

**FACT SHEET AND STATEMENT OF BASIS  
MANTI CITY CORPORATION  
RENEWAL PERMIT: DISCHARGE, & REUSE  
UPDES PERMIT NUMBER: UT0026026  
MINOR MUNICIPAL**

**FACILITY CONTACTS**

**Person Name:** Kent Barton  
**Position:** City Manager  
**Phone Number:** 435.835.2401  
**Email:** [kentbarton@manticity.com](mailto:kentbarton@manticity.com)

**Person Name:** Cory Hatch  
**Position:** Sewer Supervisor  
**Phone Number:** 435.851.1011  
**Email:** [Crhatch69@hotmail.com](mailto:Crhatch69@hotmail.com)

**Permittee Name:** Manti City Corporation  
**Mailing Address:** 50 South Main, Suite 1  
Manti, Utah 84642  
**Telephone:** 435.851.1011  
**Actual Address:** 1500 North 100 East  
Manti, Utah 84642

**DESCRIPTION OF FACILITY**

The Manti City Wastewater Treatment Facility (the facility) is located at 1500 N 100 E, Manti, Sanpete County, Utah and serves the City of Manti with the outfall located at latitude 39° 17' 10" N and longitude 111° 38' 05" W. The design capacity is 0.33 MGD with maximum design capacity is 0.97 MGD, an average five-year flow of 0.29, and a population equivalent of 3,862 with 25 miles of sewer collection pipes.

The facility consists of an influent pump station, 8-inch Parshall Flume, flow meter, grinder, bar screen, and three facultative lagoon cells totaling 41.5 acres. Cell #1 is 14.1 acres, cell #2 is 13.6 acres, cell #3 is 13.7 acres with chlorination for disinfection on the effluent.

In 2011, Manti City had a Wastewater Capital Facility Plan completed and determined that a total containment lagoon would be the most cost-effective option. Manti City reconstructed the third cell in 2012 and planned to construct additional cells in the future. However, additional property is not available and the seepage rate of the third cell is less than anticipated.

The facility UPDES permit allows for discharge to the San Pitch River between October 1 and February 28 each calendar year. Currently, the facility does not have a pipeline to the San Pitch River. The facility holds the water in the lagoons during the winter months. During the summer, the water is piped to City owned property where it is reused to irrigate pasture. In the future, Manti will install a pipe to discharge into the San Pitch River.

### **SUMMARY OF CHANGES FROM PREVIOUS PERMIT**

The facility has one reuse site on City owned property, Outfall 002R. The adjacent farmland is no longer used as a reuse site, therefore, Outfall 001R has been discontinued.

Manti City completed an upgrade in 2021 to their facility's chlorine building and installed piping to the reuse site.

The total residual chlorine limit (TRC) is based on the acute TRC water quality standard at end-of-pipe, and is retained from the previous permit. This effluent limit is below the minimum quantification level (ML) of the most common and practical EPA approved TRC methods. The Division has determined the current acceptable ML to be 0.06 mg/L and the method detection limit (MDL) to be 0.02 mg/L when using the DPD colorimetric Method #4500 – CL G. Measured values greater than or equal to the ML of 0.06 mg/L will be considered violations of the permit, and values less than the ML of 0.06 mg/L will be considered to be in compliance with the permit. For purposes of calculating averages and reporting on the Discharge Monitoring Report form, the following will apply:

- 1) analytical values less than 0.02 mg/L shall be considered zero; and
- 2) analytical values less than 0.06 mg/L and equal to or greater than 0.02 mg/L will be recorded as measured.

### **DISCHARGE**

#### **DESCRIPTION OF DISCHARGE**

Manti City has been reporting monthly self-monitoring results on NetDMR. Manti City operates its wastewater treatment facility as a total reuse facility. Manti City maintains a UPDES permit in the event that a discharge from their facility is necessary.

Manti has been reporting self-monitoring results on Discharge Monitoring Reports on a monthly basis.

<b><u>Outfall</u></b>	<b><u>Description of Discharge Point</u></b>
001	The discharge is located on the southwest side of the lagoon system at latitude 39° 17' 10" N and longitude 111° 38' 05" W.
002R	<b><u>Description of Reuse Water Discharge Point</u></b> The reuse is located on the northwest of the lagoon system at latitude 39° 17' 43.43" N and longitude 111° 38' 06.40" W.

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

If a discharge were to occur, it would be pumped into an irrigation ditch, which is a Class 2B, 3C, 3D, 4 according to *Utah Administrative Code (UAC) R317-2-13*:

- 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.

PND Draft

## **SURFACE WATER DISCHARGE**

### **Basis for Effluent Limitations**

Limitations on total suspended solids (TSS), biochemical oxygen demand (BOD<sub>5</sub>), *E. coli*, pH and percent removal for BOD<sub>5</sub> and TSS are based on current Utah Secondary Treatment Standards, UAC R317-1-3.2. The facility has requested the alternative effluent limits for BOD<sub>5</sub> and TSS, per R317-1-3.2.G. Manti meets all the requirements and the alternative effluent limits will be incorporated into both outfalls for this permit. The percent removal reduction will continue from the previous permit. The reduction is based on *40 CFR 133.105 Treatment Equivalent to secondary treatment* which allows for a reduction in percent removal for waste stabilization pond facilities.

The total residual chlorine (TRC) and dissolved oxygen (DO) limitations are based on the water quality considerations of the San Pitch River (UAC R317-2) and were derived in the wasteload analysis. The wasteload analysis indicates that these limitations should be sufficiently protective of water quality and should meet State water quality standards in the receiving water.

Attached is a Wasteload Analysis for this discharge into the San Pitch River. It has been determined that this discharge will not cause a violation of water quality standards. An Antidegradation Level II review is not required since the Level I review shows that water quality impacts are minimal. The permittee is expected to be able to comply with these limitations.

The monitoring frequency for Type II reuse for this facility is the same as the surface water monitoring requirements and similar facilities within the State.

### **Total Maximum Daily Load (TMDL) Requirements**

Based on the 2018/2020 303 (d) list assessment, the receiving water, San Pitch River (San Pitch-3-1, assessment unit UT16030004-005\_01), is listed for ammonia, dissolved oxygen, *E. Coli*, pH and total dissolved solids (TDS).

A TMDL was completed for the Middle San Pitch River (HUC #16030004) on November 18th 2003 (UDWQ 2003). The TMDL identified a critical season of March 1 - September 30 where the loading capacity was exceeded and load limitations apply. As a result, new discharges with a potential to cause or contribute to the existing impairment are not allowed during the critical season and must meet the TMDL endpoint of <1,200 mg/L TDS during the non-critical season – October 1 through the end of February.

### **Parameters of Concern**

The potential parameters of concern identified for the discharge/receiving water were BOD<sub>5</sub>, total suspended solids, total dissolved solids, total ammonia, and total residual chlorine as determined in consultation with the UPDES Permit Writer.

### **Reasonable Potential Analysis**

Since January 1, 2016, DWQ has conducted reasonable potential analysis (RP) on all new and renewal applications received after that date. To complete a RP analysis, more than 10 data points per parameter are needed. The facility did not discharge out of Outfall 001 and therefore minimal metal data available. For this permit cycle, Manti City will be required to sample, at a minimum, annual metal sampling from Outfall 001 and 001R. If additional sampling is performed, it shall be reported to DWQ. Less than 10 data points may affect the RP outcomes which may require additional monitoring in the future.

<b>Table 1</b>					
<b>Outfall 001</b>					
<b>Effluent Limitations for Surface Water Discharge <sup>a, b, c</sup></b>					
<b>October 1 to February 28</b>					
<b>Parameter</b>	<b>Maximum Monthly Avg</b>	<b>Maximum Weekly Avg</b>	<b>Daily Minimum</b>	<b>Daily Maximum</b>	<b>Yearly Maximum</b>
Total Flow, mgd	--	--	--	0.97	--
BOD <sub>5</sub> , mg/L <sup>b</sup>	45	65	--	--	--
BOD <sub>5</sub> Min. % Removal	65	--	--	--	--
TSS, mg/L	45	65	--	--	--
TSS Min. % Removal	65	--	--	--	--
<i>E. coli</i> , No./100mL	126	158	--	--	--
pH, Standard Units	--	--	5.0	--	--
Dissolved Oxygen, mg/L	--	--	5.0	--	--
TDS, mg/L	1,200	--	--	--	--
TRC, mg/L	--	--	--	0.015	--
Ammonia, mg/L	--	--	--	2.9	--
Oil & Grease, mg/L	--	--	--	--	--
Total Phosphorus, lbs/year	--	--	--	--	--
Total Kjeldahl Nitrogen, mg/L	--	--	--	--	--
Orthophosphate, mg/L	--	--	--	--	--
Nitrate, mg/L	--	--	--	--	--
Nitrite, mg/L	--	--	--	--	--
Metals <sup>i, j, k</sup>	--	--	--	--	--

### Surface Water Self-Monitoring and Reporting Requirements

The permit will require reports to be submitted monthly and annually, as applicable, on Discharge Monitoring Report (DMR) and submitted using NetDMR. DMRs are due by the 28<sup>th</sup> day of the following month. Lab sheets for metals must be attached to the DMRs.

<b>Table 2</b>			
<b>Influent</b>			
<b>Self-Monitoring and Reporting Requirements<sup>a, b, e</sup></b>			
<b>Parameter</b>	<b>Frequency</b>	<b>Sample Type</b>	<b>Units</b>
BOD <sub>5</sub> <sup>b</sup>	Monthly	Composite	mg/L
TSS <sup>b</sup>	Monthly	Composite	mg/L
TDS	Monthly	Composite	mg/L
Total Phosphorus (as P) <sup>h</sup>	Monthly	Composite	mg/L
Total Kjeldahl Nitrogen (as N) <sup>h</sup>	Monthly	Composite	mg/L

<b>Table 3</b>			
<b>Outfall 001</b>			
<b>Effluent Self-Monitoring and Reporting Requirements<sup>a, b</sup></b>			
<b>Parameter</b>	<b>Frequency</b>	<b>Sample Type</b>	<b>Units</b>
Total Flow <sup>c, d, e</sup>	Continuous	Recorder	MGD
BOD <sub>5</sub>	Monthly	Composite	mg/L
TSS	Monthly	Composite	mg/L
<i>E. coli</i>	Monthly	Grab	No./100mL
pH	Monthly	Grab	SU
DO	Monthly	Grab	mg/L
TDS	Monthly	Composite	mg/L
TRC	Monthly	Grab	mg/L
Ammonia	Monthly	Grab	mg/L
Oil & Grease <sup>f, g</sup>	When Sheen Observed	Grab	mg/L
Total Phosphorus (as P) <sup>h</sup>	Monthly	Composite	mg/L
Total Kjeldahl Nitrogen (as N) <sup>h</sup>	Monthly	Composite	mg/L
Orthophosphate (as P) <sup>h</sup>	Monthly	Composite	mg/L
Nitrate, NO <sub>3</sub> <sup>h</sup>	Monthly	Composite	mg/L
Nitrite, NO <sub>2</sub> <sup>h</sup>	Monthly	Composite	mg/L
Metals <sup>i, j, k</sup>	Quarterly	Composite	mg/L

#### Table References

- a. See Definitions, *Part VIII*, for definition of terms.
- b. All parameters in this table will be reported on the monthly Discharge Monitoring Report.
- c. Flow measurements of effluent volume shall be made in such a manner that the permittee can affirmatively demonstrate that representative values are being obtained.
- d. If the rate of discharge is controlled, the rate and duration of discharge shall be reported.
- e. 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. There shall be no visible sheen or floating solids or visible foam in other than trace amounts.

- g. Oil & Grease sampled when sheen is present or visible. If no sheen is present or visible, report 9 under "NODI" in NetDMR.
- h. Monitoring only for total phosphorus (TP), orthophosphate as P (OP), total ammonia, nitrate, nitrite, and total Kjeldahl nitrogen as N (TKN) have been included to comply with Utah Secondary Treatment Standards and the Technology-based Phosphorus Effluent limit rule in *UAC R317-1-3.3*
- i. Metals samples should be analyzed using a method that meets MDL requirements. If a test method is not available the permittee must submit documentation to the Director regarding the method that will be used. The sample type (composite or grab) should be performed according to the methods requirements.
- j. Metals are being sampled in support of the work being done for the Reasonable Potential Analysis. The Metal parameters will be monitored and reported on an annual basis by the facility on Discharge Monitoring Report, but will not have a limit associated with them, if Manti decides to sample more frequently for these parameters, the additional data will be required as per Part V.E.
- k. Metals
- |                |         |          |        |
|----------------|---------|----------|--------|
| Arsenic        | Copper  | Mercury  | Silver |
| Cadmium        | Cyanide | Nickel   | Zinc   |
| Total Chromium | Lead    | Selenium |        |

### End Table References

### Reuse

#### Basis for Effluent Limitations for Reuse

The limitations for BOD, TSS, pH and *E.coli* are set in accordance with *UAC R317-3-11.5.C.5*. The permit limitations for Outfall 001D are in Tables 4 with monitoring and reporting requirements in Table 5 and 6.

<b>Table 4</b>				
<b>Outfall 002R</b>				
<b>Type II Reuse Effluent Limitations <sup>a, b</sup></b>				
<b>Parameter</b>	<b>Max Monthly Average</b>	<b>Max Weekly Median</b>	<b>Daily Minimum</b>	<b>Daily Maximum</b>
BOD <sub>5</sub>	25	35	--	--
TSS	25	35	-	--
<i>E. coli</i> , No/100mL	--	158	--	500
pH, Standard Units	--	--	6.5	9.0
Metals <sup>i, j, k</sup>	--	--	--	--

**Reuse Self-Monitoring and Reporting Requirements**

The permit will require reports to be submitted monthly and annually, as applicable, on Discharge Monitoring Report (DMR) and submitted using NetDMR. DMRs are due by the 28<sup>th</sup> day of the following month. Lab sheets for metals must be attached to the DMRs.

<b>Table 5</b>			
<b>Outfall 002R</b>			
<b>Self-Monitoring and Reporting Requirements <sup>a, b, d</sup></b>			
<b>Parameter</b>	<b>Frequency</b>	<b>Sample Type</b>	<b>Units</b>
Applied Flow <sup>c</sup>	Continuous	Recorder	MGD
Irrigated Acreage	Monthly	Estimated	mg/L
BOD <sub>5</sub>	Monthly	Composite	mg/L
TSS	Monthly	Composite	mg/L
TDS	Monthly	Composite	mg/L
<i>E. coli</i>	Monthly	Grab	No./100mL
pH	Monthly	Grab	SU
Metals <sup>i, j, k</sup>	Annually	Comp/Grab	mg/L
Total Inorganic Nitrogen	Monthly	Grab	mg/L
Cell Depth	Monthly	Measure	Feet
Free Board	Monthly	Measure	Feet

<b>Table 6</b>	
<b>Land Application per Crop Type <sup>e</sup></b>	
Crop Type	List of crops grown on each site
Crop Harvest (tons/yr)	As measured based on harvest records
Land Application Area (acres)	Land treated process water effluent was applied based on application area
Number of Days per Season	Estimated (about 180 days/growing season)

**Table References**

- a. See Definitions, *Part VIII*, for definition of terms.
- b. All parameters in this table will be reported on the monthly Discharge Monitoring Report.
- c. Flow measurements of effluent volume shall be made in such a manner that the permittee can affirmatively demonstrate that representative values are being obtained.
- d. Effluent shall only be disposed of by methods allowed by R317-3-11.5.A.
- e. Metals samples should be analyzed using a method that meets MDL requirements. If a test method is not available the permittee must submit documentation to the Director regarding the method that will be used. The sample type (composite or grab) should be performed according to the methods requirements.
- f. Metals are being sampled in support of the work being done for the Reasonable Potential Analysis. The Metal parameters will be monitored and reported on an annual basis by the facility on Discharge Monitoring Report, but will not have a limit associated with them, if Manti decides to sample more frequently for these parameters, the additional data will be required as per Part V.E.
- g. Metals
 

Arsenic	Copper	Mercury	Silver
Cadmium	Cyanide	Nickel	Zinc
Total Chromium	Lead	Selenium	
- h. Land Application Reports shall be summarized per crop type and submitted annually, no later than January 28<sup>th</sup> of the month following the completed reporting period.

**End Table References**



**Lagoon Best Management Practices:**

- 1) The permittee shall take such parameters as are necessary to maintain and operate the facility in a manner that will minimize upsets and ensure stable operating conditions.
- 2) The permittee shall visually inspect, at least weekly, the pond(s) to determine if there is adequate freeboard to minimize the likelihood of an accidental discharge occurring. If it is determined that a discharge is occurring and/or there is not adequate freeboard, the appropriate corrective measures shall be taken immediately.
- 3) The permittee shall take precautions and have erosion control measures in place that, in the event of a bypass of treatment, the discharge will not cause erosion into the Waters of the State.

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

- (1) The application of treated effluent to frozen, ice-covered, or snow-covered land is prohibited.
- (2) No person shall apply treated effluent where the slope of the site exceeds 6 percent.
- (3) The use should not result in a surface water runoff.
- (4) The use must not result in the creation of an unhealthy or nuisance condition, as determined by the local health department.
- (5) Any irrigation with treated effluent must be at least 300 feet from a potable well.
- (6) For Type I reuse, any irrigation must be at least 50 feet from any potable water well.
- (7) For Type II reuse, any irrigation must be at least 300 feet from any potable water well.
- (8) For Type II reuse, spray irrigation must be at least 100 feet from areas intended for public access. This distance may be reduced or increased by the Director.
- (9) Impoundments of treated effluent, if not sealed, must be at least 500 feet from any potable well.
- (10) Public access to effluent storage and irrigation or disposal sites shall be restricted by a stock-tight fence or other comparable means which shall be posted and controlled to exclude the public.

### **BIOSOLIDS**

The State of Utah has adopted the 40 CFR 503 federal regulations for the disposal of sewage sludge (biosolids) by reference. However, since this facility is a lagoon, there is not any regular sludge production. Therefore 40 CFR 503 does not apply at this time. In the future, if the sludge needs to be removed from the lagoons and is disposed in some way, the Division of Water Quality must be contacted prior to the removal of the sludge to ensure that all applicable state and federal regulations are met

### **STORM WATER**

Separate storm water permits may be required based on the types of activities occurring on site.

Permit coverage under the Multi Sector General Permit (MSGP) for Storm Water Discharges from Industrial Activities is required based on the Standard Industrial Classification (SIC) code for the facility and the types of industrial activities occurring. If the facility is not already covered, it has 30 days from when this permit is issued to submit the appropriate Notice of Intent (NOI) for the MSGP or exclusion documentation. Previously storm water discharge requirements and coverage were combined in this individual permit. These have been separated to provide consistency among permittees, electronic reporting for storm water discharge monitoring reports, and increase flexibility to changing site conditions.

Permit coverage under the Construction General Storm Water Permit (CGP) is required for any construction at the facility which disturb an acre or more, 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.

Information on storm water permit requirements can be found at <http://stormwater.utah.gov>.

### **PRETREATMENT REQUIREMENTS**

The pretreatment program will be overseen by the Division of Water Quality (DWQ). This is due to the permittee having a flow of less than one (1) MGD. Although the DWQ will oversee the pretreatment program for the permittee, any wastewater discharges to the POTW by industrial users could be 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.

To assist DWQ the permittee must provide information updating the industrial waste survey (IWS) as required in Part II of the permit. Information was provided in the application by the permit regarding the IWS. 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 UPDES Permit. The IWS also assists DWQ regarding the needs of the permittee regarding pretreatment assistance.

Based on the review of the permit data, the facility has not discharged in the last three years. Influent data for flow, BOD<sub>5</sub>, and TSS should be collected to ensure loading criteria can be evaluated for future capacity needs of the wastewater treatment system. The following link was used to review the permit data: <https://echo.epa.gov/effluent-charts#UT0026026>.

It is required that the permittee submit for review any local limits that are developed to DWQ 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 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.

The permittee is a minor municipal facility that will be discharging an infrequent amount of effluent, in which toxicity is neither an existing concern, nor likely to be present. Also, the receiving irrigation ditch is regularly dry; therefore there is not any available data to conclude that the irrigation ditch is impaired. Based on these considerations, and the absence of receiving stream water quality monitoring data, there is no reasonable potential for toxicity in the permittee's discharge (per State of Utah Permitting and Enforcement Guidance Document for WET Control). As such, there will be no numerical WET limitations or WET monitoring requirements in this permit. However, 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 and Reviewed by  
Sarah Ward, Discharge Permit Writer/Reuse  
Daniel Griffin, Biosolids  
Jennifer Robinson, Pretreatment  
Lonnie Shull, Biomonitoring  
Carl Adams, Storm Water  
Mike Allred, TMDL/Watershed  
Suzan Tahir, 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 Division of Water Quality public notice website.

During the public comment period provided under R317-8-6.5, any interested person may submit written comments on the draft permit and may request a public hearing, if no hearing has already been scheduled. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. All comments will be considered in making the final decision and shall be answered as provided in R317-8-6.12.

DWQ-2021-023742

This Page Intentionally Left Blank

**ATTACHMENT 1**

*Industrial Waste Survey*

PVNDraft

This Page Intentionally Left Blank

# 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  
PO 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.

---

Inspector

---

Waste Treatment Facility

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

Jennifer Robinson  
Division of Water Quality  
PO 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							

PV Draft

This Page Intentionally Left Blank

**ATTACHMENT 2**

*Wasteload Analysis*

PND Draft

This Page Intentionally Left Blank

**ATTACHMENT 3**

*Reasonable Potential Analysis*



PND Draft

This Page Intentionally Left Blank

## REASONABLE POTENTIAL ANALYSIS

The Division of 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 from 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.

Since January 1, 2016, DWQ has conducted RP on all new and renewal applications received after that date. To complete a RP, more than 10 data points per parameter are needed. The facility did not discharge out of Outfall 001 and therefore minimal metals data were available. For this permit cycle, Manti City will be required to sample, at a minimum, annual metal sampling from Outfall 001 and 001R. If additional sampling is performed, it shall be reported to DWQ. Less than 10 data points may affect the RP outcomes which may require additional monitoring in the future.

<b>RP Procedure Output</b>	
<b>Facility Name:</b>	<b>Manti</b>
<b>Permit Number:</b>	<b>UT0026026</b>
<b>Outfall Number:</b>	<b>Outfall 001</b>
<b>Parameter</b>	<b>Selenium</b>
<b>Distribution</b>	<b>Lognormal</b>
<b>Data Units</b>	<b>mg/L</b>
<b>Reporting Limit</b>	<b>0.0008</b>
<b>Significant Figures</b>	<b>4</b>
<b>Confidence Interval</b>	<b>99</b>
<b>Maximum Reported Effluent Conc.</b>	<b>0.02 mg/L</b>
<b>Coefficient of Variation (CV)</b>	<b>2.982</b>
<b>RP Multiplier</b>	<b>69.76</b>
<b>Projected Maximum Effluent Conc. (MEC)</b>	<b>1.395 mg/L</b>
<b>Acute Criterion</b>	<b>0.0057 mg/L</b>
<b>Chronic Criterion</b>	<b>0.023 mg/L</b>
<b>Human Health Criterion</b>	<b>0</b>
<b>RP for Acute?</b>	<b>YES</b>
<b>RP for Chronic?</b>	<b>YES</b>
<b>RP for Human Health?</b>	<b>N/A</b>
<b>Effluent Data</b>	
<b>#</b>	
<b>1</b>	<b>0.02</b>
<b>2</b>	<b>0.0008</b>
<b>3</b>	<b>0.0012</b>
<b>4</b>	<b>0.001</b>

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