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

**FACT SHEET/STATEMENT OF BASIS  
SANTAQUIN WATER RECLAMATION FACILITY  
UPDES PERMIT NUMBER: UT0026000  
UPDES BIOSOLIDS PERMIT NUMBER: UTL-026000  
UPDES MULTI-SECTOR STORM WATER GENERAL PERMIT NUMBER: UTR000000  
MAJOR MUNICIPAL**

**FACILITY CONTACTS**

Person Name: Jason Callaway  
Position: Plant Operator  
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Person Name: Wade Eva  
Position: Public Works Director  
Telephone: 801-754-3211, City Offices Main Number

Facility Name: Santaquin Water Reclamation Facility  
Facility Address: 1215 North Center Street  
Santaquin, Utah 84655  
Mailing Address: 275 West Main Street  
Santaquin, Utah 84655

**DESCRIPTION OF FACILITY**

The Santaquin Water Reclamation Facility (SWRF) currently consists of an aerated lagoon and disposes of its effluent through land application during the irrigation season. During the winter months, the effluent is stored in one of two ponds with a total capacity of 178 million gallons. Santaquin is in the process of constructing a membrane bioreactor (MBR) plant that will replace the existing lagoon system. The reclaimed water produced by the MBR will meet Type I reuse standards and will be utilized in the City's existing pressurized irrigation system during the irrigation season and will be stored in the existing winter storage ponds during the winter months. The two winter storage ponds are located about 1.5 miles west of the new SWRF. Off spec water that does not meet Type I reuse standards can be stored at the SWRF in a 1.6 million gallon on site detention pond. This off spec water can be recirculated through the treatment system.

This is the first UPDES permit for the city. The SWRF will treat all of the municipal wastewater in Santaquin City. The new treatment facility will have a design flow rate of 1.0 MGD and consists of a rotary drum screen, anoxic basins, aerobic basins, MBR treatment followed by ultraviolet disinfection prior to conveyance to the winter storage ponds where it will be stored until it is needed for distribution in the pressurized irrigation system.

**DISCRIPTION OF DISCHARGE**

The SWRF serves the City of Santaquin with a population of approximately 9,500.

Outfall  
001R

Description of Discharge Point

The Santaquin Water Reclamation Facility (SWRF) is located at latitude 39°59'46N and longitude 111°47'22W. The effluent will be sampled for effluent limit compliance prior to its direct delivery to the City's existing winter storage ponds located offsite and west of the SWRF. During the irrigation season, the reclaimed water will be distributed from the ponds through Santaquin City's secondary pressurized irrigation system. The effluent will be held in the offsite ponds until it is needed in the distribution system.

**BASIS FOR EFFLUENT LIMITATIONS**

The Type I Reuse effluent limits for BOD5, TSS, E-Coli and pH are based upon *UAC R317-3-11.5*.

The effluent limits for Outfall 001R are as follows:

Parameter	Type I Reuse Limitations a/ b/ c/ d/e/f/				
	Max Monthly Avg	Max Weekly median	Daily Min	Max Daily Avg	Daily Max
Turbidity, NTU	NA	NA	NA	2	5
BOD <sub>5</sub> , mg/L	10	NA	NA	NA	NA
E-Coli, No./100mL	NA	ND	NA	NA	9
pH, Standard Units	NA	NA	6	NA	9

- a/ See *Definitions, Part VIII*, for definition of terms.
- b/ An alternative disposal option or diversion to storage must be automatically activated if turbidity exceeds the maximum instantaneous limit for more than 5 minutes.
- c/ The weekly median E. coli concentration shall be non-detect.
- d/ The facility is required to disinfect to destroy, inactivate or remove pathogenic microorganisms by chemical, physical or biological means. Disinfection may be accomplished by chlorination, ozonation, or other chemical disinfectants, UV radiation, or other approved processes.
- e/ An alternative disposal option or diversion to storage must be available in the event that quality requirements are not met.
- f/ The facility shall also have the ability to disinfect the effluent effective immediately and lasting the duration of this permit.

**SELF MONITORING AND REPORTING REQUIREMENTS**

The following self-monitoring requirements are based upon *UAC R317-3-11.5*. The permit will require reports to be submitted monthly and quarterly, as applicable, on Discharge Monitoring Report (DMR) forms due 28 days after the end of the monitoring period.

Self-Monitoring and Reporting Requirements for Type I Reuse			
Parameter	Frequency	Sample Type	Units
Total Flow <u>a/</u>	Continuous	Recorder	MGD
BOD <sub>5</sub>	Weekly	Composite	mg/L
Turbidity	Continuous	Recorder	NTU
E-Coli.	Weekly	Grab	No./100mL
pH	Daily/Continuous/Weekly	Grab/Recorder	SU

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

**Management Practices for Land Application of Treated Effluent**

1. The application of treated effluent to frozen, ice-covered, or snow covered land is prohibited.
2. No person shall apply treated effluent where the slope of the site exceeds 6 percent.
3. The use should not result in a surface water runoff.
4. The use must not result in the creation of an unhealthy or nuisance condition, as determined by the local health department.
5. Any irrigation with treated effluent must be at least 300 feet away from a potable well.
6. For Type I reuse, any irrigation must be at least 50 feet away from any potable water well.
7. Impoundments of treated effluent, if not sealed, must be at least 500 feet away from any potable well.

**BIOSOLIDS**

**DESCRIPTION OF TREATMENT AND DISPOSAL**

The Santaquin Wastewater Reclamation Facility is expected to dispose of approximately 25 dry metric tons of wastewater solids (sewage sludge) per year. The wastewater solids will be stabilized during the membrane bioreactor process with an average retention time of at least 60 days. The wastewater solids from the membrane bioreactor process will be de-watered with a screw press, and hauled to the Bay View Landfill (which has a valid UPDES biosolids permit). Once at the landfill, the solids will either be landfilled, or further processed by the windrow method of composting to meet Class A standards for sale or giveaway to the public, since the membrane bioreactor process does meet a process to significantly reduce pathogens, nor meet a method of vector attraction reduction.

**SOLIDS MONITORING REQUIREMENTS**

Under *40 CFR 503* solids are not required to be monitored for heavy metals content or pathogen

reduction if the solids are disposed in a landfill.

**LANDFILL MONITORING**

Paint Filter Test

Under 40 CFR 258, landfill monitoring requirements, the solids will need to pass a paint filter test before the solids are disposed of in a landfill. If the solids do not pass a paint filter test, the solids cannot be disposed in a landfill.

Vector Attraction Reduction Monitoring

Under 40 CFR 503.33, the solids need to meet a method of vector attraction reduction. If the solids are disposed in the landfill the solids will need to be covered daily with soil or another approved material. If the solids are not covered daily, the solids cannot be disposed in the landfill.

<b>Minimum Frequency of Monitoring</b>	
<b>Amount of Solids Disposed Per Year</b>	<b>Monitoring Frequency</b>
> 0 to < 290, DMT	Once per year

Since Santaquin is not expected to produce more than 290 dry metric tons of solids per year, Santaquin will be required to monitor at least once per year for paint filter tests.

**RECORD KEEPING**

The record keeping requirements from 40 CFR 503.17 are included under Part III.G. of the permit. Since the solids are disposed in a landfill the records need to be retained for a minimum of five years.

**REPORTING**

The SWRF needs to submit an annual biosolids report as required in 40 CFR 503.18. This report is to include the results of all solids monitoring performed in accordance with Part III.C. of the permit, information on management practices, solids treatment, and certifications. This report is due no later than February 19 of each year. Each report is for the previous calendar year.

**PRETREATMENT REQUIREMENTS**

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

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

An industrial waste survey (IWS) is required of the permittee as stated in Part III 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 III 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, as per *UAC R317-8-8.8(4)(c)*, that the permittee submit for review and public notice any local limits that are developed to the Division of Water Quality for review.

### **STORM WATER PROVISIONS**

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

The permit requires the preparation and implementation of a storm water pollution prevention plan for all areas within the confines of the plant. Elements of this plan are required to include: 1. The development of a pollution prevention team: 2. Development of drainage maps and materials stockpiles: 3. An inventory of exposed materials: 4. Spill reporting and response procedures: 5. A preventative maintenance program: 6. Employee training: 7. Certification that storm water discharges are not mixed with non-storm water discharges: 8. Compliance site evaluations and potential pollutant source identification, and: 9. Visual examinations of storm water discharges.

### **PERMIT DURATION**

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

Drafted by

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Utah Division of Water Quality

### **PUBLIC NOTICE**

Began:  
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