FACT SHEET STATEMENT OF BASIS
MORGAN CITY CORPORATION
WASTEWATER TREATMENT FACILITY
UPDES PERMIT No. UT0020893

RENEWAL PERMIT

MINOR MUNICIPAL

FACILITY CONTACTS

Name:	Jamie Grandpre	Name:	The Honorable Jim Egbert
Position:	Water & Wastewater Senior Operator	Position:	Mayor of Morgan City
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DESCRIPTION OF FACILITY AND BACKGROUND INFORMATION

The Morgan City Wastewater Treatment Facility is located approximately 1.5 miles northwest of Morgan, Utah in Morgan County. According to the most recent census data, the population of Morgan is approximately 2,635, with approximately 850 sewer connections. The facility has been upgraded and will continue upgrades during the life of this permit. The design capacity is 0.45 million gallons per day (MGD).

The facility comprises an influent pump station, influent 8-inch Parshall Flume, influent flow meter, grinder, bar screen, four aerated lagoon cells and winter storage cell, (cell #1 has six aerators, cell #2 has three aerators, cell #3 has two aerators and cell #4 has one aerator) chlorinator, effluent 90° "V" notch weir, and effluent flow meter. Chlorination takes place in a 6-foot diameter concrete pipe following the last stabilization cell. The pipe is 70 feet long and has a detention time of approximately one hour at the current average daily flow rate.

DESCRIPTION OF DISCHARGE

Outfall Number	Location of Discharge Point:
001	A 12-inch outfall pipe, located at 41°03'07" latitude and 111°41'57" longitude on the southwest side of the lagoon system.

RECEIVING WATERS AND STREAM CLASSIFICATIONS

The final discharge is into the Weber River (classified 1C, 2B, 3A, and 4).

Class 1C - protected for domestic purposes with prior treatment process as required by the Utah Division of Drinking Water.

Class 2 B - protected for secondary contact recreation such as boating, wading, or similar uses.

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.

The segment of the Weber River that Morgan discharges to is listed as impaired on the303(d) list due to a Bio-assessment conducted in 2008 and that it's been designated a low priority for TMDL development.

BASIS FOR EFFLUENT LIMITATIONS

Limitations on total suspended solids (TSS), biochemical oxygen demand (BOD_5), E. coli and pH are based on current Utah Secondary Treatment Standards, *(Utah Administrative Code [UAC] R317-1-3.2)*. The total residual chlorine (TRC) and dissolved oxygen (D.O.) limitations are based on water quality considerations of the Weber River *(UAC R317-2)* and were derived in the wasteload analysis (see Addendum). The TRC limit derived in the wasteload incorporates additional modeling data (see Addendum). The wasteload analysis indicates that these limitations should be sufficiently protective of water quality and should meet State water quality standards in receiving waters.

Parameter	Effluent Limitations a/			
	Maximum Monthly Avg	Maximum Weekly Avg	Daily Minimum	Daily Maximum
Flow, MGD	NA	NA	NA	0.450
BOD_5, mg/L	45	65	NA	NA
BOD_5 Min. % Removal	65	NA	NA	NA
TSS, mg/L	45	65	NA	NA
TSS Min. % Removal	65	NA	NA	NA
E-Coli, No./100mL	126	157	NA	NA
TRC, mg/L				
Winter(Jan-March)	NA	NA	NA	0.34
Spring (April-June)	NA	NA	NA	0.57
Summer (July-Sept.)	NA	NA	NA	4.7
Fall (Oct.-Dec.)	NA	NA	NA	0.15
DO, mg/L	NA	NA	5.0	NA
pH, Standard Units	NA	NA	6.5	9.0
Total Phosphorus, mg/L b/	NA	NA	NA	NA
Total Kjeldahl Nitrogen, mg/L b/	NA	NA	NA	NA
Orthophosphate, mg/L	NA	NA	NA	NA
Ammonia, mg/L	NA	NA	NA	NA
Nitrate-Nitrite, mg/L	NA	NA	NA	NA

a/ See Definitions, *Part VI*, 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.

NA – Not Applicable

SELF-MONITORING AND REPORTING REQUIREMENTS

The following effluent self-monitoring requirements are based on the *Utah Monitoring, Recording and Reporting Frequency Guideline as effective December 1, 1991*. Reports shall be made on Discharge Monitoring Report (DMR) forms (EPA Form 3320-1) and are due 28 days after the end of the monitoring month.

Self-Monitoring and Reporting Requirements a/			
Parameter	Frequency	Sample Type	Units
Total Flow b/ c/	Continuous	Recorder	MGD
BOD_5, Influent d/	Monthly	Grab	mg/L
Effluent	Monthly	Grab	mg/L
TSS, Influent d/	Monthly	Grab	mg/L
Effluent	Monthly	Grab	mg/L
E. coli	Monthly	Grab	No./100mL
TRC	Daily	Grab	mg/L
DO	Monthly	Grab	mg/L
PH	Monthly	Grab	SU
Total Phosphorus, Influent d/	Monthly	Composite	mg/L
Effluent	Monthly	Composite	mg/L
Total Kjeldahl Nitrogen, Influent d/	Monthly	Composite	mg/L
Effluent	Monthly	Composite	mg/L
Orthophosphate	Monthly	Composite	mg/L
Ammonia	Monthly	Composite	mg/L
Nitrate-Nitrite	Monthly	Composite	mg/L

a/ See Definitions, *Part VI*, 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.

SUBSTANTIVE PERMIT CHANGES

In September 2014, the Utah Water Quality Board adopted a new rule for control of phosphorus discharges into waters of the state that became effective January 1, 2015. The Technology-Based Phosphorus Effluent Limits or TBPEL Rule, R317-1-3.3 requires that discharges having reasonable potential to discharge phosphorus implement new water quality monitoring requirements by July 1, 2015 and requires that these dischargers meet specified effluent limits by January 1, 2020.The changes are reflected in the new permit.

STORM WATER REQUIREMENTS

Wastewater treatment facilities, including lagoon systems, are required to comply with storm water permit requirements if they meet one or both of the following criteria:

1. The facility has an approved pretreatment program as described in *Title 40, Code of Federal Regulations (CFR) Part 403.*

2. The facility has a design flow of 1.0 MGD or greater.

The Morgan City lagoon system does not meet either of these criteria; therefore no storm water requirements are included in the permit. A storm water re-opener provision is included in the permit should storm water requirements be needed in the future.

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 recommended that the permittee perform an annual evaluation of the need to revise or develop technically based local limits for pollutants of concern, to implement the general and specific prohibitions *40 CFR, Part 403.5(a)* and *Part 403.5(b).* This evaluation may indicate

that present local limits are sufficiently protective, need to be revised or should be developed. The permittee must submit for review any local limits that are developed to the Division of Water Quality for review.

BIOMONITORING REQUIREMENTS

As part of a nationwide effort to control toxic discharges, biomonitoring requirements are being included in permits for facilities where effluent toxicity is an existing or potential concern. In Utah, this is done in accordance with the *State of Utah Permitting and Enforcement Guidance Document for Whole Effluent Toxicity (WET) 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.*

Morgan City is a minor municipal facility, discharges less than one (1) MGD, and has no industries contributing to the wastewater system. The dilution ratio of the stream to discharge is approximately 66 to 1. Based on these considerations, there is no reasonable potential for toxicity in Morgan City's discharge (per *State of Utah Permitting and Enforcement Guidance Document for Whole Effluent Toxicity 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. This provision allows for modification of the permit, should additional information indicate the presence of toxicity in the discharge.

SEWAGE SLUDGE (BIOSOLIDS) DISPOSAL REQUIREMENTS

Because the permitted facility is a lagoon system, there is no regular sludge production. Therefore, the requirements of *40 CFR Part 503* do not apply unless or until sludge is removed from the bottom of the lagoon and used or disposed in some way.

PERMIT DURATION

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

Drafted by Lonnie Shull
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Utah Division of Water Quality
July 17, 2015