

Official Draft Public Notice Version **September 15, 2026**

The findings, determinations, and assertions contained in this document are not final and subject to change following the public comment period.

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

UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM (UPDES) PERMITS

Major Industrial Permit No. **UT0025836**

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

JORDAN VALLEY WATER CONSERVANCY DISTRICT

is hereby authorized to discharge from

JORDAN VALLEY SOUTHWEST GROUNDWATER TREATMENT PLANT

to receiving waters named **TRANSITIONAL WATERS AND GILBERT BAY OF THE GREAT SALT LAKE, AND THE JORDAN RIVER,**

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

This permit shall become effective on **Month X**, 2026

This permit expires at 11:59 pm on **Month X**, 2031.

Signed this **day of Month**, 2026.

Candice A. Hasenyager, P.E.
Director

DWQ-2026-003306

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PART I
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I. DISCHARGE LIMITATIONS AND REPORTING REQUIREMENTS

- A. Description of Discharge Points. The authorization to discharge wastewater provided under this part is limited to those outfalls specifically designated below as discharge locations. Discharges at any location not authorized under 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 Numbers

Location of Discharge Outfalls

001

Located at latitude 40°45'37.59" N and longitude 112°10'13.32" W. This outfall conveys byproduct and excess untreated groundwater from the deep aquifer. The discharge is through a 16-inch diameter pipe directly to the Transitional Waters and Gilbert Bay of the Great Salt Lake. The compliance monitoring point is at the Facility prior to effluent entering the 21-mile byproduct pipeline, except for end of pipe monitoring as required in Part I.C Specific Limitations and Self-Monitoring Requirements.

002

Located at latitude 40°36'5.58" N and longitude 112°55'13.37" W. The discharge will consist only of untreated shallow aquifer groundwater that has not been impacted by historic mining activities. The discharge is through a 30-inch diameter pipe from the river discharge vault at the Facility.

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

C. Specific Limitations and Self-Monitoring Requirements.

1. Effective immediately, and lasting through the life of this permit, there shall be no acute or chronic toxicity in Outfalls 001 and 002 as defined in Part VIII and determined by test procedures described in Part I. C.4.a & b of this permit.
2.
 - a. Effective immediately and lasting the duration of this Permit, the Permittee is authorized to discharge from Outfall 001 and 002. Such discharges shall be limited and monitored by the Permittee as specified below:

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(1) Outfall 001

Outfall 001					
Parameter	Effluent Limitations ^{1, 2}				
	Maximum Monthly Avg	Maximum Weekly Avg	Annual Average	Daily Minimum	Daily Maximum
Total Flow, MGD	3.0	-	-	-	-
Selenium, mg/L	-	-	-	-	0.054
Oil & Grease, mg/L	-	-	-	-	10.0
pH, Standard Units	-	-	-	6.5	9
Mass Loading Limits					
	Maximum Monthly Avg	Maximum Weekly Avg	Annual Loading	Daily Minimum	Daily Maximum
Selenium, kg/year	-	-	224	-	-
Mercury, kg/year	-	-	0.38	-	-
Other					
Selenium, mg/kg	Implementation of the selenium water quality standard of 12.5 mg/kg for Gilbert Bay of the Great Salt Lake (GSL) is outlined in Part I.C.3.c of this UPDES Permit				
1. See Definitions, Part VIII, for the definition of terms.					
2. All parameters in this table will be reported on the monthly Discharge Monitoring Report. There shall be no visible sheen or floating solids or visible foam in other than trace amounts. There shall be no discharge of sanitary wastes.					

Outfall 001 Self-Monitoring and Reporting Requirements ¹			
Parameter	Frequency ³	Sample Type	Units
Total Flow ^{4, 5, 6}	Continuous	Recorder	MGD
TSS ⁷	2 x Weekly	Composite or Grab	mg/L
Selenium ⁸	2 x Weekly	Composite or Grab	mg/L
TDS	2 x Weekly	Composite or Grab	mg/L
Mercury ^{8, 9}	Monthly	Grab	ng/L
Oil & Grease	When Sheen Observed ¹⁰	Grab	mg/L
Selenium, Monthly Loading	Monthly	Calculated	kg
Selenium, Annual Loading ³	Annually	Calculated	kg
Selenium, Bird Eggs ^{3, 11}	Annually	Report	mg/kg dry weight (dw)
Mercury, Monthly Loading	Monthly	Calculated	kg
Mercury, Annual Loading ³	Annually	Calculated	kg
pH	Monthly	Grab	SU
Whole Effluent Toxicity ¹² Acute Biomonitoring <i>Cyprinodon variegatus</i>	Quarterly	Composite	Pass/Fail
Whole Effluent Toxicity ¹² Chronic Biomonitoring <i>Cyprinodon variegatus</i>	Quarterly	Composite	TUc ≤ 1.6 ¹³
Metals, ^{14, 15, 16}	Quarterly	Composite/Grab	mg/L
Annual Reports ¹⁷	Annually	N/A	N/A
1. See Definitions, Part VIII, for the definition of terms.			
3. For clarification, annual and quarterly monitoring requirements and limits are based on the calendar year.			
4. Flow measurements of effluent volume shall be made in such a manner that the permittee can affirmatively demonstrate that representative values are being obtained.			

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Outfall 001 Self-Monitoring and Reporting Requirements ¹			
Parameter	Frequency ³	Sample Type	Units
5. If the rate of discharge is controlled, the rate and duration of discharge shall be reported.			
6. The flow rates and durations of all discharges shall be reported in the Annual Discharge Operating Report.			
7. Monitoring of this parameter is required at the end of pipe during pipeline cleaning operations. Monitoring results must be included with the Discharge Monitoring Reports for that monitoring period. If lake levels rise where monitoring at the end of pipe is not feasible, then the Permittee may petition the Director of the Utah Division of Water Quality (Director) to establish an alternate sampling point.			
8. Metals results were reviewed for the last 36 months. Only selenium and mercury appeared to be close to the limits suggested in the Wasteload Analysis (WLA). DWQ has determined that increased monitoring and more stringent effluent limits are not appropriate at this time. Effluent limits and monitoring for selenium and mercury remain the same as the previous permit.			
9. Mercury samples must be analyzed using Method 1631 or other sufficiently sensitive method. Mercury needs to have appropriate Quality Control sampling methods established to avoid spikes.			
10. Oil & Grease sampled when sheen is present or visible. If no sheen is present or visible, report a no data indicator (NODI) code of 9 (Conditional Monitoring -Not Required This Period).			
11. Implementation of the selenium water quality standard of 12.5 mg/kg for Gilbert Bay of the GSL is outlined in Part I.C.3.c of this UPDES Permit.			
12. Chronic WET tests will be considered an indicator for Class 5 waters of the Great Salt Lake because of uncertainties regarding the representativeness of the standard test species for the Great Salt Lake.			
13. TUC is calculated by dividing the receiving water effluent concentration determined in accordance with R317-2-5 by the chronic test IC ₂₅ . The TUC is an indicator, and an exceedance is not used for determining compliance			
14. Metals samples should be analyzed using a method that meets MDL requirements. If a test method is not available, the Permittee must submit documentation to the Director regarding the method that will be used. The sample type (composite or grab) should be performed according to the methods requirements.			
15. Metals are being sampled in support of the work being done for the Reasonable Potential Analysis. The Metal parameters will be monitored and reported on a Quarterly basis by the facility on the Discharge Monitoring Report but will not have a limit associated with them. If the Permittee decides to sample more frequently for these parameters, the additional data shall be reported to DWQ per Part V. E of this permit.			
16. The Permittee shall monitor the following metals at the end of pipe Quarterly with the most sensitive method; Arsenic, Cadmium, Chromium, Copper, Cyanide, Iron, Lead, Nickel, Silver and Zinc. The sample type (composite or grab) should be performed according to the method's requirements.			
17. The Annual Discharge Operating Report, Annual Project Operating Report, and Annual Characterization Report (if applicable) shall be submitted to DWQ by February 1st of the following year.			

(2) Outfall 002

Outfall 002					
Parameter	Effluent Limitations ^{1, 2}				
	Maximum Monthly Avg	Maximum Weekly Avg	Annual Average	Daily Minimum	Daily Maximum
Total Flow, MGD	4.2	-	-	-	-
Selenium, mg/L	-	-	-	-	0.027
TDS, mg/L	-	-	-	-	1,200
Oil & Grease, mg/L	-	-	-	-	10.0
pH, Standard Units	-	-	-	6.5	9
WET, Acute Biomonitoring	-	-	-	-	LC ₅₀ > 100% Effluent
WET, Chronic Biomonitoring					IC ₂₅
Summer (Jul-Sep)	-	-	-	-	19%
Fall (Oct-Dec)	-	-	-	-	22%

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Outfall 002					
Parameter	Effluent Limitations ^{1, 2}				
	Maximum Monthly Avg	Maximum Weekly Avg	Annual Average	Daily Minimum	Daily Maximum
Winter (Jan-Mar)	-	-	-	-	20%
Spring (Apr-Jun)	-	-	-	-	17%
Mass Loading Limits					
	Maximum Monthly Avg	Maximum Weekly Avg	Annual Loading	Daily Minimum	Daily Maximum
Selenium, kg/year	-	-	26.4	-	-
1. See Definitions, Part VIII, for the definition of terms.					
2. All parameters in this table will be reported on the monthly Discharge Monitoring Report. There shall be no visible sheen or floating solids or visible foam in other than trace amounts. There shall be no discharge of sanitary wastes.					

Outfall 002 Self-Monitoring and Reporting Requirements ¹			
Parameter	Frequency ³	Sample Type	Units
Total Flow ^{4, 5}	Continuous	Recorder	MGD
TDS	2 x Weekly	Composite or Grab	mg/L
TSS	2 x Weekly	Composite or Grab	mg/L
Selenium	2 x Weekly	Composite or Grab	mg/L
Phosphorus	Monthly	Composite	mg/L
Oil & Grease	When Sheen Observed ¹⁰	Grab	mg/L
Selenium, Monthly Loading	Monthly	Calculated	kg
Selenium, Annual Loading ³	Annually	Calculated	kg
pH	Monthly	Grab	SU
Whole Effluent Toxicity ¹⁸ Fathead Minnows - Acute Ceriodaphnia - Acute	2 nd & 4 th Quarter 1 st & 3 rd Quarter	Composite Composite	Pass/Fail Pass/Fail
Whole Effluent Toxicity ¹⁹ Ceriodaphnia - Chronic Fathead Minnows - Chronic	2 nd & 4 th Quarter 1 st & 3 rd Quarter	Composite Composite	Pass/Fail Pass/Fail
Metals ^{20, 21, 22}	Quarterly	Composite/Grab	mg/L
1. See Definitions, Part VIII, for the definition of terms.			
3. For clarification, annual and quarterly monitoring requirements and limits are based on the calendar year.			
4. Flow measurements of effluent volume shall be made in such a manner that the permittee can affirmatively demonstrate that representative values are being obtained.			
5. If the rate of discharge is controlled, the rate and duration of discharge shall be reported.			
10. Oil & Grease sampled when sheen is present or visible. If no sheen is present or visible, report a no data indicator (NODI) code of 9 (Conditional Monitoring -Not Required This Period).			
18. The acute Ceriodaphnia will be tested during the 1st and 3rd quarters, and the acute fathead minnows will be tested during the 2nd and 4th quarters.			
19. The chronic Ceriodaphnia will be tested during the 2nd and 4th quarters, and the chronic fathead minnows will be tested during the 1st and 3rd quarters.			
20. Metals samples should be analyzed using a method that meets MDL requirements. If a test method is not available, the permittee must submit documentation to the Director regarding the method that will be used. The sample type (composite or grab) should be performed according to the methods requirements.			
21. Metals are being sampled in support of the work being done for the Reasonable Potential Analysis. The Metal parameters will be monitored and reported on a Quarterly basis by the facility on the Discharge Monitoring Report but will not have a limit associated with them. If the Permittee decides to sample more frequently for these parameters, the additional data shall be reported to DWQ per Part V. E of this permit.			

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Outfall 002 Self-Monitoring and Reporting Requirements ¹			
Parameter	Frequency ³	Sample Type	Units
22. The Permittee shall monitor the following metals at the Outfall 002 monitoring point on a quarterly basis with the most sensitive method; Arsenic, Cadmium, Chromium, Cyanide, Iron, Lead, Mercury, Nickel, Selenium, Silver and Zinc. The sample type (composite or grab) should be performed according to the method's requirements.			

3. Additional Sampling Requirements

a. ***Sampling Location:***

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations:

- (1) Outfall 001 shall be monitored at the Southwest Groundwater Treatment Plant prior to the effluent entering the byproduct pipeline;
- (2) Outfall 002 shall be monitored at the point of discharge prior to mixing with any receiving water.

b. ***Annual Discharge Operating Report for Pump to Waste, Upset Discharges, and Cleaning and Maintenance Conditions for the Shallow Wells:***

On an annual basis, the Permittee will summarize the duration and frequency of all pump to waste discharges, discharges associated with cleaning and maintenance of the reverse osmosis unit and any discharges resulting from facility upset conditions that occurred during that calendar year. The Permittee shall submit this summary to the Division of Water Quality (DWQ) by February 1st of the following year.

c. ***Joint Discharge Area Transitional Waters Monitoring Program:***

The Permittee and Rio Tinto Kennecott (RTK) discharge effluent to the Transitional Waters and Gilbert Bay of the Great Salt Lake, via Outfalls 001 and 012, respectively. For purposes of this section, the "Joint Discharge Area" means the outfall channel and the transitional wetland delta downgradient of Outfalls 001 and 012, including any lentic habitats that have formed. The GSL is a resource for migratory birds such as waterfowl, shorebirds, and other waterbirds. Transitional wetlands created by the discharges to the Joint Discharge Area serve as feeding and nesting habitats for birds. Habitats near the Joint Discharge Area have been found to contain elevated levels of selenium and mercury in water and in sediment compared to other GSL habitats. See DWQ-2011-009595. As of the date of this Permit, approximately 1.5 miles of transitional wetland habitat has developed at the Joint Discharge Area.

- (1) Coordination with RTK:

Because the Permittee and RTK both discharge to the Joint Discharge Area, each carries parallel monitoring obligations under its respective UPDES permits (UT0025836 for the Permittee and UT0000051 for RTK). The Permittee is strongly encouraged to coordinate with RTK to satisfy these parallel obligations through a single, coordinated monitoring effort, thereby avoiding duplication of sampling efforts, and limiting impacts to avian wildlife in the Joint Discharge Area.

The Permittee shall notify the Director as soon as possible, but no later than April 1 of any calendar year, if efforts to coordinate joint monitoring with RTK for that year are unsuccessful. In the event that coordination is unsuccessful, the Permittee shall independently satisfy all monitoring obligations under this section.

(2) Field Sampling Plan:

The Field Sampling Plan (FSP) shall specify the operational requirements of the Joint Discharge Area Transitional Waters Monitoring Program. The FSP shall include, at a minimum: 1) sampling locations; 2) sampling frequency; 3) sample media; 4) sample collection methods; 5) bird survey methods; 6) field water quality parameters; 7) analytical procedures; 8) chain of custody procedures; 9) data quality objectives/quality assurance requirements; 10) documentation and reporting requirements; and 11) any other requirements determined by the Director.

The currently approved FSP is incorporated by reference into this Permit and constitutes an enforceable requirement of this Permit. The Permittee shall implement and comply with the monitoring and analysis requirements of the FSP. Failure to implement or comply with the FSP constitutes a violation of this Permit.

The Permittee shall submit any modifications to the FSP to the Director for review and approval far enough in advance of the affected sampling season to allow review and approval before sampling begins. The Director may require modifications to the FSP, which the Permittee shall incorporate into a revised FSP submitted for approval within a time specified by the Director. Following Director approval, the modified FSP shall be incorporated by reference into this Permit and shall replace the previous FSP.

(3) Sampling and Monitoring Requirements:

The Permittee shall ensure the FSP requires monitoring of the Joint Discharge Area to evaluate the bioaccumulation of selenium and mercury through the food web, including water, organic particulate matter, macro-invertebrates, brine shrimp, and bird eggs, and to document bird use of the Joint Discharge Area.

- (a) *Bird egg collection.* The Permittee must collect up to eight (8) bird eggs annually, if available, during the nesting season (April 15 through June 30). The Permittee must collect eggs from bird nests in the Joint Discharge Area consistent with the limits and conditions of the applicable U.S. Fish and Wildlife Service Scientific Collecting Permit(s) authorizing the collection, and with the protocol specified in the FSP.

The Permittee shall analyze all collected eggs for total mercury and selenium.

(4) Implementation of the Se Tissue-Based Standard:

The Permittee shall compare the geometric mean of the selenium concentration of all bird eggs collected (a minimum of five (5) eggs is required to trigger this requirement) in a single nesting season to the tissue-based selenium water quality standard of 12.5 mg/kg dry weight. If the annual geometric mean dry weight concentration of all the eggs collected exceed any limit listed below, the Permittee shall comply with the corresponding requirements. A minimum of five (5) bird eggs is required to trigger this requirement.

- (a) **9.8 to less than 12.5 mg/kg dry weight Selenium:**

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The Permittee shall prepare and, if required by the Director, implement a plan to decrease bird exposures to selenium from the effluent unless the Permittee can demonstrate to the Director's satisfaction that the discharge from Outfall 001 is not the cause of the selenium value in the bird eggs. The plan, including an implementation schedule, must be submitted for approval by the Director within 90 days of notice that this condition exists.

(b) 12.5 mg/kg dry weight Selenium and above:

In addition to the plan required above, the Director may exercise the reopener provision for this Permit and impose additional selenium reduction requirements. If the receiving waters are determined to be impaired, the Permittee may be subject to additional selenium reductions under the TMDL process.

(5) Exceedances:

- (a) *Individual egg result.* If any individual bird egg selenium concentration equals or exceeds 9.8 mg/kg, the Permittee shall notify the Director in writing within seven (7) business days of receiving the laboratory result. The Permittee shall include in the notification: 1) the egg result; 2) the collection location; 3) the collection date; and 4) the species. This is an early-warning reporting requirement and does not, by itself, constitute a violation of the Permit or an exceedance of the 12.5 mg/kg tissue-based standard.
- (b) *Seasonal geometric mean.* If the annual geometric mean selenium concentration of the bird eggs collected in a nesting season (minimum five eggs) equals or exceeds 9.8 mg/kg dry weight, the Permittee shall notify the Director in writing within seven (7) business days of receipt of the final laboratory results for eggs collected during the bird nesting season (April 15 through June 30). The Permittee shall include in the notification: 1) the geometric mean; 2) the number of eggs collected; 3) the individual egg results; and 4) which threshold under the 12.5 mg/kg Se tissue-based standard provision has been met. This notification constitutes the notice that this condition exists for purposes of the Implementation of the Se Tissue-Based Standard provision, and the Permittee shall comply with the corresponding requirements of that provision.

(6) Bird Surveys:

The Permittee must conduct, at a minimum, four (4) bird surveys, approximately every two (2) weeks during the nesting season (April 15 through June 30), in accordance with the protocol specified in the FSP, and must document, to the extent observed, bird abundance, diversity and use of the Joint Discharge Area. The Permittee shall include the identification of birds to species and the presence or absence of the target shorebird species used for egg sampling (American Avocet and Black-necked Stilt) and evidence of feeding and nesting within the Joint Discharge Area.

(7) Co-located environmental sampling:

The Permittee must collect co-located water, organic particulate matter and macro-invertebrate samples within the Joint Discharge Area, timed to support evaluation of selenium and mercury exposure during the nesting season. Water and organic

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particulate matter samples must be collected as spatially and temporally paired samples at each sampling location. The Permittee shall conduct the following analyses:

- (a) *Water*: The Permittee shall analyze all water samples for total selenium, total dissolved selenium, methylmercury and total mercury;
- (b) *Macro-invertebrates*: The Permittee shall analyze all macro-invertebrate samples for selenium and total mercury; and
- (c) Organic particulate matter: The Permittee shall analyze all organic particulate matter for selenium.

(8) Open-water sampling:

The Permittee must attempt sampling twice each year of the open waters of Gilbert Bay in the vicinity of where the outfall channel meets the GSL, once during the nesting season and once in October. Sample collection may be constrained by site dynamics, including brine shrimp availability. The Permittee shall conduct the following analysis:

- (a) *Water*: The Permittee shall analyze all water samples for total mercury, methylmercury, and selenium; and
- (b) *Brine shrimp*: The Permittee shall analyze all brine shrimp samples for total mercury and selenium.

(9) Annual Project Operating Report:

The Permittee shall submit an Annual Project Operating Report to DWQ no later than February 1 of the following year, unless another date is agreed upon, in writing, by the Director. The Annual Project Operating Report must contain the following information:

- (a) Detailed field and laboratory data and analysis;
- (b) Summary of results from the bird surveys;
- (c) Summary of bird egg sampling data and analysis;
- (d) Summary of co-located water, macro-invertebrate, and organic particulate matter sampling and data analysis;
- (e) Summary of open-water brine shrimp and water sampling data and analysis; and
- (f) Summary of any additional monitoring or analysis required by the FSP.

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

a. *Whole Effluent Testing – Acute Toxicity.*

Starting immediately, the Permittee shall quarterly conduct acute static renewal toxicity tests on a composite sample of the final effluent at Outfalls 001 and 002. The sample shall be collected at the point of compliance before mixing with the receiving water.

The monitoring frequency for acute tests shall be quarterly, 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.4.c., Accelerated Testing). Unless otherwise approved by the Director, 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.

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The static-renewal 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, Fifth Edition, October 2002, EPA-821-R-02-012 as per 40 CFR 136.3(a) TABLE IA-LIST OF APPROVED BIOLOGICAL METHODS.

- (1) For Outfall 001, the Permittee shall conduct the acute 96-hour static renewal toxicity test using *Cyprinodon variegatus* (sheepshead minnow) using 24-hour solution renewal.
- (2) For Outfall 002, the Permittee shall conduct the 48-hour static renewal toxicity test using *Ceriodaphnia dubia* (solution renewal every 24 hours) and the acute 96-hour static renewal toxicity test using *Pimephales promelas* (fathead minnow) with solution renewal every 24 hours).

Based on the Test Acceptability Criteria included in Utah Pollutant Discharge Elimination System (UPDES) Permit and Enforcement Guidance Document for Whole Effluent Toxicity Control (Biomonitoring) February 2018, the Director may require acceptable variations in the test, i.e. temperature, carbon dioxide atmosphere, or any other acceptable variations in the testing procedure, as documented in the Fact Sheet Statement of Basis. If possible, dilution water should be taken from the receiving stream. A valid replacement test is required within the specified sampling period to remain in compliance.

Acute toxicity occurs when 50 percent or more mortality is observed for either species at any effluent concentration. Mortality in the control must simultaneously be 10 percent or less for the results to be considered valid. If more than 10 percent control mortality occurs, the test shall be repeated until satisfactory control mortality is achieved. The Permittee shall meet all QA/QC requirements of the acute WET testing method listed in this Section of the permit.

If the permit contains a total residual chlorine limitation such that it may interfere with WET testing (>0.20 mg/L), the permittee may dechlorinate the sample in accordance with approved USEPA methods for WET testing the sample. If dechlorination is affecting the test, the Permittee may collect the sample just before chlorination with Director approval.

Quarterly test results shall be reported along with the DMR submitted for the end of the required reporting period (month, quarter or semi-annual) 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. Monthly test results shall be reported along with the DMR submitted for that month. The format for the report shall be consistent with Appendix C of "Utah Pollutant Discharge Elimination System (UPDES) Permitting and Enforcement Guidance Document for Whole Effluent Toxicity (Biomonitoring), Utah Division of Water Quality, February 2018.

b. *Whole Effluent Testing – Chronic Toxicity.*

- (1) Outfall 001

Chronic WET tests are considered an indicator for Class 5 waters (Great Salt Lake) because of uncertainties regarding the representativeness of the standard

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test species for Great Salt Lake. If a separate acute test is not conducted, the results of the acute duration portion of a chronic test are reported as specified in Part a. Whole Effluent Testing – Acute Toxicity. As an indicator, the chronic test results can demonstrate compliance with portions of the Narrative Standards (R317-2-7.2). However, the chronic WET test results alone do not demonstrate noncompliance with the Narrative Standards. As indicators, the chronic WET test results alone are not used for determining reasonable potential for toxicity or noncompliance with the permit.

Starting immediately, the Permittee shall quarterly, conduct chronic static renewal toxicity tests on a composite sample of the final effluent at Outfall 001. The sample shall be collected at the point of compliance before mixing with the receiving water.

Three samples are required and samples shall be collected on Monday, Wednesday and Friday of each sampling period or collected on a two-day progression for each sampling period. This may be changed upon Director approval. The chronic toxicity tests shall be conducted in general accordance with the procedures set out in the latest revision of Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Marine and Estuarine Organisms, Third Edition, October 2002 EPA-821-R-02-014 [select one for Great Salt Lake Facilities]) as per 40 C.F.R. § 136.3(a) TABLE IA-LIST OF APPROVED BIOLOGICAL METHODS. Test species for Outfall 001 shall consist of *Cyprinodon variegatus* (sheepshead minnow).

A multi dilution test consisting of at least five concentrations and a control is required at two dilutions below and two above the receiving water concentration (RWC), if possible. If test acceptability criteria are not met for control survival, growth, or reproduction, the test shall be considered invalid. A valid replacement test is required within the specified sampling period to remain in compliance with this permit. For Outfall 001, Chronic toxicity occurs when, during a chronic toxicity test, the $TU_c \geq 1.6$. Toxic unit chronic (TU_c) is the reciprocal of the effluent concentration that causes no observable effect on the test organisms by the end of the chronic exposure period and is calculated as $100/IC_{25}$. If a sample is found to be chronically toxic during a routine test, the monitoring frequency shall become biweekly (see Part I.C.4.c.) Accelerated Testing).

(2) Outfall 002

Starting immediately, the Permittee shall quarterly conduct chronic static renewal toxicity tests on a composite sample of the final effluent at Outfall 002. The sample shall be collected at the point of compliance before mixing with the receiving water.

Three samples are required and samples shall be collected on Monday, Wednesday and Friday of each sampling period or collected on a two-day progression for each sampling period. This may be changed upon Director approval. The chronic toxicity tests shall be conducted in general accordance with the procedures set out in the latest revision of Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms, Fourth Edition, October 2002, EPA— 821-R-02-013 ([or] Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Marine and Estuarine Organisms, Third Edition, October 2002 EPA-

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821-R-02-014 [select one for Great Salt Lake Facilities]) as per 40 C.F.R. § 136.3(a) TABLE IA-LIST OF APPROVED BIOLOGICAL METHODS. Test species for Outfall 002 shall consist of Ceriodaphnia dubia and Pimephales promelas (fathead minnow).

A multi dilution test consisting of at least five concentrations and a control is required at two dilutions below and two above the RWC, if possible. If test acceptability criteria are not met for control survival, growth, or reproduction, the test shall be considered invalid. A valid replacement test is required within the specified sampling period to remain in compliance with this permit. For Outfall 002, Chronic toxicity occurs when, during a chronic toxicity test, the 25% inhibition concentration (IC₂₅) calculated on the basis of test organism survival and growth or survival and reproduction, is less than or equal to X% effluent concentration (equivalent to the RWC). The seasonal RWC is included in the table below.

Outfall 002, Chronic WET, Seasonal Concentrations	
Season	IC ₂₅
Summer (Jul-Sep)	19%
Fall (Oct-Dec)	22%
Winter (Jan-Mar)	20%
Spring (Apr-Jun)	17%

If a sample is found to be chronically toxic during a routine test, the monitoring frequency shall become biweekly (see Part I.C.4.c.) Accelerated Testing.

The Director may enter acceptable variations in the test procedure here as documented in the Fact Sheet and based on the test acceptability criteria as contained in Utah Pollutant Discharge Elimination System (UPDES) Permitting and Enforcement Guidance Document for Whole Effluent Toxicity Control February, 2018). If possible, dilution water should be obtained from the receiving stream.

If the permit contains a total residual chlorine limitation such that it may interfere with WET testing (>0.20 mg/L), the permittee may dechlorinate the sample in accordance with the standard method. If dechlorination is negatively affecting the test, the permittee may collect the sample just before chlorination with Director approval.

Quarterly test results shall be reported along with the DMR submitted for the end of the required reporting period (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). Monthly test results shall be reported along with the DMR submitted for that month. The format for the report shall be consistent with Appendix C of "Utah Pollutant Discharge Elimination System (UPDES) Permitting and Enforcement Guidance Document for Whole Effluent Toxicity, Utah Division of Water Quality, February, 2018.

- c. *Accelerated Testing.* When whole effluent toxicity is indicated during routine WET testing as specified in this permit, the Permittee shall notify the Director in writing within 5 days after becoming aware of the test result. The permittee shall perform an accelerated schedule of WET testing to establish whether a pattern of toxicity exists unless the permittee notifies the Director and commences a PTI, TIE, or a TRE.

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Accelerated testing or the PTI, TIE, or TRE will begin within fourteen days after the permittee becomes aware of the test result. Accelerated testing shall be conducted as specified under Part I. Pattern of Toxicity. If the accelerated testing demonstrates no pattern of toxicity, routine monitoring shall be resumed.

- d. *Pattern of Toxicity.* A pattern of toxicity is defined by the results of a series of up to five biomonitoring tests pursuant to the accelerated testing requirements using a full set of dilutions for acute (five plus the control) and five effluent dilutions for chronic (five plus the control), on the species found to be more sensitive, once every week for up to five consecutive weeks for acute and once every two weeks up to ten consecutive weeks for chronic.

If two (2) consecutive tests (not including the scheduled test which triggered the search for a pattern of toxicity) do not result in an exceedance of the acute or chronic toxicity criteria, no further accelerated testing will be required and no pattern of toxicity will be found to exist. The permittee will provide written verification to the Director within 5 days of determining whether no pattern of toxicity exists, and resume routine monitoring.

A pattern of toxicity may or may not be established based on the following:

WET tests should be run at least weekly (acute) or every two weeks (chronic) (note that only one test should be run at a time), for up to 5 tests, until either:

- 1) 2 consecutive tests fail, or 3 out of 5 tests fail, at which point a pattern of toxicity will have been identified, or
- 2) 2 consecutive tests pass, or 3 out of 5 tests pass, in which case no pattern of toxicity is identified.

- e. *Preliminary Toxicity Investigation.*

- (1) When a pattern of toxicity is detected, the Permittee will notify the Director in writing within 5 days and begin an evaluation of the possible causes of the toxicity. The permittee will have 15 working days from demonstration of the pattern of toxicity to complete an optional 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 any spill may have occurred.
- (2) If the PTI identifies a probable toxicant and/or a probable source of toxicity, the permittee shall submit, as part of its final results, written notification of that effect to the Director. Within thirty days of completing the PTI the permittee shall submit to the Director for approval a control program to control effluent toxicity and shall proceed to implement such plan in accordance with the Director's approval. The control program, as submitted to or revised by the Director, will be incorporated into the permit. After final implementation, the permittee must demonstrate successful removal of toxicity by passing a two species WET test as outlined in this permit. With adequate justification, the Director may extend these deadlines.

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- (3) If no probable explanation for toxicity is identified in the PTI, the permittee 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,4,f Toxicity Reduction Evaluation.
 - (4) If toxicity spontaneously disappears during the PTI, the permittee shall submit written notification to that effect to the Director, with supporting testing evidence.
- f. *Toxicity Reduction Evaluation (TRE)*. If a pattern of toxicity is detected the permittee shall initiate a TIE/TRE within 7 days unless the Director has accepted the decision to complete a PTI. With adequate justification, the Director may extend the 7-day deadline. The purpose of the TIE portion of a TRE will be to establish the cause of the toxicity, locate the source(s) of the toxicity, and the TRE will 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, the permittee 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 toxicity spontaneously disappears during the TIE/TRE, the permittee shall submit written notification to that effect to the Director.

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

- (a) An alternative control program for compliance with the numerical requirements.
- (b) If necessary, as determined by the Director, provide a modified biomonitoring protocol which compensates for the pollutant(s) being controlled numerically.

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 modified WET testing requirements without public notice.

Failure to conduct an adequate TIE/TRE 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. After implementation of TIE/TRE plan, the

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permittee must demonstrate successful removal of toxicity by passing a two species WET test as outlined in this permit.

D. Reporting of Monitoring Results.

1. Reporting of Wastewater Monitoring Results Monitoring results obtained during the previous month shall be summarized for each month and reported in 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

2. To establish accurate characterization of the effluent concentrations and source for Copper, Lead, and Mercury, the Permittee will be required to submit an Annual Characterization Report, due February 1st each year, with details for any sampling protocols, sampling ports, source of contaminants, and any other information that will help accurately characterize the effluent parameters in question. As per Part V.E. of the UPDES permit, all data is required to be reported to DWQ. The report shall be signed and certified in accordance with the requirements of *Signatory Requirements* (see Part VII.G), and submitted to the Division of Water Quality at the following address:

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

II. PRETREATMENT REQUIREMENTS

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

1. *Indirect Discharge* means the introduction of pollutants into a Publicly Owned Treatment Works (POTW) from any non-domestic source regulated under section 307 (b), (c) or (d) of the CWA.
2. *Interference* means a discharge which, alone or in conjunction with a discharge or discharges from other sources, both:
 - a. Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and
 - b. Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.
3. *Pass Through means* a Discharge which exits the POTW into waters of the State or waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).
4. *Publicly Owned Treatment Works or POTW* means a treatment works, as defined by section 212 of the CWA, which is owned by a State or municipality (as defined by section 502(4) of the CWA). This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW Treatment Plant. The term also means the municipality, as defined in section 502(4) of the CWA, which has jurisdiction over the Indirect Discharges to and the discharges from such a treatment works.
5. *Significant Industrial User (SIU)* means:
 - a. Except as provided in paragraphs (5)(b) and (5)(c) of this definition, the term Significant Industrial User means:
 - (1) All Industrial Users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR chapter I, subchapter N; and
 - (2) Any other Industrial User that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewater); contributes a process wastestream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW Treatment plant; or is designated as such by the

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Control Authority on the basis that the Industrial User has a reasonable potential for adversely affecting the POTW's operation or for violating any Pretreatment Standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

- b. The Control Authority may determine that an Industrial User subject to categorical Pretreatment Standards under § 403.6 and 40 CFR chapter I, subchapter N is a Non-Significant Categorical Industrial User rather than a Significant Industrial User on a finding that the Industrial User never discharges more than 100 gallons per day (gpd) of total categorical wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater, unless specifically included in the Pretreatment Standard) and the following conditions are met:
 - (1) The Industrial User, prior to the Control Authority's finding, has consistently complied with all applicable categorical Pretreatment Standards and Requirements;
 - (2) The Industrial User annually submits the certification statement required in § 403.12(q) together with any additional information necessary to support the certification statement; and
 - (3) The Industrial User never discharges any untreated concentrated wastewater.
- c. Upon a finding that an Industrial User meeting the criteria in paragraph (5)(a)(2) of this definition has no reasonable potential for adversely affecting the POTW's operation or for violating any Pretreatment Standards or requirement, the Control Authority may at any time, on its own initiative or in response to a petition received from an Industrial User or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such Industrial User is not a Significant Industrial User.

6. *User or Industrial User (IU)* means a source of Indirect Discharge.

B. Discharge to POTW. Any wastewaters discharged to the sanitary sewer, either as a direct discharge or as a hauled waste, are subject to Federal, State and local pretreatment regulations. Pursuant to Section 307 of The Water Quality Act of 1987, the Permittee shall comply with all applicable federal General Pretreatment Regulations promulgated at 40 CFR 403, the State Pretreatment Requirements at UAC R317-8-8, and any specific local discharge limitations developed by the Publicly Owned Treatment Works (POTW) accepting the wastewaters. At a minimum, the discharge into a POTW must meet the requirements of Part II. D. and E. of the permit.

C. Hazardous Waste Notification. The Permittee must notify the POTW, the EPA Regional Waste Management Director, the Director and the State hazardous waste authorities in writing if they discharge any substance into a POTW that, if otherwise disposed of, would be considered a hazardous waste under 40 CFR 261. This notification must include the name of the hazardous waste, the EPA hazardous waste number, and the type of discharge (continuous or batch).

D. General and Specific Prohibitions.

- 1. General Prohibitions. The Permittee may not introduce into a POTW any pollutant(s) which cause Pass Through or Interference. These general prohibitions and the specific prohibitions in paragraph 2. of this section apply to the introducing pollutants into a POTW whether or not the Permittee is subject to other National Pretreatment Standards or any national, State, or local Pretreatment Requirements.

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2. Specific Prohibitions. The following pollutants shall not be introduced into a POTW:
- 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;
 - h. Any trucked or hauled pollutants, except at discharge points designated by the POTW;
or
 - i. Any pollutant that causes Pass Through or Interference at the POTW.
 - j. Any specific pollutant which exceeds any Local Limitation established by the POTW.
- E. Categorical Standards. In addition to the general and specific limitations expressed in *Part II. D.* of this section, applicable National Categorical Pretreatment Standards must be met by all Industrial Users discharging into a POTW. These standards are published in the federal regulations at *40 CFR 405 through 471*.

III. BIOSOLIDS REQUIREMENTS

The State of Utah has adopted the 40 CFR 503 federal regulations for the disposal of sewage sludge (biosolids) by reference. However, since this facility does not generate, receive, treat or dispose of biosolids. Therefore 40 CFR 503 does not apply.

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IV. STORM WATER REQUIREMENTS.

- A. Industrial Storm Water Permit. Based on the Standard Industrial Classification code, this permittee does not fall within the categories of industrial dischargers that are regulated under UAC R317-8-11.3. Therefore, the facility is not required to maintain separate coverage or an appropriate exclusion under the Multi-Sector General Permit (MSGP) for Storm Water Discharges Associated with Industrial Activities (UTR000000).
- B. Construction Storm Water Permit. Any construction at the facility that disturbs an acre or more of land, including less than an acre if it is part of a common plan of development or sale, is required to obtain coverage under the UPDES Construction General Storm Water Permit (UTRC000000). Permit coverage must be obtained prior to land disturbance. If the site qualifies, a Low Erosivity Waiver (LEW) Certification may be submitted instead of permit coverage.

V. MONITORING, RECORDING & GENERAL REPORTING REQUIREMENTS

- A. 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 Admin. Code *R317-2-10*, *R317-8-4(4.1)(10)(d)*, and/or *40 CFR 503* utilizing sufficiently sensitive test methods unless other test procedures have been specified in this permit. Monitoring must be conducted according to the test procedures listed above unless another method is required under 40 CFR subchapters N or O. Sufficiently sensitive test method means: (1) The method minimum level (ML) is at or below the level of the effluent limit established in the permit for the measured pollutant or pollutant parameter; or (2) The method has the lowest ML of the analytical methods approved under *40 CFR part 136* or required under *40 CFR chapter I, subchapter N or O* for the measured pollutant or pollutant parameter as per *40 CFR 122.44(i)(1)(iv)(A)*.
- C. Penalties for Tampering. The *Act* provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both.
- D. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any Compliance Schedule of this permit shall be submitted no later than 14 days following each schedule date.
- E. Additional Monitoring by the Permittee. If the Permittee monitors any parameter more frequently than required by this permit, using test procedures approved under Permit Part V.B., 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.
- F. Records Contents. Records of monitoring information shall include:
1. The date, exact place, and time of sampling or measurements;
 2. The individual(s) who performed the sampling or measurements;
 3. The date(s) and time(s) analyses were performed;
 4. The individual(s) who performed the analyses;
 5. The analytical techniques or methods used; and,
 6. The results of such analyses.
- G. Retention of Records. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least five years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time. A copy of this UPDES permit must be maintained on site during the duration of activity at the permitted location
- H. Twenty-four Hour Notice of Noncompliance Reporting.
1. The Permittee shall (orally) report any noncompliance including transportation accidents, spills, and uncontrolled runoff from biosolids transfer or land application sites which may

seriously endanger health or environment, as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of circumstances. The report shall be made to the Division of Water Quality (DWQ) via the 24-hour answering service (801) 536-4123.

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

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2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit, including but not limited to, biosolids treatment, collection, storage facilities or area, transport vehicles and containers, and land application sites;
4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the *Act*, any substances or parameters at any location, including, but not limited to, digested biosolids before dewatering, dewatered biosolids, biosolids transfer or staging areas, any ground or surface waters at the land application sites or biosolids, soils, or vegetation on the land application sites; and,
5. The Permittee shall make the necessary arrangements with the landowner or leaseholder to obtain permission or clearance, the Director, or authorized representative, upon the presentation of credentials and other documents as may be required by law, will be permitted to enter without delay for the purposes of performing their responsibilities.

VI. COMPLIANCE RESPONSIBILITIES

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

- (2) There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance, and
 - (3) The Permittee submitted notices as required under *Part VI.G.3*.
 - b. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed in *Parts VI.G.2.a (1), (2) and (3)*.
3. Notice.
- a. *Anticipated bypass.* Except as provided above in *Part VI.G.2* and below in *Part VI.G.3.b*, if the permittee knows in advance of the need for a bypass, it shall submit prior notice, at least ninety days before the date of bypass. The prior notice shall include the following unless otherwise waived by the Director:
 - (1) Evaluation of alternative to bypass, including cost-benefit analysis containing an assessment of anticipated resource damages;
 - (2) A specific bypass plan describing the work to be performed including scheduled dates and times. The permittee must notify the Director in advance of any changes to the bypass schedule;
 - (3) Description of specific measures to be taken to minimize environmental and public health impacts;
 - (4) A notification plan sufficient to alert all downstream users, the public and others reasonably expected to be impacted by the bypass;
 - (5) A water quality assessment plan to include sufficient monitoring of the receiving water before, during and following the bypass to enable evaluation of public health risks and environmental impacts; and,
 - (6) Any additional information requested by the Director.
 - b. *Emergency Bypass.* Where ninety days advance notice is not possible, the permittee must notify the Director, and the Director of the Department of Natural Resources, as soon as it becomes aware of the need to bypass and provide to the Director the information in *Part VI.G.3.a.(1) through (6)* to the extent practicable.
 - c. *Unanticipated bypass.* The permittee shall submit notice of an unanticipated bypass to the Director as required under *Part V.H*, Twenty-Four Hour Reporting. The permittee shall also immediately notify the Director of the Department of Natural Resources, the public and downstream users and shall implement measures to minimize impacts to public health and environment to the extent practicable.

H. Upset Conditions.

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1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with technology-based permit effluent limitations if the requirements of paragraph 2 of this section are met. Director's administrative determination regarding a claim of upset cannot be judiciously challenged by the permittee until such time as an action is initiated for noncompliance.
 2. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The permittee submitted notice of the upset as required under *Part V.H, Twenty-four Hour Notice of Noncompliance Reporting*; and,
 - d. The permittee complied with any remedial measures required under *Part VI.D, Duty to Mitigate*.
 3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.
- I. Toxic Pollutants. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of *The Water Quality Act of 1987* for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
- J. Changes in Discharge of Toxic Substances. Notification shall be provided to the Executive Secretary as soon as the permittee knows of, or has reason to believe:
1. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - a. One hundred micrograms per liter (100 ug/L);
 - b. Two hundred micrograms per liter (200 ug/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/L) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - c. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with *UAC R317-8-3.4(7)* or (10); or,
 - d. The level established by the Executive Secretary in accordance with *UAC R317-8-4.2(6)*.
 2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":\

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- a. Five hundred micrograms per liter (500 ug/L);
- b. One milligram per liter (1 mg/L) for antimony;
- c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with *UAC R317-8-3.4(9)*; or,
- d. The level established by the Executive Secretary in accordance with *UAC R317-8-4.2(6)*.

VII. GENERAL REQUIREMENTS

- A. Planned Changes. The Permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 122.29(b); or
 2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit nor to notification requirements under Subsection R317-8-4.1(15).
 3. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. The permittee shall give notice to the Director of any planned changes at least 30 days prior to their implementation.
- B. Anticipated Noncompliance. The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity, which may result in noncompliance with permit requirements.
- C. Permit Actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- D. Duty to Reapply. If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. The application shall be submitted at least 180 days before the expiration date of this permit.
- E. Duty to Provide Information. The Permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.
- F. Other Information. When the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Director, it shall promptly submit such facts or information.
- G. Signatory Requirements. All applications, reports or information submitted to the Director shall be signed and certified.
1. All permit applications shall be signed by either a principal executive officer or ranking elected official. A person is a duly authorized representative only if:

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- 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.
 - (1) For a corporation. By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - (a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or
 - (b) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 - (2) For a partnership or sole proprietorship. By a general partner or the proprietor, respectively; or
 - (3) For a municipality, State, Federal, or other public agency. By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
 - (a) The chief executive officer of the agency, or
 - (b) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).
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.
 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

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the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- H. Penalties for Falsification of Reports. The *Act* provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than \$10,000.00 per violation, or by imprisonment for not more than six months per violation, or by both.
- I. Availability of Reports. Except for data determined to be confidential under *UAC R317-8-3.2*, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the office of Director. As required by the *Act*, permit applications, permits and effluent data shall not be considered confidential.
- J. Oil and Hazardous Substance Liability. Nothing in this permit shall be construed to preclude the permittee of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under the *Act*.
- K. Property Rights. The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.
- L. Severability. The provisions of this permit are severable, and if any provisions of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
- M. Transfers. This permit may be automatically transferred to a new permittee if:
1. The current Permittee notifies the Director at least 20 days in advance of the proposed transfer date;
 2. The notice includes a written agreement between the existing and new permittee's containing a specific date for transfer of permit responsibility, coverage, and liability between them; and,
 3. The Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify, or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph 2 above.
- N. State or Federal Laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Sections 19-5-117 and 510 of the Clean Water Act or any applicable Federal or State transportation regulations, such as but not limited to the Department of Transportation regulations.

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- 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 the permittee discharges are modified in such a manner as to require different effluent limits than contained in this permit.
 2. A final WLA is developed and approved by the State and/or EPA for incorporation in this permit.
 3. Revisions to the current CWA § 208 areawide treatment management plans or promulgations/revisions to TMDLs (40 CFR 130.7) approved by the EPA and adopted by DWQ which calls for different effluent limitations than contained in this permit.
- P. Biosolids – Reopener Provision. This permit may be reopened and modified (following proper administrative procedures) to include the appropriate biosolids limitations (and compliance schedule, if necessary), management practices, other appropriate requirements to protect public health and the environment, or if there have been substantial changes (or such changes are planned) in biosolids use or disposal practices; applicable management practices or numerical limitations for pollutants in biosolids have been promulgated which are more stringent than the requirements in this permit; and/or it has been determined that the permittees biosolids use or land application practices do not comply with existing applicable state or federal regulations.

Q. 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* and/or *b* of this permit, during the duration of this permit.
2. The TRE results indicate that the toxicant(s) represent pollutant(s) or pollutant parameter(s) that may be controlled with specific numerical limits, and the Director concludes that numerical controls are appropriate.
3. Following the implementation of numerical control(s) of toxicant(s), the Director agrees that a modified biomonitoring protocol is necessary to compensate for those toxicants that are controlled numerically.
4. 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.

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. "Average annual discharge limit" means maximum allowable average of monthly discharges over a calendar year, calculated as the sum of all monthly discharges measured during a calendar year divided by the number of monthly discharges measured during the year. The timeframe is defined as from January 1st to December 31st.
4. "Act," means the *Utah Water Quality Act*.
5. "Acute toxicity" occurs when 50 percent or more mortality is observed for either test species at any effluent concentration (lethal concentration or "LC₅₀").
6. "Bypass," means the diversion of waste streams from any portion of a treatment facility.
7. "Chronic toxicity" occurs when the IC₂₅ < XX% effluent: Summer (Jul-Sep) 19% , Fall (Oct-Dec) 22%, Winter (Jan-Mar) 20%, Spring (Apr-Jun) 17%. The XX% effluent is the concentration of the effluent in the receiving water, at the end of the mixing zone expressed as per cent effluent.
8. "IC₂₅" is the concentration of toxicant (given in % effluent) that would cause a 25% reduction in mean young per female, or a 25% reduction in overall growth for the test population.
9. "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:

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- 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.
10. "CWA" means *The Federal Water Pollution Control Act*, as amended, by *The Clean Water Act of 1987*.
11. "Daily Maximum" (Daily Max.) is the maximum value allowable in any single sample or instantaneous measurement.
12. "EPA," means the United States Environmental Protection Agency.
13. "Director," means Director of the Division of Water Quality.
14. A "grab" sample, for monitoring requirements, is defined as a single "dip and take" sample collected at a representative point in the discharge stream.
15. An "instantaneous" measurement, for monitoring requirements, is defined as a single reading, observation, or measurement.
16. "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.
17. "Upset," means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.