

Official Draft Public Notice Version **August 29, 2023**

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

**FACT SHEET AND STATEMENT OF BASIS
CENTRAL VALLEY WATER RECLAMATION FACILITY
MODIFIED PERMIT: DISCHARGE, BIOSOLIDS, & REUSE
UPDES PERMIT NUMBER: UT0024392
UPDES BIOSOLIDS PERMIT NUMBER: UTL-024392
MAJOR MUNICIPAL**

FACILITY CONTACTS

Entity/Operator:	Central Valley Water Reclamation Facility
Person Name:	Phillip Heck PhD, P.E.
Position:	General Manager
Person Name:	Brandon Heidelberger, P.E.
Position:	Assistant General Manager
Person Name:	Bryan Mansell, P.E.
Position:	Chief Engineer
Person Name:	Edward Harrison
Position:	Laboratory Director
Person Name:	Gary Faulkner
Position:	Plant Superintendent
Facility Name:	Central Valley Water Reclamation Facility (Central Valley)
Mailing Address:	800 West Central Valley Road Salt Lake City, Utah 84119-3379
Telephone:	(801) 973-9100
Actual Address:	800 West Central Valley Road

DESCRIPTION OF FACILITY

Central Valley Water Reclamation Facility (Central Valley) was completed and in total operation in 1989. Central Valley is an interlocal agreement entity comprised of Cottonwood Improvement District, Mt. Olympus Improvement District, Granger-Hunter Improvement District, Kearns Improvement District, Murray City, City of South Salt Lake, and Taylorsville-Bennion Improvement District. The current design capacity is 75 MGD (average daily flow) for a population equivalent of 750,000. The organic design capacity is 125,000 pounds of BOD and 125,000 pounds of TSS. The plant consists of six mechanical bar screens, five headworks pumps, four aerated grit chambers followed by ten primary clarifiers, four trickling filters, six solids contact basins, twelve secondary clarifiers, four ultraviolet light disinfection channels, two reaeration channels, six anaerobic digesters, and three sludge belt presses. The ultraviolet

disinfection system was installed in 2009 to replace the original chlorination / de-chlorination system from service which resulted in removal of the total residual chlorine limit from the permit. Central Valley operates a disk filter to produce Type I reuse water during the spring and summer months. Reuse water fills the irrigation pond west of the facility which is then used to irrigate its golf course. The facility processes approximately 0.75-1.0 MGD of Type I water, or 1.3% of the total flow while in operation. Overflow from the irrigation pond could flow to Vitro Ditch but has never done so, as the water level is managed so that Type I reuse is only produced to supply golf course watering needs

The ponds at the golf course are filled with Type II reuse water. Over flows from these ponds goes to the old "Vitro Ditch" and back into Mill Creek. This flow rate is less than 100 gpm. Prior to 2020, the point of overflow was only noted in the permit, but not noted as an official outfall. The current, and ongoing upgrades at the facility have improved the quality and control of the reuse system, and the Reuse Outfall (002R) was added to the permit. Outfall 002R is from the golf course ponds to the Vitro ditch (unclassified). The receiving waters that control the effluent limits for outfall 002R are the same as for Central Valley's primary outfall 001; i.e., Mill Creek and the Jordan River.

The reuse water meets all the Outfall 001 effluent limits and requirements when it is collected prior to being discharged. The reuse water then receives additional treatment by filtration and chlorination before being monitored and sent to the reuse or golf course ponds. The water added to the golf course ponds is added to the first pond, then flows through the other two ponds in series prior to discharging to the Vitro ditch. Testing showed that during this flow path, the residual chlorine has enough time to dissipate prior to the discharge from the last pond.

Since the Reuse water in the golf course pond meets both Outfall 001 and Type II Reuse requirements prior to entering the ponds, and the only addition to the process (chlorination) dissipates prior to the discharge, it was decided that the outfall will only be monitored for the presence or absence of flow to the golf course ponds.

During the renewal process in 1999, Central Valley requested a reduction in monitoring frequency for all parameters except for WET. This request was granted and the frequencies were reduced to four (4) times a week from seven (7) times a week. This was done based on the Division of Water Quality's 1996 Performance Based Reduction of UPDES Monitoring Frequencies document.

During the 2010 permit cycle the DWQ determined that, historically, the receiving water was incorrectly assigned to the Jordan River and effluent was actually being discharged to Mill Creek. Also, DWQ used an improved model in 2015 to model dischargers to the Jordan River. Thus, the WLA for the 2015 renewal permit was developed accordingly. As a result of this change, effluent limits for many parameters have become more restrictive. As a result of this WLA and the use of an RP model an effluent limit for copper was added for the 2015 renewal.

Central Valley worked with Rocky Mountain Power to evaluate the facility and determine if there were any places they might be able to improve energy efficiency. One place that was noted is that if they were to measure the effluent dissolved oxygen (DO) after the cascade structure they could

reduce the amount of energy required for aeration of the effluent in the post aeration channels. This change was granted during the 2015 renewal.

Instead of an effluent flow limit being added in the 2015 renewal permit, Central Valley requested that mass limits be included for water quality based effluent limits. The renewed permit added the following effluent mass loading limits for CBOD5, Ammonia (as N), and Total Copper.

TBPEL Rule

On December 16, 2014, the Utah Water Quality Board adopted *Utah Administrative Code (UAC) R317-1-3.3, Technology-Based Limits for Controlling Phosphorous Pollution*. The Technology-Based Phosphorous Effluent Limits (TBPEL) establishes new regulations for the discharge of phosphorus to surface waters and is self-implementing.

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

On March 27, 2017, DWQ approved the Central Valley TBPEL variance request with an interim total phosphorous annual average limit of 4.0 mg/L beginning January 1, 2020. This permit modification incorporated the approved variance with the interim limits and dates that were previously public noticed in the local newspaper, in which no comments were received. These changes were carried forward in the 2020 renewal. Central Valley was on schedule, and improvements were to be completed by January 1, 2025.

WET Guidance

In 2018 DWQ finalized and updated Whole Effluent Toxicity Permit and Enforcement Guidance and started following it in the development of all new or renewed permits. This would have been the first time the new WET Guidance was used in the Central Valley Permit. In line with the new WET Guidance, Central Valley requested, and DWQ approved the use of a CO2 atmosphere to control pH drift in WET Samples.

Another change as a result of the WET Guidance update is the requirement that a facility discharging greater than 20 MGD will sample monthly. Prior to March of 2002 Central Valley was conducting WET test monthly. In 2002, Central Valley requested a reduction in WET testing frequency. The request was approved and the frequency was reduced to quarterly. The DWQ reviewed Central Valley's history of WET and will apply the updated WET policy to Central Valley although it was previously were approved to reduce the testing frequency. The WET testing frequency will be increased to monthly with alternating species until Central Valley can qualify for the reduction again.

Central Valley also expressed a concern that under certain circumstances a facility could fail a Chronic Wet Test, commence Accelerated testing and end up having the retesting overlap for multiple subsequent sampling events.

During the discussion of this possibility it was determined that the WET language and policy allows for the suspension of regularly scheduled WET testing during the accelerated testing period, and that providing the test was passed, the results of a passing accelerated test that extended over into the regular scheduled testing period could be used in place of that regularly scheduled WET Testing event. As a result, it was determined that when during the Chronic WET testing a failure occurs, and the permittee commences with the Accelerated Testing (Part I, C. 4, b and c of the permit), regularly scheduled Chronic WET testing requirements for that species are suspended until the conclusion of the Accelerated Testing to establish whether a pattern of toxicity exists.

WQBEL Changes from WLA

Prior to development of the WLA, the DWQ and the facilities that discharge to the Jordan River worked to get a better understanding of the flows in the river. Specifically, they worked on updating the understanding of the 7Q10 low flow for the Jordan River. As a result, the ammonia limits changed in the WLA for the facilities. Also, the the seasonal timing of the limits were adjusted to reflect the climatological seasons, and the flows in the Jordan River.

In the previous permit the chronic ammonia limit for October, and the acute ammonia limit for the Summer were from the Jordan River POTW WLA and are based on protection of downstream use, the rest of the ammonia limits were from the Mill Creek WLA. For the 2020 renewal, all the ammonia limits were from the Mill Creek WLA which is more stringent the those for the Jordan River POTW WLA.

Compliance Schedule

As a result of the ongoing plant upgrades and associated construction activities, Central Valley will need to make various operational changes until the completion of construction activities. The construction and plant upgrades were scheduled to be completed and fully operational by the end of December, 2024. In order to accommodate the plant construction and changes, DWQ added a compliance schedule to the permit (Part I.C.3) which synchronized the changes in monitoring requirements and effluent limits with construction completion; new effluent limits and monitoring requirements will not go into effect until January 1, 2025. This date is also when the Variance for the TBPEL Rule expires. Until January 1, 2025, the requirements and limits from the previous permit will remain in effect.

The Annual Report submission required in the Variance is included in the permit as a condition of the variance and requires Central Valley to report, in detail, on the progress of all the work that has been done, and the schedule of work still to be completed. This report will also count as an ongoing requirement of the compliance schedule.

Central Valley is located at 800 West Central Valley Road (about 3190 South) in South Salt Lake, Salt Lake County, Utah, with its Outfall 001 at latitude 40°42'30" and longitude 111°54'57".

SUMMARY OF CHANGES FROM PREVIOUS PERMIT

Since the issuance of the renewal permit, several major global events have interrupted and delayed the construction efforts and work. As a result of these unanticipated interruptions, the whole of the upgrades will not be completed until 18 months after the initial expected deadline. Central valley has requested that the compliance deadline for meeting all the new effluent limit and monitoring requirements be extended until June 30, 2026. There will be no modification of the Reuse requirements.

The current permit Interim limits went into effect on June 1, 2020 and were going to end on December 31, 2024. The modification of the compliance schedule will extend the termination date to June 30, 2026.

Effluent Limits
Current Permit Effluent Limits Timeline
Interim Limits June 1, 2022 through December 31, 2024
Final Effluent Limits, January 1, 2025
Modified Permit Effluent Limits Timeline
Interim Limits June 1, 2022 through <u>June 30, 2026</u>
Final Effluent Limits, <u>July 1, 2026</u>
Monitoring Requirements
Current Permit Monitoring Requirements Timeline
Interim Requirements June 1, 2022 through December 31, 2024
Final Requirements, January 1, 2025 to
Modified Permit Monitoring Requirements Timeline
Interim Requirements June 1, 2022 through <u>June 30, 2026</u>
Final Requirements, <u>July 1, 2026</u>

The reporting required by the compliance schedule and Variance will also be extended until June 30, 2026.

It also has been identified that during the last renewal, when implementation of the new WET monitoring requirements was suspended until the end of the construction activities, the Previous Permits Chronic and Acute WET monitoring requirements were swapped. This will be corrected in this modification.

WET Limits and Monitoring Requirements		
Permit	Parameter	Frequency
April 1, 2017 through December 31, 2021		
2015 (Previous) Permit Requirements WET - Biomonitoring	WET - Biomonitoring Ceriodaphnia - Acute Ceriodaphnia – Chronic Fathead Minnows – Acute Fathead Minnows - Chronic	1 st , & 3 rd Quarter Quarterly 2 nd , & 4 th Quarter Quarterly
June 1, 2022 through December 31, 2024		
2020 (Current) Permit Requirements WET - Biomonitoring	WET - Biomonitoring Ceriodaphnia - Chronic Ceriodaphnia – Acute Fathead Minnows – Chronic Fathead Minnows - Acute	1 st , & 3 rd Quarter Quarterly 2 nd , & 4 th Quarter Quarterly
Requirements will be Modified to		
June 1 2022 to <u>June 30, 2026</u>		
Corrected Interim Requirements WET - Biomonitoring	WET – Biomonitoring <u>Ceriodaphnia - Acute</u> <u>Ceriodaphnia – Chronic</u> <u>Fathead Minnows – Acute</u> <u>Fathead Minnows – Chronic</u>	<u>1st, & 3rd Quarter</u> <u>Quarterly</u> <u>2nd, & 4th Quarter</u> <u>Quarterly</u>
<u>July 1, 2026 to permit expiration</u>		
Final Requirements WET - Biomonitoring	WET - Biomonitoring Ceriodaphnia – Chronic Fathead Minnows – Chronic	Monthly with Alternating Species Monthly with Alternating Species

DISCHARGE

The Corrected/Modified Effluent are indicated by being underlined. The Effluent Limits are:

Parameter	Effluent Limitations *a					
	Concentration					Mass, lbs
	Average Monthly	Average Weekly	Annual Average	Daily Minimum	Daily Maximum	Average Monthly
Interim Limits June 1, 2022 through <u>June 30, 2026</u>						

Parameter	Effluent Limitations *a					
	Concentration					Mass, lbs
	Average Monthly	Average Weekly	Annual Average	Daily Minimum	Daily Maximum	Average Monthly
CBOD ₅ , mg/L						
Summer (Jul-Sep)	16.0	27.0	-	-	-	300,240
Fall (Oct-Dec)	20.0	28.0	-	-	-	375,300
Winter (Jan-Mar)	20.0	28.0	-	-	-	375,300
Spring (Apr-Jun)	20.0	28.0	-	-	-	375,300
BOD ₅ Min. % Removal	85	-	-	-	-	-
TSS, mg/L	25	35	-	-	-	-
TSS Min. % Removal	85	-	-	-	-	-
Dissolved Oxygen, mg/L	-	-	-	5.0	-	-
Total Ammonia (as N), mg/L						
Summer (Jul-Sep)	3.7	-	-	-	13.1	69,431
October	4.5	-	-	-	15.9	84,443
November-December	5.9	-	-	-	15.9	110,714
Winter (Jan-Mar)	5.8	-	-	-	12.3	108,837
Spring (Apr-Jun)	5.3	-	-	-	15.9	99,4555
Total Phosphorous, mg/L *c	-	-	4.0	-	-	-
<i>E. coli</i> , No./100mL	126	157	-	-	-	-
WET, Acute Biomonitoring	-	-	-	-	LC ₅₀ > 100% Effluent	-
WET, Chronic Biomonitoring	-	-	-	-	IC ₂₅ > RWC	-
Summer (Jul-Sep)	-	-	-	-	92% Eff.	-
Fall (Oct-Dec)	-	-	-	-	95% Eff.	-
Winter (Jan-Mar)	-	-	-	-	94% Eff.	-
Spring (Apr-Jun)	-	-	-	-	89% Eff.	-
Oil & Grease, mg/L	-	-	-	-	10.0	-
pH, Standard Units	-	-	-	6.5	9	-
Total Copper, mg/L	0.0233	-	-	-	-	437.2
Final Effluent Limits, July 1, 2026						
CBOD ₅ , mg/L						
Summer (Jul-Sep)	16.0	27.0	-	-	-	300,240
Fall (Oct-Dec)	20.0	28.0	-	-	-	375,300
Winter (Jan-Mar)	20.0	28.0	-	-	-	375,300
Spring (Apr-Jun)	20.0	28.0	-	-	-	375,300
BOD ₅ Min. % Removal	85	-	-	-	-	-
TSS, mg/L	25	35	-	-	-	-
TSS Min. % Removal	85	-	-	-	-	-

Parameter	Effluent Limitations *a					
	Concentration					Mass, lbs
	Average Monthly	Average Weekly	Annual Average	Daily Minimum	Daily Maximum	Average Monthly
Dissolved Oxygen, mg/L	-	-	-	5.0	-	-
Total Ammonia (as N), mg/L						
Summer (Jun-Aug)	3.6	-	-	-	4.7	67554
Fall (Sep - Nov)	3.8	-	-	-	5.4	71307
Winter (Dec - Feb)	3.7	-	-	-	6.4	69431
Spring (Mar -May)	3.8	-	-	-	5.4	71307
Total Phosphorous, mg/L			1.0			
<i>E. coli</i> , No./100mL	126	157	-	-	-	-
WET, Chronic Biomonitoring	-	-	-	-	IC ₂₅ > RWC	-
Summer (Jul-Sep)	-	-	-	-	85% Eff.	-
Fall (Oct-Dec)	-	-	-	-	92% Eff.	-
Winter (Jan-Mar)	-	-	-	-	97% Eff.	-
Spring (Apr-Jun)	-	-	-	-	92% Eff.	-
Oil & Grease, mg/L	-	-	-	-	10.0	-
pH, Standard Units	-	-	-	6.5	9	-
Total Copper, mg/L	0.0233	-	-	-	-	437.2
*a. See Definitions, Part VIII, for definition of terms						
*b. The chronic ammonia limit for October, and the acute ammonia limit for the Summer are from the Jordan River POTW WLA and are based on protection of downstream uses.						
*c. TBPEL of 4.0 mg/L went into effect on January 1, 2020.						
*d. The final limits go into effect on <u>July 1, 2026</u> .						

SELF-MONITORING AND REPORTING REQUIREMENTS

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

The Corrected/Modified Monitoring Requirements are indicated by being underlined in the table below:

Self-Monitoring and Reporting Requirements *a			
Parameter	Frequency	Sample Type	Units
Interim Requirements, June 1, 2022 through <u>June 30, 2026</u>			

Self-Monitoring and Reporting Requirements *a			
Parameter	Frequency	Sample Type	Units
Total Flow *e, *f	Continuous	Recorder	MGD
CBOD ₅ , Influent *g	4 x Weekly	Composite	mg/L, lbs
Effluent	4 x Weekly	Composite	mg/L, lbs
TSS, Influent *g	4 x Weekly	Composite	mg/L
Effluent	4 x Weekly	Composite	mg/L
<i>E. coli</i>	4 x Weekly	Grab	No./100mL
pH	Daily	Grab	SU
Total Ammonia	4 x Weekly	Grab	mg/L, lbs
DO	Daily	Grab	mg/L
WET - Biomonitoring *h, *i			
<u>Ceriodaphnia - Acute</u>	<u>1st, & 3rd Quarter</u>	Composite	Pass/Fail
<u>Ceriodaphnia – Chronic</u>	<u>Quarterly</u>	Composite	Pass/Fail
<u>Fathead Minnows – Acute</u>	<u>2nd, & 4th Quarter</u>	Composite	Pass/Fail
<u>Fathead Minnows – Chronic</u>	<u>Quarterly</u>	Composite	Pass/Fail
Oil & Grease *k	When Sheen Observed	Grab	mg/L
Total Ammonia (as N), *l	Monthly	Composite	mg/L
Orthophosphate (as P), *l			
Effluent	Monthly	Composite	mg/L
Total Phosphorus (as P), *l			
Influent	Monthly	Composite	mg/L
Effluent	Monthly	Composite	mg/L
Total Kjeldahl Nitrogen TKN (as N), *l			
Influent	Monthly	Composite	mg/L
Effluent	Monthly	Composite	mg/L
Nitrate, NO ₃ *l	Monthly	Composite	mg/L
Nitrite, NO ₂ *l	Monthly	Composite	mg/L
TDS	Monthly	Composite	mg/L
Effluent Metals			
Total Copper *m	Monthly	Composite *n	mg/L, lbs
Total Selenium *m	Monthly	Composite *n	mg/L
Total Mercury *m	Monthly	Grab *n	mg/L
Other Parameters			
Metals, (Pretreatment/RP)			
Influent	6 x Yearly *o	Grab/Composite *n	mg/L
Effluent	6 x Yearly *o	Grab/Composite *n	mg/L
Organic Toxics *p			
Influent	2 x Yearly *q	Grab/Composite *n	mg/L
Effluent	2 x Yearly *q	Grab/Composite *n	mg/L

Self-Monitoring and Reporting Requirements *a			
Parameter	Frequency	Sample Type	Units
Final Requirements, <u>July 1, 2026</u>			
Total Flow *e, *f	Continuous	Recorder	MGD
CBOD ₅ , Influent *g Effluent	4 x Weekly	Composite	mg/L, lbs
	4 x Weekly	Composite	mg/L, lbs
TSS, Influent *g Effluent	4 x Weekly	Composite	mg/L
	4 x Weekly	Composite	mg/L
<i>E. coli</i>	4 x Weekly	Grab	No./100mL
pH	Daily	Grab	SU
Total Ammonia	4 x Weekly	Grab	mg/L, lbs
DO	Daily	Grab	mg/L
WET - Biomonitoring *h, *i Ceriodaphnia - Chronic Fathead Minnows - Chronic	Monthly with Alternating Species, *j	Composite Composite	Pass/Fail Pass/Fail
Oil & Grease *k	When Sheen Observed	Grab	mg/L
Total Ammonia (as N), *l	Monthly	Composite	mg/L
Orthophosphate (as P), *l Effluent	Monthly	Composite	mg/L
Total Phosphorus (as P), *l Influent Effluent	Monthly	Composite	mg/L
	Monthly	Composite	mg/L
Total Kjeldahl Nitrogen TKN (as N), *l Influent Effluent	Monthly	Composite	mg/L
	Monthly	Composite	mg/L
Nitrate, NO ₃ *l	Monthly	Composite	mg/L
Nitrite, NO ₂ *l	Monthly	Composite	mg/L
TDS	Monthly	Composite	mg/L
Effluent Metals			
Total Copper *m	Monthly	Composite *n	mg/L, lbs
Total Selenium *m	Monthly	Composite *n	mg/L
Total Mercury *m	Monthly	Grab *n	mg/L
Free Cyanide *m	Monthly	Grab *n	mg/L
Total Cadmium *m	Monthly	Composite *n	mg/L
Other Parameters			
Metals, (Pretreatment/RP) Influent Effluent	6 x Yearly *o	Grab/Composite *n	mg/L
	6 x Yearly *o	Grab/Composite *n	mg/L
Organic Toxics *p Influent Effluent	2 x Yearly *q	Grab/Composite *n	mg/L
	2 x Yearly *q	Grab/Composite *n	mg/L

Self-Monitoring and Reporting Requirements *a			
Parameter	Frequency	Sample Type	Units
*a. See Definitions, Part VIII, for definition of terms			
*e. Flow measurements of influent/effluent volume shall be made in such a manner that the permittee can affirmatively demonstrate that representative values are being obtained.			
*f. If the rate of discharge is controlled, the rate and duration of discharge shall be reported.			
*g. 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			
*h. Failure of an individual WET test does not constitute a violation of the permit, so long as an investigation is initiated in accordance with the permit. If an alternate species is approved for WET testing, the permit will be modified accordingly without a public comment period.			
*i. Receiving Water Concentration (RWC) refers to the target receiving water concentration for the chronic WET test			
*j. Chronic WET test on Ceriodaphnia and fathead minnows will be tested monthly, alternating between the two species.			
*k. Oil & Grease sampled when sheen is present or visible.			
*l. These reflect changes and additions required with the adoption of <i>UCA R317-1-3.3</i> , Technology-based Phosphorus Effluent Limit rule. The rule requires that all monitoring shall be based on 24-hour composite samples by use of an automatic sampler or a minimum of four grab samples collected a minimum of two hours a part. This collection method is only for the monthly samples being collected in compliance with the rule.			
*m. RP has shown that these metals need to be monitored for in the effluent at a higher frequency, and/or have an effluent limit associated with them.			
*n. Use the collection method for each parameter that is consistent with a corresponding EPA approved method stated in <i>40 CFR Part 136</i> or approved by the Director.			
*o. The pretreatment metals sampling must be done in January - February, March - April, May - June, July – August, September – October, and November – December of each year			
*p. The toxic pollutants are listed in <i>40 CFR 122 Appendix D Table II (Organic Toxic Pollutants)</i> The pesticides fraction of Appendix D, Table II is suspended unless pesticides are expected to be present.			
*q. The organic toxics must be sampled during the months of January – June and July – December each year.			

BIOSOLIDS

No changes to the Biosolids Program or requirement are included in this Permit Modification.

STORM WATER

No changes to the Storm Water Program or requirement are included in this Permit Modification.

PRETREATMENT REQUIREMENTS

No changes to the Pretreatment Program or requirement are included in this Permit Modification.

BIOMONITORING REQUIREMENTS

A nationwide effort to control toxic discharges where effluent toxicity is an existing or potential concern is regulated in accordance with the Utah Pollutant Discharge Elimination System Permit and Enforcement Guidance Document for Whole Effluent Toxicity Control (biomonitoring), dated February 2018. Authority to require effluent biomonitoring is provided in Permit Conditions, UAC R317-8-4.2, Permit Provisions, UAC R317-8-5.3 and Water Quality Standards, UAC R317-2-5 and R317 -2-7.2.

Since the permittee is a major municipal discharger, the renewal permit will again require WET testing. The permittee will continue Chronic WET testing using one species monthly, alternating between Ceriodaphnia dubia and Pimephales promelas (fathead minnow). The permit will contain the standard requirements for re-testing upon failure of a WET test, and for a Toxicity Reduction Evaluation (TRE) as appropriate.

Since the permittee is a major municipal discharger, the renewal permit will again require whole effluent toxicity (WET) testing. At the beginning, Acute and Chronic quarterly biomonitoring will be again be required as described in the permit. As a result of the change in designation of receiving waters for the previous renewal, the Chronic Biomonitoring IC₂₅ concentrations changed greatly. The previous WLA included an IC₂₅ > 37%. The interim IC₂₅ concentrations for the renewal are listed in the table below, along with the final IC₂₅ concentrations. The IC₂₅ concentration is the inhibition 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.

Chronic toxicity occurs when the survival, growth, or reproduction for either test species, when exposed to a dilution of RWC% effluent or lower, is significantly less (at 95% confidence level) than that of the control specimens. The RWC% effluent dilution criterion is based upon the waste load analysis and is consistent with previous permit conditions. The permit will also contain a toxicity limitation re-opener provision. This provision allows for modification of the permit at any time to include WET limitations and/or increased WET monitoring, should additional information indicate the presence of toxicity in the discharge.

Seasonal Chronic WET RWC Limits, From WLA		
Season	Chronic WET IC ₂₅ RWC% Effluent	
	Interim RWC	Final RWC
Summer (Jul-Sep)	92% Eff.	85% Eff.
Fall (Oct-Dec)	95% Eff.	92% Eff.
Winter (Jan-Mar)	94% Eff.	97% Eff.
Spring (Apr-Jun)	89% Eff.	92% Eff.

PERMIT DURATION

It is recommended that this permit be effective for the remainder of the original permits five (5) year duration, and will expire on December 31, 2026.

Drafted and Reviewed by
Daniel Griffin, Discharge Permit Writer
Lonnie Shull, Biomonitoring
Utah Division of Water Quality, (801) 536-4300

PUBLIC NOTICE

Began: June Day, 2023
Ended: Junly Day, 2023

Comments will be received at: 195 North 1950 West
PO Box 144870
Salt Lake City, UT 84114-4870

The Public Noticed of the draft permit was published on the Division of Water Quality Public Notice Webpage.

During the public comment period provided under R317-8-6.5, any interested person may submit written comments on the draft permit and may request a public hearing, if no hearing has already been scheduled. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. All comments will be considered in making the final decision and shall be answered as provided in R317-8-6.12.

DWQ-2023-118814

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ATTACHMENT 1

Wasteload Analysis

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ATTACHMENT 2

**Due Diligence Variance and
Compliance Schedule Request**

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