

Official Draft Public Notice Version **May 2, 2017**

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
OAKLEY CITY
RENEWAL PERMIT: DISCHARGE, BIOSOLIDS & STORM WATER
UPDES PERMIT NUMBER: UT0020061
UPDES BIOSOLIDS PERMIT NUMBER: UTL-020061
UPDES MULTI-SECTOR STORM WATER GENERAL PERMIT NUMBER: UTR000000
MINOR MUNICIPAL**

FACILITY CONTACTS

Person Name: Bob Johnson
Position: Operator
Phone Number: (435) 783-5734

Facility Name: Oakley City Wastewater Treatment Plant
Mailing and Facility Address: P.O. Box 129
Oakley City, Utah 84055-0400

Telephone: (435) 783-5734
Actual Address: 4449 Millrace Road
Oakley City, Utah 84055

DESCRIPTION OF FACILITY

The Oakley City Wastewater Treatment Plant (OCWTP) is a Membrane Bioreactor (MBR) treatment plant with a design capacity of 0.25 MGD. The facility serves the City of Oakley, located in Summit County, with a current population of just over 900. The facility consists of a 2 mm screen and compactor, grit removal, aeration basin, MBR for microfiltration and ultraviolet disinfection. The outfall location is at latitude 40°42'34" and longitude 111°17'59" and discharges directly to the Weber River.

SUMMARY OF CHANGES FROM PREVIOUS PERMIT

Implementation of the Rockport and Echo Reservoir TMDL has been included in this permit renewal. Specifically, annual loading caps for total phosphorus and total nitrogen, which were determined by the final TMDL have been added as permit limits.

Water Quality 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, C further states that where an existing TMDL has allocated a total phosphorus wasteload to a treatment works, no TBPEL or phosphorus loading cap, as applicable, will be applied. As such, this TBPEL will not be applicable to OCWTP; instead the total phosphorus load allocation from the Echo Reservoir TMDL will be implemented. The monitoring schedule for total phosphorus, total Kjeldahl nitrogen (as N), ammonia, nitrate-nitrite will continue in this permit renewal.

DISCHARGE

DESCRIPTION OF DISCHARGE

Oakley City reports self-monitoring results on Discharge Monitoring Reports (DMRs) on a monthly basis. A summary of self-monitoring data for the last three years is attached. The data demonstrates that the facility has a good compliance history with only one effluent limit violation during this timeframe.

<u>Outfall</u>	<u>Description of Discharge Point</u>
002	Located at latitude 40° 42'34" and longitude 111°17'59"; 50 feet east of the treatment facility on Millrace Road (1000 W).

RECEIVING WATERS AND STREAM CLASSIFICATION

The final discharge is to the Weber River which is classified as 1C, 2B, 3A, and 4 (in that segment) according to *Utah administrative Code (UAC) R317-2-6 and R317-2-13.4*:

- Class 1C -- Protected for domestic purposes with prior treatment by treatment processes as required by the Utah Division of Drinking Water
- 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 3A -- Protected for cold water species of game fish and other cold water aquatic life, 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), biochemical oxygen demand (BOD5), E. coli, pH and percent removal for BOD5 and TSS are based on current Utah Secondary Treatment Standards, UAC R317-1-3.2. The dissolved oxygen (DO) limitation is based upon the WLA. The oil and grease limitation is based on best professional judgment (BPJ). Total phosphorus and total nitrogen loading limits are based on the *The Rockport Reservoir and Echo Reservoir TMDL Final Report* (SWCA Environmental Consultants, 2014).

Total Maximum Daily Load

The OCWTP discharges into the Weber River and subsequently to Rockport and Echo Reservoirs, which are on Utah's 303(d) list of impaired waters. Specifically, Echo Reservoir's Class 3A beneficial use (protected for cold-water species of game fish and other cold-water aquatic life, including the necessary aquatic organisms in their food chain) has been identified as impaired due to low DO and high total phosphorus (TP) concentrations. The *Rockport Reservoir and Echo Reservoir TMDL Final Report* (SWCA Environmental Consultants, 2014) includes waste load allocations for total phosphorus and total nitrogen for Oakley. These load limits are included in this permit.

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.

A quantitative RP analysis was performed on ammonia to determine if there was reasonable potential for the discharge to exceed the applicable water quality standards. Based on the RP analysis, ammonia does not have reasonable potential to exceed the applicable water quality standard at a 95% confidence interval, but does at a 99% confidence interval. This outcome requires routine monitoring for ammonia, but not an effluent limit.

The permit limitations are:

Parameter	Effluent Limitations *a					
	Maximum Monthly Avg	Maximum Weekly Avg	Yearly Average	Daily Minimum	Daily Maximum	Load limit
Total Flow	0.25	--	--	--	--	--
BOD ₅ , mg/L	25	35	--	--	--	--
BOD ₅ Min. % Removal	85	--	--	--	--	--
TSS, mg/L	25	35	--	--	--	--
TSS Min. % Removal	85	--	--	--	--	--
Dissolved Oxygen, mg/L	--	--	--	5.0	--	--
<i>E. coli</i> , No./100mL	126	157	--	--	--	--
Total Phosphorous, (kg) Summer: April-Sept Annual limit	--	--	--	--	--	173 346
Total Nitrogen, (kg) Summer: April-Sept Annual limit	--	--	--	--	--	1,732 3,464
Oil & Grease, mg/L	--	--	--	--	10.0	--
pH, Standard Units	--	--	--	6.5	9	--

SELF-MONITORING AND REPORTING REQUIREMENTS

The following self-monitoring requirements have changes in this permit renewal. 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 must be attached to the DMRs.

Self-Monitoring and Reporting Requirements *a			
Parameter	Frequency	Sample Type	Units
Total Flow *b, *c	Continuous	Recorder	MGD
BOD ₅ , Influent *d	Monthly	Composite	mg/L
Effluent	Monthly	Composite	mg/L
TSS, Influent *d	Monthly	Composite	mg/L
Effluent	Monthly	Composite	mg/L
<i>E. coli</i>	Monthly	Grab	No./100mL
pH	Monthly	Grab	SU
Total Ammonia (as N)	Monthly	Composite	mg/L
DO	Monthly	Grab	mg/L
Oil & Grease *f	When Sheen Observed	Grab	mg/L
Orthophosphate, (as P) *k Effluent	Monthly	Composite	mg/L
Phosphorus, Total *k Influent	Monthly	Composite	mg/L
Effluent	Monthly	Composite	mg/L, kg
Total Kjeldahl Nitrogen, TKN (as N) *k, Influent	Monthly	Composite	mg/L
Effluent	Monthly	Composite	mg/L
Nitrate, NO ₃ *k,	Monthly	Composite	mg/L
Nitrite, NO ₂ *k,	Monthly	Composite	mg/L
Temperature, mg/L,	Monthly	Composite	mg/L
Nitrogen, Total	Monthly	Composite	mg/L, kg
WET, Acute Biomonitoring *h *i	Once, within 6 months of permit issuance.	Composite	--
Metals *i,*h	Once, within 6 months of permit issuance.	Composite	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.

*f Oil & Grease sampled when sheen is present or visible. If no sheen is present or visible, report NA.

- *h An acute Ceriodaphnia and flathead minnow WET test shall be conducted once during this permit cycle. This must be completed within 6 month of permit effective date.
- *i Metals analysis have not previously been required for this facility. One metals analysis is required with this permit renewal, which shall be conducted in conjunction with the Acute WET tests to be conducted within the first 6 month of the permit effective date. Metals to be analyzed include Selenium, Mercury, Lead, Copper, Chromium, Arsenic and Zinc.
- *k These reflect changes required with the adoption of UCA R317-1-3.3, Technology-based Phosphorus Effluent Limits rule.

ANTIDEGREDATION REVIEW

Antidegradation Reviews are intended to ensure that waters that have better quality than required by the standards are not degraded unless the degradation is necessary for important social or economic reasons.

Oakley has completed an Antidegradation Level II Review for discharges to the Weber River, a Class 1C drinking water source. This document is part of the UPDES Permit Application and is available for review.

The Level II Review demonstrated that the facility is being renewed without any changes to flow or concentrations and that the plant is necessary for economic and social growth of the serviced community.

The DWQ concurs with the findings of the Level I (compliance with water quality standards) and Level II Review.

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.

SUBSTANTIAL BIOSOLIDS TREATMENT CHANGES

None

DESCRIPTION OF TREATMENT AND DISPOSAL

The Permittee submitted their 2016 annual biosolids report on January 25th, 2017. The report states the Permittee produced 11.0 dry metric tons (DMT) of solids and disposed of all of the solids at the Summit County Landfill. The wastewater solids were stabilized during the MBR process with an average retention time of over 60 days. The wastewater solids from the MBR process were dewatered with a screw press and passed a paint filter test before it was hauled to the Landfill for disposal.

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 2016, the Oakley City Wastewater treatment plant disposed of 11.0 DMT of biosolids, therefore they need to sample at least 1 time a year. However, OCWTP is not required to monitor for heavy metals or pathogens if the biosolids are disposed of in a landfill.

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)). Permittee disposed of 11.0 DMT of biosolids at the Summit County Landfill.

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 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 40 CFR Part 503.13(b) Table 1 and the heavy metals loading rates in 40 CFR Part 503.13(b) Table 2; or

The maximum heavy metals in 40 CFR Part 503.13(b) Table 1 and the monthly heavy metals concentrations in 40 CFR Part 503.13(b) Table 3.

Tables 1, 2, and 3 of Heavy Metal Limitations

Pollutant Limits, (40 CFR Part 503.13(b)) Dry Mass Basis				
Heavy Metals	Table 1	Table 2	Table 3	Table 4
	Ceiling Conc. Limits, (mg/kg)	CPLR ¹ , (mg/ha)	Pollutant Conc. Limits, (mg/kg)	APLR ² , (mg/ha-yr)
Total Arsenic	75	41	41	41
Total Cadmium	85	39	39	39
Total Copper	4300	1500	1500	1500
Total Lead	840	300	300	300
Total Mercury	57	17	17	17
Total Molybdenum	75	N/A	N/A	N/A
Total Nickel	420	420	420	420
Total Selenium	100	100	100	100
Total Zinc	7500	2800	2800	2800

Any violation of these limitations shall be reported in accordance with the requirements of Part III.F.1. of the permit .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	Class B
B Salmonella species –less than three (3) MPN 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	

¹ CPLR -- Cumulative Pollutant Loading Rate

² APLR – Annual Pollutant Loading Rate

³ MPN –Most Probable Number

Pathogen Control Class	
Class A	Class B
Viable helminth ova –less than one (1) MPN per four (4) grams total solids	

Class A Requirements for Home Lawn and Garden Use

If biosolids are land applied to home lawns and gardens, 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.

OCWTP does not intend to give away biosolids for land application on home lawns or gardens, and will therefore not be required to meet PFRP. If the permittee changes their intentions in the future, they will need to meet a specific PFRP, 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

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 the biosolids cannot be sold or given away to the public, and the permittee will need find another method of beneficial use or disposal.

Pathogens Class B

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). OCWTP does not intend to land apply the biosolids and will therefore not be required to meet PSRP. If the permittee intends to land apply in the future, they will need to meet a specific PSRP, 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.

Vector Attraction Reduction (VAR)

If the biosolids are land applied OCWTP will be required to meet VAR through the use of a method of listed under 40 CFR 503.33. OCWTP does not intend to land apply the biosolids and will therefore not be required to meet VAR. If the permittee intends to land apply in the future, they need to meet one of the listed alternatives in 40 CFR 503.33, 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

OCWTP 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 III.B 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.

STORM WATER

STORMWATER REQUIREMENTS

The Utah Administrative Code (UAC) R-317-8-3.9 requires storm water permit provisions to include the development of a storm water pollution prevention plan for waste water treatment facilities if the facility meets one or both of the following criteria.

1. waste water treatment facilities with a design flow of 1.0 MGD or greater, and/or,
2. waste water treatment facilities with an approved pretreatment program as described in 40CFR Part 403,

The OCWTP does not meet either of the above criteria; therefore this permit does not include storm water provisions. However, the permit does include a storm water re-opener provision.

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 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 required that the permittee submit for review any local limits that are developed to the Division of Water Quality for review. If local limits are developed it is required 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.

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.

The permittee is a minor municipal discharger that will be contributing a small volume of effluent to the existing stream flow (4%), in which toxicity is not likely to be present. Further, this facility accepts waste water from approximately 900 households, and no categorical industries discharge to the facility. Based on these considerations, there is no reasonable potential for toxicity in the permittee's discharge. As such, there will be no numerical WET limitations or WET monitoring requirements in this permit. However, this permit renewal will require one acute WET test to be completed to verify effluent is not toxic. This test must be completed within 6 month of permit effective date and accompany a metals analysis. Further, the permit will contain a toxicity limitation re-opener provision that allows for modification of the permit 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:
Nate Nichols, Discharge
Daniel Griffin, Biosolids
Jennifer Robinson, Pretreatment
Michael George, Storm Water
Nick von Stackelberg, Wasteload Analysis
Utah Division of Water Quality, (801) 536-4300

PUBLIC NOTICE

Began: Month Day, Year
Ended: Month Day, Year

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 in the (NEWSPAPER OF RECORD FOR AREA).

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.

ADDENDUM TO FSSOB

During finalization of the Permit certain dates, spelling edits and minor language corrections were completed. Due to the nature of these changes they were not considered Major and the permit is not required to be re Public Noticed.

Responsiveness Summary

(Explain any comments received and response sent. Actual letters can be referenced, but not required to be included).

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PVD Draft

ATTACHMENT 1

Industrial Waste Survey

PV Draft

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Industrial Pretreatment Wastewater Survey



Do you periodically experience any of the following treatment works problems:

- foam, floaties or unusual colors
- plugged collection lines caused by grease, sand, flour, etc.
- discharging excessive suspended solids, even in the winter
- smells unusually bad
- waste treatment facility doesn't seem to be treating the waste right

Perhaps the solution to a problem like one of these may lie in investigating the types and amounts of wastewater entering the sewer system from industrial users.

An industrial user (IU) is defined as a non-domestic user discharging to the waste treatment facility which meets any of the following criteria:

1. **has a lot of process wastewater (5% of the flow at the waste treatment facility or more than 25,000 gallons per work day.)**

Examples: Food processor, dairy, slaughterhouse, industrial laundry.

2. **is subject to Federal Categorical Pretreatment Standards;**

Examples: metal plating, cleaning or coating of metals, blueing of metals, aluminum extruding, circuit board manufacturing, tanning animal skins, pesticide formulating or packaging, and pharmaceutical manufacturing or packaging,

3. **is a concern to the POTW.**

Examples: septage hauler, restaurant and food service, car wash, hospital, photo lab, carpet cleaner, commercial laundry.

All users of the water treatment facility are **prohibited** from making the following types of discharges:

1. A discharge which creates a fire or explosion hazard in the collection system.
2. A discharge which creates toxic gases, vapor or fumes in the collection system.
3. A discharge of solids or thick liquids which creates flow obstructions in the collection system.
4. An acidic discharge (low pH) which causes corrosive damage to the collection system.
5. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause problems in the collection system or at the waste treatment facility.
6. Waste haulers are prohibited from discharging without permission. (No midnight dumping!)

When the solution to a sewer system problem may be found by investigating the types and amounts of wastewater entering the sewer system discharged from IUs, it's appropriate to conduct an Industrial Waste Survey.

An Industrial Waste Survey consists of:

Step 1: Identify Industrial Users

Make a list of all the commercial and industrial sewer connections.

Sources for the list:

business license, building permits, water and wastewater billing, Chamber of Commerce, newspaper, telephone book, yellow pages.

Split the list into two groups:

domestic wastewater only--no further information needed
everyone else (IUs)

Step 2: Preliminary Inspection

Go visit each IU identified on the "everybody else" list.

Fill out the **Preliminary Inspection Form** during the site visit.

Step 3: Informing the State

Please fax or send a copy of the Preliminary inspection form (both sides) to:

Jennifer Robinson

Division of Water Quality
288 North 1460 West
P.O. Box 144870
Salt Lake City, UT 84114-4870

Phone: (801) 536-4383
Fax: (801) 536-4301
E-mail: jenrobinson@utah.gov

PRELIMINARY INSPECTION FORM

INSPECTION DATE ___ / ___ /

Name of Business _____ Person Contacted _____
Address _____ Phone Number _____

Description of Business _____

Principal product or service: _____

Raw Materials used: _____

Production process is: Batch Continuous Both

Is production subject to seasonal variation? yes no

If yes, briefly describe seasonal production cycle.

This facility generates the following types of wastes (check all that apply):

- | | |
|---|--|
| 1. <input type="checkbox"/> Domestic wastes | (Restrooms, employee showers, etc.) |
| 2. <input type="checkbox"/> Cooling water, non-contact | 3. <input type="checkbox"/> Boiler/Tower blowdown |
| 4. <input type="checkbox"/> Cooling water, contact | 5. <input type="checkbox"/> Process |
| 6. <input type="checkbox"/> Equipment/Facility washdown | 7. <input type="checkbox"/> Air Pollution Control Unit |
| 8. <input type="checkbox"/> Storm water runoff to sewer | 9. <input type="checkbox"/> Other describe |

Wastes are discharged to (check all that apply):

- | | |
|---|---------------------------------------|
| <input type="checkbox"/> Sanitary sewer | <input type="checkbox"/> Storm sewer |
| <input type="checkbox"/> Surface water | <input type="checkbox"/> Ground water |
| <input type="checkbox"/> Waste haulers | <input type="checkbox"/> Evaporation |
| <input type="checkbox"/> Other (describe) | |

Name of waste hauler(s), if used

Is a grease trap installed? Yes No

Is it operational? Yes No

Does the business discharge a lot of process wastewater?

- | | | |
|---|-----|----|
| • More than 5% of the flow to the waste treatment facility? | Yes | No |
| • More than 25,000 gallons per work day? | Yes | No |

Does the business do any of the following:

- | | |
|---|--|
| <input type="checkbox"/> Adhesives | <input type="checkbox"/> Car Wash |
| <input type="checkbox"/> Aluminum Forming | <input type="checkbox"/> Carpet Cleaner |
| <input type="checkbox"/> Battery Manufacturing | <input type="checkbox"/> Dairy |
| <input type="checkbox"/> Copper Forming | <input type="checkbox"/> Food Processor |
| <input type="checkbox"/> Electric & Electronic Components | <input type="checkbox"/> Hospital |
| <input type="checkbox"/> Explosives Manufacturing | <input type="checkbox"/> Laundries |
| <input type="checkbox"/> Foundries | <input type="checkbox"/> Photo Lab |
| <input type="checkbox"/> Inorganic Chemicals Mfg. or Packaging | <input type="checkbox"/> Restaurant & Food Service |
| <input type="checkbox"/> Industrial Porcelain Ceramic Manufacturing | <input type="checkbox"/> Septage Hauler |
| <input type="checkbox"/> Iron & Steel | <input type="checkbox"/> Slaughter House |
| <input type="checkbox"/> Metal Finishing, Coating or Cleaning | |
| <input type="checkbox"/> Mining | |
| <input type="checkbox"/> Nonferrous Metals Manufacturing | |
| <input type="checkbox"/> Organic Chemicals Manufacturing or Packaging | |
| <input type="checkbox"/> Paint & Ink Manufacturing | |
| <input type="checkbox"/> Pesticides Formulating or Packaging | |
| <input type="checkbox"/> Petroleum Refining | |
| <input type="checkbox"/> Pharmaceuticals Manufacturing or Packaging | |
| <input type="checkbox"/> Plastics Manufacturing | |
| <input type="checkbox"/> Rubber Manufacturing | |
| <input type="checkbox"/> Soaps & Detergents Manufacturing | |
| <input type="checkbox"/> Steam Electric Generation | |
| <input type="checkbox"/> Tanning Animal Skins | |
| <input type="checkbox"/> Textile Mills | |

Are any process changes or expansions planned during the next three years? Yes No
If yes, attach a separate sheet to this form describing the nature of planned changes or expansions.

Inspector

Waste Treatment Facility

Please send a copy of the preliminary inspection form (both sides) to:

Jennifer Robinson
Division of Water Quality
P. O. Box 144870
Salt Lake City, Utah 84114-4870

Phone: (801) 536-4383
Fax: (801) 536-4301

E-Mail: jenrobinson@utah.gov

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ATTACHMENT 2

Effluent Monitoring Data

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Effluent Monitoring Data.

Month	Flow*	pH		DO	<i>E. coli</i>		BOD5		TSS	
	Ave	Min	Max	Min	Acute	Chronic	Ave	Max	Ave	Max
12/2013	.74	7.3	7.3	6.7	0	0	0	0	0	0
1/2014	.71	7.2	7.2	6.6	0	0	0	0	0	0
2/2014	.73	7.2	7.2	6.7	0	0	0	0	29	29
3/2014	.71	7.1	7.1	6.4	0	0	0	0	0	0
4/2014	.86	7.2	7.2	4.8	0	0	0	0	0	0
5/2014	.97	7.2	7.2	6.3	0	0	0	0	0	0
6/2014	.95	7.3	7.3	6.3	0	0	0	0	0	0
7/2014	.98	7.4	7.4	7	0	0	0	0	0	NODI=X
8/2014	.89	7.5	7.5	7	0	0	6	6	0	NODI=X
9/2014	.73	7.4	7.4	7.7	0	0	0	0	0	0
10/2014	.72	7.2	7.2	7.7	0	0	0	0	0	0
11/2014	.71	7.2	7.2	7.5	0	0	0	0	0	0
12/2014	.72	7.2	7.3	7.5	0	0	0	0	0	0
1/2015	.74	7.2	7.2	8.6	0	0	0	0	0	0
2/2015	.72	7.6	7.6	0	0	0	0	0	0	0
3/2015	.78	7.1	7.1	5.7	0	0	0	0	0	0
4/2015	.78	7.1	7.1	5.7	0	0	0	0	0	0
5/2015	.115	7.4	7.4	7.9	0	0	0	0	0	0
6/2015	.79	7.2	7.2	6	0	0	0	0	0	0
7/2015	.79	7.2	7.2	6	0	0	0	0	0	0
8/2015	.78	6.9	6.9	6	0	0	0	0	0	0
9/2015	.71	7.5	7.5	4.6	0	0	0	0	0	0
10/2015	.74	N/A	7.1	0	0	0	0	0	0	0
11/2015	.74	7.2	7.2	6.9	0	0	0	0	0	0
12/2015	.69	6.9	N/A	6	0	0	0	0	0	0
1/2016	.71	7	7	7.9	0	0	0	0	0	0
2/2016	Not Received	Not Received	Not Received	Not Received	Not Received	Not Received				
3/2016	.74	7.2	N/A	7.7	0	0	0	0	0	0
4/2016	.81	7	7	6.2	0	0	0	0	4	4
5/2016	.81	N/A	7.2	6.2	0	0	0	0	0	N/A
6/2016	.77	7.2	N/A	5.6	0	0	0	0	0	N/A
7/2016	.85	7.4	7.4	5.9	0	0	0	0	0	N/A
8/2016	.89	7.4	7.4	5.9	0	0	0	0	0	0
9/2016	.76	7.4	7.4	4.5	0	0	0	0	0	0
10/2016	Not Received	Not Received	Not Received	Not Received	Not Received	Not Received				
11/2016	.072	7.2	7.2	6.6	0	0	0	0	0	N/A

* Flow inadvertently reported incorrectly during previous permit cycle. All reported values should be 1/10th.

ATTACHMENT 3

Wasteload Analysis

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ATTACHMENT 4

Reasonable Potential Analysis

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REASONABLE POTENTIAL ANALYSIS

Water Quality has worked to improve our reasonable potential analysis (RP) for the inclusion of limits for parameters in the permit by using an EPA provided model. As a result of the model, more parameters may be included in the renewal permit. A Copy of the Reasonable Potential Analysis Guidance (RP Guide) is available at water Quality. There are four outcomes for the RP Analysis⁴. They are;

- Outcome A: A new effluent limitation will be placed in the permit.
- Outcome B: No new effluent limitation. Routine monitoring requirements will be placed or increased from what they are in the permit,
- Outcome C: No new effluent limitation. Routine monitoring requirements maintained as they are in the permit,
- Outcome D: No limitation or routine monitoring requirements are in the permit.

Historically, Metals screening has not be required at Oakley City Wastewater Treatment facility. However, reasonable potential analysis was used to determine if the facility had reasonable potential to exceed ammonia water quality standards.

The RP model was run on ammonia using the most recent data back through 2012. This resulted in 16 normally distributed data points. Results of the analysis indicate that there is not Reasonable Potential for an acute limit for ammonia at 95% confidence, but, there is RP at 99% Confidence. This result (outcome C) indicates that the inclusion of an effluent limit for ammonia is not required at this time, but routine monitoring requirements will be added in the permit.

⁴ See Reasonable Potential Analysis Guidance for definitions of terms

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Ammonia RP Results

RP Procedure Output		Effluent Data					
Facility Name:	Oakely City WWTP		#				
Permit Number:	UT0020061		1	1.2			
Outfall Number:	002		2	1.8			
Parameter	Ammonia		3	0.1			
Distribution	Normal		4	1.5			
Data Units	mg/L		5	1.2			
Reporting Limit	0.1		6	0.1			
Significant Figures	3		7	0.9			
Confidence Interval	95		8	9			
			9	0.4			
Maximum Reported Effluent Conc.	9.0	mg/L	10	0.1			
Coefficient of Variation (CV)	1.54		11	0.1			
RP Multiplier	1.43		12	0.1			
Projected Maximum Effluent Conc. (MEC)	12.9	mg/L	13	6.2			
			14	2.1			
Acute Criterion	20		15	0.3			
Chronic Criterion	NA		16	0.7			
Human Health Criterion	NA						
RP for Acute?	NO						
RP for Chronic?	NA						
RP for Human Health?	NA						
Confidence Interval	99						
Maximum Reported Effluent Conc.	9.0	mg/L					
Coefficient of Variation (CV)	1.54						
RP Multiplier	2.25						
Projected Maximum Effluent Conc. (MEC)	20.02						
Acute Criterion	20.0	mg/L					
Chronic Criterion	NA						
Human Health Criterion	NA						
RP for Acute?	YES						
RP for Chronic?	NA						
RP for Human Health?	NA						