STATEMENT OF BASIS/TECHNICAL SUMMARY AND
EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

DESCRIPTION OF APPLICATION

Applicant:	Gregory Power Partners LLC; Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0005219000 (EPA I.D. No. TX0137502)
Regulated activity:	Industrial wastewater permit
Type of application:	Renewal
Request:	Renewal without changes
Authority:	Federal Clean Water Act (CWA) §402; Texas Water Code (TWC) §26.027; 30 Texas Administrative Code (TAC) Chapter 305, Subchapters C-F, and Chapters 307 and 319; commission policies; and Environmental Protection Agency (EPA) guidelines

EXECUTIVE DIRECTOR RECOMMENDATION

The executive director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The draft permit will expire at midnight, five years from the date of permit issuance according to the requirements of 30 TAC §305.127(1)(C)(i).

REASON FOR PROJECT PROPOSED

The applicant applied to the Texas Commission on Environmental Quality (TCEQ) for a renewal of its existing permit.

PROJECT DESCRIPTION AND LOCATION

The applicant currently operates Gregory Power Plant, a combined-cycle, natural gas-fired electricity generation plant.

The facility operations generate cooling tower blowdown, low volume waste sources, and domestic wastewater. Cooling tower blowdown and low volume waste sources are collected in the Master Sump before combining with treated domestic wastewater and discharging via Outfall 001. Cooling tower blowdown receives no treatment prior to discharge to the Master Sump. Low volume waste sources consist of gas turbine wash water (no chemicals), demineralizer regenerant waste, and general wash down water. Gas turbine wash water receives no treatment prior to discharge to the Master Sump. Demineralizer regenerant waste is neutralized prior to discharge to the Master Sump. General wash down water will be routed through an oil/water separator prior to discharge to the Master Sump. Domestic wastewater will be treated by an on-site biological treatment package plant prior to discharge. However, the domestic treatment train has not been constructed and in the interim domestic wastewater is pumped and hauled off site for treatment. Chemical metal cleaning wastes are collected and hauled off-site for disposal.

The facility is located at 4633 Highway 361, near the City of Gregory in San Patricio County, Texas.

Discharge Route and Designated Uses

The effluent is discharged via pipe from the Master Sump to an open ditch then directly to Corpus Christi Bay in Segment No. 2481 of the Bays and Estuaries. The open ditch is not assessed as a water of the state. The designated uses for Segment No. 2481 are primary contact recreation, exceptional aquatic life use, and oyster waters. The effluent limits in the draft permit will maintain and protect the

existing instream uses. All determinations are preliminary and subject to additional review and revisions.

Endangered Species Review
A watershed of high priority has been identified in Segment No. 2481 in portions of San Patricio County. The piping plover, *Charadrius melodus* Ord, a threatened aquatic dependent species, is found in the watershed of Segment No. 2481; however, the facility is not a petroleum facility and its discharge is not expected to have an effect on the piping plover. This determination is based on the United States Fish and Wildlife Service's (USFWS) biological opinion on the State of Texas authorization of the TPDES (September 14, 1998, October 21, 1998 update). To make this determination for TPDES permits, TCEQ and EPA only considered aquatic or aquatic dependent species occurring in watersheds of critical concern or high priority as listed in Appendix A of the USFWS biological opinion. The determination is subject to reevaluation due to subsequent updates or amendments to the biological opinion. The permit does not require EPA review with respect to the presence of endangered or threatened species.

Impaired Water Bodies
Corpus Christi Bay (Recreational Beaches; 2481CB) is currently listed on the State's inventory of impaired and threatened waters (the 2016 Clean Water Act Section 303(d) list). The 2481CB listing is specifically for elevated bacteria levels at Cole Park (AU 2481CB_03), Ropes Park (AU 2481CB_04), and Poenisch Park (AU 2481CB_06). The draft permit authorizes the discharge of treated domestic wastewater; therefore, it includes Enterococci limits of 35 colony forming units (CFU) or most probable number (MPN)/100 mL (daily average) and 104 CFU or MPN/100 mL (daily maximum), which are equivalent to the bacteria criteria for the segment. These limits have been applied at internal Outfall 301, which is the sampling and compliance point for the treated domestic wastewater. This permit action is a renewal of an existing authorization and will not contribute to the recreational beaches impairment in Corpus Christi Bay.

Completed Total Maximum Daily Loads (TMDLs)
There are no completed TMDLs for Segment No. 2481.

Dissolved Oxygen
The discharge will be comprised primarily of the cooling tower blowdown and low volume waste effluent components, which are not expected to contain significant levels of oxygen-demanding constituents. Due to the low levels of oxygen-demanding constituents expected in the discharge via Outfall 001, no significant dissolved oxygen depletion is anticipated in the receiving waters as a result of this discharge.

SUMMARY OF EFFLUENT DATA

The following is a quantitative description of the discharge described in the monthly effluent report data for the period **May 2019** through **September 2020.** The permittee reported a discharge only six times during the review period. The "Avg of Daily Avg" values presented in the following table are the average of all daily average values for the reporting period for each pollutant. The "Max of Daily Max" values presented in the following table are the individual maximum values for the reporting period for each pollutant. Flows are expressed in million gallons per day (MGD). All pH values are expressed in standard units (SU). Bacteria values are expressed in colony forming units (CFU) or most probable number (MPN) per 100 milliliters (mL).

Flow

Outfall	Frequency	Avg of Daily Avg, MGD	Max of Daily Max, MGD
001	Continuous	0.259	1.052
101	Continuous	0.269	0.947
201	Continuous	0.030	0.253
301	Not active	No discharge	No discharge

Temperature

Outfall	Temperature	Daily Average, °F	Daily Maximum, °F
001		85.13	94.0

Effluent Characteristics

Outfall	Pollutant	Avg of Daily Avg		Max of Daily Max	
		lbs/day	mg/L	lbs/day	mg/L
101	Free available chlorine	0.02	0.10	0.21	0.50
	Total chromium	0.02	0.01	0.21	0.02
	Total zinc	0.49	0.30	1.72	2.2
	pH range, in SU	6.90 (min)		9.10	
201	Oil and Grease	1.09	4.39	9.0	7.0
	Total Suspended Solids	1.50	6.70	12.60	30.0
	pH range, in SU	7.00 (min)		8.50	

Only three effluent limit violations were documented in the monthly effluent reports: a pH of 9.10 SU in May 2019 at Outfall 101; and total zinc concentrations of 1.4 mg/L (daily average) and 2.2 mg/L (daily maximum) in April 2020 at Outfall 101. No changes were made to the draft permit because these are isolated violations and do not represent an on-going compliance issue.

DRAFT PERMIT CONDITIONS

The draft permit authorizes the discharge of previously monitored effluent (cooling tower blowdown from Outfall 101, low-volume waste sources from Outfall 201, and treated domestic wastewater from Outfall 301) at a daily average flow not to exceed 918,000 gallons per day via Outfall 001.

Effluent limitations are established in the draft permit as follows:

Outfall	Parameter	Daily Average		Daily Maximum	
		lbs/day	mg/L	lbs/day	mg/L
001	Flow	0.918 MGD		2.11 MGD	
	Temperature	Report, °F		Report, °F	
	Free Available Chlorine (FAC)	0.116	0.2	0.289	0.5
	Total Copper	N/A	Report	N/A	Report
	Total Zinc	N/A	Report	N/A	Report
101	Flow	0.832 MGD		0.999 MGD	
	Total Chromium	1.38	0.2	1.38	0.2
	Total Zinc	6.94	1.0	6.94	1.0
	pH range, in SU	6.5–9.0 SU			
201	Flow	0.085 MGD		1.105 MGD	
	Total Suspended Solids (TSS)	21.2	30	70.9	100
	Oil and Grease	10.6	15	14.1	20
	pH range, in SU	6.5–9.0 SU			

Outfall	Parameter	Daily Average		Daily Maximum	
		lbs/day	mg/L	lbs/day	mg/L
301	Flow	0.001 MGD		0.002 MGD	
	Biochemical Oxygen Demand, 5-day (BOD_5)	0.16	20	0.37	45
	TSS	0.16	20	0.37	45
	Chlorine Residual	N/A	1.0, min	N/A	N/A
	Enterococci	35 CFU or MPN/100 mL		104 CFU or MPN/100 mL	
	pH range, in SU	6.5–9.0 SU			

OUTFALL LOCATIONS

Outfall	Latitude	Longitude
001	27.878369 N	97.257809 W

Technology-Based Effluent Limitations (TBELs)
Regulations in Title 40 of the Code of Federal Regulations (40 CFR) require that technology-based limitations be placed in wastewater discharge permits based on effluent limitations guidelines, where applicable, or on best professional judgment (BPJ) in the absence of guidelines. Technology-based effluent limitations from 40 CFR Part 423 apply to the discharge of cooling tower blowdown and low volume waste sources from this facility. Construction of the Gregory Power Plant began in 1999; therefore, the discharge is subject to new source performance standards at 40 CFR § 423.15(a) (1982 NSPS). TBELs from 30 TAC Chapter 309 apply to the discharge of domestic wastewater. Development of technology-based effluent limitations is presented in Appendix A.

Water Quality-Based Effluent Limitations
Calculations of water quality-based effluent limitations for the protection of aquatic life and human health are presented in Appendix B. Aquatic life criteria established in Table 1 and human health criteria established in Table 2 of 30 TAC Chapter 307 are incorporated into the calculations, as are recommendations in the Water Quality Assessment Team's memorandum dated October 26, 2020. TCEQ practice for determining significant potential is to compare the reported analytical data from the facility against percentages of the calculated daily average water quality-based effluent limitation. Permit limitations are required when analytical data reported in the application exceeds 85 percent of the calculated daily average water quality-based effluent limitation. Monitoring and reporting is required when analytical data reported in the application exceeds 70 percent of the calculated daily average water quality-based effluent limitation.

Data reported in the application was screened against the calculated water quality-based effluent limitations. Pollutant analysis data for Outfall 001 indicated concentrations of total copper, total zinc, and available cyanide above the screening value for numeric limitations.

Pollutant	**Average concentration, µg/L**	**85% of Daily Average, µg/L**
Total Copper	20.5	3.11
Cyanide, available	10.25	2.23 (free cyanide)
Total Zinc	225	62.7

The pollutant analysis reported by the permittee in the application included available cyanide, however, the water quality criterion is for free cyanide, which is a subset of available cyanide. Since analytical results for available cyanide include free cyanide and metal-cyanide complexes, a requirement to retest for free cyanide only has been added to the draft permit in Other Requirement No. 10.

Pollutant data for total copper and total zinc submitted with the application exceed the 85% value requiring permit limits for the protection of aquatic life. The mixing zone for this discharge, however, overlaps with the mixing zones from two other facilities in close proximity—Corpus Christi Alumina (WQ0004646000) and Nashtec LLC (WQ0005218000). The discharges from the three facilities enter the same man-made ditch prior to entering Corpus Christi Bay. The only other contribution to the ditch is stormwater. Due to the overlapping mixing zones, further analysis was conducted. Pollutant analysis data was available for Nashtec LLC (WQ0005218000) but no pollutant data within the past five years was available for Corpus Christi Alumina (WQ0004646000). Gregory Power Partners sampled the combined effluent in the man-made ditch prior to entering Corpus Christi Bay. The concentrations of total copper and total zinc in the combined sample did not exceed the 70% value for monitoring and reporting requirements. To confirm, the pollutant concentrations for Gregory Power Partners and Nashtec LLC, the only two facilities for which discharge-specific data were available, were weighted by flow and combined. The combined concentrations of total copper and total zinc from the two dischargers were below the 70% value requiring monitoring and reporting. Therefore, permit limits for total copper and total zinc are not included in the draft permit at this time. However, self-expiring reporting requirements for total copper and total zinc at Outfall 001 have been included in the draft permit for Gregory Power Partners to establish regular monitoring and provide a larger data set of the total copper and total zinc concentrations. The permittee shall sample the daily maximum total copper and total zinc concentrations once per month.

Pollutant	WQ0005219000 only (µg/L)	WQ0005219000 and WQ0005218000 (µg/L)	Combined sample from ditch (µg/L)	70% of Daily Average (µg/L)	85% of Daily Average (µg/L)
Total copper	20.5	15.85	3.425	16.82	20.42
Total zinc	225	171.7	17.5	172	209

Total Dissolved Solids (TDS), Chloride, and Sulfate Screening
Segment No. 2481, which receives the discharge from this facility, does not have criteria established for TDS, chloride, or sulfate in 30 TAC Chapter 307; therefore, no screening was performed for TDS, chloride, or sulfate in the effluent.

pH Screening
Screening was performed for the existing permit to ensure that the technology-based pH limits of 6.0 – 9.0 SU would not cause a violation of the pH criteria in Corpus Christi Bay (Segment No. 2481) of 6.5-9.0 SU (see Appendix C). The modeling predicted that effluent limits of 6.0 – 9.0 SU would not be adequate to ensure that the discharge will not violate the pH criteria in Corpus Christi Bay and the existing permit therefore includes limits on pH of 6.5 – 9.0 SU at internal Outfalls 101, 201, and 301, which will commingle their effluents prior to discharge into Corpus Christi Bay. Limits on pH were not included at external Outfall 001 because the effluent commingles with other discharges in the East Ditch, which is not considered to be water in the state, prior to discharging to Corpus Christi Bay. Controlling pH at the three internal outfalls is the appropriate approach. The existing permit limitations for pH are continued in the draft permit.

Dissolved Oxygen Modeling
Although domestic wastewater is proposed to be authorized to be discharged, it is expected to be about 0.1% of the total discharge volume. The primary waste stream will be cooling tower blowdown (90.6%), followed by low volume waste sources (9.3%), neither of which is expected to contain significant levels of oxygen-demanding substances. Due to the low level of oxygen-demanding substances expected in the wastewater discharged via Outfall 001, no significant depletion of dissolved oxygen is anticipated to occur in the receiving water as a result of this discharge.

Temperature
Cooling tower blowdown is likely to have elevated temperatures, and it constitutes over 90% of the total volume of wastewater proposed to be discharged via Outfall 001. Monitoring and reporting requirements for daily average and daily maximum temperature have been continued at Outfall 001. The facility may monitor temperature at any location between the point at which effluent exits the Master Sump and the point of discharge into Corpus Christi Bay.

Whole Effluent Toxicity Testing (Biomonitoring)
Biomonitoring requirements are not included in the draft permit.

316(b) Cooling Water Intake Structures
The facility obtains water from San Patricio Municipal Water District, a public water system (PWS No. 2050011), for cooling purposes. The use of water obtained from a public water system for cooling purposes does not constitute the use of a cooling water intake structure; therefore, the facility is not subject to Section 316(b) of the CWA or 40 CFR Part 125, Subpart J.

SUMMARY OF CHANGES FROM APPLICATION

None.

SUMMARY OF CHANGES FROM EXISTING PERMIT

The following additional changes have been made to the draft permit.

1. The discharge route description has been revised to include "via pipe from the Master Sump to an open ditch then...". The open ditch is not assessed as a water of the state and the discharge is still considered as directly to Corpus Christi Bay. This revision is for clarity purposes and does not represent a change to the discharge route.
2. Flow at Outfall 001 shall be monitored via meter instead of calculated, per the permittee's request.
3. Monitoring and reporting requirements for total copper and total zinc at Outfall 001 have been added to the draft permit.
4. Pages 3-13 were updated (January 2016 version).
5. Limitations for FAC have been moved from internal Outfall 101 to the external Outfall 001, per the permittee's request. Effluent from the internal outfalls commingles at the sump and once a threshold volume is reached, discharges through Outfall 001. Monitoring FAC at Outfall 001 is a more accurate representation of the amount of FAC entering the receiving stream. FAC is calculated based on the flow authorized at Outfall 101. Applying the FAC limitations at Outfall 001 does not constitute a substantial change or relaxation to the permit.
6. Mass limitations for FAC have been recalculated. The existing limitations in lbs/day were not calculated using the equation provided in the existing permit. The daily average and daily

maximum limits have been revised accordingly. A compliance period is not included for FAC because it is a technology-based effluent limitation.

7. The Other Requirements section (beginning on page 14) was rearranged to assist with compliance monitoring.
8. Other Requirements No. 6 and 8 in the existing permit (Nos. 6 and 7 in the draft permit) have been revised for accuracy. The radius of the mixing zone has been updated to 200 feet in Other Requirement No. 6. The critical effluent percentages used for a combined analysis approach have been added to Other Requirement No. 8.
9. Other Requirement No. 10 in the existing permit has been removed. Industrial facilities are not to subject to the requirements of 30 TAC Chapter 217.
10. Other Requirement No. 9 was added to the draft permit to address cooling water intake structure requirements under CWA §316(b). Although CWA §316(b) does not currently apply to this facility, the applicant would be required to notify the TCEQ if there is a change in how the facility obtains cooling water.
11. Other Requirement No. 10 has been added to the draft permit. The permittee shall retest for free cyanide for a minimum of four samples.

BASIS FOR DRAFT PERMIT

The following items were considered in developing the draft permit:

1. Application received on October 8, 2019, and additional information received on November 12, 2019 and October 12, 2020.
2. Existing permits: TPDES Permit No. WQ0005219000 issued on August 2, 2017.
3. TCEQ Rules.
4. *Texas Surface Water Quality Standards* – 30 TAC §§307.1-307.10, effective March 1, 2018, as approved by EPA Region 6.
5. *Texas Surface Water Quality Standards* – 30 TAC §§307.1-307.10, effective March 6, 2014, as approved by EPA Region 6, for portions of the 2018 standards not approved by EPA Region 6.
6. *Texas Surface Water Quality Standards* – 30 TAC §§307.1-307.10, effective July 22, 2010, as approved by EPA Region 6, for portions of the 2014 standards not approved by EPA Region 6.
7. *Texas Surface Water Quality Standards* – 30 TAC §§307.1-307.10, effective August 17, 2000, and Appendix E, effective February 27, 2002, for portions of the 2010 standards not approved by EPA Region 6.
8. *Procedures to Implement the Texas Surface Water Quality Standards* (IPs), Texas Commission on Environmental Quality, June 2010, as approved by EPA Region 6.
9. *Procedures to Implement the Texas Surface Water Quality Standards*, Texas Commission on Environmental Quality, January 2003, for portions of the 2010 IPs not approved by EPA Region 6.
10. Memos from the Standards Implementation Team and Water Quality Assessment Team of the Water Quality Assessment Section of the TCEQ.
11. *Guidance Document for Establishing Monitoring Frequencies for Domestic and Industrial Wastewater Discharge Permits*, TCEQ Document No. 98-001.000-OWR-WQ, May 1998.
12. EPA Effluent Guidelines: 40 CFR Part 423 (NSPS). A new source determination was performed and the discharge of cooling tower blowdown and low volume waste sources is a new source as defined at 40 CFR §122.2.
13. Consistency with the Coastal Management Plan: The executive director has reviewed this action for consistency with the goals and policies of the Texas Coastal Management Program (CMP) in

accordance with the regulations of the General Land Office and has determined that the action is consistent with the applicable CMP goals and policies.

14. Letter dated May 28, 2014, from L'Oreal W. Stepney, P.E., Deputy Director, Office of Water, TCEQ, to Bill Honker, Director, Water Quality Protection Division, EPA (TCEQ proposed development strategy for pH evaluation procedures).
15. Letter dated June 2, 2014, from William K. Honker, P.E., Director, Water Quality Protection Division, EPA, to L'Oreal W. Stepney, P.E., Deputy Director, Office of Water, TCEQ (Approval of TCEQ proposed development strategy for pH evaluation procedures).
16. Letter dated April 29, 2014, from L'Oreal W. Stepney, P.E., Deputy Director, Office of Water, TCEQ, to Bill Honker, Director, Water Quality Protection Division, EPA (TCEQ proposed development strategy for thermal evaluation procedures)
17. Letter dated May 12, 2014, from William K. Honker, P.E., Director, Water Quality Protection Division, EPA, to L'Oreal W. Stepney, P.E., Deputy Director, Office of Water, TCEQ (Approval of TCEQ proposed development strategy for thermal evaluation procedures).

PROCEDURES FOR FINAL DECISION

When an application is declared administratively complete, the chief clerk sends a letter to the applicant advising the applicant to publish the Notice of Receipt of Application and Intent to Obtain Permit in the newspaper. In addition, the chief clerk instructs the applicant to place a copy of the application in a public place for reviewing and copying in the county where the facility is or will be located. This application will be in a public place throughout the comment period. The chief clerk also mails this notice to any interested persons and, if required, to landowners identified in the permit application. This notice informs the public about the application and provides that an interested person may file comments on the application or request a contested case hearing or a public meeting.

Once a draft permit is completed, it is sent to the chief clerk, along with the executive director's preliminary decision contained in the technical summary or fact sheet. At that time, the Notice of Application and Preliminary Decision will be mailed to the same people and published in the same newspaper as the prior notice. This notice sets a deadline for making public comments. The applicant must place a copy of the executive director's preliminary decision and draft permit in the public place with the application.

Any interested person may request a public meeting on the application until the deadline for filing public comments. A public meeting is intended for the taking of public comment and is not a contested case hearing.

After the public comment deadline, the executive director prepares a response to all significant public comments on the application or the draft permit raised during the public comment period. The chief clerk then mails the executive director's response to comments and final decision to people who have filed comments, requested a contested case hearing, or requested to be on the mailing list. This notice provides that if a person is not satisfied with the executive director's response and decision, they can request a contested case hearing or file a request to reconsider the executive director's decision within 30 days after the notice is mailed.

The executive director will issue the permit unless a written hearing request or request for reconsideration is filed within 30 days after the executive director's response to comments and final decision is mailed. If a hearing request or request for reconsideration is filed, the executive director will not issue the permit and will forward the application and request to the TCEQ commissioners for their consideration at a scheduled commission meeting. If a contested case hearing is held, it will be a legal proceeding similar to a civil trial in state district court.

If the executive director calls a public meeting or the commission grants a contested case hearing as described above, the commission will give notice of the date, time, and place of the meeting or hearing. If a hearing request or request for reconsideration is made, the commission will consider all public comments in making its decision and shall either adopt the executive director's response to public comments or prepare its own response.

For additional information about this application, contact Sarah A. Johnson at (512) 239-4649.

Sarah A. Johnson

Sarah A. Johnson

April 11, 2020; Revised May 6, May 12, and October 28, 2020
Date

Appendix A
Calculated Technology-Based Effluent Limits

New Source Performance Standards

Construction of the Gregory Power Plant began in 1999; therefore, the discharge is subject to new source performance standards at 40 CFR §423.15(a) (1982 NSPS).

Internal Outfall 101

The draft permit authorizes the discharge of cooling tower blowdown via internal Outfall 101. NSPS for cooling tower blowdown are found at 40 CFR §423.15(a)(10)(i) as follows:

Parameter	Daily Average (mg/L)	Daily Maximum (mg/L)
Free Available Chlorine (FAC)	0.2	0.5
The 126 priority pollutants (40 CFR Part 423, Appendix A) contained in chemicals added for cooling tower maintenance, except:	No detectable amount	No detectable amount
Total Chromium	0.2	0.2
Total Zinc	1.0	1.0

NSPS found at 40 CFR §423.15(a)(10)(ii) specify that FAC may not be discharged from any unit for more than two hours in any one day and that not more than one unit in any plant may discharge FAC at any one time unless the facility can demonstrate that the units in a particular location cannot operate at or below this level of chlorination.

The ELGs shown above are applied as mass limits using the following conversion:

Mass Limit (lbs/day) = ELG (mg/L) × Permitted Flow (0.832 MGD) × 8.345

FAC (lbs/day) = FAC (mg/L) × Permitted Flow (0.832 MGD) × 8.345 × (2 hours/24 hours)

In addition, NSPS at 40 CFR §423.15(a)(1) specify that pH must be within a range of 6.0-9.0 standard units.

Based on the requirements and calculation shown above, technology-based effluent limits for cooling tower blowdown at internal Outfall 101 have been established as follows:

Parameter	Daily Average		Daily Maximum	
	lbs/day	mg/L	lbs/day	mg/L
FAC	0.116	0.2	0.289	0.5
Total Chromium	1.38	0.2	1.38	0.2
Total Zinc	6.94	1.0	6.94	1.0
pH	Between 6.0 and 9.0 SU			

Other Requirement No. 5 of the draft permit has been continued to regulate the 126 priority pollutants as follows:

> The 126 priority pollutants (Appendix A of Part 423) contained in chemicals added for cooling tower maintenance, except chromium and zinc, must be limited in the discharge to "no detectable amount." Total chromium must be limited to a daily average of 0.2 mg/L and a daily

maximum of 0.2 mg/L and total zinc must be limited to a daily average of 1.0 mg/L and a daily maximum of 1.0 mg/L.

Internal Outfall 201

The draft permit authorizes the discharge of low volume waste sources via internal Outfall 201. NSPS for low volume waste sources are found at 40 CFR §423.15(a)(3) as follows:

Parameter	Daily Average (mg/L)	Daily Maximum (mg/L)
Total Suspended Solids (TSS)	30	100
Oil and Grease	15	20

The ELGs shown above are applied as mass limits using the following conversion:

Mass Limit (lbs/day) = ELG (mg/L) × Permitted Flow (0.085 MGD) × 8.345

In addition, NSPS at 40 CFR § 423.15(a)(1) specify that pH must be within a range of 6.0-9.0 standard units.

Based on the requirements and calculations shown above, technology-based effluent limits for low volume waste sources at internal Outfall 201 have been established as follows:

Parameter	Daily Average		Daily Maximum	
	lbs/day	mg/L	lbs/day	mg/L
TSS	21.2	30	70.9	100
Oil and Grease	10.6	15	14.1	20
pH	Between 6.0 and 9.0 SU			

Internal Outfall 301

The draft permit authorizes the discharge of domestic wastewater via internal Outfall 301. Regulations applicable to domestic wastewater are found at 30 TAC Chapter 309 as follows:

Parameter	Daily Average (mg/L)	Daily Maximum (mg/L)
BOD_5	20	45
TSS	20	45
Chlorine Residual	1.0, min	N/A
pH	Between 6.0 and 9.0 SU	

With the exception of chlorine residual, the concentration limits shown above are applied as mass limits using the following conversion:

Mass Limit (lbs/day) = ELG (mg/L) × Permitted Flow (0.001 MGD) × 8.345

Based on the requirements and calculations shown above, technology-based effluent limits for treated domestic wastewater at internal Outfall 301 have been established as follows:

Parameter	Daily Average		Daily Maximum	
	lbs/day	mg/L	lbs/day	mg/L
BOD_5	0.16	20	0.37	45
TSS	0.16	20	0.37	45
Chlorine Residual	N/A	1.0, min	N/A	N/A
pH	Between 6.0 and 9.0 SU			

Appendix B
Calculated Water Quality-Based Effluent Limits

TEXTOX MENU #5 - BAY OR WIDE TIDAL RIVER

The water quality-based effluent limitations developed below are calculated using:

Table 1, 2014 Texas Surface Water Quality Standards (30 TAC 307) for Saltwater Aquatic Life
Table 2, 2018 Texas Surface Water Quality Standards for Human Health
"Procedures to Implement the Texas Surface Water Quality Standards," TCEQ, June 2010

PERMIT INFORMATION

Permittee Name:	Gregory Power Partners LLC
TPDES Permit No:	WQ0005219000
Outfall No:	001
Prepared by:	S. Johnson
Date:	08/12/2020

DISCHARGE INFORMATION

Receiving Waterbody:	Corpus Christi Bay
Segment No:	2481
TSS (mg/L):	10
Effluent Flow for Aquatic Life (MGD)	<10
% Effluent for Chronic Aquatic Life (Mixing Zone):	8
% Effluent for Acute Aquatic Life (ZID):	30
Oyster Waters?	yes
Effluent Flow for Human Health (MGD):	<10
% Effluent for Human Health:	4

CALCULATE DISSOLVED FRACTION (AND ENTER WATER EFFECT RATIO IF APPLICABLE):

Estuarine Metal	*Intercept (b)*	*Slope (m)*	*Partition Coefficient (Kp)*	*Dissolved Fraction (Cd/Ct)*	*Source*	*Water Effect Ratio (WER)*	*Source*
Aluminum	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Arsenic	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Cadmium	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Chromium (total)	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Chromium (trivalent)	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Chromium (hexavalent)	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Copper	4.85	-0.72	13489.63	0.881		1.00	Assumed
Lead	6.06	-0.85	162181.01	0.381		1.00	Assumed
Mercury	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Nickel	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Selenium	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Silver	5.86	-0.74	131825.67	0.431		1.00	Assumed
Zinc	5.36	-0.52	69183.10	0.591		1.00	Assumed

AQUATIC LIFE

CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:

Parameter	*SW Acute Criterion (µg/L)*	*SW Chronic Criterion (µg/L)*	*WLAa (µg/L)*	*WLAc (µg/L)*	*LTAa (µg/L)*	*LTAc (µg/L)*	*Daily Avg. (µg/L)*	*Daily Max. (µg/L)*
Acrolein	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Parameter	*SW Acute Criterion (µg/L)*	*SW Chronic Criterion (µg/L)*	*WLAa (µg/L)*	*WLAc (µg/L)*	*LTAa (µg/L)*	*LTAc (µg/L)*	*Daily Avg. (µg/L)*	*Daily Max. (µg/L)*
Aldrin	1.3	N/A	4.33	N/A	1.39	N/A	2.03	4.31
Aluminum	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Arsenic	149	78	497	975	159	595	233	494
Cadmium	40.0	8.75	133	109	42.7	66.7	62.7	132
Carbaryl	613	N/A	2043	N/A	654	N/A	961	2033
Chlordane	0.09	0.004	0.300	0.0500	0.0960	0.0305	0.0448	0.0948
Chlorpyrifos	0.011	0.006	0.0367	0.0750	0.0117	0.0458	0.0172	0.0364
Chromium (trivalent)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chromium (hexavalent)	1090	49.6	3633	620	1163	378	555	1176
Copper	13.5	3.6	51.1	51.1	16.3	31.2	24.0	50.8
Copper (oyster waters)	3.6	N/A	51.1	N/A	16.3	N/A	24.0	50.8
Cyanide (free)	5.6	5.6	18.7	70.0	5.97	42.7	8.78	18.5
4,4'-DDT	0.13	0.001	0.433	0.0125	0.139	0.00763	0.0112	0.0237
Demeton	N/A	0.1	N/A	1.25	N/A	0.763	1.12	2.37
Diazinon	0.819	0.819	2.73	10.2	0.874	6.24	1.28	2.71
Dicofol [Kelthane]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dieldrin	0.71	0.002	2.37	0.0250	0.757	0.0153	0.0224	0.0474
Diuron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan I (*alpha*)	0.034	0.009	0.113	0.113	0.0363	0.0686	0.0533	0.112
Endosulfan II (*beta*)	0.034	0.009	0.113	0.113	0.0363	0.0686	0.0533	0.112
Endosulfan sulfate	0.034	0.009	0.113	0.113	0.0363	0.0686	0.0533	0.112
Endrin	0.037	0.002	0.123	0.0250	0.0395	0.0153	0.0224	0.0474
Guthion [Azinphos Methyl]	N/A	0.01	N/A	0.125	N/A	0.0763	0.112	0.237
Heptachlor	0.053	0.004	0.177	0.0500	0.0565	0.0305	0.0448	0.0948
Hexachlorocyclohexane (*gamma*) [Lindane]	0.16	N/A	0.533	N/A	0.171	N/A	0.250	0.530
Lead	133	5.3	1162	174	372	106	155	329
Malathion	N/A	0.01	N/A	0.125	N/A	0.0763	0.112	0.237
Mercury	2.1	1.1	7.00	13.8	2.24	8.39	3.29	6.96
Methoxychlor	N/A	0.03	N/A	0.375	N/A	0.229	0.336	0.711
Mirex	N/A	0.001	N/A	0.0125	N/A	0.00763	0.0112	0.0237
Nickel	118	13.1	393	164	126	99.9	146	310
Nonylphenol	7	1.7	23.3	21.3	7.47	13.0	10.9	23.2
Parathion (ethyl)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pentachlorophenol	15.1	9.6	50.3	120	16.1	73.2	23.6	50.0
Phenanthrene	7.7	4.6	25.7	57.5	8.21	35.1	12.0	25.5
Polychlorinated Biphenyls [PCBs]	10	0.03	33.3	0.375	10.7	0.229	0.336	0.711
Selenium	564	136	1880	1700	602	1037	884	1870
Silver	2	N/A	15.5	N/A	4.95	N/A	7.27	15.3
Toxaphene	0.21	0.0002	0.700	0.00250	0.224	0.00153	0.00224	0.00474
Tributyltin [TBT]	0.24	0.0074	0.800	0.0925	0.256	0.0564	0.0829	0.175
2,4,5 Trichlorophenol	259	12	863	150	276	91.5	134	284
Zinc	92.7	84.2	523	1781	167	1086	245	520

HUMAN HEALTH

CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:

Parameter	*Fish Only Criterion (µg/L)*	*WLAh (µg/L)*	*LTAh (µg/L)*	*Daily Avg. (µg/L)*	*Daily Max. (µg/L)*
Acrylonitrile	115	2875	2674	3930	8315
Aldrin	1.147E-05	0.000287	0.000267	0.000392	0.000829
Anthracene	1317	32925	30620	45011	95228
Antimony	1071	26775	24901	36604	77441

Parameter	*Fish Only Criterion (µg/L)*	*WLAh (µg/L)*	*LTAh (µg/L)*	*Daily Avg. (µg/L)*	*Daily Max. (µg/L)*
Arsenic	N/A	N/A	N/A	N/A	N/A
Barium	N/A	N/A	N/A	N/A	N/A
Benzene	581	14525	13508	19857	42010
Benzidine	0.107	2.68	2.49	3.65	7.73
Benzo(*a*)anthracene	0.025	0.625	0.581	0.854	1.80
Benzo(*a*)pyrene	0.0025	0.0625	0.0581	0.0854	0.180
Bis(chloromethyl)ether	0.2745	6.86	6.38	9.38	19.8
Bis(2-chloroethyl)ether	42.83	1071	996	1463	3096
Bis(2-ethylhexyl) phthalate [Di(2-ethylhexyl) phthalate]	7.55	189	176	258	545
Bromodichloromethane [Dichlorobromomethane]	275	6875	6394	9398	19884
Bromoform [Tribromomethane]	1060	26500	24645	36228	76645
Cadmium	N/A	N/A	N/A	N/A	N/A
Carbon Tetrachloride	46	1150	1070	1572	3326
Chlordane	0.0025	0.0625	0.0581	0.0854	0.180
Chlorobenzene	2737	68425	63635	93543	197905
Chlorodibromomethane [Dibromochloromethane]	183	4575	4255	6254	13232
Chloroform [Trichloromethane]	7697	192425	178955	263064	556550
Chromium (hexavalent)	502	12550	11672	17157	36298
Chrysene	2.52	63.0	58.6	86.1	182
Cresols [Methylphenols]	9301	232525	216248	317884	672532
Cyanide (free)	N/A	N/A	N/A	N/A	N/A
4,4'-DDD	0.002	0.0500	0.0465	0.0683	0.144
4,4'-DDE	0.00013	0.00325	0.00302	0.00444	0.00939
4,4'-DDT	0.0004	0.0100	0.00930	0.0136	0.0289
2,4'-D	N/A	N/A	N/A	N/A	N/A
Danitol [Fenpropathrin]	473	11825	10997	16165	34201
1,2-Dibromoethane [Ethylene Dibromide]	4.24	106	98.6	144	306
m-Dichlorobenzene [1,3-Dichlorobenzene]	595	14875	13834	20335	43022
o-Dichlorobenzene [1,2-Dichlorobenzene]	3299	82475	76702	112751	238542
p-Dichlorobenzene [1,4-Dichlorobenzene]	N/A	N/A	N/A	N/A	N/A
3,3'-Dichlorobenzidine	2.24	56.0	52.1	76.5	161
1,2-Dichloroethane	364	9100	8463	12440	26319
1,1-Dichloroethylene [1,1-Dichloroethene]	55114	1377850	1281401	1883658	3985155
Dichloromethane [Methylene Chloride]	13333	333325	309992	455688	964075
1,2-Dichloropropane	259	6475	6022	8851	18727
1,3-Dichloropropene [1,3-Dichloropropylene]	119	2975	2767	4067	8604
Dicofol [Kelthane]	0.30	7.50	6.98	10.2	21.6
Dieldrin	2.0E-05	0.000500	0.000465	0.000683	0.00144
2,4-Dimethylphenol	8436	210900	196137	288321	609986
Di-*n*-Butyl Phthalate	92.4	2310	2148	3158	6681
Dioxins/Furans [TCDD Equivalents]	7.97E-08	0.0000020	0.0000019	0.0000027	0.0000058
Endrin	0.02	0.500	0.465	0.683	1.44
Epichlorohydrin	2013	50325	46802	68799	145554
Ethylbenzene	1867	46675	43408	63809	134998
Ethylene Glycol	1.68E+07	420000000	390600000	574182000	1214766000
Fluoride	N/A	N/A	N/A	N/A	N/A
Heptachlor	0.0001	0.00250	0.00233	0.00341	0.00723
Heptachlor Epoxide	0.00029	0.00725	0.00674	0.00991	0.0209
Hexachlorobenzene	0.00068	0.0170	0.0158	0.0232	0.0491
Hexachlorobutadiene	0.22	5.50	5.12	7.51	15.9
Hexachlorocyclohexane (*alpha*)	0.0084	0.210	0.195	0.287	0.607
Hexachlorocyclohexane (*beta*)	0.26	6.50	6.05	8.88	18.7
Hexachlorocyclohexane (*gamma*) [Lindane]	0.341	8.53	7.93	11.6	24.6

Parameter	*Fish Only Criterion (µg/L)*	*WLAh (µg/L)*	*LTAh (µg/L)*	*Daily Avg. (µg/L)*	*Daily Max. (µg/L)*
Hexachlorocyclopentadiene	11.6	290	270	396	838
Hexachloroethane	2.33	58.3	54.2	79.6	168
Hexachlorophene	2.90	72.5	67.4	99.1	209
4,4'-Isopropylidenediphenol [Bisphenol A]	15982	399550	371582	546224	1155618
Lead	3.83	251	233	343	726
Mercury	0.0250	0.625	0.581	0.854	1.80
Methoxychlor	3.0	75.0	69.8	102	216
Methyl Ethyl Ketone	9.92E+05	24800000	23064000	33904080	71729040
Methyl *tert*-butyl ether [MTBE]	10482	262050	243707	358248	757927
Nickel	1140	28500	26505	38962	82430
Nitrate-Nitrogen (as Total Nitrogen)	N/A	N/A	N/A	N/A	N/A
Nitrobenzene	1873	46825	43547	64014	135431
N-Nitrosodiethylamine	2.1	52.5	48.8	71.7	151
N-Nitroso-di-*n*-Butylamine	4.2	105	97.7	143	303
Pentachlorobenzene	0.355	8.88	8.25	12.1	25.6
Pentachlorophenol	0.29	7.25	6.74	9.91	20.9
Polychlorinated Biphenyls [PCBs]	6.4E-04	0.0160	0.0149	0.0218	0.0462
Pyridine	947	23675	22018	32366	68475
Selenium	N/A	N/A	N/A	N/A	N/A
1,2,4,5-Tetrachlorobenzene	0.24	6.00	5.58	8.20	17.3
1,1,2,2-Tetrachloroethane	26.35	659	613	900	1905
Tetrachloroethylene [Tetrachloroethylene]	280	7000	6510	9569	20246
Thallium	0.23	5.75	5.35	7.86	16.6
Toluene	N/A	N/A	N/A	N/A	N/A
Toxaphene	0.011	0.275	0.256	0.375	0.795
2,4,5-TP [Silvex]	369	9225	8579	12611	26681
1,1,1-Trichloroethane	784354	19608850	18236231	26807258	56714676
1,1,2-Trichloroethane	166	4150	3860	5673	12003
Trichloroethylene [Trichloroethene]	71.9	1798	1672	2457	5198
2,4,5-Trichlorophenol	1867	46675	43408	63809	134998
TTHM [Sum of Total Trihalomethanes]	N/A	N/A	N/A	N/A	N/A
Vinyl Chloride	16.5	413	384	563	1193

CALCULATE 70% AND 85% OF DAILY AVERAGE EFFLUENT LIMITATIONS:

Aquatic Life *Parameter*	*70% of Daily Avg. (µg/L)*	*85% of Daily Avg. (µg/L)*
Acrolein	N/A	N/A
Aldrin	1.42	1.73
Aluminum	N/A	N/A
Arsenic	163	198
Cadmium	43.9	53.3
Carbaryl	672	817
Chlordane	0.0313	0.0381
Chlorpyrifos	0.0120	0.0146
Chromium (trivalent)	N/A	N/A
Chromium (hexavalent)	389	472
Copper	16.8	20.4
Copper (oyster waters)	16.8	20.4
Cyanide (free)	6.14	7.46
4,4'-DDT	0.00784	0.00952
Demeton	0.784	0.952

Aquatic Life *Parameter*	*70% of Daily Avg.* *(µg/L)*	*85% of Daily Avg.* *(µg/L)*
Diazinon	0.898	1.09
Dicofol [Kelthane]	N/A	N/A
Dieldrin	0.0156	0.0190
Diuron	N/A	N/A
Endosulfan I (*alpha*)	0.0373	0.0453
Endosulfan II (*beta*)	0.0373	0.0453
Endosulfan sulfate	0.0373	0.0453
Endrin	0.0156	0.0190
Guthion [Azinphos Methyl]	0.0784	0.0952
Heptachlor	0.0313	0.0381
Hexachlorocyclohexane (*gamma*) [Lindane]	0.175	0.213
Lead	109	132
Malathion	0.0784	0.0952
Mercury	2.30	2.79
Methoxychlor	0.235	0.285
Mirex	0.00784	0.00952
Nickel	102	124
Nonylphenol	7.68	9.32
Parathion (ethyl)	N/A	N/A
Pentachlorophenol	16.5	20.1
Phenanthrene	8.45	10.2
Polychlorinated Biphenyls [PCBs]	0.235	0.285
Selenium	619	751
Silver	5.08	6.17
Toxaphene	0.00156	0.00190
Tributyltin [TBT]	0.0580	0.0705
2,4,5 Trichlorophenol	94.1	114
Zinc	172	209

Human Health *Parameter*	*70% of Daily Avg.* *(µg/L)*	*85% of Daily Avg.* *(µg/L)*
Acrylonitrile	2751	3340
Aldrin	0.000274	0.000333
Anthracene	31508	38260
Antimony	25622	31113
Arsenic	N/A	N/A
Barium	N/A	N/A
Benzene	13899	16878
Benzidine	2.55	3.10
Benzo(*a*)anthracene	0.598	0.726
Benzo(*a*)pyrene	0.0598	0.0726
Bis(chloromethyl)ether	6.56	7.97
Bis(2-chloroethyl)ether	1024	1244
Bis(2-ethylhexyl) phthalate [Di(2-ethylhexyl) phthalate]	180	219
Bromodichloromethane [Dichlorobromomethane]	6579	7988
Bromoform [Tribromomethane]	25359	30793
Cadmium	N/A	N/A
Carbon Tetrachloride	1100	1336
Chlordane	0.0598	0.0726
Chlorobenzene	65480	79512
Chlorodibromomethane [Dibromochloromethane]	4378	5316
Chloroform [Trichloromethane]	184144	223604

Human Health ***Parameter***	*70% of Daily Avg.* *(µg/L)*	*85% of Daily Avg.* *(µg/L)*
Chromium (hexavalent)	12009	14583
Chrysene	60.2	73.2
Cresols [Methylphenols]	222519	270202
Cyanide (free)	N/A	N/A
4,4'-DDD	0.0478	0.0581
4,4'-DDE	0.00311	0.00377
4,4'-DDT	0.00956	0.0116
2,4'-D	N/A	N/A
Danitol [Fenpropathrin]	11316	13741
1,2-Dibromoethane [Ethylene Dibromide]	101	123
m-Dichlorobenzene [1,3-Dichlorobenzene]	14234	17285
o-Dichlorobenzene [1,2-Dichlorobenzene]	78926	95838
p-Dichlorobenzene [1,4-Dichlorobenzene]	N/A	N/A
3,3'-Dichlorobenzidine	53.5	65.0
1,2-Dichloroethane	8708	10574
1,1-Dichloroethylene [1,1-Dichloroethene]	1318561	1601109
Dichloromethane [Methylene Chloride]	318982	387335
1,2-Dichloropropane	6196	7524
1,3-Dichloropropene [1,3-Dichloropropylene]	2846	3457
Dicofol [Kelthane]	7.17	8.71
Dieldrin	0.000478	0.000581
2,4-Dimethylphenol	201824	245073
Di-*n*-Butyl Phthalate	2210	2684
Dioxins/Furans [TCDD Equivalents]	0.0000019	0.0000023
Endrin	0.478	0.581
Epichlorohydrin	48159	58479
Ethylbenzene	44666	54237
Ethylene Glycol	401927400	488054700
Fluoride	N/A	N/A
Heptachlor	0.00239	0.00290
Heptachlor Epoxide	0.00693	0.00842
Hexachlorobenzene	0.0162	0.0197
Hexachlorobutadiene	5.26	6.39
Hexachlorocyclohexane (*alpha*)	0.200	0.244
Hexachlorocyclohexane (*beta*)	6.22	7.55
Hexachlorocyclohexane (*gamma*) [Lindane]	8.15	9.90
Hexachlorocyclopentadiene	277	336
Hexachloroethane	55.7	67.6
Hexachlorophene	69.3	84.2
4,4'-Isopropylidenediphenol [Bisphenol A]	382357	464291
Lead	240	291
Mercury	0.598	0.726
Methoxychlor	71.7	87.1
Methyl Ethyl Ketone	23732856	28818468
Methyl *tert*-butyl ether [MTBE]	250773	304511
Nickel	27273	33117
Nitrate-Nitrogen (as Total Nitrogen)	N/A	N/A
Nitrobenzene	44810	54412
N-Nitrosodiethylamine	50.2	61.0
N-Nitroso-di-*n*-Butylamine	100	122
Pentachlorobenzene	8.49	10.3
Pentachlorophenol	6.93	8.42
Polychlorinated Biphenyls [PCBs]	0.0153	0.0185

Human Health *Parameter*	*70% of Daily Avg.* *(µg/L)*	*85% of Daily Avg.* *(µg/L)*
Pyridine	22656	27511
Selenium	N/A	N/A
1,2,4,5-Tetrachlorobenzene	5.74	6.97
1,1,2,2-Tetrachloroethane	630	765
Tetrachloroethylene [Tetrachloroethylene]	6698	8134
Thallium	5.50	6.68
Toluene	N/A	N/A
Toxaphene	0.263	0.319
2,4,5-TP [Silvex]	8828	10719
1,1,1-Trichloroethane	18765081	22786170
1,1,2-Trichloroethane	3971	4822
Trichloroethylene [Trichloroethene]	1720	2088
2,4,5-Trichlorophenol	44666	54237
TTHM [Sum of Total Trihalomethanes]	N/A	N/A
Vinyl Chloride	394	479

Appendix C
Comparison of Technology-Based Effluent Limits and Water Quality-Based Effluent Limits

The following table is a summary of technology-based effluent limitations calculated/assessed in the draft permit (Technology-Based), calculated/ assessed water quality-based effluent limitations (Water Quality-Based), and effluent limitations in the existing permit (Existing Permit). Effluent limitations appearing in bold are the most stringent of the three and are included in the draft permit.

Outfall	*Pollutant*	*Technology-Based*				*Water Quality-Based*				*Draft Permit*			
		Daily Avg		*Daily Max*		*Daily Avg*		*Daily Max*		*Daily Avg*		*Daily Max*	
		lbs/day	*mg/L*	*lbs/day*	*mg/L*	*lbs/day*	*mg/L*	*lbs/day*	*mg/L*	*lbs/day*	*mg/L*	*lbs/day*	*mg/L*
001	Flow	0.918 MGD		2.11 MGD		0.918 MGD		2.11 MGD		**0.918 MGD**		**2.11 MGD**	
	Temperature	N/A		N/A		Report, °F		Report, °F		**Report, °F**		**Report, °F**	
	Free Available Chlorine	**0.116**	**0.2**	**0.289**	**0.5**	N/A	N/A	N/A	N/A	-	-	-	-
	Total Copper	N/A	N/A	N/A	N/A	N/A	**Report**	N/A	**Report**	-	-	-	-
	Total Zinc	N/A	N/A	N/A	N/A	N/A	**Report**	N/A	**Report**	-	-	-	-
101	Flow	0.832 MGD		0.999 MGD		N/A		N/A		**0.832 MGD**		**0.999 MGD**	
	Free Available Chlorine	-	-	-	-	N/A	N/A	N/A	N/A	1.38	0.2	3.47	0.5
	Total Chromium	1.38	0.2	1.38	0.2	N/A	N/A	N/A	N/A	**1.38**	**0.2**	**1.38**	**0.2**
	Total Zinc	6.94	1.0	6.94	1.0	N/A	N/A	N/A	N/A	**6.94**	**1.0**	**6.94**	**1.0**
	pH	Between 6.0 and 9.0 SU				Between 6.5 and 9.0 SU				**Between 6.5 and 9.0 SU**			
201	Flow	0.085 MGD		1.105 MGD		N/A		N/A		**0.085 MGD**		**1.105 MGD**	
	TSS	21.2	30	70.9	100	N/A	N/A	N/A	N/A	**21.2**	**30**	**70.9**	**100**
	Oil and Grease	10.6	15	14.1	20	N/A	N/A	N/A	N/A	**10.6**	**15**	**14.1**	**20**
	pH	Between 6.0 and 9.0 SU				Between 6.5 and 9.0 SU				**Between 6.5 and 9.0 SU**			
301	Flow	0.001 MGD		0.002 MGD		N/A		N/A		**0.001 MGD**		**0.002 MGD**	
	BOD_5	0.16	20	0.37	45	N/A	N/A	N/A	N/A	**0.16**	**20**	**0.37**	**45**
	TSS	0.16	20	0.37	45	N/A	N/A	N/A	N/A	**0.16**	**20**	**0.37**	**45**
	Chlorine Residual	N/A	1.0, min	N/A	N/A	N/A	N/A	N/A	N/A	**1.0, min**		**N/A**	
	Enterococci	N/A		N/A		35 CFU or MPN/100 mL		104 CFU or MPN/100 mL		**35 CFU or MPN/100 mL**		**104 CFU or MPN/100 mL**	
	pH	Between 6.0 and 9.0 SU				Between 6.5 and 9.0 SU				**Between 6.5 and 9.0 SU**			

TPDES PERMIT NO.
WQ0005219000
[For TCEQ office use only -
EPA I.D. No. TX0137502]

This renewal replaces TPDES Permit No. WQ0005219000, issued on August 2, 2017.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
P.O. Box 13087
Austin, Texas 78711-3087

PERMIT TO DISCHARGE WASTES
under provisions of
Section 402 of the Clean Water Act
and Chapter 26 of the Texas Water Code
and 40 CFR Part423

Gregory Power Partners LLC

whose mailing address is

910 Louisiana Street
Houston, Texas 77002

is authorized to treat and discharge wastes from Gregory Power Plant, a combined-cycle, natural gas-fired electricity generation plant (SIC 4911 and 4931)

located at 4633 Highway 361, near the City of Gregory in San Patricio County, Texas 78359

via pipe from the Master Sump to an open ditch then directly to Corpus Christi Bay in Segment No. 2481 of the Bays and Estuaries

only according to effluent limitations, monitoring requirements, and other conditions set forth in this permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ), the laws of the State of Texas, and other orders of the TCEQ. The issuance of this permit does not grant to the permittee the right to use private or public property for conveyance of wastewater along the discharge route described in this permit. This includes, but is not limited to, property belonging to any individual, partnership, corporation, or other entity. Neither does this permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

This permit shall expire at midnight, five years from the date of permit issuance.

ISSUED DATE:

For the Commission

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS — Outfall Number 001

1. During the period beginning upon the date of permit issuance and lasting through the date of permit expiration, the permittee is authorized to discharge previously monitored effluent (cooling tower blowdown, low-volume waste sources, and treated domestic wastewater) subject to the following effluent limitations:

   The daily average flow of effluent shall not exceed 0.918 million gallons per day (MGD). The daily maximum flow shall not exceed 2.11 MGD.

Effluent Characteristics	Discharge Limitations					Minimum Self-Monitoring Requirements	
	Daily Average		Daily Maximum		Single Grab	Report Daily Average and Daily Maximum	
	lbs/day	mg/L	lbs/day	mg/L	mg/L	Measurement Frequency	Sample Type
Flow	0.918 MGD		2.11 MGD		N/A	1/day	Meter
Temperature [1]	Report, °F		Report, °F		N/A	1/day	In situ
Free Available Chlorine [2]	0.116	0.2	0.289	0.5	0.5	1/week	Grab
Total Copper [3]	N/A	Report	N/A	Report	N/A	1/month	Grab
Total Zinc [3]	N/A	Report	N/A	Report	N/A	1/month	Grab

2. There must be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

3. Effluent monitoring samples must be taken at the following location: after the exit from the Master Sump and prior to discharge to the East Ditch.

[1] Temperature monitoring may be performed at any location between the exit from the Master Sump and the point of discharge into Corpus Christi Bay.
[2] Samples must be representative of periods of chlorination. See Other Requirement No. 3(f).
[3] Effective upon the date of permit issuance and lasting until the date of permit expiration.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS — Outfall Number 101

1. During the period beginning upon the date of permit issuance and lasting through the date of permit expiration, the permittee is authorized to discharge cooling tower blowdown [1] subject to the following effluent limitations:

   The daily average flow of effluent shall not exceed 0.832 MGD. The daily maximum flow shall not exceed 0.999 MGD.

Effluent Characteristics	Discharge Limitations					Minimum Self-Monitoring Requirements	
	Daily Average		Daily Maximum		Single Grab	Report Daily Average and Daily Maximum	
	lbs/day	mg/L	lbs/day	mg/L	mg/L	Measurement Frequency	Sample Type
Flow	0.832 MGD		0.999 MGD		N/A	Continuous	Meter
Total Chromium	1.38	0.2	1.38	0.2	0.2	1/week	Grab
Total Zinc	6.94	1.0	6.94	1.0	1.0	1/week	Grab

2. The pH must not be less than 6.5 standard units nor greater than 9.0 standard units and must be monitored 1/day by grab sample.

3. There must be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

4. Effluent monitoring samples must be taken at the following location: internal Outfall 101, at the sample tap in the cooling tower blowdown line leading to the Master Sump.

[1] See Other Requirement No. 3(d).

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS — Outfall Number 201

1. During the period beginning upon the date of permit issuance and lasting through the date of permit expiration, the permittee is authorized to discharge low-volume waste sources [1] subject to the following effluent limitations:

   The daily average flow of effluent shall not exceed 0.085 MGD. The daily maximum flow shall not exceed 1.105 MGD.

Effluent Characteristics	Discharge Limitations					Minimum Self-Monitoring Requirements	
	Daily Average		Daily Maximum		Single Grab	Report Daily Average and Daily Maximum	
	lbs/day	mg/L	lbs/day	mg/L	mg/L	Measurement Frequency	Sample Type
Flow	0.085 MGD		1.105 MGD		N/A	Continuous	Meter
Total Suspended Solids	21.2	30	70.9	100	100	1/week	Grab [2]
Oil and Grease	10.6	15	14.1	20	20	1/week	Grab [2]

2. The pH must not be less than 6.5 standard units nor greater than 9.0 standard units and must be monitored 1/day by grab sample [2].

3. There must be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

4. Effluent monitoring samples must be taken at the following location: internal Outfall 201, at the sample tap(s) in the low volume waste sources line(s) leading to the Master Sump.

[1] See Other Requirement No. 3(a).
[2] See Other Requirement No. 8.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS — Outfall Number 301

1. During the period beginning upon the date of permit issuance and lasting through the date of permit expiration, the permittee is authorized to discharge treated domestic wastewater subject to the following effluent limitations:

   The daily average flow of effluent shall not exceed 0.001 MGD. The daily maximum flow shall not exceed 0.002 MGD.

Effluent Characteristics	Discharge Limitations					Minimum Self-Monitoring Requirements	
	Daily Average		Daily Maximum		Single Grab	Report Daily Average and Daily Maximum	
	lbs/day	mg/L	lbs/day	mg/L	mg/L	Measurement Frequency	Sample Type
Flow	0.001 MGD		0.002 MGD		N/A	1/day	Weir
Biochemical Oxygen Demand, 5-day	0.16	20	0.37	45	45	1/week	Grab
Total Suspended Solids	0.16	20	0.37	45	45	1/week	Grab
Chlorine Residual	N/A	1.0, min	N/A	N/A	1.0, min	1/week	Grab
Enterococci [1]	35		104		N/A	1/quarter	Grab

2. The pH must not be less than 6.5 standard units nor greater than 9.0 standard units and must be monitored 1/day by grab sample.

3. There must be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

4. The effluent must contain a chlorine residual of at least 1.0 mg/L after a detention time of at least 20 minutes (based on peak flow) and must be monitored once per week by grab sample. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

5. Effluent monitoring samples must be taken at the following location: internal Outfall 301, at the domestic wastewater package treatment plant clearwell.

[1] Colony forming units (CFU) or most probable number (MPN) per 100 mL.

DEFINITIONS AND STANDARD PERMIT CONDITIONS

As required by Title 30 Texas Administrative Code (TAC) Chapter 305, certain regulations appear as standard conditions in waste discharge permits. 30 TAC §§305.121 - 305.129 (relating to Permit Characteristics and Conditions) as promulgated under the Texas Water Code (TWC) §§5.103 and 5.105, and the Texas Health and Safety Code (THSC) §§361.017 and 361.024(a), establish the characteristics and standards for waste discharge permits, including sewage sludge, and those sections of 40 Code of Federal Regulations (CFR) Part 122 adopted by reference by the Commission. The following text includes these conditions and incorporates them into this permit. All definitions in Texas Water Code §26.001 and 30 TAC Chapter 305 shall apply to this permit and are incorporated by reference. Some specific definitions of words or phrases used in this permit are as follows:

1. Flow Measurements

   a. Annual average flow - the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months. The annual average flow determination shall consist of daily flow volume determinations made by a totalizing meter, charted on a chart recorder, and limited to major domestic wastewater discharge facilities with a one million gallons per day or greater permitted flow.

   b. Daily average flow - the arithmetic average of all determinations of the daily flow within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily flow, the determination shall be the arithmetic average of all instantaneous measurements taken during that month. Daily average flow determination for intermittent discharges shall consist of a minimum of three flow determinations on days of discharge.

   c. Daily maximum flow - the highest total flow for any 24-hour period in a calendar month.

   d. Instantaneous flow - the measured flow during the minimum time required to interpret the flow measuring device.

   e. 2-hour peak flow (domestic wastewater treatment plants) - the maximum flow sustained for a two-hour period during the period of daily discharge. The average of multiple measurements of instantaneous maximum flow within a two-hour period may be used to calculate the 2-hour peak flow.

   f. Maximum 2-hour peak flow (domestic wastewater treatment plants) - the highest 2-hour peak flow for any 24-hour period in a calendar month.

2. Concentration Measurements

   a. Daily average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements.

      i. For domestic wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values in the previous four consecutive month period consisting of at least four measurements shall be utilized as the daily average concentration.

      ii. For all other wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.

   b. 7-day average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar week, Sunday through Saturday.

   c. Daily maximum concentration - the maximum concentration measured on a single day, by the sample type specified in the permit, within a period of one calendar month.

   d. Daily discharge - the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the "daily discharge" is calculated as the total

mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the sampling day.

The "daily discharge" determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the "daily discharge" determination of concentration shall be the arithmetic average (weighted by flow value) of all samples collected during that day.

e. Bacteria concentration (Fecal coliform, *E. coli*, or Enterococci) – the number of colonies of bacteria per 100 milliliters effluent. The daily average bacteria concentration is a geometric mean of the values for the effluent samples collected in a calendar month. The geometric mean shall be determined by calculating the nth root of the product of all measurements made in a calendar month, where n equals the number of measurements made; or computed as the antilogarithm of the arithmetic mean of the logarithms of all measurements made in a calendar month. For any measurement of bacteria equaling zero, a substitute value of one shall be made for input into either computation method. If specified, the 7-day average for bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.

f. Daily average loading (lbs/day) - the arithmetic average of all daily discharge loading calculations during a period of one calendar month. These calculations must be made for each day of the month that a parameter is analyzed. The daily discharge, in terms of mass (lbs/day), is calculated as (Flow, MGD × Concentration, mg/L × 8.34).

g. Daily maximum loading (lbs/day) - the highest daily discharge, in terms of mass (lbs/day), within a period of one calendar month.

3. Sample Type

a. Composite sample - For domestic wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC §319.9(a). For industrial wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC §319.9(c).

b. Grab sample - an individual sample collected in less than 15 minutes.

4. Treatment Facility (facility) - wastewater facilities used in the conveyance, storage, treatment, recycling, reclamation or disposal of domestic sewage, industrial wastes, agricultural wastes, recreational wastes, or other wastes including sludge handling or disposal facilities under the jurisdiction of the Commission.

5. The term "sewage sludge" is defined as solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in 30 TAC Chapter 312. This includes the solids that have not been classified as hazardous waste separated from wastewater by unit processes.

6. Bypass - the intentional diversion of a waste stream from any portion of a treatment facility.

MONITORING AND REPORTING REQUIREMENTS

1. Self-Reporting

Monitoring results shall be provided at the intervals specified in the permit. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall conduct effluent sampling and reporting in accordance with 30 TAC §§319.4 - 319.12. Unless otherwise specified, effluent monitoring data shall be submitted each month, to the Enforcement Division (MC 224), by the 20th day of the following month for each discharge that is described by this permit whether or not a discharge is made for that month. Monitoring results must be submitted online using the NetDMR reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. Monitoring results must be signed and certified as required by Monitoring and Reporting Requirements No. 10.

As provided by state law, the permittee is subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the Clean Water Act; TWC Chapters 26, 27, and 28; and THSC Chapter 361, including but not limited to knowingly making any false statement, representation, or certification on any report, record, or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, or falsifying, tampering with or knowingly rendering inaccurate any monitoring device or method required by this permit or violating any other requirement imposed by state or federal regulations.

2. Test Procedures

   a. Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§319.11 - 319.12. Measurements, tests, and calculations shall be accurately accomplished in a representative manner.

   b. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification.

3. Records of Results

   a. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.

   b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by this permit, records of all data used to complete the application for this permit, and the certification required by 40 CFR §264.73(b)(9) shall be retained at the facility site, or shall be readily available for review by a TCEQ representative for a period of three years from the date of the record or sample, measurement, report, application or certification. This period shall be extended at the request of the Executive Director.

   c. Records of monitoring activities shall include the following:

      i. date, time, and place of sample or measurement;
      ii. identity of individual who collected the sample or made the measurement;
      iii. date and time of analysis;
      iv. identity of the individual and laboratory who performed the analysis;
      v. the technique or method of analysis; and
      vi. the results of the analysis or measurement and quality assurance/quality control records.

      The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that may be instituted against the permittee.

4. Additional Monitoring by Permittee

   If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit using approved analytical methods as specified above, all results of such monitoring shall be included in the calculation and reporting of the values submitted on the approved self-report form. Increased frequency of sampling shall be indicated on the self-report form.

5. Calibration of Instruments

   All automatic flow measuring or recording devices and all totalizing meters for measuring flows shall be accurately calibrated by a trained person at plant start-up and as often thereafter as necessary to ensure accuracy, but not less often than annually unless authorized by the Executive Director for a longer period. Such person shall verify in writing that the device is operating properly and giving accurate results. Copies of the verification shall be retained at the facility site or shall be readily available for review by a TCEQ representative for a period of three years.

6. Compliance Schedule Reports

   Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date to the regional office and the Enforcement Division (MC 224).

7. Noncompliance Notification

   a. In accordance with 30 TAC §305.125(9) any noncompliance that may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Report of such information shall be provided orally or by facsimile transmission (FAX) to the regional office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the regional office and the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. For Publicly Owned Treatment Works (POTWs), effective September 1, 2020, the permittee must submit the written report for unauthorized discharges and unanticipated bypasses that exceed any effluent limit in the permit using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.

   b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:
      i. unauthorized discharges as defined in Permit Condition 2(g).
      ii. any unanticipated bypass that exceeds any effluent limitation in the permit.
      iii. violation of a permitted maximum daily discharge limitation for pollutants listed specifically in the Other Requirements section of an Industrial TPDES permit.

   c. In addition to the above, any effluent violation that deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the regional office and the Enforcement Division (MC 224) within 5 working days of becoming aware of the noncompliance.

   d. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the Enforcement Division (MC 224) as promptly as possible. For effluent limitation violations, noncompliances shall be reported on the approved self-report form.

8. In accordance with the procedures described in 30 TAC §§35.301 - 35.303 (relating to Water Quality Emergency and Temporary Orders) if the permittee knows in advance of the need for a bypass, it shall submit prior notice by applying for such authorization.

9. Changes in Discharges of Toxic Substances

   All existing manufacturing, commercial, mining, and silvicultural permittees shall notify the regional office, orally or by facsimile transmission within 24 hours, and both the regional office and the Enforcement Division (MC 224) in writing within five (5) working days, after becoming aware of or having reason to believe:

   a. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) that is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
      i. one hundred micrograms per liter (100 µg/L);
      ii. two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
      iii. five (5) times the maximum concentration value reported for that pollutant in the permit application; or
      iv. the level established by the TCEQ.

b. That any activity has occurred or will occur that would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

i. five hundred micrograms per liter (500 µg/L);
ii. one milligram per liter (1 mg/L) for antimony;
iii. ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
iv. the level established by the TCEQ.

10. Signatories to Reports

All reports and other information requested by the Executive Director shall be signed by the person and in the manner required by 30 TAC §305.128 (relating to Signatories to Reports).

11. All POTWs must provide adequate notice to the Executive Director of the following:

a. any new introduction of pollutants into the POTW from an indirect discharger that would be subject to CWA §301 or §306 if it were directly discharging those pollutants;

b. any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit; and

c. for the purpose of this paragraph, adequate notice shall include information on:

i. the quality and quantity of effluent introduced into the POTW; and
ii. any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

PERMIT CONDITIONS

1. General

a. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.

b. This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:

i. violation of any terms or conditions of this permit;
ii. obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
iii. a change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

c. The permittee shall furnish to the Executive Director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending, or terminating the permit. The permittee shall also furnish to the Executive Director, upon request, copies of records required to be kept by the permit.

2. Compliance

a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.

b. The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment,

revocation, or suspension, or for denial of a permit renewal application or an application for a permit for another facility.

c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

d. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation that has a reasonable likelihood of adversely affecting human health or the environment.

e. Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.

f. A permit may be amended, suspended and reissued, or revoked for cause in accordance with 30 TAC §§305.62 and 305.66 and TWC §7.302. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

g. There shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Other Requirements section of this permit.

h. In accordance with 30 TAC §305.535(a), the permittee may allow any bypass to occur from a TPDES permitted facility that does not cause permitted effluent limitations to be exceeded or an unauthorized discharge to occur, but only if the bypass is also for essential maintenance to assure efficient operation.

i. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under Texas Water Code §§7.051 - 7.075 (relating to Administrative Penalties), 7.101 - 7.111 (relating to Civil Penalties), and 7.141 - 7.202 (relating to Criminal Offenses and Penalties) for violations including, but not limited to, negligently or knowingly violating the federal CWA §§301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under the CWA §402, or any requirement imposed in a pretreatment program approved under the CWA §§402(a)(3) or 402(b)(8).

3. Inspections and Entry

a. Inspection and entry shall be allowed as prescribed in the TWC Chapters 26, 27, and 28, and THSC Chapter 361.

b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit, or other order of the Commission. Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to public health or the environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in TWC §7.002. The statement above, that Commission entry shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection, is not grounds for denial or restriction of entry to any part of the facility, but merely describes the Commission's duty to observe appropriate rules and regulations during an inspection.

4. Permit Amendment or Renewal

   a. The permittee shall give notice to the Executive Director as soon as possible of any planned physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements. Notice shall also be required under this paragraph when:

      i. the alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in accordance with 30 TAC §305.534 (relating to New Sources and New Dischargers); or

      ii. the alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements in Monitoring and Reporting Requirements No. 9; or

      iii. the alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

   b. Prior to any facility modifications, additions, or expansions that will increase the plant capacity beyond the permitted flow, the permittee must apply for and obtain proper authorization from the Commission before commencing construction.

   c. The permittee must apply for an amendment or renewal at least 180 days prior to expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. If an application is submitted prior to the expiration date of the permit, the existing permit shall remain in effect until the application is approved, denied, or returned. If the application is returned or denied, authorization to continue such activity shall terminate upon the effective date of the action. If an application is not submitted prior to the expiration date of the permit, the permit shall expire and authorization to continue such activity shall terminate.

   d. Prior to accepting or generating wastes that are not described in the permit application or that would result in a significant change in the quantity or quality of the existing discharge, the permittee must report the proposed changes to the Commission. The permittee must apply for a permit amendment reflecting any necessary changes in permit conditions, including effluent limitations for pollutants not identified and limited by this permit.

   e. In accordance with the TWC §26.029(b), after a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, in accordance with applicable laws, to conform to new or additional conditions.

   f. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under CWA §307(a) for a toxic pollutant that is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition. The permittee shall comply with effluent standards or prohibitions established under CWA §307(a) for toxic pollutants within the time provided in the regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

5. Permit Transfer

   a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of facilities authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC 148) of the Water Quality Division.

   b. A permit may be transferred only according to the provisions of 30 TAC §305.64 (relating to Transfer of Permits) and 30 TAC §50.133 (relating to Executive Director Action on Application or WQMP update).

6. Relationship to Hazardous Waste Activities

   This permit does not authorize any activity of hazardous waste storage, processing, or disposal that requires a permit or other authorization pursuant to the Texas Health and Safety Code.

7. Relationship to Water Rights

   Disposal of treated effluent by any means other than discharge directly to water in the state must be specifically authorized in this permit and may require a permit pursuant to Texas Water Code Chapter 11.

8. Property Rights

   A permit does not convey any property rights of any sort, or any exclusive privilege.

9. Permit Enforceability

   The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

10. Relationship to Permit Application

    The application pursuant to which the permit has been issued is incorporated herein; provided, however, that in the event of a conflict between the provisions of this permit and the application, the provisions of the permit shall control.

11. Notice of Bankruptcy.

    a. Each permittee shall notify the executive director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of Title 11 (Bankruptcy) of the United States Code (11 USC) by or against:

       i. the permittee;
       ii. an entity (as that term is defined in 11 USC, §101(15)) controlling the permittee or listing the permit or permittee as property of the estate; or
       iii. an affiliate (as that term is defined in 11 USC, §101(2)) of the permittee.

    b. This notification must indicate:

       i. the name of the permittee;
       ii. the permit number(s);
       iii. the bankruptcy court in which the petition for bankruptcy was filed; and
       iv. the date of filing of the petition.

OPERATIONAL REQUIREMENTS

1. The permittee shall at all times ensure that the facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. This includes, but is not limited to, the regular, periodic examination of wastewater solids within the treatment plant by the operator in order to maintain an appropriate quantity and quality of solids inventory as described in the various operator training manuals and according to accepted industry standards for process control. Process control, maintenance, and operations records shall be retained at the facility site, or shall be readily available for review by a TCEQ representative, for a period of three years.

2. Upon request by the Executive Director, the permittee shall take appropriate samples and provide proper analysis in order to demonstrate compliance with Commission rules. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall comply with all applicable provisions of 30 TAC Chapter 312 concerning sewage sludge use and disposal and 30 TAC §§319.21 - 319.29 concerning the discharge of certain hazardous metals.

3. Domestic wastewater treatment facilities shall comply with the following provisions:

   a. The permittee shall notify the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, in writing, of any facility expansion at least 90 days prior to conducting such activity.

   b. The permittee shall submit a closure plan for review and approval to the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, for any closure activity at least 90 days prior to conducting such activity. Closure is the act of permanently taking a waste management unit or treatment facility out of service and includes the permanent removal from service of any pit, tank, pond, lagoon, surface impoundment or other treatment unit regulated by this permit.

4. The permittee is responsible for installing prior to plant start-up, and subsequently maintaining, adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, or retention of inadequately treated wastewater.

5. Unless otherwise specified, the permittee shall provide a readily accessible sampling point and, where applicable, an effluent flow measuring device or other acceptable means by which effluent flow may be determined.

6. The permittee shall remit an annual water quality fee to the Commission as required by 30 TAC Chapter 21. Failure to pay the fee may result in revocation of this permit under TWC §7.302(b)(6).

7. Documentation

   For all written notifications to the Commission required of the permittee by this permit, the permittee shall keep and make available a copy of each such notification under the same conditions as self-monitoring data are required to be kept and made available. Except for information required for TPDES permit applications, effluent data, including effluent data in permits, draft permits and permit applications, and other information specified as not confidential in 30 TAC §1.5(d), any information submitted pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted in the manner prescribed in the application form or by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, information may be made available to the public without further notice. If the Commission or Executive Director agrees with the designation of confidentiality, the TCEQ will not provide the information for public inspection unless required by the Texas Attorney General or a court pursuant to an open records request. If the Executive Director does not agree with the designation of confidentiality, the person submitting the information will be notified.

8. Facilities that generate domestic wastewater shall comply with the following provisions; domestic wastewater treatment facilities at permitted industrial sites are excluded.

   a. Whenever flow measurements for any domestic sewage treatment facility reach 75% of the permitted daily average or annual average flow for three consecutive months, the permittee must initiate engineering and financial planning for expansion or upgrading of the domestic wastewater treatment or collection facilities. Whenever the flow reaches 90% of the permitted daily average or annual average flow for three consecutive months, the permittee shall obtain necessary authorization from the Commission to commence construction of the necessary additional treatment or collection facilities. In the case of a domestic wastewater treatment facility that reaches 75% of the permitted daily average or annual average flow for three consecutive months, and the planned population to be served or the quantity of waste produced is not expected to exceed the design limitations of the treatment facility, the permittee shall submit an engineering report supporting this claim to the Executive Director of the Commission.

      If in the judgment of the Executive Director the population to be served will not cause permit noncompliance, then the requirement of this section may be waived. To be effective, any waiver must be in writing and signed by the Director of the Enforcement Division (MC 149) of the Commission, and such waiver of these requirements will be reviewed upon expiration of the existing permit; however, any such waiver shall not be interpreted as condoning or excusing any violation of any permit parameter.

b. The plans and specifications for domestic sewage collection and treatment works associated with any domestic permit must be approved by the Commission, and failure to secure approval before commencing construction of such works or making a discharge is a violation of this permit and each day is an additional violation until approval has been secured.

c. Permits for domestic wastewater treatment plants are granted subject to the policy of the Commission to encourage the development of area-wide waste collection, treatment, and disposal systems. The Commission reserves the right to amend any domestic wastewater permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from said system, to such area-wide system; or to amend this permit in any other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.

9. Domestic wastewater treatment plants shall be operated and maintained by sewage plant operators holding a valid certificate of competency at the required level as defined in 30 TAC Chapter 30.

10. For Publicly Owned Treatment Works (POTWs), the 30-day average (or monthly average) percent removal for BOD and TSS shall not be less than 85%, unless otherwise authorized by this permit.

11. Facilities that generate industrial solid waste as defined in 30 TAC §335.1 shall comply with these provisions:

a. Any solid waste, as defined in 30 TAC §335.1 (including but not limited to such wastes as garbage, refuse, sludge from a waste treatment, water supply treatment plant or air pollution control facility, discarded materials, discarded materials to be recycled, whether the waste is solid, liquid, or semisolid), generated by the permittee during the management and treatment of wastewater, must be managed in accordance with all applicable provisions of 30 TAC Chapter 335, relating to Industrial Solid Waste Management.

b. Industrial wastewater that is being collected, accumulated, stored, or processed before discharge through any final discharge outfall, specified by this permit, is considered to be industrial solid waste until the wastewater passes through the actual point source discharge and must be managed in accordance with all applicable provisions of 30 TAC Chapter 335.

c. The permittee shall provide written notification, pursuant to the requirements of 30 TAC §335.8(b)(1), to the Corrective Action Section (MC 127) of the Remediation Division informing the Commission of any closure activity involving an Industrial Solid Waste Management Unit, at least 90 days prior to conducting such an activity.

d. Construction of any industrial solid waste management unit requires the prior written notification of the proposed activity to the Registration and Reporting Section (MC 129) of the Permitting and Remediation Support Division. No person shall dispose of industrial solid waste, including sludge or other solids from wastewater treatment processes, prior to fulfilling the deed recordation requirements of 30 TAC §335.5.

e. The term "industrial solid waste management unit" means a landfill, surface impoundment, waste-pile, industrial furnace, incinerator, cement kiln, injection well, container, drum, salt dome waste containment cavern, or any other structure vessel, appurtenance, or other improvement on land used to manage industrial solid waste.

f. The permittee shall keep management records for all sludge (or other waste) removed from any wastewater treatment process. These records shall fulfill all applicable requirements of 30 TAC Chapter 335 and must include the following, as it pertains to wastewater treatment and discharge:

i. volume of waste and date(s) generated from treatment process;
ii. volume of waste disposed of on-site or shipped off-site;
iii. date(s) of disposal;

iv. identity of hauler or transporter;
v. location of disposal site; and
vi. method of final disposal.

The above records shall be maintained on a monthly basis. The records shall be retained at the facility site, or shall be readily available for review by authorized representatives of the TCEQ for at least five years.

12. For industrial facilities to which the requirements of 30 TAC Chapter 335 do not apply, sludge and solid wastes, including tank cleaning and contaminated solids for disposal, shall be disposed of in accordance with THSC Code Chapter 361.

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OTHER REQUIREMENTS

1. The executive director reviewed this action for consistency with the goals and policies of the Texas Coastal Management Program (CMP) in accordance with the regulations of the General Land Office and determined that the action is consistent with the applicable CMP goals and policies.

2. Violations of daily maximum limitations for the following pollutants shall be reported orally or by facsimile to TCEQ Region 14 within 24 hours from the time the permittee becomes aware of the violation, followed by a written report within five working days to TCEQ Region 14 and Compliance Monitoring Team (MC 224):

Pollutant	MAL[1] (mg/L)
Chromium (Total)	0.003
Zinc (Total)	0.005

Test methods used must be sensitive enough to demonstrate compliance with the permit effluent limitations. If an effluent limit for a pollutant is less than the MAL, then the test method for that pollutant must be sensitive enough to demonstrate compliance at the MAL. Permit compliance/noncompliance determinations will be based on the effluent limitations contained in this permit, with consideration given to the MAL for the pollutants specified above.

When an analysis of an effluent sample for a pollutant listed above indicates no detectable levels above the MAL and the test method detection level is as sensitive as the specified MAL, a value of zero shall be used for that measurement when making calculations for the self-reporting form. This applies to determinations of daily maximum concentration, calculations of loading and daily averages, and other reportable results.

When a reported value is zero based on this MAL provision, the permittee shall submit the following statement with the self-reporting form either as a separate attachment to the form or as a statement in the comments section of the form:

> "The reported value(s) of zero for [list pollutant(s)] on the self-reporting form for [monitoring period date range] is based on the following conditions: (1) the analytical method used had a method detection level as sensitive as the MAL specified in the permit, and (2) the analytical results contained no detectable levels above the specified MAL."

When an analysis of an effluent sample for a pollutant indicates no detectable levels and the test method detection level is not as sensitive as the MAL specified in the permit, or an MAL is not specified in the permit for that pollutant, the level of detection achieved shall be used for that measurement when making calculations for the self-reporting form. A zero may not be used.

3. DEFINITIONS

   (a) The term *low-volume waste sources* means, taken collectively as if from one source, wastewater from all sources except those for which specific limitations or standards are otherwise established in 40 CFR Part 423. Low-volume waste sources include, but are not limited to, the following: Wastewaters from ion exchange water treatment systems, water treatment evaporator blowdown, laboratory and sampling streams, boiler blowdown, floor drains, cooling tower basin cleaning wastes, recirculating house service water systems, and wet scrubber air pollution control systems whose primary purpose is particulate removal.

[1] Minimum analytical level.

Sanitary wastes, air conditioning wastes, and wastewater from carbon capture or sequestration systems are not included in this definition.

(b) The term *chemical metal cleaning waste* means any wastewater resulting from the cleaning of any metal process equipment with chemical compounds, including, but not limited to, boiler tube cleaning.

This permit does not authorize the discharge of chemical metal cleaning waste.

(c) The term *metal cleaning waste* means any wastewater resulting from cleaning (with or without chemical cleaning compounds) any metal process equipment including, but not limited to, boiler tube cleaning, boiler fireside cleaning, and air preheater cleaning.

This permit does not authorize the discharge of metal cleaning waste.

(d) The term *blowdown* means the minimum discharge of recirculating water for the purpose of discharging materials contained in the water, the further buildup of which would cause concentration in amounts exceeding limits established by best engineering practices.

(e) The term *average concentration* as it relates to chlorine discharge means the average of analyses made over a single period of chlorine release which does not exceed two hours.

(f) FREE AVAILABLE CHLORINE

(1) The term *free available chlorine* means the value obtained using any of the "chlorine—free available" methods in Table IB in 40 CFR 136.3(a) where the method has the capability of measuring free available chlorine, or other methods approved by the permitting authority.

(2) Free available chlorine (FAC) may not be discharged from any unit for more than two hours in any one day, and not more than one unit in any plant may discharge free available chlorine at any one time unless the permittee can demonstrate to the permitting authority that the units in a particular location cannot operate at or below this level of chlorination.

(3) Daily mass loading of FAC must be calculated using the following equation:

$$\text{FAC (lbs/day)} = \text{FAC (mg/L)} \times \text{flow (MGD)} \times 8.345 \times (2 \text{ hours}/24 \text{ hours})$$

where: FAC (mg/L) = concentration of FAC measured in the effluent during representative periods of chlorination.

flow (MGD) = total actual flow of discharge via outfall during sampling day

4. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.

5. The 126 priority pollutants (Appendix A of 40 CFR Part 423) contained in chemicals added for cooling tower maintenance, except chromium and zinc, must be limited in the discharge to "no detectable amount." Total chromium must be limited to a daily average of 0.2 mg/L and a daily maximum of 0.2 mg/L and total zinc must be limited to a daily average of 1.0 mg/L and a daily maximum of 1.0 mg/L.

6. MIXING ZONE DEFINITION

The mixing zone is defined as a volume within a radius of 200 feet from the point of discharge. Chronic toxic criteria apply at the edge of the mixing zone.

7. This permit provision acknowledges that the discharge from Outfall 001 of this permit commingles in the East Ditch (not considered water in the state) with discharges from Outfall 001 of TPDES Permit No. WQ0004646000 and Outfall 001 of TPDES Permit No. WQ0005218000 prior to discharge into Corpus Christi Bay. Therefore, to address the potential effects of overlapping mixing zones, a combined effluent analysis was used to assess the water quality-based effluent limits. Under these conditions, the critical effluent percentages are as follows:

   Zone of Initial Dilution = 30%
   Aquatic Life Mixing Zone = 8%
   Human Health Mixing Zone = 4%

   However, if in the next permit action a combined effluent analysis cannot be completed due to either insufficient pollutant data from the other nearby dischargers or from the commingled effluent in the East Ditch, then the discharge from Outfall 001 of this permit may be screened using the following critical effluent percentages:

   Zone of Initial Dilution = 100%
   Aquatic Life Mixing Zone = 100%
   Human Health Mixing Zone = 100%

8. If low volume waste is being discharged from more than one location to the Master Sump, the permittee shall obtain grab samples from each location and use the appropriate analysis procedure below.

   A. Total Suspended Solids: Grab samples obtained from each location may be analyzed in either of the following ways:

      (1) Individually – Each sample may be analyzed individually. The daily average must be the flow-weighted average of the results for all samples, and the daily maximum must be the maximum of the results for all samples; or

      (2) Combined – All samples may be physically combined into a single flow-weighted sample for analysis and reporting.

   B. Oil and Grease: Grab samples must be analyzed individually. The daily average must be the flow-weighted average of the results for all samples, and the daily maximum must be the maximum of the results for all samples.

   C. pH: Grab samples must be analyzed individually. The minimum and maximum of the results for all samples must be used for reporting purposes.

9. COOLING WATER INTAKE STRUCTURE REQUIREMENTS

   At the time of issuance of this permit, the permittee is not subject to CWA 316(b) rules, however, the permittee shall provide written notification to the TCEQ Industrial Permits Team (MC 148) and Region 14 Office of any change in procedure or facility modification which alters the method by which the facility obtains water for cooling purposes. This notification must be submitted 30 days prior to any such change and must include a description of the planned changes. The TCEQ may, upon review of the notification, reopen the permit to include additional terms and conditions as necessary.

10. Wastewater discharged via Outfall 001 must be sampled and analyzed for free cyanide. Any analytical method for free cyanide that is approved in 40 CFR Part 136 may be used. Analytical sampling for Outfall 001 must be completed within 60 days of a discharge that is representative of normal operations. Results of the analytical testing must be submitted within 90 days of the final sampling event to the TCEQ Industrial Permits Team (MC 148). Based on a technical review of the

submitted analytical results, an amendment may be initiated by TCEQ staff to include additional effluent limitations, monitoring requirements, or both.

Metal	**Effluent Concentration (µg/L)[1]**					**MAL[2] (µg/L)**
	Sample 1	Sample 2	Sample 3	Sample 4	Average	
Free Cyanide						2

[1] Indicate units if different from µg/L.
[2] Minimum Analytical Level