

**FACT SHEET  
STATEMENT OF BASIS  
LITTLE MOUNTAIN SERVICE AREA  
UPDES PERMIT NUMBER: UT0025569  
RENEWAL PERMIT  
MINOR MUNICIPAL**

**FACILITY CONTACTS**

Kent J. Bradford, Chairman  
Little Mountain Service Area  
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**DESCRIPTION OF FACILITY**

The Little Mountain Service Area owns and operates a Publicly Owned Treatment Work (POTW) system located at 9800 West 900 South in Ogden Utah. The facility is located near the shoreline of the Great Salt Lake. This facility had a UPDES discharge permit which was issued on December 29, 1981 and expired on December 31, 1986. The permit was not renewed due to low flows and high evaporation rates. Currently the POTW is treating only domestic wastewater from four local businesses and one residence, a total equivalent population of 422. The four local businesses are Scott Testing, which at this time is not occupied, Jewett-Cameron Lumber Corp, Western Zirconium and Riverside Industries.

The POTW was going to be expanded to receive wastewater from Western Zirconium. The wastewater that was going to be discharged to the POTW from Western Zirconium was from the metal products manufacturing and fabricating facility. Currently the facility has decided to not expand to accommodate the additional flow from Western Zirconium.

The POTW has been modified from three non-discharging ponds to a treatment process that includes three biological stabilization ponds, slow sand filtration, and UV disinfection. With the current treatment processes, the POTW would be able to meet the permit limitations. The design flow of this facility is 0.245 MGD. The discharge is to the West Warren Waste Ditch (canal) that combines with the Weber River, hence to the Great Salt Lake.

## **DESCRIPTION OF DISCHARGE**

The POTW is currently treating the domestic wastewater from four local businesses and one residence, a total equivalent population of 422. The four local businesses are Scott Testing, Jewett-Cameron Lumber Corp, Western Zirconium and Riverside Industries.

## **RECEIVING WATERS AND STREAM CLASSIFICATION**

The discharge flows into the West Warren Waste Ditch (Canal) which enters the Weber River hence to the Great Salt Lake. The West Warren Waste Ditch (Canal) is Class 3E, the Weber River is Class 3C, 3D, 4 and the Great Salt Lake is Class 5, according to *Utah Administrative Code (UAC) R317-2-13*, as follows:

- Class 3C -Protected for nongame fish and other aquatic life, including the necessary aquatic organisms in their food chain.
- Class 3D -Protected for waterfowl, shore bird and other water-oriented wildlife not included in Classes 3A, 3B, or 3 C including the necessary aquatic organisms in their food chain.
- Class 3E -Severely habitat limited waters. Narrative standards will be applied to protect these waters for aquatic wildlife.
- Class 4 -Protected for agricultural uses including irrigation of crops and stock watering.
- Class 5 -Protected for primary and secondary contact recreation, aquatic wildlife, and mineral extraction.

## **BASIS FOR EFFLUENT LIMITATIONS AND CHANGES FROM PREVIOUS PERMIT**

Limitations on total suspended solids (TSS), biochemical oxygen demand (BOD<sub>5</sub>), e-coli, pH and percent removal for BOD<sub>5</sub> and TSS are based on current Utah Secondary Treatment Standards, *UAC R317-1-3.2*. The oil and grease limits are based on best professional judgment (BPJ). The BPJ is based on the fact that there is the reasonable potential of oil and grease coming from Western Zirconium and potential from the other manufacturing facilities that may discharge to the POTW. Bis (2-ethylhexyl) phthalate will remain the same as the previous permit limits. DO is based on the waste load analysis in order to meet water quality standards. TRC was taken out of the permit since the permittee will be using UV disinfection. WET limits are based on Utah WET criteria.

Parameter	Effluent Limitations			
	Maximum Monthly Avg	Maximum Weekly Avg	Daily Minimum	Daily Maximum
Flow, MGD	0.245	NA	NA	NA
BOD <sub>5</sub> , mg/L	25	35	NA	NA
BOD <sub>5</sub> Min. % Removal	85	NA	NA	NA
TSS, mg/L	25	35	NA	NA
TSS Min. % Removal	85	NA	NA	NA
E-Coli, No./100mL	126	157	NA	NA
WET, Acute Biomonitoring	NA	NA	NA	Pass
Bis(2-ethylhexyl) phthalate, ug/L	5.9	NA	NA	NA
Oil & Grease, mg/L	NA	NA	NA	10
pH, Standard Units	NA	NA	6.5	9.0
DO, mg/L	NA	NA	5.0	NA

NA – Not Applicable.

### **SELF-MONITORING AND REPORTING REQUIREMENTS**

The following self-monitoring requirements are in accordance with the Utah reporting guidelines. Reports will be required monthly and quarterly, as applicable on Discharge Monitoring Report (DMR) forms, and are due 28 days after the end of the monitoring period. Lab sheets for biomonitoring must be attached to the biomonitoring DMR.

Self-Monitoring and Reporting Requirements			
Parameter	Frequency	Sample Type	Units
Total Flow	Continuous	Recorder	MGD
BOD <sub>5</sub> , Influent Effluent	2 X Monthly	Composite	mg/L
	2 X Monthly	Composite	mg/L
TSS, Influent Effluent	2 X Monthly	Composite	mg/L
	2 X Monthly	Composite	mg/L
E-Coli	2 X Monthly	Grab	No./100mL
WET, Acute Biomonitoring	Quarterly	Composite	Pass/Fail
Bis(2-ethylhexyl) phthalate	2 X Monthly	Grab	ug/L
Oil & Grease	Monthly	Grab	mg/L
pH	2 X Monthly	Grab	SU
DO	2 X Monthly	Grab	mg/L
Metals, Influent and Effluent	Semiannually	Composite	mg/L
	Semiannually	Composite	mg/L
Organic Toxics, Influent and Effluent	Yearly	Grab	mg/L

## **PRETREATMENT REQUIREMENTS**

In the previous permit the POTW was intending to develop a pretreatment program and allow Western Zirconium to discharge process wastewater to the POTW. To accommodate the additional process wastewater flow, from Western Zirconium, the POTW was intending to expand the current facility. Currently the facility has decided to not expand and so long as no process wastewater violates the requirement of *UAC R317-8-8.5* and the POTW does not receive categorical wastewater the POTW will not be required to develop an approved pretreatment program.

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

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

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

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

The permit requires the permittee to semiannually monitor the influent and effluent for metals and yearly monitor the influent and effluent for TTOs.

## **BIOMONITORING REQUIREMENTS**

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

8-4.2, Permit Provisions, UAC R317-8-5.3 and Water Quality Standards, UAC R317-2-5 and R317-2-7.2.

Because of the nature of water to be treated, there is reasonable potential for toxics to be present therefore the permit will require acute WET limits for both species Ceriodaphnia dubia and Pimephales promelas (fathead minnow). The permit will contain the standard requirements for accelerated testing upon failure of a WET test, and a PTI (Preliminary Toxicity Investigation) and TRE (Toxicity Reduction Evaluation) as necessary.

### **STORMWATER**

A treatment works facility treating domestic sewage or any other sewage sludge, a wastewater treatment device or system used in the storage, treatment, recycling and reclamation of municipal sewage, and lands dedicated to the disposal of sewage sludge that are located within the confines of the facility is required to obtain a storm water permit conforming to the provisions of the Utah Pollutant Discharge Elimination System Multi Sector General Permit for Industrial Activities if the treatment facility meets one of the following two criteria,

- any facility that holds an approved pretreatment program as described in *40CFR Part 403*
- or, has a design flow of 1.0 MGD or greater.

The POTW does not fit one of these criteria therefore the UPDES Storm Water Permit requirements will not be included in the UPDES permit. If conditions change at the facility the permit may be reopened to include Storm Water requirements.

### **BIOSOLIDS**

Because the permitted facility is a lagoon, there is no regular sludge production. Therefore, the requirements of 40 CFR 503 do not apply unless the biosolids are removed from the bottom of the lagoon and used or disposed in some way. If this is done the permittee must notify the DWQ required the removal of the sludge 90 day prior to the removal. At this time there will be no biosolids permit issued.

### **PERMIT DURATION**

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

Drafted by Jennifer Robinson  
Utah Division of Water Quality  
Drafted August 16, 2013

