

Official Draft Public Notice Version **October 6, 2016**

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

**FACT SHEET STATEMENT OF BASIS  
SOUTH DAVIS SEWER DISTRICT NORTH TREATMENT PLANT  
RENEWAL PERMIT: DISCHARGE, BIOSOLIDS & STORM WATER  
UPDES PERMIT NUMBER: UT0021636  
UPDES BIOSOLIDS PERMIT NUMBER: UTL-021636  
UPDES MULTI-SECTOR STORM WATER GENERAL PERMIT NUMBER: UTR000000  
MAJOR MUNICIPAL**

**FACILITY CONTACTS**

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**DESCRIPTION OF FACILITY**

The South Davis County Sewer District North Wastewater Treatment Plant (SDSDN) serves the cities of Centerville, Woods Cross, West Bountiful and portions of Bountiful with a daily average design flow of 12 million gallons per day (MGD) and a design population equivalent of 75,000. The facility functions in single-stage trickling filter mode. Unit operations and processes at SDSDN include influent pumping, screening, grit removal, primary clarification, biological processing using trickling filters, secondary clarification, chlorination, and dechlorination prior to release into the State Canal. Sludge generated during unit processes is stabilized in two-stage mesophilic anaerobic digesters and dried in drying beds. The facility is located in West Bountiful with outfall 001 which discharges to the State Canal at Latitude 40°54'17" and Longitude 111°56'04" and STORET number 499078.

**SUMMARY OF CHANGES FROM PREVIOUS PERMIT**

Consistent with the Division of Water Quality (DWQ) process and EPA policy, an effluent flow limit is now included in the permit.

A new model is used by DWQ to develop a waste load allocation (WLA) for dischargers to Waters of the State. In preparing for using this model for the Jordan River, DWQ determined that the

receiving stream should have a synoptic study completed to improve the understanding of the waterway and enhance the WLA. This study was conducted during the summer of 2014.

The BOD effluent limits for the Jordan River dischargers were not modeled this permit cycle as the waste load analyst indicated that the previous limits are sufficiently protective.

DWQ adopted UAC R317-1-3.3, Technology-Based Phosphorus Effluent Limit (TBPEL) Rule in 2014. The TBPEL rule as it relates to "non-lagoon" wastewater treatment plants establishes new regulations for the discharge of phosphorus to surface waters and is self-implementing. The TBPEL rule includes the following requirements for non-lagoon wastewater treatment plants:

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.

The TBPEL discharging treatment works are required to implement, at a minimum, monthly monitoring of the following beginning July 1, 2015:

R317-1-3.3, D, 1 Influent for total phosphorus (as P) and total Kjeldahl nitrogen (as N) concentrations;

R317-1-3.3, D, 2. Effluent for total phosphorus and orthophosphate (as P), ammonia, nitrate-nitrite and total Kjeldahl nitrogen (an N);

In R317-1-3.3, D, 3 the rule states 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 apart.

In addition to the influent and effluent quarterly sampling for metals, SDSDN will be required to sample for metals on a quarterly basis at a location upstream from the outfall location.

## DISCHARGE

### **DESCRIPTION OF DISCHARGE**

SDSDN has been reporting self-monitoring results on discharge monitoring reports on a monthly basis. There have not been significant violations during that time.

<u>Outfall</u>	<u>Description of Discharge Point</u>
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01	Located at latitude 40°56'04" and longitude 111°56'04". The treated effluent is discharged through a 36 inch corrugated metal pipe directly to the State Canal immediately west of the facility.
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### **RECEIVING WATERS AND STREAM CLASSIFICATION**

The discharge flows into the State Canal before entering the Great Salt Lake. The State Canal is classified as 2B, 3B, 3D and 4 according to Utah Administrative Code R317-2-6:

- Class 2B - Protected for infrequent primary contact recreation. Also protected for secondary contact recreation where there is a low likelihood of ingestion of water or a low degree of bodily contact with the water. Examples include, but are not limited to, wading, hunting, and fishing.
- Class 3B - Protected for warm water species of game fish and other warm water aquatic life, including the necessary aquatic organisms in their food chain.
- Class 3D - Protected for waterfowl, shore birds and other water-oriented wildlife not included in Classes 3A, 3B, or 3C, including the necessary aquatic organisms in their food chain.
- Class 4 - Protected for agricultural uses including irrigation of crops and stock watering.

#### **BASIS FOR EFFLUENT LIMITATIONS**

Limitations on total suspended solids (TSS), *E. coli*, pH and percent removal for biochemical oxygen demand (BOD<sub>5</sub>), and TSS are based on current Utah Secondary Treatment Standards, UAC R317-1-3.2. The limit for total phosphorous is technology based. The dissolved oxygen (DO), BOD<sub>5</sub>, copper, ammonia, total residual chlorine (TRC) and WET testing limits are based upon water quality standards obtained from the waste load analysis (WLA). The chronic ammonia criterion is dependent on the presence or absence of Early Life Stages ( ELS) of aquatic life in the State Canal. The provisional determination was that ELS are absent in the State Canal from November through February. SDSDN may complete an ELS determination study for the months of March and October. SDSDN will have an interim limit, which is the limit from the previous permit, for the months of March and October for total ammonia until the ELS determination study is complete or until the date listed in the compliance schedule. The WLA indicates that these limitations should be sufficiently protective of water quality, in order to meet State water quality standards in the receiving waters. The oil and grease limitation is based on best professional judgment (BPJ).

#### **Reasonable Potential Analysis**

Since January 1, 2016, DWQ has conducted reasonable potential analysis (RP) on all new and renewal applications received after that date. RP for this permit renewal was conducted following DWQ's September 10, 2015 Reasonable Potential Analysis Guidance (RP Guidance). There are four outcomes defined in the RP Guidance: Outcome A, B, C, or D. These Outcomes provide a frame work for what routine monitoring or effluent limitations are required. Initial screening for metals values that were submitted through the discharge monitoring reports showed that there was not a reasonable potential for any of the metals to exceed the standard. However, a quantitative RP analysis was performed on copper to determine if there was reasonable potential for the discharge to exceed the applicable water quality standards. Based on the RP analysis, the following parameters exceeded the most stringent chronic water quality standard or were determined to have a reasonable potential to exceed the standard: none. A copy of the initial screening is included at the end of this Fact Sheet.

Parameter	Effluent Limitations *a			
	Maximum Monthly Avg.	Maximum Weekly Avg.	Daily Minimum	Daily Maximum
Flow, MGD	12.0	NA	NA	NA
BOD <sub>5</sub> , mg/L				
Summer (Jul-Sep)	20.0	27.0	NA	NA
Fall (Oct-Dec)	25.0	35.0	NA	NA
Winter (Jan-Mar)	25.0	35.0	NA	NA
Spring (Apr-Jun)	25.0	35.0	NA	NA
BOD <sub>5</sub> Min. % Removal	85.0	NA	NA	NA
TSS, mg/L	25	35	NA	NA
TSS Min. % Removal	85	NA	NA	NA
Dissolved Oxygen, mg/L	NA	NA	5.0	NA
Total Ammonia (as N), mg/L				
Summer (Jul-Sep)	8.0	NA	NA	31.7
Fall (October)	10.0	NA	NA	16.2
(effective date of this permit – March 31, 2018)				
Fall (October)	See *h	NA	NA	16.2
(April 1, 2018-expiration date of this permit)				
Fall (Nov-Dec)	10.0	NA	NA	16.2
Winter (Jan-Feb)	12.0	NA	NA	23.4
Winter (March)	12.0	NA	NA	23.4
(effective date of this permit – March 31, 2018)				
Winter (March)	See *h	NA	NA	23.4
(April 1, 2018-expiration date of this permit)				
Spring (Apr-Jun)	12.0	NA	NA	26.8
<i>E. coli</i> , No./100mL	126	157	NA	NA
TRC, mg/L				
Summer (Jul-Sep)	NA	NA	NA	0.090
Fall (Oct-Dec)	NA	NA	NA	0.060
Winter (Jan-Mar)	NA	NA	NA	0.070
Spring (Apr-Jun)	NA	NA	NA	0.060
WET, Chronic Biomonitoring	NA	NA	NA	IC <sub>25</sub> > 22% effluent
Oil & Grease, mg/L	NA	NA	NA	10.0
pH, Standard Units	NA	NA	6.5	9

NA – Not Applicable.

### SELF-MONITORING AND REPORTING REQUIREMENTS

The following self-monitoring requirements are similar to the previous permit. Monitoring for parameters associated with UCA R317-1-3.3 (Technology-based Phosphorus Effluent Limits rule) have been added or modified. The permit will require reports to be submitted monthly and annually, as applicable, on Discharge Monitoring Report or NetDMR (DMR) no later than the 28<sup>th</sup> day of the month following the completed reporting period. Lab sheets for biomonitoring must be attached to the biomonitoring DMR. Lab sheets for metals and toxic organics must be attached to the DMR.

Self-Monitoring and Reporting Requirements *a			
Parameter	Frequency	Sample Type	Units
Total Flow *b, *c	Continuous	Recorder	MGD
BOD <sub>5</sub> , Influent *d Effluent	3 x Week	Composite	mg/L
	3 x Week	Composite	mg/L
TSS, Influent *d Effluent	3 x Week	Composite	mg/L
	3 x Week	Composite	mg/L
<i>E. coli</i>	3 x Week	Grab	No./100mL
pH	Daily	Grab	SU
Total Ammonia (as N),	3 x Week	Grab	mg/L
Total Ammonia (as N), *g	Monthly	Composite	mg/L
DO	Daily	Grab	mg/L
TRC	Daily	Grab	mg/L
WET - Biomonitoring Ceriodaphnia - Chronic Fathead Minnows - Chronic	1 <sup>st</sup> & 3 <sup>rd</sup> Quarter 2 <sup>nd</sup> & 4 <sup>th</sup> Quarter	Composite Composite	Pass/Fail Pass/Fail
Oil & Grease *f	Monthly If Sheen Is Observed	Grab	mg/L
Orthophosphate, (as P) *g Effluent	Monthly	Composite	mg/L
Phosphorus, Total *g Influent Effluent	Monthly	Composite	mg/L
	Monthly	Composite	mg/L
Total Kjeldahl Nitrogen, TKN (as N) *g Influent Effluent	Monthly	Composite	mg/L
	Monthly	Composite	mg/L
Nitrate + Nitrite *g	Monthly	Composite	mg/L
Metals, Influent *e Effluent	Quarterly	Composite	mg/L
	Quarterly	Composite	mg/L
Organic Toxics	Yearly	Grab	mg/L

- \*a See Definitions, *Part VIII*, for definition of terms.
- \*b 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.
- \*c If the rate of discharge is controlled, the rate and duration of discharge shall be reported.
- \*d 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.
- \*e In addition to the influent and effluent quarterly sampling for metals, SDSDN will be required to sample for metals on a quarterly basis at a location upstream from the outfall location.
- \*f Oil & Grease sampled when sheen is present or visible. If no sheen is present or visible, report NA.
- \*g These reflect changes required with the adoption of UCA R317-1-3.3, Technology-based Phosphorus Effluent Limits rule.
- \*h Total ammonia compliance schedule:

<b>Date</b>	<b>Milestone</b>
December 31, 2016	Submit a plan for ELS determination in the State Canal for the months of March and October for DWQ approval.
March 31, 2018	Submit a report to DWQ summarizing the findings of the ELS determination study in the State Canal for the months of March and October.
May 1, 2018	<p style="text-align: center;">Determination of ELS.</p> If it has been determined by DWQ that ELS are present; the Total Ammonia Effluent Limit for the months of March and/or October is 8.0 mg/L. If it is has been determined by DWQ that ELS are not present for the month of March and/or October; the Total Ammonia Effluent Limit is 10.0 mg/L for the month of October and/or 12.0 mg/L for the month of March

## BIOSOLIDS

For clarification purposes, sewage sludge is considered solids, until treatment or testing shows that the solids are safe, and meet beneficial use standards. After the solids are tested or treated, the solids are then known as biosolids. Class A biosolids may be used for high public contact sites, such as home lawns and gardens, parks, or playing fields, etc. Class B biosolids may be used for low public contact sites, such as farms, rangeland, or reclamation sites, etc.

### **DESCRIPTION OF TREATMENT, BENEFICIAL USE AND DISPOSAL**

SDSDN submitted their 2014 annual biosolids report on March 3, 2015. The report states SDSDN disposed of 802 Dry Metric Tons (DMT) of solids. Of the 802 DMT of solids disposed of, 324 DMT were stored from 2012, 266 DMT were stored from 2013, and 213 were from 2014. The remaining 365 DMT produced in 2014 are being stored. All of the Biosolids were disposed of through land application at agronomic rates as a Class B product at the Grant Smith farm in West Bountiful for agriculture purposes. The biosolids were used to produce hay, or used on pasture land for horses and cattle.

The SDSDN facility functions in single-stage trickling filter mode. Sludge generated during unit processes is stabilized in two-stage mesophilic anaerobic digesters with a solids retention time of at least 30 days. After stabilization, the Class B biosolids are wasted to drying beds for dewatering before the biosolids are land applied for beneficial use.

### **SELF-MONITORING REQUIREMENTS**

Under *40 CFR 503.16(a)(1)*, the self-monitoring requirements are based upon the amount of biosolids disposed per year and shall be monitored according to the chart below.

Minimum Frequency of Monitoring (40 CFR Part 503.16, 503.26. and 503.46)		
Amount of Biosolids Disposed Per Year		Monitoring Frequency
Dry US Tons	Dry Metric Tons	Per Year or Batch
> 0 to < 320	> 0 to < 290	Once Per Year or Batch
> 320 to < 1650	> 290 to < 1,500	Once a Quarter or Four Times
> 1,650 to < 16,500	> 1,500 to < 15,000	Bi-Monthly or Six Times
> 16,500	> 15,000	Monthly or Twelve Times

In 2014, SDSDN disposed of 802 DMT of biosolids. Therefore, if the biosolids are to be land applied, the biosolids shall be monitored at least four times per year.

#### Landfill Monitoring

Under 40 CFR 258, the landfill monitoring requirements include a paint filter test. If the biosolids do not pass a paint filter test, the biosolids cannot be disposed in the sanitary landfill (*40 CFR 258.28(c)(1)*). SDSDN did not dispose of any biosolids at the Bay Area Refuse Disposal site in Davis County.

## **BIOSOLIDS LIMITATIONS**

### Heavy Metals

#### Class A Biosolids for Home Lawn and Garden Use

The intent of the heavy metals regulations of Table 3, 40 CFR 503.13 is to ensure the heavy metals do not build up in the soil in home lawn and gardens to the point where the heavy metals become phytotoxic to plants. The permittee will be required to produce an information sheet (see Part III. C. of the permit) to be made available to all people who are receiving and land applying Class A biosolids to their lawns and gardens. If the instructions of the information sheet are followed to any reasonable degree, the Class A biosolids will be able to be land applied year after year, to the same lawns and garden plots without any deleterious effects to the environment. The information sheet must be provided to the public, because the permittee is not required, nor able to track the quantity of Class A biosolids that are land applied to home lawns and gardens.

#### Class A Requirements With Regards to Heavy Metals

If the biosolids are to be applied to a lawn or home garden, the biosolids shall not exceed the maximum heavy metals in Table 1 and the monthly average pollutant concentrations in Table 3 (see Table 1 and Table 3 below). If the biosolids do not meet these requirements, the biosolids cannot be sold or given away for applications to home lawns and gardens.

#### Class B Requirements for Agriculture and Reclamation Sites

The intent of the heavy metals regulations of Tables 1, 2 and 3, of 40 CFR 503.13 is to ensure that heavy metals do not build up in the soil at farms, forest land, and land reclamation sites to the point where the heavy metals become phytotoxic to plants. The permittee will be required to produce an information sheet (see Part III. C. of the permit) to be handed out to all people who are receiving and land applying Class B biosolids to farms, ranches, and land reclamation sites (if biosolids are only applied to land owned by the permittee, the information sheet requirements are waived). If the biosolids are land applied according to the regulations of 40 CFR 503.13, to any reasonable degree, the Class B biosolids will be able to be land applied year after year, to the same farms, ranches, and land reclamation sites without any deleterious effects to the environment.

#### Class B Requirements With Regards to Heavy Metals

If the biosolids are to be land applied to agricultural land, forest land, a public contact site or a reclamation site it must meet at all times:

The maximum heavy metals listed in Table 1 and the heavy metals loading rates in Table 2; or

The maximum heavy metals in Table 1 and the monthly heavy metals concentrations in Table 3.

Tables 1, 2, and 3 of Heavy Metal Limitations



Pollutant Limits, (40 CFR Part 503.13)			
Heavy Metals	Table 1	Table 2	Table 3
All heavy metals concentrations shall be measured and reported	Daily Maximum mg/Kg *a, *b, *c	Cumulative Loading Rate Kg/Ha	Monthly Average Concentration mg/Kg *a, *b, *c,
Total Arsenic	75	41	41
Total Cadmium	85	39	39
Total Copper	4300	1500	1500
Total Lead	840	300	300
Total Mercury	57	17	17
Total Molybdenum	75	N/A	N/A
Total Nickel	420	420	420
Total Selenium	100	100	100
Total Zinc	7500	2800	2800

\*a, The limitations represent the maximum allowable levels of heavy metals in any biosolids intended for land application.

\*c, Any violation of these limitations shall be reported in accordance with the requirements of Part III.F.1. of the permit.

\*d, These limitations represent the maximum allowable levels of heavy metals based on an average of all samples taken during a 30-day period.

If the biosolids do not meet these requirements they cannot be land applied.

Pathogens

The Pathogen Control class listed in the table below must be met;

Pathogen Control Class	
Class A (40 CFR Part 503.32 (a), (3-8))	Class B (40 CFR Part 503.32 (b), (2))
<i>Salmonella</i> species -less than three (3) per four (4) grams total solids (or less than 1,000 fecal coliforms per gram total solids)	Fecal Coliforms –less than 2,000,000 colony forming units (CFU) per gram total solids
Enteric viruses -less than one (1) MPN (or plaque forming unit) per four (4) grams total solids	
Viable helminth ova -less than one (1) MPN per four (4) grams total solids	
MPN –Most Probable Number	

### Class A Requirements Land Application

If biosolids are to be land applied, the biosolids need to be treated by a specific process to further reduce pathogens (PFRP), and meet a microbiological limit of less than less than 3 most probable number (MPN) of *Salmonella* per 4 grams of total solids (or less than 1,000 most probable number (MPN/g) of fecal coliform per gram of total solids) to be considered Class A biosolids. SDSDN choses to accomplish this in the following way:

1. *Class A, Alternative 4* - This additional testing requires SDSDN to monitor for viable helminth ova (tape worms and round worm eggs that could hatch), enteric viruses (viruses of the gut), as well as fecal coliform or *Salmonella*. (40 CFR 503.32(a) (6) (iii)).
2. Composting- For either the within-vessel composting method or the static aerated pile composting method, the temperature of the sewage sludge is maintained at 55° C (131°F) or higher for three (3) days, and tested for either fecal coliform or *Salmonella*. For the windrow composting method, the temperature of the sewage sludge is maintained at 55° C (131°F) or higher or higher for 15 days or longer. During the period when the compost is maintained at 55 degrees or higher, there shall be a minimum of five (5) turnings of the windrow, and tested for either fecal coliform or *Salmonella*. (40 CFR 503.32(a) (7) (iii,) 40 CFR 503 Appendix B, B, 1)

The practice of sale or giveaway to the public is an acceptable use of biosolids of this quality as long as the biosolids continue to meet Class A standards with respect to pathogens. If the biosolids do not meet Class A pathogen standards described above the biosolids cannot be sold or given away to the public, and the SDSDN will need find another method of beneficial use or disposal.

### Class B Requirements Land Application

If biosolids are to be land applied for agriculture or land reclamation the solids need to be treated by a specific process to significantly reduce pathogens (PSRP) found under 40 CFR 503.32 (b). SDSDN choses to accomplish this in the following way

1. Testing - the biosolids and must be tested and meet a microbiological limit of less than 2,000,000 MPN of fecal coliform per gram for the biosolids to be considered Class B biosolids with respect to pathogens. Under 40 CFR 503.32 (b)(2),
2. Anaerobic Digestion - The PSRP may be accomplished through anaerobic digesters that have a minimum retention time of 15 days at 95° F (35° C) or 60 days at 68° F (20°C). Under 40 CFR 503.32 (b)(3)

### Vector Attraction Reduction (VAR) Requirements

If the biosolids are land applied, SDSDN will be required to meet a method of vector attraction reduction under 40 CFR 503.33. SDSDN intends to accomplish the VAR through the method below:

1. Anaerobic Digestion- Under *40 CFR 503.33(b)(1)*, the solids need to be treated for at least 15 days at a temperature of a least 95°F (35°C) with a 38% reduction of volatile solids.

If the permittee intends to use another one of the listed alternatives, the Director and the EPA must be informed at least thirty (30) days prior to its use. This change may be made without additional public notice

#### Landfill Monitoring

Under *40 CFR 258*, the landfill monitoring requirements include a paint filter test to determine if the biosolids exhibit free liquid. If the biosolids do not pass a paint filter test, the biosolids cannot be disposed in the sanitary landfill (*40 CFR 258.28(c)(1)*).

#### Record Keeping

The record keeping requirements from *40 CFR 503.17* are included under *Part III.G.* of the permit. The amount of time the records must be maintained are dependent on the quality of the biosolids in regards to the metals concentrations. If the biosolids continue to meet the metals limits of *Table 3* of *40 CFR 503.13*, and are sold or given away the records must be retained for a minimum of five years. If the biosolids are disposed in a landfill the records must be retained for a minimum of five years.

#### Reporting

SDSDN must report annually as required in *40 CFR 503.18*. This report is to include the results of all monitoring performed in accordance with *Part II.C* of the permit, information on management practices, biosolids treatment, and certifications. This report is due no later than February 19 of each year. Each report is for the previous calendar year. Due to the similar nature of the South Davis Sewer District Plants the district submits the data for both the North and South plants in one report.

### **MONITORING DATA**

#### **METALS MONITORING DATA**

SDSDN sampled the biosolids for heavy metals four times in 2014. The data below shows that SDSDN met the requirements for exceptional quality biosolids, with respect to heavy metals, whether the biosolids were Class A, or Class B with respect to pathogen reduction. The monitoring data is below.

SDSDN Metals Monitoring Data, 2014			
Parameter	Table 3, (Exceptional Quality) mg/kg	Average, mg/kg	Maximum, mg/kg
Arsenic	41.0	9.02	9.39
Cadmium	39.0	1.24	1.32
Copper	1,500.0	658	754
Lead	300.0	22.3	29.0
Mercury	17.0	5.68	6.18
Molybdenum	75.0	8.99	10.5
Nickel	400.0	42.0	51.1
Selenium	36.0	8.88	16.8
Zinc	2,800.0	920	1350

### **PATHOGEN MONITORING DATA**

SDSDN was not required to sample for either fecal coliform or *Salmonella* if the biosolids have met a process to significantly reduce pathogens (PSRP). The PSRP was met through the anaerobic digesters, therefore the SDSDN did not sample for pathogens.

### **STORM WATER**

#### **STORMWATER REQUIREMENTS**

Storm water provisions are included in this combined UPDES permit.

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

The permit requires the preparation and implementation of a storm water pollution prevention plan for all areas within the confines of the plant. Elements of this plan are required to include:

1. The development of a pollution prevention team:
2. Development of drainage maps and materials stockpiles:
3. An inventory of exposed materials:
4. Spill reporting and response procedures:
5. A preventative maintenance program:
6. Employee training:
7. Certification that storm water discharges are not mixed with non-storm water discharges:
8. Compliance site evaluations and potential pollutant source identification, and:
9. Visual examinations of storm water discharges.

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

### **PRETREATMENT REQUIREMENTS**

The pretreatment requirements remain the same as in the current permit. Any changes to the program must be submitted for approval to the Division of Water Quality. Authority to require a pretreatment program is provided for in 19-5-108 UCA, 1953 ann. and UAC R317-8-8.

The permittee is required to perform an evaluation of the need to revise or develop technically based local limits to implement the general and specific prohibitions of 40 CFR, Part 403.5(a) and Part 403.5(b). This evaluation may indicate that present local limits are sufficiently protective, or that they must be revised. As part of this evaluation, the permit requires quarterly influent and effluent monitoring for metals and organic toxics listed in R317-8-7.5 and sludge monitoring for potential pollutants listed in 40 CFR 503.

### **BIOMONITORING REQUIREMENTS**

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

Since the permittee is classified as a major municipal discharger, the renewal permit will again require Whole Effluent Toxicity (WET) testing. Chronic toxicity tests will be conducted quarterly, alternating between *Ceriodaphnia dubia* and *Pimephales promelas* (fathead minnows) species, as detailed in the permit. Alternating species has been previously granted to the permittee, and will continue in this permit renewal as well, based upon the absence of confirmed toxicity and the permitting authorities best professional judgment. A review of previous WET tests indicates only isolated chronic WET testing failures, which were followed up by passing chronic WET retests and no pattern of toxicity being established. Therefore, no changes are being proposed to the permittee's biomonitoring requirements.

The permit will contain the standard requirements for a TRE (Toxicity Reduction Evaluation) as necessary. 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.

### **PERMIT DURATION**

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

Drafted by  
Matthew Garn, P.E., Discharge  
Nicholas von Stackelberg, WLA  
Daniel Griffin, Biosolids  
Jennifer Robinson, Pretreatment  
Michael George, Storm Water  
Utah Division of Water Quality  
801-536-4300  
September 29, 2016

**PUBLIC NOTICE**

Began:

Ended:

Public Noticed in The Salt Lake Tribune and Deseret News

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

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-2015-007433

ATTACHMENT 1

Wasteload Analysis

P/N DRAFT





**REASONABLE POTENTIAL ANALYSIS**

SDSDN supplied the results for metals sampling from Summer 2011 through Summer 2014. The data was organized into a single table in a spreadsheet for review. A screening of the data showed that a more detailed RP review was not required.

A Summary of the RP Model inputs and outputs are summarized in the tables below.

P/N DRAFT







ATTACHMENT 2

Reasonable Potential Analysis

P/N DRAFT

