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

UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM (UPDES) PERMITS

Major Municipal Permit No. **UT0020303**
Biosolids Permit No. **UTL020303**
Storm Water Permit No. **UTR000000**

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

TREMONTON WASTEWATER TREATMENT PLANT

is hereby authorized to discharge from its wastewater treatment facility to receiving waters named **MALAD RIVER**, to dispose of biosolids, and to discharge storm water, in accordance with specific limitations, outfalls, and other conditions set forth herein.

This permit shall become effective on October 01, 2013

This permit expires at midnight on September 30, 2018.

Signed this 3rd day of October, 2013

John J. Whitehead
Acting Director
Utah Division of Water Quality

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I. DISCHARGE LIMITATIONS AND REPORTING REQUIREMENTS

A. Description of Discharge Point. The authorization to discharge wastewater provided under this part is limited to those outfalls specifically designated below as discharge locations. Discharges at any location not authorized under a UPDES permit are violations of the *Act* and may be subject to penalties under the *Act*. Knowingly discharging from an unauthorized location or failing to report an unauthorized discharge may be subject to criminal penalties as provided under the *Act*.

Outfall Number	Location of Discharge Outfall
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.

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

C. Specific Limitations and Self-Monitoring Requirements.

1. Effective immediately, and lasting through the life of this permit, there shall be no acute or chronic toxicity in Outfall 001 as defined in *Part VIII*, and determined by test procedures described in *Part I. C.3.a & b* of this permit.

2. Effective immediately and lasting the duration of this permit, TWWTP is authorized to discharge from Outfall 001. Such discharges shall be limited and monitored by TWWTP as specified below:

Effluent Limitations a/				
Parameter	Monthly Average	Maximum Weekly Average	Daily Minimum	Daily Maximum
Total Flow, MGD	2.0	NA	NA	NA
BOD_5, mg/L	25	35	NA	NA
BOD_5, 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-Mar) Interim Limit	NA	NA	NA	NA
Ammonia (mg/L) Winter (Jan-Mar) Final Limit b/	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

Self-Monitoring and Reporting Requirements a/			
Parameter	Frequency	Sample Type	Units
Total Flow c/ d/	Continuous	Recorder	MGD
BOD_5, Influent e/	2 x Week	Composite	mg/L
BOD_5, Effluent	2 x Week	Composite	mg/L
BOD_5, Minimum % Removal	Monthly	Calculation	%
TSS, Influent e/	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 f/	Monthly	Grab	mg/L
Oil & Grease	Monthly If Sheen is Observed	Grab	mg/L
pH	2 x Week	Grab	SU
WET, Acute Biomonitoring	2 x Year	Composite	Pass/Fail
Metals, Influent	2 x Year	Composite	mg/L
Metals, Effluent	2 x Year	Composite	mg/L
Organic Toxics g/	2nd & 4th Year	Grab	mg/L

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

b/ Ammonia Winter Limit Compliance Schedule:

Date	Milestone
March 31, 2014	Complete Ammonia Sampling for Winter Season
January 1, 2015	Comply with Final Winter Ammonia Effluent Limit

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

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

e/ 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.

f/ Total Phosphorus is being sampled in support of the work being done for the TMDL currently underway for the Bear River. The Pollutant of Concern (POC's) will be monitored and reported by the facility on a monthly basis, but will not have a limit associated with them. Minimum sampling frequency requested is monthly, reporting the monthly average. If more sampling is done, an average value should be reported.

g/ Testing must be performed in the second and fourth 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

3. Acute Whole Effluent Toxicity (WET) Testing.

a. *Whole Effluent Testing – Acute Toxicity.* Starting on the effective date of this permit, TWWTP shall conduct acute static replacement toxicity tests semi-annually on a composite sample of the final effluent. The sample shall be collected at outfall 001.

The monitoring frequency for acute tests shall be semi-annually unless a sample is found to be acutely toxic during a routine test. If that occurs, the monitoring frequency shall become weekly (See *Part I.C.3.b, Accelerated Testing*). Samples shall be collected on a two day progression; i.e., if the first sample is on a Monday, during the next sampling period, the sampling shall begin on a Wednesday, etc.

The replacement static acute toxicity tests shall be conducted in general accordance with the procedures set out in the latest revision of *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, 5th Edition, (EPA 821/R/02/012), October 2002,* as per *40 CFR 136.3(a) TABLE 1A-LIST OF APPROVED BIOLOGICAL METHODS.* The permittee shall conduct the 48-hour static replacement toxicity test using Ceriodaphnia dubia and the acute 96-hour static replacement toxicity test using Pimephales promelas (fathead minnow). This will be done alternating semi-annually between Ceriodaphnia dubia and Pimephales promelas (fathead minnow).

Acute toxicity occurs when 50 percent or more mortality is observed for either species at any effluent concentration (lethal concentration or LC_{50}). Mortality in the control must simultaneously be 10 percent or less for the results to be considered valid. If more than 10 percent control mortality occurs, the test shall be repeated until satisfactory control mortality is achieved.

Semi-annual test results shall be reported along with the Discharge Monitoring Report (DMR) submitted for the end of the reporting calendar quarter e.g., biomonitoring results for the calendar quarter ending March 31 shall be reported with the DMR due April 28, with the remaining biomonitoring reports submitted with DMRs due each July 28, October 28, and January 28). All test results shall be reported along with the DMR submitted for that reporting period. The format for the report shall be consistent with the latest revision of the *Region VIII Guidance* and shall include all chemical and physical data as specified.

If the results for a minimum of ten consecutive tests indicate no acute toxicity, the permittee may request a reduction in testing frequency and/or reduction to one species. The Director may approve, partially approve, or deny the request based on results and other available information. If approval is given, the modification will take place without a public notice.

b. *Accelerated Testing.* When acute toxicity is indicated during routine biomonitoring as specified in this permit, TWWTP shall notify the Director in writing within five (5) days after becoming aware of the test result. TWWTP shall perform an accelerated schedule of biomonitoring to establish whether a pattern of toxicity exists. Accelerated testing will begin within seven (7) days after TWWTP becomes aware of the test result. Accelerated testing shall be conducted as specified under *Part I.C.3.c, Pattern of Toxicity.* If the accelerated testing demonstrates no pattern of toxicity, routine monitoring shall be resumed.

c. *Pattern of Toxicity.* A pattern of toxicity is defined by the results of a series of up to five (5) biomonitoring tests pursuant to the accelerated testing requirements using 100 percent effluent on the single species found to be more sensitive, once every week for up to five (5) consecutive weeks.

If two (2) consecutive tests (not including the scheduled quarterly or monthly test which triggered the search for a pattern of toxicity) do not result in acute toxicity, no further accelerated testing will be required and no pattern of toxicity will be found to exist. TWWTP will provide written verification to the Director within five (5) days, and resume routine monitoring.

A pattern of toxicity is established if one of the following occurs:

(1) If two (2) consecutive test results (not including the scheduled quarterly or monthly test, which triggered the search for a pattern of toxicity) indicate acute toxicity, this constitutes an established pattern of toxicity.

(2) If consecutive tests continue to yield differing results each time, TWWTP will be required to conduct up to a maximum of five (5) acute tests (not including the scheduled quarterly or monthly test which triggered the search for a pattern of toxicity). If three out of five test results indicate acute toxicity, this will constitute an established pattern of toxicity.

d. *Preliminary Toxicity Investigation.*

(1) When a pattern of toxicity is detected TWWTP will notify the Director in writing within five (5) days and begin an evaluation

of the possible causes of the toxicity. TWWTP will have fifteen (15) working days from demonstration of the pattern to complete a Preliminary Toxicity Investigation (PTI) and submit a written report of the results to the Director. The PTI may include, but is not limited to, additional chemical and biological monitoring, examination of pretreatment program records, examination of discharge monitoring reports, a thorough review of the testing protocol, evaluation of treatment processes and chemical use, inspection of material storage and transfer areas to determine if a spill may have occurred, and similar procedures.

(2) If the PTI identifies a probable toxicant and/or a probable source of toxicity TWWTP shall submit, as part of its final results written notification of that effect to the Director. Within thirty (30) days of completing the PTI TWWTP shall submit for approval a control program to control effluent toxicity and shall proceed to implement such a plan within seven (7) days following approval. The control program, as submitted to or revised by the Director, may be incorporated into the permit.

(3) If no probable explanation for toxicity is identified in the PTI, TWWTP shall notify the Director as part of its final report, along with a schedule for conducting a Phase I Toxicity Reduction Evaluation (TRE) (See *Part I.C.3.e, Toxicity Reduction Evaluation*).

(4) If toxicity spontaneously disappears during the PTI, TWWTP shall submit written notification to that effect to the Director as part of the reporting requirements of paragraph a.

e. *Toxicity Reduction Evaluation (TRE).* If toxicity is detected during the life of this permit and it is determined by the Director that a TRE is necessary, TWWTP shall be so notified and shall initiate a TRE immediately thereafter. The purpose of the TRE will be to establish the cause of toxicity, locate the source(s) of the toxicity, and control or provide treatment for the toxicity.

A TRE may include but is not limited to one, all, or a combination of the following:

(1) Phase I – Toxicity Characterization

(2) Phase II – Toxicity Identification Procedures

(3) Phase III – Toxicity Control Procedures

(4) Any other appropriate procedures for toxicity source elimination and control.

If the TRE establishes that the toxicity cannot be immediately eliminated, TWWTP shall submit a proposed compliance plan to the Director. The plan shall include the proposed approach to control toxicity and a proposed compliance schedule for achieving control. If the approach and schedule are acceptable to the Director, this permit may be reopened and modified.

If the TRE shows that the toxicity is caused by a toxicant(s) that may be controlled with specific numerical limitations, TWWTP may:

(a) Submit an alternative control program for compliance with the numerical requirements.

(b) If necessary, provide a modified biomonitoring protocol, which compensates for the pollutant(s) being controlled numerically.

If acceptable to the Director, this permit may be reopened and modified to incorporate any additional numerical limitations, a modified compliance schedule if judged necessary by the Director, and/or a modified biomonitoring protocol.

Failure to conduct an adequate TRE, or failure to submit a plan or program as described above, or the submittal of a plan or program judged inadequate by the Director, shall be considered a violation of this permit.

D. Reporting of Wastewater Monitoring Results. Monitoring results obtained during the previous month shall be summarized for each month and reported on a Discharge Monitoring Report Form (EPA No. 3320-1) or by NetDMR, post-marked or entered into NetDMR no later than the 28th day of the month following the completed reporting period. If no discharge occurs during the reporting period, "no discharge" shall be reported. Legible copies of these, and all other reports including whole effluent toxicity (WET) test reports required herein, shall be signed and certified in accordance with the requirements of *Signatory Requirements (see Part VII.G)*, and submitted by NetDMR, or to the Division of Water Quality at the following address:

Department of Environmental Quality
Division of Water Quality
PO Box 144870
Salt Lake City, Utah 84114-4870

II. INDUSTRIAL PRETREATMENT PROGRAM

A. Self-Monitoring and Reporting Requirements.

1. Because the design capacity of this municipal wastewater treatment facility is less than 5 MGD TWWTP 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, TWWTP shall conduct an **industrial waste survey**, as described in *Part II.B.1*, and submit it to the Division of Water Quality within **sixty (60) calendar days** of the effective date of this permit and shall sample and analyze both the influent and effluent annually, for the following parameters.

Metals Monitoring for Pretreatment Program				
Parameter	Sample Type	Frequency	Test Limit a./	Units
Total Arsenic	Composite	Quarterly	501.9	ug/L
Total Cadmium		Quarterly	1.6	
Total Chromium		Quarterly	525.2	
Total Copper		Quarterly	65.6	
Total Lead		Quarterly	22.5	
Total Cyanide	Grab	Quarterly	5.2	
Total Mercury	Composite/Grab	Quarterly	0.04	
Total Molybdenum	Composite	Quarterly		
Total Nickel		Quarterly	377.8	
Total Selenium		Quarterly	15.4	
Total Silver		Quarterly	27.7	
Total Zinc		Quarterly	450.6	

a./ The minimum detection limit (MDL) of the test method used for analysis must be below this limit, if a test method is not available TWWTP must submit documentation to the Director regarding the method that will be used.

The results of these analyses shall be submitted along with the Discharge Monitoring Report (DMR) at the end of that reporting period.

B. Industrial Wastes.

1. The "Industrial Waste Survey" as required by *Part II.A.1.* consists of; identifying each significant industrial user (SIU), determination of the qualitative and quantitative characteristics of each discharge, and appropriate production data. A (SIU) is defined as an industrial user discharging to a publicly-owned treatment works (POTW) that satisfies any of the following: (1) has a process wastewater flow of 25,000 gallons or more per average work day; (2) has a flow greater than five percent of the flow carried by the municipal system receiving the waste; (3) is subject to Categorical Pretreatment Standards, or (4) has a reasonable potential for adversely

affecting the POTW's operation or for violating any pretreatment standard or requirement.

2. TWWTP 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.

3. Pretreatment Standards (*40 CFR 403.5*) developed pursuant to *Section 307* of *The Water Quality Act of 1987* require that under no circumstances shall TWWTP allow introduction of the following pollutants into the waste treatment system from any source of non-domestic discharge:

    a. Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, wastestreams with a closed cup flashpoint of less than 140°F (60°C);

    b. Pollutants, which will cause corrosive structural damage to the POTW, but in no case, discharges with a pH lower than 5.0;

    c. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW resulting in interference;

    d. Any pollutant, including oxygen demanding pollutants (BOD, etc.) released in a discharge at such volume or strength as to cause interference in the POTW;

    e. Heat in amounts, which will inhibit biological activity in the POTW, resulting in interference, but in no case, heat in such quantities that the influent to the sewage treatment works exceeds 104˚F (40˚C);

    f. Petroleum oil, nonbiodegradable 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.

4. 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).

5. TWWTP shall provide adequate notice to the Director and the Division of Water Quality Industrial Pretreatment Coordinator of;

    a. 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;

    b. 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

    c. For the purposes of this section, adequate notice shall include information on:

        (1) The quality and quantity of effluent to be introduced into such treatment works; and,

        (2) Any anticipated impact of the change on the quantity or quality of effluent to be discharged from such publicly owned treatment works.

6. At such time as a specific pretreatment limitation becomes applicable to an industrial user of TWWTP, the Director may, as appropriate, do the following:

    a. Amend TWWTPs UPDES discharge permit to specify the additional pollutant(s) and corresponding effluent limitation(s) consistent with the applicable national pretreatment limitation;

    b. Require TWWTP to specify, by ordinance, contract, or other enforceable means, the type of pollutant(s) and the maximum amount which may be discharged to TWWTP facility for treatment. Such requirement shall be imposed in a manner consistent with the POTW program development requirements of the *General Pretreatment Regulations* at *40 CFR 403*; and/or,

    c. Require TWWTP to monitor its discharge for any pollutant, which may likely be discharged from TWWTP's facility, should the industrial user fail to properly pretreat its waste.

7. 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 TWWTP has failed to properly delineate maximum acceptable industrial contributor levels, the Director will look primarily to TWWTP as the responsible party.

8. If local limits are developed per R317-8-8.5(4)(b) to protect the POTW from passthrough or interference, then the POTW must submit limits to DWQ for review and public notice R317-8-8.5(4)(c).

III. BIOSOLIDS REQUIREMENTS

A. Description of Treatment and Disposal.

The authorization to dispose of biosolids (sewage sludge) provided under this permit is limited to those biosolids produced from the treatment works owned and operated by the TWWTP. The specific method of disposal is designated below.

1. Treatment.

   Biosolids (sewage sludge) at the TWWTP are stabilized in an oxidation ditch, and dewatered with screw presses. And composted to meet Class A standards for sale or giveaway to the public.

2. Disposal Methods.

a. Class A biosolids (compost) are sold or given away to the public

b. Biosolids that do not meet Class A standards are disposed in a landfill.

3. Changes in Treatment Systems and Disposal Practices.

   Should the TWWTP change their disposal methods or the biosolids generation and handling processes of the plant, the TWWTP must notify the Director at least 180 days in advance. This includes, but is not limited to, the addition or removal of any biosolids treatment units (e.g., digesters, drying beds, etc.) and/or any other change that would require a major modification of the permit.

   For any biosolids that are landfilled, the requirements of *Utah Administrative Code R315-301-5* and *Section 2.12* of the latest version of the *EPA Region VIII Biosolids Management Handbook* must be followed.

B. Specific Limitations and Self-Monitoring Requirements.

All biosolids generated by this facility that are composted, and sold or given away to the public or land applied shall meet the requirements of Part IIII.B. 1, 2, 3 and 4, listed below.

1. Metals Limitations

The maximum metals concentrations in Table 3 must be met.

Pollutant	Table 3
All metals concentrations shall be measured and reported on a dry weight basis	Monthly Average mg/kg a/
Total Arsenic	41
Total Cadmium	39
Total Copper	1500
Total Lead	300
Total Mercury	17
Total Molybdenum	75.0
Total Nickel	420
Total Selenium	100
Total Zinc	2800

a/ See Part I.A. for definition of terms

2. Pathogen Reduction Requirements.

If the biosolids are to be sold or given away in a bag or a similar container for application to lawns and home gardens it shall meet the Class A pathogen limitations as described below. If the biosolids do not meet these pathogen limitations, the biosolids cannot be sold or given away.

Class A Pathogen Requirements a/

Salmonella Limits (or Fecal Coliform)		The process to further reduce pathogens will be met by:
Fecal Coliform shall be < 1000 MPN/g of total solids **OR** *Salmonella* shall be <3 MPN/4g of total solids b/	**AND**	Using the windrow method of composting, the temperature of the biosolids must be maintained at 55° C (131°F) or higher for 15 days or longer, with a minimum of 5 turnings of the windrows during those 15 days.

b/ Based on a minimum of seven (7) samples of biosolids collected over a two-week period (or as approved by the Permitting Authority in your sampling and analysis plan).

3. Vector Attraction Reduction Requirements a/

Vector attraction will be met by:

Aerobic treatment of the biosolids at 40°C or higher (104° F) for at least 14 days.

There are additional pathogen reduction and vector attraction reduction alternatives available in *40 CFR 503.32* and *40 CFR 503.33.* If TWWTP intends to use one of these alternatives the Permitting Authority and the EPA must be informed at least 30 days prior to its use. This change may be made without additional public notice.

4. Self-Monitoring Requirements

   a. At a minimum, upon the effective date of this permit, all biosolids (compost) that are sold or given away, must be monitored for metals, pathogens and applicable vector attraction reduction requirements shall be monitored according to *40 CFR 503.16.*

Minimum Frequency of Monitoring (Dry Metric Tons (DMT))	
Amount of Biosolids Disposed Per Year	Monitoring Frequency
0 to <290 DMT	Once per year
290 to <1,500 DMT	Four times per year

   b. The Permitting Authority may request additional monitoring for specific heavy metals derived from biosolids if the data shows a potential for concern.

For biosolids that are sold or given away, an information sheet shall be provided to the person who receives the biosolids. The information sheet shall contain directions on the proper use of the biosolids product.

C. <u>Special Conditions on Biosolids Storage</u>

For biosolids or material derived from biosolids that are stored in piles for one year or longer, measures shall be taken to ensure that erosion (whether by wind or water) does not occur. However, best management practices should also be used for piles used for biosolids treatment and storage. If a treatment pile or storage pile is considered to have caused a problem, best management practices could be added as a requirement in the next permit renewal.

Permanent storage of biosolids is prohibited. Biosolids shall not be temporarily stored for more than two years. Written permission to store biosolids for more than two years must be obtained from the Permitting Authority.

D. Representative Sampling.

Biosolids samples used to measure compliance with Part IIII.B. of this Permit shall be collected at locations representative of the quality of biosolids generated at the treatment works and immediately prior to land application.

E. Reporting of Monitoring Results.

TWWTP shall provide the results of all monitoring performed in accordance with Part III.B., and information on management practices, biosolids treatment, site restrictions and certifications shall be provided no later than February 19 of each year. Each report is for the previous calendar year. If no biosolids were sold or given away during the reporting period, "no biosolids were sold or given away" shall be reported. Legible copies of these, and all other reports required herein, shall be signed and certified in accordance with the *Signatory Requirements (see Part IV)*, and submitted to the Utah Division of Water Quality and the EPA at the following addresses:

Original to: Biosolids Coordinator
Utah Division of Water Quality
P. O. Box 144870
Salt Lake City Utah, 84114-4870

Copy to: Biosolids Coordinator, 8P-W-P
U. S. Environmental Protection Agency
Region VIII
1595 Wynkoop St.
Denver, Colorado 80202-1129

F. Additional Record Keeping Requirements Specific to Biosolids.

1. If so notified by the Permitting Authority TWWTP may be required to add additional record keeping if information provided indicates that this is necessary to protect public health and the environment.

2. TWWTP is required to keep the following information for at least 5 years:

   a) Concentration of each heavy metal in Table 3 (Part III.B.1.).

   b) A description of how the pathogen reduction requirements in Part III.B.2. were met.

   c) A description of how the vector attraction reduction requirements in Part III.B.3. were met.

   d) A description of how the management practices in Part III.C. were met (if necessary).

   e) The following certification statement:

"I certify under the penalty of law, that the heavy metals requirements, the pathogen requirements, and the vector attraction requirements in Part III.B., have been met. This determination has been made under my direction and supervision in accordance with the system designed to assure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements, the vector attraction reduction requirements and the management practices have been met. I am aware that there are significant penalties for false certification including the possibility of imprisonment."

3. TWWTP 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 the life of the permit. Data collected on site, copies of Biosolids Report forms, and a copy of this UPDES biosolids-only permit must be maintained on site during the duration of activity at the permitted location.

IV. STORM WATER REQUIREMENTS.

A. Coverage of This Section. The requirements listed under this section shall apply to storm water discharges. Storm water discharges from the following portions of the facility may be eligible for coverage under this permit: biosolids drying beds, haul or access roads on which transportation of biosolids may occur, grit screen cleaning areas, chemical loading, unloading and storage areas, salt or sand storage areas, vehicle or equipment storage and maintenance areas, or any other wastewater treatment device or system, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including lands dedicated to the disposal of sewage sludge that are located within the confines of the facility that may have a reasonable expectation to contribute to pollutants in a storm water discharge.

B. Prohibition of Non-Storm Water Discharges. Except for discharges identified in *Part I.*, and discharges described below in this paragraph, non-storm water discharges are prohibited. The following non-storm water discharges may be authorized under this permit provided the non-storm water component of the discharge is in compliance with this section; discharges from fire fighting activities; fire hydrant flushing; potable water sources including waterline flushing; drinking fountain water; irrigation drainage and lawn watering; routine external building wash down water where detergents or other compounds have not been used in the process; pavement wash waters where spills or leaks of toxic or hazardous materials (including oils and fuels) have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; uncontaminated compressor condensate; uncontaminated springs; uncontaminated ground water; and foundation or footing drains where flows are not contaminated with process materials such as solvents.

C. Storm Water Pollution Prevention Plan Requirements. TWWTP must have (on site) or develop and implement a storm water pollution prevention plan as a condition of this permit.

1. Contents of the Plan. The plan shall include, at a minimum, the following items:

a. *Pollution Prevention Team.* Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team who are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

b. *Description of Potential Pollutant Sources.* Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials, which may be

reasonably expected to have the potential as a significant pollutant source. Each plan shall include, at a minimum:

(1) *Drainage*. A site map indicating drainage areas and storm water outfalls. For each area of the facility that generates storm water discharges associated with the waste water treatment related activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow and an identification of the types of pollutants that are likely to be present in storm water discharges associated with the activity. Factors to consider include the toxicity of the pollutant; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified. The site map shall include but not be limited to:

(a) Drainage direction and discharge points from all wastewater associated activities including but not limited to grit screen cleaning, bio-solids drying beds and transport, chemical/material loading, unloading and storage areas, vehicle maintenance areas, salt or sand storage areas.

(b) Location of any erosion and sediment control structure or other control measures utilized for reducing pollutants in storm water runoff.

(c) Location of bio-solids drying beds where exposed to precipitation or where the transportation of bio-solids may be spilled onto internal roadways or tracked off site.

(d) Location where grit screen cleaning or other routinely performed industrial activities are located and are exposed to precipitation.

(e) Location of any handling, loading, unloading or storage of chemicals or potential pollutants such as caustics, hydraulic fluids, lubricants, solvents or other petroleum products, or hazardous wastes and where these may be exposed to precipitation.

(f) Locations where any major spills or leaks of toxic or hazardous materials have occurred.

(g) Location of any sand or salt piles.

(h) Location of fueling stations or vehicle and equipment maintenance and cleaning areas that are exposed to precipitation.

(i) Location of receiving streams or other surface water bodies.

(j) Locations of outfalls and the types of discharges contained in the drainage areas of the outfalls.

(2) *Inventory of Exposed Materials.* An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the effective date of this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the effective date of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

(3) *Spills and Leaks.* A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.

(4) *Sampling Data.* A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

(5) *Summary of Potential Pollutant Sources and Risk Assessment.* A narrative description of the potential pollutant sources from the following activities associated with treatment works: access roads/rail lines; loading and unloading operations; outdoor storage activities; material handling sites; outdoor vehicle storage or maintenance sites; significant dust or particulate generating processes; and onsite waste disposal practices. Specific potential pollutants shall be identified where known.

(6) *Measures and Controls.* TWWTP shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential

sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

(7) *Good Housekeeping*. All areas that may contribute pollutants to storm waters discharges shall be maintained in a clean, orderly manner. These are practices that would minimize the generation of pollutants at the source or before it would be necessary to employ sediment ponds or other control measures at the discharge outlets. Where applicable, such measures or other equivalent measures would include the following: sweepers and covered storage to minimize dust generation and storm runoff; conservation of vegetation where possible to minimize erosion; sweeping of haul roads, bio-solids access points, and exits to reduce or eliminate off site tracking; sweeping of sand or salt storage areas to minimize entrainment in storm water runoff; collection, removal, and proper disposal of waste oils and other fluids resulting from vehicle and equipment maintenance; other equivalent measures to address identified potential sources of pollution.

(8) *Preventive Maintenance*. A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

(9) *Spill Prevention and Response Procedures*. Areas where potential spills that can contribute pollutants to storm water discharges can occur, and their accompanying drainage points, shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures and equipment for cleaning up spills shall be identified in the plan and made available to the appropriate personnel.

(10) *Inspections*. In addition to the comprehensive site evaluation required under paragraph (*Part IV.C.1.b.(16)*) of this section, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility on a periodic basis. The following areas shall be included in all inspections: access roads/rail lines, equipment storage and maintenance areas (both indoor and outdoor areas); fueling; material handling areas, residual treatment, storage, and

disposal areas; and wastewater treatment areas. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained. The use of a checklist developed by the facility is encouraged.

(11) *Employee Training.* Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. The pollution prevention plan shall identify how often training will take place, but training should be held at least annually (once per calendar year). Employee training must, at a minimum, address the following areas when applicable to a facility: petroleum product management; process chemical management; spill prevention and control; fueling procedures; general good housekeeping practices; proper procedures for using fertilizers, herbicides and pesticides.

(12) *Record keeping and Internal Reporting Procedures.* A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

(13) *Non-storm Water Discharges.*

(a) *Certification.* The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with *Part VII.G* of this permit.

(b) *Exceptions.* Except for flows from fire fighting activities, sources of non-storm water listed in *Part IV.B.* (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water

discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(c) *Failure to Certify.* Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the *Director* within 180 days after the effective date of this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the State, which are not, authorized by a *UPDES* permit are unlawful, and must be terminated.

(14) *Sediment and Erosion Control.* The plan shall identify areas, which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

(15) *Management of Runoff.* The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that TWWTP determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity *Part IV.C.1.b* (Description of Potential Pollutant Sources) of this permit] shall be considered when determining reasonable and appropriate measures. Appropriate measures or other equivalent measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, wet detention/retention devices and discharging storm water through the waste water facility for treatment.

(16) *Comprehensive Site Compliance Evaluation.* Qualified personnel shall conduct site compliance evaluations at

appropriate intervals specified in the plan, but in no case less than once a year. Such evaluations shall provide:

(a) Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(b) Based on the results of the evaluation, the description of potential pollutant sources identified in the plan in accordance with *Part IV.C.1.b* (Description of Potential Pollutant Sources) of this section and pollution prevention measures and controls identified in the plan in accordance with *Part IV.C.1.b.(6)* (Measures and Controls) of this section shall be revised as appropriate within 2 weeks of such evaluation and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the evaluation.

(c) A report summarizing the scope of the evaluation, personnel making the evaluation, the date(s) of the evaluation, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph *i.* (above) shall be made and retained as part of the storm water pollution prevention plan for at least 3 years after the date of the evaluation. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with *Part VII.G* (Signatory Requirements) of this permit.

(17) *Deadlines for Plan Preparation and Compliance*. TWWTP shall prepare and implement a plan in compliance with the provisions of this section within 270 days of the effective date of this permit. If TWWTP already has a plan, it shall be

revised according to *Part IV.C.1.b.(16)*, Comprehensive Site Evaluation.

(18) *Keeping Plans Current.* TWWTP shall amend the plan whenever there is a change in design, construction, operation, or maintenance, that has a significant effect on the potential for the discharge of pollutants to the waters of the state or if the storm water pollution prevention plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified by the plan, or in otherwise achieving the general objective of controlling pollutants in storm water discharges associated with the activities at the facility.

D. Monitoring and Reporting Requirements.

1. Quarterly Visual Examination of Storm Water Quality. Facilities shall perform and document a visual examination of a storm water discharge associated with industrial activity from each outfall, except discharges exempted below. The examination must be made at least once in each of the following designated periods during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event: January through March; April through June; July through September; and October through December.

   a. *Sample and Data Collection.* Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The examination must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where practicable, the same individual should carry out the collection and examination of discharges for entire permit term.

   b. *Visual Storm Water Discharge Examination Reports.* Visual examination reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

   c. *Representative Discharge.* When TWWTP has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area

drained by the outfall, TWWTP reasonably believes discharge substantially identical effluents, TWWTP may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfall(s) provided that TWWTP includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that TWWTP believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

d. *Adverse Conditions*. When a discharger is unable to collect samples over the course of the visual examination period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination and retain this documentation onsite with the results of the visual examination. Adverse weather conditions, which may prohibit the collection of samples, include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

e. *Inactive and Unstaffed Site*. When a discharger is unable to conduct visual storm water examinations at an inactive and unstaffed site, the operator of the facility may exercise a waiver of the monitoring requirement as long as the facility remains inactive and unstaffed. The facility must maintain a certification with the pollution prevention plan stating that the site is inactive and unstaffed so that performing visual examinations during a qualifying event is not feasible.

V. MONITORING, RECORDING & GENERAL REPORTING REQUIREMENTS

A. Representative Sampling. Samples taken in compliance with the monitoring requirements established under *Part I* shall be collected from the effluent stream prior to discharge into the receiving waters. Samples and measurements shall be representative of the volume and nature of the monitored discharge. Samples of biosolids shall be collected at a location representative of the quality of biosolids immediately prior to the use-disposal practice.

B. Monitoring Procedures. Monitoring must be conducted according to test procedures approved under *Utah Administrative Code ("UAC") R317-2-10 and 40CFR Part 503*, unless other test procedures have been specified in this permit.

C. Penalties for Tampering. The *Act* provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or by both.

D. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any Compliance Schedule of this permit shall be submitted no later than 14 days following each schedule date.

E. Additional Monitoring by the Permittee. If TWWTP 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. TWWTP shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least five years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time. A copy of this UPDES permit must be maintained on site during the duration of activity at the permitted location

H. Twenty-four Hour Notice of Noncompliance Reporting.

1. TWWTP 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 TWWTP first became aware of circumstances. The report shall be made to the Division of Water Quality, (801) 538-6146, or 24-hour answering service (801) 536-4123.

2. The following occurrences of noncompliance shall be reported by telephone (801) 536-4123 as soon as possible but no later than 24 hours from the time TWWTP 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 TWWTP 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) 538-6146.

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 TWWTP 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 TWWTP's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit, including but not limited to, biosolids treatment, collection, storage facilities or area, transport vehicles and containers, and land application sites;

4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the *Act*, any substances or parameters at any location, including, but not limited to, digested biosolids before dewatering, dewatered biosolids, biosolids transfer or staging areas, any ground or surface waters at the land application sites or biosolids, soils, or vegetation on the land application sites; and,

5. TWWTP 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. TWWTP 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. TWWTP 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 TWWTP 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 TWWTP 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. TWWTP 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. TWWTP shall also take all reasonable steps to minimize or prevent any land application in violation of this permit.

E. Proper Operation and Maintenance. TWWTP 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 TWWTP 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 TWWTP 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. TWWTP 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 TWWTP for bypass, unless:

      (1) Bypass was unavoidable to prevent loss of human life, personal injury, or severe property damage;

      (2) There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance, and

      (3) TWWTP 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 TWWTP 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. TWWTP 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, TWWTP 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*. TWWTP shall submit notice of an unanticipated bypass to the Director as required under *Part V.H*, Twenty Four Hour Reporting. TWWTP shall also immediately notify the Director of the Department of Natural Resources, the public and downstream users and shall implement measures to minimize impacts to public health and environment to the extent practicable.

H. Upset Conditions.

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of paragraph 2 of this section are met. Director's administrative determination regarding a claim of upset cannot be judiciously challenged by TWWTP 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 TWWTP can identify the cause(s) of the upset;

    b. The permitted facility was at the time being properly operated;

    c. TWWTP submitted notice of the upset as required under *Part V.H, Twenty-four Hour Notice of Noncompliance Reporting*; and,

    d. TWWTP complied with any remedial measures required under *Part VI.D, Duty to Mitigate*.

3. Burden of proof. In any enforcement proceeding, TWWTP seeking to establish the occurrence of an upset has the burden of proof.

VII. GENERAL REQUIREMENTS

A. Planned Changes. TWWTP 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 TWWTP 's existing sludge facilities or their manner of operation or to current sludge management practices of storage and disposal, TWWTP shall give notice to the Director of any planned changes at least 30 days prior to their implementation.

B. Anticipated Noncompliance. TWWTP 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 TWWTP 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 TWWTP wishes to continue an activity regulated by this permit after the expiration date of this permit, TWWTP 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. TWWTP 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. TWWTP shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

F. Other Information. When TWWTP 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 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 TWWTP of any legal action or relieve TWWTP from any responsibilities, liabilities, or penalties to which TWWTP 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:

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 TWWTP from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by *UCA 19-5-117* and *Section 510* of the *Act* or any applicable Federal or State transportation regulations, such as but not limited to the Department of Transportation regulations.

O. Water Quality - Reopener Provision. This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations and compliance schedule, if necessary, if one or more of the following events occurs:

1. Water Quality Standards for the receiving water(s) to which TWWTP discharges are modified in such a manner as to require different effluent limits than contained in this permit.

2. A final wasteload allocation is developed and approved by the State and/or EPA for incorporation in this permit.

3. Revisions to the current CWA § 208 areawide treatment management plans or promulgations/revisions to TMDLs (40 CFR 130.7) approved by the EPA and adopted by DWQ which calls for different effluent limitations than contained in this permit.

P. 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 TWWTPs biosolids use or land application practices do not comply with existing applicable state of federal regulations.

Q. Toxicity Limitation - Reopener Provision. This permit may be reopened and modified (following proper administrative procedures) to include, whole effluent toxicity (WET) limitations, a compliance date, a compliance schedule, a change in the whole effluent toxicity (biomonitoring) protocol, additional or modified numerical limitations, or any other conditions related to the control of toxicants if one or more of the following events occur;

1. Toxicity is detected, as per *Part I.C.4.a* of this permit, during the duration of this permit.

2. The TRE results indicate that compliance with the toxic limits will require an implementation schedule past the date for compliance and the Director agrees with the conclusion.

3. The TRE results indicate that the toxicant(s) represent pollutant(s) that may be controlled with specific numerical limits, and the Director

agrees that numerical controls are the most appropriate course of action.

4. Following the implementation of numerical control(s) of toxicant(s), the Director agrees that a modified biomonitoring protocol is necessary to compensate for those toxicant that are controlled numerically.

5. The TRE reveals other unique conditions or characteristics, which in the opinion of the permit issuing authority justify the incorporation of unanticipated special conditions in the permit.

R. Storm Water-Reopener Provision. At any time during the duration (life) of this permit, this permit may be reopened and modified (following proper administrative procedures) as per *UAC R317.8*, to include, any applicable storm water provisions and requirements, a storm water pollution prevention plan, a compliance schedule, a compliance date, monitoring and/or reporting requirements, or any other conditions related to the control of storm water discharges to "waters-of-State".

VIII. DEFINITIONS

A. Wastewater.

1. The "7-day (and weekly) average", other than for e-coli bacteria, fecal coliform bacteria, and total coliform bacteria, is the arithmetic average of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. Geometric means shall be calculated for e-coli bacteria, fecal coliform bacteria, and total coliform bacteria. The 7-day and weekly averages are applicable only to those effluent characteristics for which there are 7-day average effluent limitations. The calendar week, which begins on Sunday and ends on Saturday, shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If a calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for that calendar week shall be included in the data for the month that contains Saturday.

2. The "30-day (and monthly) average," other than for e-coli bacteria, fecal coliform bacteria and total coliform bacteria, is the arithmetic average of all samples collected during a consecutive 30-day period or calendar month, whichever is applicable. Geometric means shall be calculated for e-coli bacteria, fecal coliform bacteria and total coliform bacteria. The calendar month shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms.

3. "Act," means the *Utah Water Quality Act.*

4. "Acute toxicity" occurs when 50 percent or more mortality is observed for either test species at any effluent concentration.

5. "Bypass," means the diversion of waste streams from any portion of a treatment facility.

6. "Chronic toxicity" occurs when the survival, growth, or reproduction for either test species exposed to a dilution of 25 percent effluent (or lower) is significantly less (at the 95 percent confidence level) than the survival, growth, or reproduction of the control specimens.

7. "Composite Samples" shall be flow proportioned. The composite sample shall, as a minimum, contain at least four (4) samples collected over the compositing period. Unless otherwise specified, the time between the collection of the first sample and the last sample shall not

be less than six (6) hours nor more than 24 hours. Acceptable methods for preparation of composite samples are as follows:

a. Constant time interval between samples, sample volume proportional to flow rate at time of sampling;

b. Constant time interval between samples, sample volume proportional to total flow (volume) since last sample. For the first sample, the flow rate at the time the sample was collected may be used;

c. Constant sample volume, time interval between samples proportional to flow (i.e., sample taken every "X" gallons of flow); and,

d. Continuous sample volume, with sample collection rate proportional to flow rate.

8. "CWA," means *The Federal Water Pollution Control Act*, as amended, by *The Clean Water Act of 1987*.

9. "Daily Maximum" (Daily Max.) is the maximum value allowable in any single sample or instantaneous measurement.

10. "EPA," means the United States Environmental Protection Agency.

11. "Director," means Director of the Utah Division of Water Quality.

12. A "grab" sample, for monitoring requirements, is defined as a single "dip and take" sample collected at a representative point in the discharge stream.

13. An "instantaneous" measurement, for monitoring requirements, is defined as a single reading, observation, or measurement.

14. "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.

15. "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

TWWTP. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

B. Biosolids.

1. "Biosolids," means any material or material derived from sewage solids that have been biologically treated.

2. "Dry Weight-Basis," means 100 percent solids (i.e. zero percent moisture).

3. "Land Application" is the spraying or spreading of biosolids onto the land surface; the injection of biosolids below the land surface; or the incorporation of biosolids into the land so that the biosolids can either condition the soil or fertilize crops or vegetation grown in the soil. Land application includes distribution and marketing (i.e. the selling or giving away of the biosolids).

4. "Pathogen," means an organism that is capable of producing an infection or disease in a susceptible host.

5. "Pollutant" for the purposes of this permit is an organic substance, an inorganic substance, a combination of organic and inorganic substances, or pathogenic organisms that after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism either directly from the environment or indirectly by ingestion through the food-chain, could on the basis of information available to the Administrator of EPA, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunction in reproduction), or physical deformations in either organisms or offspring of the organisms.

6. "Runoff" is rainwater, leachate, or other liquid that drains over any part of a land surface and runs off the land surface.

7. "Similar Container" is either an open or closed receptacle. This includes, but is not limited to, a bucket, a box, a carton, and a vehicle or trailer with a load capacity of one metric ton or less.

8. "Total Solids" are the materials in the biosolids that remain as a residue if the biosolids are dried at 103°C or 105°C.

9. "Treatment Works" are either Federally owned, publicly owned, or privately owned devices or systems used to treat (including recycling and reclamation) either domestic sewage or a combination of domestic sewage and industrial waste or liquid manure.

10. "Vector Attraction" is the characteristic of biosolids that attracts rodents, flies mosquito's or other organisms capable of transporting infectious agents.

11. "Animals" for the purpose of this permit are domestic livestock.

12. "Annual Whole Sludge Application Rate" is the amount of sewage sludge (dry-weight basis) that can be applied to a unit area of land during a cropping cycle.

13. "Agronomic Rate is the whole sludge application rate (dry-weight basis) designed to: (1) provide the amount of nitrogen needed by the crop or vegetation grown on the land; and (2) minimize the amount of nitrogen in the sewage sludge that passes below the root zone of the crop or vegetation grown on the land to the ground water.

14. "Annual Pollutant Loading Rate" is the maximum amount of a pollutant (dry-weight basis) that can be applied to a unit area of land during a 365-day period.

15. "Application Site or Land Application Site" means all contiguous areas of a users' property intended for sludge application.

16. "Cumulative Pollutant Loading Rate" is the maximum amount of an inorganic pollutant (dry-weight basis) that can be applied to a unit area of land.

17. "Grit and Screenings" are sand, gravel, cinders, other materials with a high specific gravity and relatively large materials such as rags generated during preliminary treatment of domestic sewage at a treatment works and shall be disposed of according to *40 CFR 258*.

18. "High Potential for Public Contact Site" is land with a high potential for contact by the public. This includes, but is not limited to, public parks, ball fields, cemeteries, plant nurseries, turf farms, and golf courses.

19. "Low Potential for Public Contact Site" is the land with a low potential for contact by the public. This includes, but is not limited to, farms, ranches, reclamation areas, and other lands which are private lands,

restricted public lands, or lands which are not generally accessible to or used by the public.

20. "Monthly Average" is the arithmetic mean of all measurements taken during the month.

21. "Volatile Solids" is the amount of the total solids in sewage sludge lost when the sludge is combusted at 550 degrees Celsius for 15-20 minutes in the presence of excess air.

C. 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 *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:

    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 (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;

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
TREMONTON WASTEWATER TREATMENT PLANT
RENEWAL PERMIT: DISCHARGE, BIOSOLIDS & STORM WATER
UPDES PERMIT NUMBER: UT0020303
UPDES BIOSOLIDS PERMIT NUMBER: UTL-020303
UPDES MULTI-SECTOR STORM WATER GENERAL PERMIT NUMBER: UTR000000
MAJOR MUNICIPAL

FACILITY CONTACTS

Person Name:	Jon Miller
Position:	Plant Manager
Person Name:	Paul Fulgham
Position:	Public Works Director
Facility Name:	City Of Tremonton
Mailing Address:	30 East 1200 South Tremonton, Utah 84065
Telephone:	(435) 257-2674

DESCRIPTION OF FACILITY

Tremonton Wastewater Treatment Plant (TWWTP) has a design flow rate of 2.0 million gallons per day (MGD). The facility serves the cities of Tremonton and Garland in Box Elder County, UT. The facilities flow passes through: influent electronic flow meters, 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 outfall is located at latitude 40° 41' 57" and longitude 112° 09' 36" and STORET number 490271.

SUMMARY OF CHANGES FROM PREVIOUS PERMIT

Chronic ammonia standard is now being applied to class 3C and 3D waters; as a result ammonia limits have been added to this permit. A compliance schedule for the ammonia limits for the winter season is included. TWWTP will sample for ammonia for 2014 winter season. TWWTP will then comply with the final effluent limits for ammonia for the winter season beginning in January 2015. All other 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.

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 (BOD_5), E. Coli, pH and percent removal for BOD_5 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). The permit limitations are:

Effluent Limitations a/				
Parameter	Monthly Average	Maximum Weekly Average	Daily Minimum	Daily Maximum
Total Flow, MGD	2.0	NA	NA	NA
BOD_5, mg/L	25	35	NA	NA
BOD_5, 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-Mar) Interim Limit	NA	NA	NA	NA
Ammonia (mg/L) Winter (Jan-Mar) Final Limit b/	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.

SELF-MONITORING AND REPORTING REQUIREMENTS

The following self-monitoring requirements are the same as in the previous permit with the exception that ammonia has been added to the monitoring requirements. The reporting requirements will be submitted on Discharge Monitoring Report Form (EPA No. 3320-1) or by NetDMR, post-marked or entered into NetDMR no later than the 28th day of the month following the completed reporting period.

Self-Monitoring and Reporting Requirements a/			
Parameter	Frequency	Sample Type	Units
Total Flow c/ d/	Continuous	Recorder	MGD
BOD_5, Influent e/	2 x Week	Composite	mg/L
BOD_5, Effluent	2 x Week	Composite	mg/L
BOD_5, Minimum % Removal	Monthly	Calculation	%
TSS, Influent e/	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 f/	Monthly	Grab	mg/L
Oil & Grease	Monthly If Sheen is Observed	Grab	mg/L
pH	2 x Week	Grab	SU
WET, Acute Biomonitoring	2 x Year	Composite	Pass/Fail
Metals, Influent	2 x Year	Composite	mg/L
Metals, Effluent	2 x Year	Composite	mg/L
Organic Toxics	2nd & 4th Year	Grab	mg/L

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

b/ Ammonia Winter Limit Compliance Schedule:

Date	Milestone
March 31, 2014	Complete Ammonia Sampling for 2014Winter Season
January 1, 2015	Comply with Final Winter Ammonia Effluent Limit

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

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

e/ 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.

f/ Total Phosphorus is being sampled in support of the work being done for the TMDL currently underway for the Bear River. The Pollutant of Concern (POC's) will be

monitored and reported by the facility on a monthly basis, but will not have a limit associated with them. Minimum sampling frequency requested is monthly, reporting the monthly average. If more sampling is done, an average value should be reported.

g/ Testing must be performed in the second and fourth 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

WASTE LOAD ANALYSIS AND ANTIDEGRADATION REVIEW

Effluent limitations may also be derived using a Wasteload Analysis (WLA). The WLA incorporated Secondary Treatment Standards, Water Quality Standards, Antidegradation Reviews (ADR), as appropriate and designated uses into a water quality model that projects the effects of discharge concentrations on receiving water quality. Effluent limitations are those that the model demonstrates are sufficient to meet State water quality standards in the receiving waters. During the UPDES renewal development, a WLA and ADR were performed. An ADR Level I review was performed and concluded that an ADR Level II review was not required. The WLA indicates that the effluent limitations should be sufficiently protective of water quality, in order to meet State water quality standards in the receiving waters.

BIOSOLIDS

DESCRIPTION OF TREATMENT AND DISPOSAL

The solids at the TWWTP are stabilized by oxidation ditches for about 15 days, and pumped to the screw presses where the solids are de-watered to about 17% solids. 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 unless the solids are treated to meet Class A standards for pathogen and vector attraction reduction requirements. This is accomplished at the TWWTP through the windrow method of composting to meet Class A standards for land application.

In 2012, the TWWTP sold or gave away 799 dry metric tons (DMT) of Class A compost to the general public, and has 815 dry metric tons stored to be sold or given away in the future. The TWWTP plans to continue this method of disposal for the five year life span of this permit.

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 Based Upon Dry Metric Tons (DMT)	
Amount of Biosolids Produced Per Year	Monitoring Frequency
> 0 to < 290 DMT	Once Per Year
> 290 to < 1,500 DMT	Four Times Per Year

In 2012, the TWWTP sold or gave away 799 dry metric tons of biosolids, therefore they needed to sample at least four times in 2012.

LIMITATIONS

Metals

Prior to disposal, all biosolids need to be sampled and meet the metals limits of *Table 3, 40 CFR 503.13* for the biosolids to be considered Class A (exceptional quality) with respect to heavy metals. 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 exceptional quality standards. If the biosolids do not meet the exceptional quality standards for heavy metals, the biosolids cannot be sold or given away to the public. However, since all biosolids produced from the TWWTP have met exceptional quality standards with respect to heavy metals during the life of the last permit, it is expected that the TWWTP will continue to meet exceptional quality standards for the life of this permit.

Pathogens Class A

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 1,000 most probable number (MPN/g) of fecal coliform per gram of total solids (or less than 3 MPN of *Salmonella* per 4 grams of total solids) to be considered Class A biosolids. 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 will need to be disposed in the landfill.

Vector Attraction Reduction

The TWWTP needs to meet a method of vector attraction reduction (VAR) if the biosolids are sold or given away to the public. The VAR will be accomplished through the windrow method of composting *(40 CFR 503.33(b)(5), the solids need to be treated for at least 14 days at a temperature of at least 40° C (104° F) for at least 14 days with an average temperature of over 45° C (113° F).* If the biosolids do not meet the VAR requirements above, the biosolids will need to be landfilled.

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).*

CLASS A PATHOGEN MONITORING DATA 2012

All biosolids given away in 2012 met Class A standards for pathogens through testing. According to *40 CFR 503.26* TWWTP was required to sample at least once for fecal coliform, with each sampling episode consisting of seven samples for fecal coliform. The TWWTP sampled the biosolids 28 times for pathogens in 2012. The Class A monitoring data is below.

Fecal Coliform Monitoring Data 2012, Class B Biosolids

Geomean of 28 samples, Most Probable Number of Fecal Coliform Per Gram of Total Solids	Maximum of 28 Samples, Most Probable Number of Fecal Coliform Per Gram of Total Solids
146.34 MPN/g	841 MPN/g
All samples must be below 1,000 most probable number per gram of total solids	

METALS MONITORING DATA

The TWWTP was required to sample at least for heavy metals in 2012, however the TWWTP sampled four times in 2012. All heavy metal samples Table 3 of *40 CFR 503.13,* therefore the TWWTP biosolids qualify as EQ in regards to metals. The monitoring data is below.

Metals Monitoring Data 2012, Class A Biosolids Compost

Parameter	Table 3, mg/Kg (Exceptional Quality)	TWWTP, Average, mg/Kg	TWWTP, Maximum, mg/Kg
Arsenic	41.0	13.76	17.4
Cadmium	39.0	0.33	0.36
Copper	1,500.0	193.0	238.0
Lead	300.0	5.51	6.9
Mercury	17.0	0.43	0.56
Molybdenum	75.0	7.9	11.10
Nickel	420.0	12.49	16.5
Selenium	36.0	7.39	9.61
Zinc	2,800.0	259.75	297.0

RECORD KEEPING

The record keeping requirements from *40 CFR 503.17* are included under *Part III.F.* 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

The TWWTP must 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.E* 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.

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.

TWWTP is currently covered under the UPDES Multi Sector General Permit for Industrial Activities.

PRETREATMENT REQUIREMENTS

Although TWWTP 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*, TWWTP 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*.

TWWTP 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. Authority to require a pretreatment program is provided for in *19-5-108 UCA, 1953 ann.* and *UAC R317-8-8*.

The permit requires 2 x year influent and effluent monitoring for metals, organic toxics listed in R317-8-7.5 will be monitored in the 2nd and 4th year of the permit, and sludge monitoring for potential pollutants listed in 40 CFR 503. TWWTP is required to submit an industrial waste survey within 60 days of permit issuance, see Part II.B.1 of the permit for details.

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 discharger, the renewal permit will require whole effluent toxicity (WET) testing. Acute toxicity tests will be conducted semi-annually alternating between the Ceriodaphnia dubia and Pimephales promelas (fathead minnows) species as detailed in the permit. The testing frequency was determined based on the fact that TWWTP has not violated a WET test for the previous permit cycle and there is no categorical industrial users discharging to the facility.

The permit will 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
Matthew Garn
Utah Division of Water Quality
July 16, 2013

PUBLIC NOTICE

Began: August 21, 2013
Ended: September 23, 2013
Public Noticed in Tremonton Leader - Garland Times

There were no comments received during the public notice period.
September 26, 2013

DWQ-2013-004969