

Official Draft Public Notice Version August 16, 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  
PITMAN FAMILY FARMS, INC.  
RENEWAL PERMIT: DISCHARGE, & BIOSOLIDS  
UPDES PERMIT NUMBER: UT0020222  
UPDES BIOSOLIDS PERMIT NUMBER: UTL-020222  
MAJOR MUNICIPAL**

**FACILITY CONTACTS**

Person Name: Mike Vance  
Position: Vice President of Turkey  
Operations and Sales  
Phone Number: (435) 436-8211

Person Name: Jay Jackson  
Position: Operator  
Phone Number: (435) 436-8211

Facility Name: Moroni City Waste Water Treatment Plant  
Operator: Pitman Family Farms, Inc.  
Mailing and Facility Address: PO Box 308  
Moroni, Utah 84646  
Telephone: (435) 436-8211  
Actual Address: 350 South 300 West, Moroni, Utah 84646

**DESCRIPTION OF FACILITY**

The Moroni City Wastewater Treatment Plant (WWTP), which is operated by Pitman Family Farm, Inc (Pitman) is a wastewater treatment facility that consists of the following unit processes: mechanical screen, primary clarifier, pre-aeration basin then to the membrane bioreactor system with UV disinfection. The sludge is pumped to two aerobic digesters and then to the solids handling facility for dewatering. The facility has been in service since 1974 with a design capacity of 1.1 million gallons per day (MGD). Although the WWTP is owned by Moroni City, Pitman Family Farms, Inc. (Pitman) operates the plant and contributes most of the plant's influent. Since Pitman is the Operator of the WWTP, the Permit has been issued to Pitman. The facility, including the permitted outfall is located at 350 West 300 South in Moroni, Sanpete County, Utah.

**SUMMARY OF CHANGES FROM PREVIOUS PERMIT**

Water quality based effluent limits have been implemented from a waste load analysis developed for this permit renewal. A Qual2Kw model was run for the 2023 waste load analysis. Changes include stricter daily maximum effluent limits and less stringent maximum monthly averages for total ammonia. These changes are due to the development of an updated Waste Load Analysis for Pitman. A reasonable potential for the discharge to exceed applicable water quality standards was determined to exist for cadmium and zinc, and

therefore, effluent limitations were added to this permit as discussed further in the **Reasonable Potential Analysis** section of the Fact Sheet.

Storm Water permit provisions have been removed as part of a programmatic separation of the previously combined UPDES and Industrial Storm Water permits. Pitman will now be required to apply for and obtain separate UPDES Industrial Storm Water Permit coverage under the MSGP No. UTR000000, or an applicable exemption, as described further in the **Storm Water Requirements** section of this Fact Sheet.

Pitman conducted quarterly acute biomonitoring during the previous permit cycle utilizing both test species during each biomonitoring event. Current Utah Division of Water Quality (UDWQ) WET guidance indicates chronic toxicity testing should be implemented when effluent makes up more than 5% of receiving water flows. Previously depending on the season, the facility was both above and below the 5% flow threshold. However, the facility now makes up more than 5% effluent in all seasons. As a result, acute WET testing will no longer be required and the facility will only conduct chronic toxicity testing as described further in the **Biomonitoring** section of this Fact Sheet.

Total residual chlorine (TRC) has been removed from the permit effluent limitations as a result of the facility switching from chlorine disinfection to ultraviolet (UV) disinfection.

Metals data must be reported as "maximum monthly values." Additionally, a more sensitive mercury method must be used to report mercury values accurately. Effluent limitations for arsenic and nickel were removed from this permit, as a reasonable potential for nickel to impact Waters of the State was not determined to exist and information was not available as to why they were added in the previous permit cycle. This is also discussed further in the **Reasonable Potential Analysis** section of the Fact Sheet

## **DISCHARGE**

### **DESCRIPTION OF DISCHARGE**

Pitman has reported self-monitoring results on Discharge Monitoring Reports (DMRs) on a monthly basis.

#### **Outfall**

001

#### **Description of Discharge Point**

An 18" underground pipe runs southeast from the treatment plant and discharges through a diffuser into the San Pitch River at latitude 39° 30' 52" and longitude 111° 35' 10".

### **RECEIVING WATERS AND STREAM CLASSIFICATION**

The discharge from Outfall 001 flows into the San Pitch River and thence into the Sevier River. The irrigation canal is Class 4; the San Pitch River is Class 2B, 3C, 3D, and 4, according to Utah Administrative Code (UAC) R317-2-12.7

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 3C -- Protected for nongame fish and other 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.

### **TOTAL MAXIMUM DAILY LOAD**

According to the Utah's 2021 303(d) Water Quality Assessment Report "Combined 2018/2020 Integrated Report Version 1.0", the receiving water for the discharge is *San Pitch River and tributaries from Gunnison Reservoir to UI32 crossing and below USFS boundary (San Pitch-3-1:UT16030004-005\_01)*. The reach was not supporting for total ammonia as N, E. Coli, pH, minimum DO with a low priority for TMDL. There is an approved TMDL for total dissolved solids (TDS).

### **BASIS FOR EFFLUENT LIMITATIONS**

In accordance with regulations promulgated in *40 Code of Federal regulations (CFR) Part 122.44* and in *Utah Administrative Code (UAC) R317-8-4.2*, effluent limitations are derived from Federal technology-based effluent limitations guidelines, Utah Secondary Treatment Standards (*UAC R317-1-3.2*) or Utah Water Quality Standards (*UAC R317-2*). In cases where multiple limits have been developed, those that are more stringent apply. In cases where no limits or multiple limits have been developed, Best Professional Judgement (BPJ) of the permitting authority may be used where applicable. 'Best Professional Judgement' refers to a discretionary, best professional decision made by the permit writer based upon precedent, prevailing regulatory standards or other relevant information.

Permit limits can also be derived from the WLA, which incorporates Secondary Treatment Standards, Water Quality Standards, including Total Maximum Daily Load (TMDL) impairments as appropriate, Antidegradation Review (ADR), and designated uses into a water quality model that projects the effects of discharge concentrations on receiving water quality. Effluent limitations are those that the model demonstrates are sufficient to meet State water quality standards in the receiving waters. During this UPDES renewal permit development, a WLA and ADR was completed as appropriate.

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 Phosphorus limits are based on UAC R317-1-3.3, Technology-Based Phosphorus Effluent Limit (TBPEL) which 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. The oil and grease are based on best professional judgment (BPJ) of the permitting authority to be consistent with other similar permitted facilities in Utah. The permit limit for TDS is based on the state-wide standard for all class 4 waters, UAC R317-2-14, to be protective of the agricultural beneficial uses.

Permit limits for ammonia, dissolved oxygen and the chronic WET effluent limit are based upon water quality standards obtained from the WLA. 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. An Antidegradation Level II review was not required since the Level I review shows no change in plant operation or flow.

### **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 arsenic, cadmium, copper, lead, mercury, nickel, selenium, and zinc to determine if there was reasonable potential for the discharge to exceed the applicable water quality standards. The analytical method for mercury used by the facility was not sensitive enough to determine mercury levels to a low enough level that a reasonable protentional for mercury limits to impact waters of the state could not accurately be determined. Due to the lack of information, mercury may be eliminated from the next permit cycle if mercury is determined to not have a reasonable potential. Based on the RP analysis, a reasonable potential for effluent exceedances exists for cadmium, copper, mercury, and zinc. All metals effluent data was run through the EPAs ProUCL program to determine if any outliers existed. An outlier was determined to exist for the cadmium data, and as a result, the data point was removed. Following the removal of the outlier data, no reasonable potential for effluent exceedances was found for cadmium. Effluent limitations were established for mercury, and continued monitoring was established for copper, mercury, and zinc. A copy of the RP analysis is included at the end of this Fact Sheet. The permit limitations are as follows:

Parameter	Effluent Limitations *a				
	Maximum Monthly Avg	Maximum Weekly Avg	Yearly Average	Daily Minimum	Daily Maximum
Total Flow	1.1	--	--	--	--
BOD <sub>5</sub> , mg/L	25	35	--	--	--
BOD <sub>5</sub> Min. % Removal	85	--	--	--	--
TSS, mg/L	25	35	--	--	--
TSS Min. % Removal	85	--	--	--	--
Dissolved Oxygen, mg/L					
Summer (Jul-Sep)		5.5		5.5	
Fall (Oct-Dec)	--	5.5	--	5.5	--
Winter (Jan-Mar)		5.5		5.5	
Spring (Apr-Jun)		5.5		5.5	
Total Ammonia (as N), mg/L					
Summer (Jul-Sep)	5.3	--	--	--	21.4
Fall (Oct-Dec)	38.5	--	--	--	24.1
Winter (Jan-Mar)	38.5	--	--	--	49.5
Spring (Apr-Jun)	5.3	--	--	--	13.7
<i>E. coli</i> , No./100mL	126	157	--	--	--
WET, Chronic Biomonitoring					
Summer (Jul-Sep)	--	--	--	--	IC25> 32% effluent
Fall (Oct-Dec)	--	--	--	--	IC25> 16% effluent
Winter (Jan-Mar)	--	--	--	--	IC25> 6% effluent
Spring (Apr-Jun)	--	--	--	--	IC25> 19% effluent
Oil & Grease, mg/L	--	--	--	--	10.0
pH, Standard Units	--	--	--	6.5	9
Mercury *h	.000020				.0049
TDS, mg/L	--	--	--	--	1200
Total Phosphorous, mg/L	--	--	1.0	--	--

**SELF-MONITORING AND REPORTING REQUIREMENTS**

The following self-monitoring requirements are the same as in 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.

Self-Monitoring and Reporting Requirements *a			
Parameter	Frequency	Sample Type	Units
Total Flow *b, *c	Continuous	Recorder	MGD
BOD <sub>5</sub> , Influent *d	2 X weekly	Composite	mg/L
Effluent	2 X weekly	Composite	mg/L
TSS, Influent *d	2 X weekly	Composite	mg/L
Effluent	2 X weekly	Composite	mg/L
<i>E. coli</i>	2 X weekly	Grab	No./100mL
pH	2 X weekly	Grab	SU
Total Ammonia (as N)	2 X weekly	Composite	mg/L
DO	2 X weekly	Grab	mg/L
WET – Biomonitoring *f			
Ceriodaphnia - Chronic	Quarterly	Composite	Pass/Fail
Fathead Minnows - Chronic	Quarterly	Composite	Pass/Fail
Oil & Grease *e	Monthly	Grab	mg/L
Orthophosphate (as P), Effluent	Monthly	Composite	mg/L
Total Phosphorus (as P), Influent	Monthly	Composite	mg/L
Effluent	Monthly	Composite	mg/L
Total Kjeldahl Nitrogen TKN (as N), Influent	Monthly	Composite	mg/L
Effluent	Monthly	Composite	mg/L
Nitrate, NO <sub>3</sub>	Monthly	Composite	mg/L
Nitrite, NO <sub>2</sub>	Monthly	Composite	mg/L
TDS, mg/L	Monthly	Composite	mg/L
Temperature, mg/L	Monthly	Composite	mg/L
Metals *g, Influent	Quarterly	Composite	mg/L
Effluent	Monthly	Composite	mg/L
Mercury Effluent	Monthly	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.
- \*e Oil & Grease sampled when sheen is present or visible. If no sheen is present or visible, report NA.
- \*f WET testing shall occur four times a year, two times during the irrigation season, and two times during the non-irrigation season. WET tests shall be at least 45 days apart. The chronic Ceriodaphnia will be tested during the 1st and 3rd quarters and the chronic fathead minnows will be tested during the 2nd and 4th quarters.
- \*g All effluent metals must be sampled monthly. Metals results were reviewed for the last 36 months. A reasonable potential analysis was run on arsenic, cadmium, copper, lead, nickel, selenium, and zinc. Effluent limitations were established for mercury.
- \*h EPA Method 1631 (or a more sensitive method than EPA Method 245.1) must be used for mercury analysis.

### 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 AND DISPOSAL**

After the influent is screened, the wastewater is treated in the membrane bioreactor plant, and solids are settled out in a clarifier, where they are sent to aerobic digesters. From here the solids are dewater in a belt press and hauled to Nutri-Mulch for further processing.

The last inspection conducted at the facility was January 31, 2023. The inspection showed that Moroni was in compliance with the biosolids management program.

### **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

The facility has yet to produce more than 200 DMT of biosolids per year, therefore they need to sample at least once a 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)*).

### **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 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 <sup>1</sup> , (mg/kg)	CPLR <sup>2</sup> , (mg/ha)	Pollutant Conc. Limits <sup>3</sup> (mg/kg)	APLR <sup>4</sup> , (mg/ha-yr)
Total Arsenic	75	41	41	2.0
Total Cadmium	85	39	39	1.9
Total Copper	4300	1500	1500	75
Total Lead	840	300	300	15
Total Mercury	57	17	17	0.85
Total Molybdenum	75	N/A	N/A	N/A
Total Nickel	420	420	420	21
Total Selenium	100	100	100	5.0
Total Zinc	7500	2800	2800	140
1, If the concentration of any 1 (one) of these parameters exceeds the Table 1 limit, the biosolids cannot be land applied or beneficially used in any way.				
2, CPLR - Cumulative Pollutant Loading Rate - The maximum loading for any 1 (one) of the parameters listed that may be applied to land when biosolids are land applied or beneficially used on agricultural, forestry, or a reclamation site.				
3, If the concentration of any 1 (one) of these parameters exceeds the Table 3 limit, the biosolids cannot be land applied or beneficially used in on a lawn, home garden, or other high potential public contact site. If any 1 (one) of these parameters exceeds the Table 3 limit, the biosolids may be land applied or beneficially reused on an agricultural, forestry, reclamation site, or other high potential public contact site, as long as it meets the requirements of Table 1, Table 2, and Table 4.				
4, APLR - Annual Pollutant Loading Rate - The maximum annual loading for any 1 (one) of the parameters listed that may be applied to land when biosolids are land applied or beneficially reused on agricultural, forestry, or a reclamation site, when they do not meet Table 3, but do meet Table 1.				

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	
503.32 (a)(1) - (5), (7), (8), Class A	503.32 (b)(1) - (5), Class B
B Salmonella species –less than three (3) MPN <sup>1</sup> per four (4) grams total solids (DWB) <sup>2</sup> or Fecal Coliforms – less than 1,000 MPN per gram total solids (DWB).	Fecal Coliforms – less than 2,000,000 MPN or CFU <sup>3</sup> per gram total solids (DWB).
503.32 (a)(6) Class A—Alternative 4	



Pathogen Control Class	
503.32 (a)(1) - (5), (7), (8), Class A	503.32 (b)(1) - (5), Class B
B Salmonella species –less than three (3) MPN per four (4) grams total solids (DWB) or less than 1,000 MPN Fecal Coliforms per gram total solids (DWB), And - Enteric viruses –less than one (1) plaque forming unit per four (4) grams total solids (DWB) And - Viable helminth ova –less than one (1) per four (4) grams total solids (DWB)	
1 - MPN – Most Probable Number	
2 - DWB – Dry Weight Basis	
3 - CFU – Colony Forming Units	

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. Pitman Family Farms, Inc. transfers the biosolids to Nutri-Mulch for processing and does not intend to handle the biosolids processing under the Pitman Family Farms, Inc. permit and has no chosen method to meet PFRP.

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). Pitman transfers the biosolids to Nutri-Mulch for processing and does not intend to handle the biosolids processing under the Pitman permit and has no chosen method to meet PSRP.

Vector Attraction Reduction (VAR)

If the biosolids are land applied Pitman will be required to meet VAR through the use of a method of listed under 40 CFR 503.33. Pitman transfers the biosolids to Nutri-Mulch for processing and does not intend to handle the biosolids processing under the Pitman permit, and has no chosen method to meet VAR.

If the biosolids do not meet a method of VAR, the biosolids cannot be land applied.

If the permittee intends to use another 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

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

Pitman 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.

### **MONITORING DATA**

Pitman transfers all biosolids produced at the facility to Nutri-Mulch for composting and distribution. They will submit monitoring results under their separate permit.

## **STORM WATER**

### **STORMWATER REQUIREMENTS**

Based on the type of industrial activities occurring at the facility, the permittee is required to maintain separate permit coverage, or an appropriate exclusion, under the Multi-Sector General Permit (MSGP) for Storm Water Discharges Associated with Industrial Activities (UTR000000). If the facility has not already done so, it has 30 days from when this permit is issued to submit the appropriate Notice of Intent (NOI) for the MSGP, or exclusion documentation. This can be accomplished online at:

<https://deq.utah.gov/water-quality/general-multi-sector-industrial-storm-water-permit-updes-permits>.

In addition, separate permit coverage under the Construction General Storm Water Permit (CGP) may be required for any construction at the facility which disturbs an acre or more of land, or is part of a common plan of development or sale that is an acre or greater. A Notice of Intent (NOI) is required to obtain a construction storm water permit prior to the period of construction. This can also be accomplished online:

<https://deq.utah.gov/water-quality/general-construction-storm-water-updes-permits>.

### **PRETREATMENT REQUIREMENTS**

The permittee is not required to develop an Approved POTW Pretreatment Program (Program). This is due to the Division of Water Quality overseeing Industrial Users discharging to the Publicly Owned Treatment Works (POTW). Also, the flow through the plant is less than five (5) MGD.

Although the permittee does not have to develop a Program, any industrial wastewater discharged to the POTW is 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. If an Industrial User begins to discharge or an existing Industrial User changes its discharge, the permittee must resubmit the IWS within sixty days following the introduction or change, as stated in Part II of the permit.

It is required that the permittee submits for review any Local Limits that are developed to the Division of Water Quality. 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 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.

Pitman conducted quarterly acute biomonitoring during the previous permit cycle utilizing both test species during each biomonitoring event. Current Utah Division of Water Quality (UDWQ) WET guidance indicates chronic toxicity testing should be implemented when effluent makes up more than 5% of receiving water flows. Previously depending on the season, the facility was both above and below the 5% flow threshold. However, the facility now makes up more than 5% effluent in all seasons. As a result, acute WET testing will no longer be required and the facility will only conduct chronic toxicity testing as mentioned previously.

Since the Permittee is a major municipal discharger, and has had a pattern of sporadic WET failures, this renewal permit will contain WET limits and require chronic whole effluent (WET) testing. The permit will contain standard requirements for accelerated testing upon failure of a WET test and a PTI (Preliminary Toxicity Investigation) and TRE (Toxicity Reduction Evaluation) as necessary.

**PERMIT DURATION**

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

Drafted by Jennifer Berjikian  
Jennifer Berjikian, Discharge  
Daniel Griffin, Biosolids  
Jennifer Robinson, Pretreatment  
Lonnie Shull, Biomonitoring  
Jennifer Berjikian, Reasonable Potential Analysis  
Chris Shope, Wasteload Analysis  
Utah Division of Water Quality, (801) 536-4300

**PUBLIC NOTICE INFORMATION (to be updated after)**

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 San Pete Messenger.

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).

**ATTACHMENT 1**

*Industrial Waste Survey*

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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](mailto: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.

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Inspector

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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](mailto:jenrobinson@utah.gov)

	<b>Industrial User</b>	<b>Jurisdiction</b>	<b>SIC Codes</b>	<b>Categorical Standard Number</b>	<b>Total Average Process Flow (gpd)</b>	<b>Total Average Facility Flow (gpd)</b>	<b>Facility Description</b>
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							

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**ATTACHMENT 2**

*Effluent Monitoring Data*

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**Effluent Monitoring Data.**

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WET Results

Month	WET Test	Pass / Fail
Mar-17	48Hr Acute Ceriodaphnia	Fail
Mar-17	96Hr Acute Pimephales Promelas	Fail
Jun-17	48Hr Acute Ceriodaphnia	N/A
Jun-17	96Hr Acute Pimephales Promelas	N/A
Sep-17	48Hr Acute Ceriodaphnia	N/A
Sep-17	96Hr Acute Pimephales Promelas	N/A
Dec-17	48Hr Acute Ceriodaphnia	N/A
Dec-17	96Hr Acute Pimephales Promelas	N/A
Mar-18	48Hr Acute Ceriodaphnia	Pass
Mar-18	96Hr Acute Pimephales Promelas	Pass
Jun-18	48Hr Acute Ceriodaphnia	Fail
Jun-18	96Hr Acute Pimephales Promelas	Pass
Sep-18	48Hr Acute Ceriodaphnia	Fail
Sep-18	96Hr Acute Pimephales Promelas	Fail
Dec-18	48Hr Acute Ceriodaphnia	Fail
Dec-18	96Hr Acute Pimephales Promelas	Fail
Mar-19	48Hr Acute Ceriodaphnia	N/A
Mar-19	96Hr Acute Pimephales Promelas	N/A
Jun-19	48Hr Acute Ceriodaphnia	Pass
Jun-19	96Hr Acute Pimephales Promelas	Pass
Sep-19	48Hr Acute Ceriodaphnia	Pass
Sep-19	96Hr Acute Pimephales Promelas	Pass
Dec-19	48Hr Acute Ceriodaphnia	Pass
Dec-19	96Hr Acute Pimephales Promelas	Pass
Mar-20	48Hr Acute Ceriodaphnia	Pass
Mar-20	96Hr Acute Pimephales Promelas	Pass
Jun-20	48Hr Acute Ceriodaphnia	Pass
Jun-20	96Hr Acute Pimephales Promelas	Pass
Sep-20	48Hr Acute Ceriodaphnia	Pass
Sep-20	96Hr Acute Pimephales Promelas	Pass
Dec-20	48Hr Acute Ceriodaphnia	Pass
Dec-20	96Hr Acute Pimephales Promelas	Pass
Mar-21	48Hr Acute Ceriodaphnia	Pass
Mar-21	96Hr Acute Pimephales Promelas	Pass
Jun-21	48Hr Acute Ceriodaphnia	Pass
Jun-21	96Hr Acute Pimephales Promelas	Pass
Sep-21	48Hr Acute Ceriodaphnia	Pass
Sep-21	96Hr Acute Pimephales Promelas	Pass
Dec-21	48Hr Acute Ceriodaphnia	N/A
Dec-21	96Hr Acute Pimephales Promelas	N/A



**ATTACHMENT 3**

*Wasteload Analysis*

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**ATTACHMENT 4**

*Reasonable Potential Analysis*

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## REASONABLE POTENTIAL ANALYSIS

The Division of Water Quality (DWQ) 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 DWQ. There are four outcomes for the RP Analysis<sup>1</sup>. 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.

Initial screening for metals values that were submitted through the discharge monitoring reports showed that a closer look at some of the metals is needed. A copy of the initial screening is included in the “Effluent Metals and RP Screening Results” table in this attachment. The initial screening check for metals showed that the full model needed to be run on arsenic, copper, and nickel.

The RP model was run on arsenic using the most recent data back through 2017. This resulted in 56 data points and that there is no Reasonable Potential to exceed an acute limit for arsenic at both 95% and 99%. This result indicates that the inclusion of an effluent limit for (metal) is not required at this time, and that routine monitoring requirements can be added or increased in the permit. (Outcome C from Reasonable Potential Guide)

The RP model was run on copper using the most recent data back through 2017. This resulted in 76 data points and that there is no Reasonable Potential to exceed an acute limit for copper at both 95% and 99%. This result indicates that the inclusion of an effluent limit for nickel is not required at this time, and that routine monitoring requirements can be added or increased in the permit. (Outcome C from Reasonable Potential Guide)

The RP model was run on nickel using the most recent data back through 2017. This resulted in 76 data points and that there is no Reasonable Potential to exceed an acute limit for nickel at both 95% and 99%. This result indicates that the inclusion of an effluent limit for nickel is not required at this time, and that routine monitoring requirements can be added or increased in the permit. (Outcome C from Reasonable Potential Guide)

The RP model was run on cadmium using the most recent data back through 2017. This resulted in 20 data points, one being an outlier, and that there is no Reasonable Potential to exceed an acute limit for cadmium at both 95% and 99%. This result indicates that the inclusion of an effluent limit for cadmium is not required at this time, and that routine monitoring requirements can be added or increased in the permit. (Outcome C from Reasonable Potential Guide)

The RP model was run on lead using the most recent data back through 2017. This resulted in 20 data points and that there is no Reasonable Potential to exceed an acute limit for lead at both 95% and 99%. This result indicates that the inclusion of an effluent limit for lead is not required at this time, and that routine monitoring requirements can be added or increased in the permit. (Outcome C from Reasonable Potential Guide)

The RP model was run on mercury using the most recent data back through 2017. This resulted in 20 data points and that there is a Reasonable Potential to exceed a chronic limit for mercury at both 95% and 99%. This result indicates that the inclusion of an effluent limit for mercury is required at this time, and that routine monitoring requirements can be added or increased in the permit. (Outcome B from Reasonable Potential Guide)

The RP model was run on selenium using the most recent data back through 2017. This resulted in 20 data points and that there is no Reasonable Potential to exceed an acute limit for selenium at both 95% and 99%.

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<sup>1</sup> See Reasonable Potential Analysis Guidance for definitions of terms

This result indicates that the inclusion of an effluent limit for selenium is not required at this time, and that routine monitoring requirements can be added or increased in the permit. (Outcome C from Reasonable Potential Guide)

The RP model was run on zinc using the most recent data back through 2017. This resulted in 20 data points and that there is no Reasonable Potential to exceed an acute limit for zinc at both 95% and 99%. This result indicates that the inclusion of an effluent limit for selenium is not required at this time, and that routine monitoring requirements can be added or increased in the permit. (Outcome C from Reasonable Potential Guide)

A Summary of the RP Model inputs and outputs are included in the table below.

The Metals Initial Screening Table and RP Outputs Table are included in this attachment.

PND Draft

RP input/output summary

RP Procedure Output	Outfall Number: 001	
Parameter	Arsenic	
Distribution	Lognormal	
Reporting Limit	(0.0005)	
Significant Figures	2	
Maximum Reported Effluent Conc.	0.062	
Coefficient of Variation (CV)	1.9	
Acute Criterion	0.699 mg/L	
Chronic Criterion	0.465 mg/L	
Confidence Interval	95	99
Projected Maximum Effluent Conc. (MEC)	0.37 mg/L	1.2 mg/L
RP Multiplier	1.9	5.8
RP for Acute?	NO	NO
RP for Chronic?	NO	NO
Outcome	C	

RP Procedure Output	Outfall Number: 001	
Parameter	Cadmium	
Distribution	Lognormal	
Reporting Limit	(0.002)	
Significant Figures	2	
Maximum Reported Effluent Conc.	323	
Coefficient of Variation (CV)	0.6	
Acute Criterion	.016 mg/L	
Chronic Criterion	.002 mg/L	
Confidence Interval	95	99
Projected Maximum Effluent Conc. (MEC)	.0002 mg/L	.0002 mg/L
RP Multiplier	1.0	1.0
RP for Acute?	NO	NO
RP for Chronic?	NO	NO
Outcome	C	

RP Procedure Output	Outfall Number:	
Parameter	Copper	
Distribution	Lognormal	
Reporting Limit	(0.001)	
Significant Figures	2	
Maximum Reported Effluent Conc.	0.0301 mg/L	
Coefficient of Variation (CV)	1.0	
Acute Criterion	0.099	
Chronic Criterion	0.085	
Confidence Interval	95	99
Projected Maximum Effluent Conc. (MEC)	0.0240 mg/L	0.0510 mg/L
RP Multiplier	.9	1.9
RP for Acute?	NO	NO
RP for Chronic?	NO	NO
Outcome	C	

RP Procedure Output	Outfall Number:	
Parameter	Lead	
Distribution	Delta-Lognormal	
Reporting Limit	(0.0005)	
Significant Figures	2	
Maximum Reported Effluent Conc.	0.0301 mg/L	
Coefficient of Variation (CV)	0.6	
Acute Criterion	.578	
Chronic Criterion	0.034	
Confidence Interval	95	99
Projected Maximum Effluent Conc. (MEC)	.0005 mg/L	0.0005 mg/L
RP Multiplier	1.0	1.0
RP for Acute?	NO	NO
RP for Chronic?	NO	NO
Outcome	C	

RP Procedure Output	Outfall Number: 001	
Parameter	Mercury	
Distribution	Normal	
Reporting Limit	(0.00002)	
Significant Figures	2	
Maximum Reported Effluent Conc.	0.0002 mg/L	
Coefficient of Variation (CV)	0.16	
Acute Criterion	.0049 mg/L	
Chronic Criterion	0.00002 mg/L	
Confidence Interval	95	99
Projected Maximum Effluent Conc. (MEC)	0.0002	0.0003
RP Multiplier	1.1	1.3
RP for Acute?	NO	NO
RP for Chronic?	YES	YES
Outcome	B	

RP Procedure Output	Outfall Number: 001	
Parameter	Nickel	
Distribution	Normal	
Reporting Limit	(0.0005)	
Significant Figures	2	
Maximum Reported Effluent Conc.	0.0076 mg/L	
Coefficient of Variation (CV)	0.61	
Acute Criterion	3.108 mg/L	
Chronic Criterion	0.514 mg/L	
Confidence Interval	95	99
Projected Maximum Effluent Conc. (MEC)	0.0073	0.0094
RP Multiplier	0.96	1.2
RP for Acute?	NO	NO
RP for Chronic?	NO	NO
Outcome	C	



RP Procedure Output	Outfall Number: 001	
Parameter	Selenium	
Distribution	Lognormal	
Reporting Limit	(0.0005)	
Significant Figures	2	
Maximum Reported Effluent Conc.	0.0051 mg/L	
Coefficient of Variation (CV)	0.35	
Acute Criterion	.036 mg/L	
Chronic Criterion	0.010 mg/L	
Confidence Interval	95	99
Projected Maximum Effluent Conc. (MEC)	0.0018	0.0025
RP Multiplier	1.2	1.7
RP for Acute?	NO	NO
RP for Chronic?	NO	NO
Outcome	C	

RP Procedure Output	Outfall Number: 001	
Parameter	Zinc	
Distribution	Delta-Lognormal	
Reporting Limit	(0.01)	
Significant Figures	2	
Maximum Reported Effluent Conc.	0.36 mg/L	
Coefficient of Variation (CV)	0.42	
Acute Criterion	0.766 mg/L	
Chronic Criterion	1.162 mg/L	
Confidence Interval	95	99
Projected Maximum Effluent Conc. (MEC)	0.0380	0.0550
RP Multiplier	1.3	1.8
RP for Acute?	NO	NO
RP for Chronic?	NO	NO
Outcome	C	

Metals Monitoring and RP Check

	Effluent							
Metal	Arsenic	Cadmium	Copper	Lead	Mercury	Nickel	Zinc	Selenium
ARP Val	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CRP Val	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ND Value	0	0	0	0	0	0	0	0
Max	.0062	323	.0301	.0058	.0002	.0076	0.36	.0051
ARP	NO	NO	YES	NO	NO	NO	NO	NO
CRP	NO	NO	YES	NO	YES	NO	YES	NO
Metals	0.0025	0.0002	0.0018	0.0005	0.0002	0.0023	0.01	0.0015
	0.0022	0.0002	0.0022	0.0005	0.0002	0.0027	0.01	0.0012
	0.002	0.0002	0.002	0.0005	0.0002	0.0027	0.01	0.0011
	0.0038	0.0002	0.0013	0.0005	0.0002	0.0025	0.01	0.0011
	0.0029	0.0002	0.001	0.0005	0.0002	0.0035	0.01	0.001
	0.0022	0.0002	0.0011	0.0005	0.0001	0.0027	0.01	0.001
	0.0055	0.0002	0.001	0.0005	0.0002	0.0037	0.02	0.0013
	0.0029	0.0002	0.0026	0.0005	0.0002	0.0035	0.02	0.0009
	0.0021	0.0002	0.0027	0.0005	0.0002	0.0041	0.03	0.0005
	0.0037	0.0002	0.0098	0.0005	0.0002	0.0041	0.03	0.0005
	0.0036	0.0002	0.0046	0.0005	0.0002	0.0059	0.01	0.0007
	0.0006	0.0002	0.0046	0.0005	0.0002	0.0059	0.01	0.001
	0.0014	0.0002	0.0063	0.0005	0.0002	0.0075	0.02	0.0008
	0.0027	0.0002	0.0014	0.0005	0.0002	0.0031	0.01	0.0006
	0.0029	0.0002	0.002	0.0005	0.0002	0.0034	0.01	0.0009
	0.0017	0.0002	0.0035	0.0005	0.0002	0.0041	0.01	0.0009
	0.0025	0.0002	0.0037	0.0005	0.0002	0.0038	0.01	0.0009
	0.0006	0.0002	0.0033	0.0005	0.0002	0.0058	0.01	0.0005
	0.0008	0.0002	0.001	0.0005	0.0002	0.002	0.008	0.0006
		0.0002	0.001	0.0005	0.0002	0.002	0.01	0.0005
			0.0032			0.0076		
			0.0051			0.003		
			0.007			0.0031		
			0.0051			0.003		
			0.0034			0.0034		
			0.009			0.0034		
		0.0125			0.003			
		0.009			0.0034			
		0.0072			0.0018			
		0.0027			0.0011			
		0.0054			0.0018			
		0.0072			0.0009			
		0.0096			0.0053			
		0.0016			0.001			

	Effluent							
Metal	Arsenic	Cadmium	Copper	Lead	Mercury	Nickel	Zinc	Selenium
ARP Val	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CRP Val	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ND Value	0	0	0	0	0	0	0	0
Max	.0062	323	.0301	.0058	.0002	.0076	0.36	.0051
ARP	NO	NO	YES	NO	NO	NO	NO	NO
CRP	NO	NO	YES	NO	YES	NO	YES	NO
			0.0072			0.0011		
			0.0135			0.0018		
			0.0271			0.0011		
			0.0033			0.0015		
			0.0045			0.0011		
			0.0045			0.0011		
			0.0057			0.0018		
			0.0086			0.0028		
			0.0057			0.0018		
			0.0114			0.0027		
			0.0128			0.0019		
			0.0093			0.0011		
			0.0021			0.0019		
			0.0128			0.0001		
			0.0011			0.0011		
			0.0017			0.0011		
			0.0017			0.0011		
			0.0026			0.0013		
			0.0054			0.0017		
			0.0078			0.0029		
			0.0078			0.0029		
			0.0069			0.0044		
			0.0039			0.0042		
			0.0139			0.0044		
			0.0069			0.0034		
			0.0114			0.0019		
			0.0046			0.0015		
			0.0044			0.001		
			0.0114			0.0019		
			0.0031			0.0011		
			0.001			0.0012		
			0.0026			0.0012		
			0.0031			0.0011		
			0.0024			0.0014		
			0.0013			0.0011		
			0.001			0.0014		
			0.0024			0.0014		





	Effluent							
Metal	Arsenic	Cadmium	Copper	Lead	Mercury	Nickel	Zinc	Selenium
ARP Val	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CRP Val	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ND Value	0	0	0	0	0	0	0	0
Max	.0062	323	.0301	.0058	.0002	.0076	0.36	.0051
ARP	NO	NO	YES	NO	NO	NO	NO	NO
CRP	NO	NO	YES	NO	YES	NO	YES	NO

PND Draft

Mercury RP Results

RP Procedure Output			Effluent Data			
Facility Name:	Moroni City Public Owned Treatment Works		#		#	#
Permit Number:	UT0020222		1	0.0002	41	81
Outfall Number:	001		2	0.0002	42	82
Parameter	Mercury		3	0.0002	43	83
Distribution	Delta-Lognormal		4	0.0002	44	84
Data Units	mg/L		5	0.0002	45	85
Reporting Limit	0.002		6	0.0002	46	86
Significant Figures	2		7	0.0002	47	87
Confidence Interval	95		8	0.0002	48	88
			9	0.0002	49	89
Maximum Reported Effluent Conc.	.0002	mg/L	10	0.0002	50	90
Coefficient of Variation (CV)	0.11		11	0.0001	51	91
RP Multiplier	1.0		12	0.0002	52	92
Projected Maximum Effluent Conc. (MEC)	.0002	mg/L	13	0.0002	53	93
			14	0.0002	54	94
Acute Criterion	.005	mg/L	15	0.0002	55	95
Chronic Criterion	0.00002	mg/L	16	0.0002	56	96
Human Health Criterion	NA	0	17	0.0002	57	97
			18	0.0002	58	98
RP for Acute?	NO		19	0.0002	59	99
RP for Chronic?	YES		20	0.0002	60	100
RP for Human Health?	N/A		21	0.0002	61	101
			22	0.0002	62	102
Confidence Interval	99		23	0.0002	63	103
			24	0.0002	64	104
Maximum Reported Effluent Conc.	.0002		25	0.0002	65	105
Coefficient of Variation (CV)	0.11		26	0.0002	66	106
RP Multiplier	1.1		27	0.0002	67	107
Projected Maximum Effluent Conc. (MEC)	.0002	mg/L	28	0.0002	68	108
			29	0.0002	69	109
Acute Criterion	0.005	mg/L	30	0.0002	70	110
Chronic Criterion	0.0002	mg/L	31	0.0002	71	111
Human Health Criterion	NA		32	0.0002	72	112
			33	0.0002	73	113
RP for Acute?	NO		34	0.0002	74	114
RP for Chronic?	YES		35	0.0002	75	115
RP for Human Health?	N/A		36	0.0002	76	116
			37	0.0002	77	117
			38	0.0002	78	118
			39		79	119
			40		80	120

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