldahl Nitrogen (as N), Effluent | Monthly | Grab | mg/L |
| Nitrate (NO3), Effluent only | Monthly | Grab | mg/L |
| Nitrite (NO2), Effluent only | Monthly | Grab | mg/L |
| Oil & Grease \*f | Monthly | Visual/Grab | mg/L |
|
| pH | 2 x Week | Grab | SU |
| WET, Acute Biomonitoring | Quarterly | Composite | Pass/Fail |
| Metals, Influent | 2 x Year | Composite | mg/L |
| Metals, Effluent | 2 x Year | Composite | mg/L |
| Organic Toxics, Influent and Effluent, \*g | 1st, 3rd, & 5th Year | Grab | mg/L |

\*a See Definitions, *Part VIII*, of the permit for definition of terms.

\*b Flow measurements of influent/effluent volume shall be made in such a manner that TWWTP can affirmatively demonstrate that representative values are being obtained.

\*c If the rate of discharge is controlled, the rate and duration of discharge shall be reported.

\*d In addition to monitoring the final discharge, influent samples shall be taken and analyzed for this constituent at the same frequency as required for this constituent in the discharge.

\*e Total Phosphorus is being sampled to reflect changes required with the adoption of UCA R317-1-3.3, Technology-based Phosphorus Effluent Limits rule and in support of the implementation work being done for the TMDL on the Bear River watershed.

\*f Oil & Grease to be sampled when sheen is present or visible. If no sheen is present or visible, report NA.

\*g Testing must be performed in the first, third and fifth year of the permit cycle. A list of the organics to be tested can be found in 40CFR122 appendix D table II. If results of metal analysis are detectable, more frequent sampling of the metals may be required.

**BIOSOLIDS**

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

DESCRIPTION OF TREATMENT AND DISPOSAL

The solids at the TWWTP are stabilized by oxidation ditches for about 15 days, and pumped to two aerobic digesters. The solids are treated for another 40 days at 20 °C (68 °F) in the first digester, then 60 days at 15 °C (59 °F) in the second unit. After which the solids are pumped to a screw press where they are dewatered from about 2% solids to around 17% solids. At this point the solids do not meet the pathogen reduction requirements for Class A or Class B standards as they come off the screw press, nor do they meet a requirement for vector attraction reduction (VAR). Therefore, the biosolids cannot be sold or given away to the general public for lawn and garden use until they undergo further treatment. To meet Class A standards TWWTP tranfers the biosolids offsite for composting through the windrow method for land application. Then the compost is sold or given away to the public.

The Permittee submitted their 2017 annual biosolids report on March 3, 2018. The report states the Permittee produced 375 dry metric tons (DMT) of solids. After the addition of wood chips and green waste, a total of 760 DMT of composted biosolids were produced and sold or given away to the public.

The last inspection conducted at the land application site was September 13, 2016. The inspection showed that TWWTP was in compliance with all aspects of the biosolids management program.

**SELF-MONITORING REQUIREMENTS**

Under *40 CFR 503.16(a)(1),* the self-monitoring requirements are based upon the amount of biosolids disposed per year and shall be monitored according to the chart below.

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

In 2017, the TWWTP disposed of 760 DMT of biosolids, therefore they need to sample at least four times a year.

Landfill Monitoring

Under *40 CFR 258,* the landfill monitoring requirements include a paint filter test. If the biosolids do not pass a paint filter test, the biosolids cannot be disposed in the sanitary landfill *(40 CFR 258.28(c)(1).*

**BIOSOLIDS LIMITATIONS**

Heavy Metals

Class A Biosolids for Home Lawn and Garden Use

The intent of the heavy metals regulations of Table 3, *40 CFR 503.13* is to ensure the heavy metals do not build up in the soil in home lawn and gardens to the point where the heavy metals become phytotoxic to plants. The permittee will be required to produce an information sheet (see *Part III. C*. of the permit) to made available to all people who are receiving and land applying Class A biosolids to their lawns and gardens. If the instructions of the information sheet are followed to any reasonable degree, the Class A biosolids will be able to be land applied year after year, to the same lawns and garden plots without any deleterious effects to the environment. The information sheet must be provided to the public, because the permittee is not required, nor able to track the quantity of Class A biosolids that are land applied to home lawns and gardens.

Class A Requirements With Regards to Heavy Metals

If the biosolids are to be applied to a lawn or home garden, the biosolids shall not exceed the maximum heavy metals in Table 1 and the monthly average pollutant concentrations in Table 3 (see Table 1 and Table 3 below). If the biosolids do not meet these requirements, the biosolids cannot be sold or given away for applications to home lawns and gardens.

Class B Requirements for Agriculture and Reclamation Sites

The intent of the heavy metals regulations of Tables 1, 2 and 3, of *40 CFR 503.13* is to ensure that heavy metals do not build up in the soil at farms, forest land, and land reclamation sites to the point where the heavy metals become phytotoxic to plants. The permittee will be required to produce an information sheet (see *Part III. C*. of the permit) to be handed out to all people who are receiving and land applying Class B biosolids to farms, ranches, and land reclamation sites (if biosolids are only applied to land owned by the permittee, the information sheet requirements are waived). If the biosolids are land applied according to the regulations of *40 CFR 503.13*, to any reasonable degree, the Class B biosolids will be able to be land applied year after year, to the same farms, ranches, and land reclamation sites without any deleterious effects to the environment.

Class B Requirements With Regards to Heavy Metals

If the biosolids are to be land applied to agricultural land, forest land, a public contact site or a reclamation site it must meet at all times:

The maximum heavy metals listed in *40 CFR Part 503.13(b) Table 1* and the heavy metals loading rates in *40 CFR Part 503.13(b) Table 2*; or

The maximum heavy metals in *40 CFR Part 503.13(b) Table 1* and the monthly heavy metals concentrations in *40 CFR Part 503.13(b) Table 3*.

Tables 1, 2, and 3 of Heavy Metal Limitations

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

Any violation of these limitations shall be reported in accordance with the requirements of Part III.F.1. of the permit .If the biosolids do not meet these requirements they cannot be land applied.

Pathogens

The Pathogen Control class listed in the table below must be met;

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

Class A Requirements for Home Lawn and Garden Use

If biosolids are land applied to home lawns and gardens, the biosolids need to be treated by a specific process to further reduce pathogens (PFRP), and meet a microbiological limit of less than less than 3 most probable number (MPN) of *Salmonella* per 4 grams of total solids (or less than 1,000 most probable number (MPN/g) of fecal coliform per gram of total solids) to be considered Class A biosolids. The TWWTP will achieve PFRP through a method of windrow composting.

1. Windrow Method- Using the windrow method of composting, the temperature needs to be maintained at 55 oC (131 oF) or higher for fifteen days, with a minimum of five turnings during those fifteen days,

The composting method is found under *(40 CFR 503.32(a)(8)(ii)).*

The practice of sale or giveaway to the public is an acceptable use of biosolids of this quality as long as the biosolids continue to meet Class A standards with respect to pathogens. If the biosolids do not meet Class A pathogen standards the biosolids cannot be sold or given away to the public, and the permittee will need find another method of beneficial use or disposal.

Pathogens Class B

If biosolids are to be land applied for agriculture or land reclamation the solids need to be treated by a specific process to significantly reduce pathogens (PSRP). The PSRP may be accomplished through testing or compostingcomposting:

1. Under *40 CFR 503.32 (b)(2)*, TSSD may test the biosolids and must meet a microbiological limit of less than 2,000,000 MPN of fecal coliform per gram for the biosolids to be considered Class B biosolids with respect to pathogens.

2. Under *40 CFR 503.32 (b)(3)* the PSRP may be accomplished through composting. To achieve this, the temperature must be above 40o C (104o F) or higher, and remain at 40o C or higher for a minimum of five days. For four hours, during the five days, the temperature needs to exceed 55o C (113o F).

### 

### Vector Attraction Reduction (VAR)

If the biosolids are land applied TWWTP will be required to meet VAR through the use of a method of listed under *40 CFR 503.33.*  The TWWTP intends to meet the vector attraction reduction requirements through one of the methods listed below.

1. Under *40 CFR 503.33(b)(5)* the solids need treated through composting with a temperature of 40° C (104° F) or higher for at least 14 days with an average temperature of over 45° C (113° F).

If the biosolids do not meet a method of VAR, the biosolids cannot be land applied.

If the permittee intends to use another one of the listed alternatives in *40 CFR 503.33*, the Director and the EPA must be informed at least thirty (30) days prior to its use. This change may be made without additional public notice

Landfill Monitoring

Under *40 CFR 258,* the landfill monitoring requirements include a paint filter test to determine if the biosolids exhibit free liquid. If the biosolids do not pass a paint filter test, the biosolids cannot be disposed in the sanitary landfill *(40 CFR 258.28(c)(1).*

Record Keeping

The record keeping requirements from *40 CFR 503.17* are included under *Part III.G*. of the permit. The amount of time the records must be maintained are dependent on the quality of the biosolids in regards to the metals concentrations. If the biosolids continue to meet the metals limits of *Table 3* of *40 CFR 503.13*, and are sold or given away the records must be retained for a minimum of five years. If the biosolids are disposed in a landfill the records must retained for a minimum of five years.

Reporting

TWWTPmust report annually as required in *40 CFR 503.18*. This report is to include the results of all monitoring performed in accordance with *Part III.B* of the permit, information on management practices, biosolids treatment, and certifications. This report is due no later than February 19 of each year. Each report is for the previous calendar year.

**MONITORING DATA**

METALS MONITORING DATA

The TWWTP was required to sample for metals at least four times in 2017. TWWTP sampled the biosolids four times. All biosolids land applied in 2017 met *Table 3* of *40 CFR 503.13,* therefore the TWWTP biosolids qualify as EQ with regards to metals. The monitoring data is below.

TWWTP Metals Monitoring Data 2017

| TWWTP Metals Monitoring Data, 2017 | | | |
| --- | --- | --- | --- |
| Parameter | Table 3, mg/kg  (Exceptional Quality) | Average, mg/kg | Maximum, mg/kg |
| Arsenic | 41.0 | 17.65 | 25.60 |
| Cadmium | 39.0 | 0.3 | 0.42 |
| Copper | 1,500.0 | 244.5 | 321 |
| Lead | 300.0 | 6.84 | 9.33 |
| Mercury | 17.0 | 1.1 | 3.1 |
| Molybdenum | 75.0 | 10.72 | 13.9 |
| Nickel | 400.0 | 21.92 | 29.90 |
| Selenium | 36.0 | 7.12 | 11.8 |
| Zinc | 2,800.0 | 416.75 | 550 |

**PATHOGEN MONITORING DATA (Compost)**

The TWWTP was required to monitor the composted biosolids for pathogens at least four times in 2017 The TWWTP had the choice to sample for *fecal* coliform or *salmonella*, and the TWWTP chose *fecal* coliform. Each monitoring episode needs to consist of seven samples, for a total 28 samples. All compost sold or given away in 2017 met the Class A pathogen standards for compost. The monitoring data is below.

TWWTP Fecal Coliform Monitoring Data 2017 (Compost)

|  |  |
| --- | --- |
| Geometric Mean of 28 Samples,  Most Probable Number Per Gram (2017) | Maximum of 28 Samples,  Most Probable Number Per Gram (2017) |
| 32.09 | 249.6 |

###### STORM WATER

STORMWATER REQUIREMENTS

Storm water provisions are included in this combined UPDES permit.

The storm water requirements are based on the UPDES Multi-Sector General Permit for Storm Water Discharges for Industrial Activity, General Permit No. UTR000000 (MSGP). All sections of the MSGP that pertain to discharges from wastewater treatment plants have been included and sections which are redundant or do not pertain have been deleted.

The permit requires the preparation and implementation of a storm water pollution prevention plan for all areas within the confines of the plant. Elements of this plan are required to include:

1. The development of a pollution prevention team:

2. Development of drainage maps and materials stockpiles:

3. An inventory of exposed materials:

4. Spill reporting and response procedures:

5. A preventative maintenance program:

6. Employee training:

7. Certification that storm water discharges are not mixed with non-storm water discharges:

8. Compliance site evaluations and potential pollutant source identification, and:

9. Visual examinations of storm water discharges.

## PRETREATMENT REQUIREMENTS

The permittee has not been designated for pretreatment program development because it does not meet conditions which necessitate a full program. The flow through the plant is less than five (5) MGD, there are no categorical industries discharging to the treatment facility, industrial discharges comprise less than 1 percent of the flow through the treatment facility, and there is no indication of pass through or interference with the operation of the treatment facility such as upsets or violations of the POTW's UPDES permit limits*.*

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

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

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

# BIOMONITORING REQUIREMENTS

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

Since the permittee is a Major municipal discharging facility, the renewal permit will require whole effluent toxicity (WET) testing. Previously, Acute WET tests were conducted semi-annually alternating between the Ceriodaphnia dubia and Pimephales promelas (fathead minnows) test species. The previous testing frequency was determined based on the fact that TWWTP has not violated a WET test for the previous permit cycle and that there is no categorical industrial users discharging to the facility. For this permit renewal, the TWWTP facility will be required to conduct quarterly Acute toxicity testing alternating between the Ceriodaphnia dubia and Pimephales promelas (fathead minnows) species as detailed in the permit. This increase to quarterly WET testing is based upon the revised UPDES Permitting and Enforcement Guidance Document for Whole Effluent Toxicity Control dated February 2018, which requires at a minimum quarterly WET testing for all Major facilities.

The permit will also contain the standard requirements for accelerated testing upon failure of a WET test and a PTI (Preliminary Toxicity Investigation) and TRE (Toxicity Reduction Evaluation) as necessary.

###### PERMIT DURATION

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

Drafted by

Jeff Studenka, Discharge

Daniel Griffin, Biosolids

Jennifer Robinson, Pretreatment

Michael George, Storm Water

Lonnie Shull, Biomonitoring

Nick von Stackelberg, Wasteload Analysis & Antidegradation Review

Utah Division of Water Quality, (801) 536-4300

**PUBLIC NOTICE INFORMATION (Updated September 30, 2018)**

Began: August 29, 2018

Ended: September 29, 2018

The Public Notice of the draft renewal permit was published in The Tremonton Leader-Garland Times at the beginning of the public comment period.

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.

No comments were received during the public comment period. Staff recommends reissuance of the UPDES permit as drafted.

**ADDENDUM TO FSSOB**

Attachment 1: Wasteload Analysis

DWQ-2018-005662

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**ATTACHMENT 1**

*Wasteload Analysis*

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1. CPLR -- Cumulative Pollutant Loading Rate [↑](#footnote-ref-1)
2. APLR – Annual Pollutant Loading Rate [↑](#footnote-ref-2)
3. MPN –Most Probable Number [↑](#footnote-ref-3)