August 7, 2020

Executive Director
Applications Review and Processing Team, MC-148
Texas Commission on Environmental Quality
12100 Park 35 Circle
Austin, Texas 78753

Subject: Submittal of TPDES Permit Renewal Application
WQ0001031000, NRG Texas Power LLC
12070 Beaumont Hwy, Houston, Texas 77049
CN 603207218; RN 100542851

To Whom It May Concern:

NRG Texas Power LLC (NRG) is submitting the enclosed application for a renewal of Texas Pollutant Discharge Elimination System (TPDES) permit No. WQ0001031000 re-authorizing wastewater discharge from the Greens Bayou Electrical Generating Station.

One original and two additional copies of this application are enclosed and each includes the following:

- Industrial Administrative Report 1.0;
- SPIF;
- Industrial Technical Report 1.0;
- Worksheets 1.0, 2.0, 4.0, and 5.0;
- Core Data Form;
- USGS Map;
- Flow Diagram and Water Balance;
- Site Drawing; and
- Supporting Attachments.

If you have any questions regarding this renewal application, please contact Mr. James Gay, NRG Senior Environmental Specialist, at 281-433-2035, or at James.Gay@nrg.com.

Sincerely,

NRG Texas Power LLC

James Gay

Senior Environmental Specialist

cc: Amanda Ragatz, ERM

P:\Projects\0498048 DM 27977H(Cvr Ltr).docx

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

TCEQ INDUSTRIAL WASTEWATER PERMIT APPLICATION

INDUSTRIAL ADMINISTRATIVE REPORT

Complete and submit this checklist with the application.

APPLICANT NAME: NRG Texas Power LLC

PERMIT NUMBER: WQ0001031000

Check Y for each of the following items included in this application. If an item was not included, check N.

	Y	N		Y	N
Administrative Report 1.0	☒	☐	Worksheet 8.0	☐	☒
Administrative Report 1.1	☐	☒	Worksheet 9.0	☐	☒
SPIF	☒	☐	Worksheet 10.0	☐	☒
Core Data Form	☒	☐	Worksheet 11.0	☐	☒
Technical Report 1.0	☒	☐	Worksheet 11.1	☐	☒
Worksheet 1.0	☒	☐	Worksheet 11.2	☐	☒
Worksheet 2.0	☒	☐	Worksheet 11.3	☐	☒
Worksheet 3.0	☐	☒	Original USGS Map	☒	☐
Worksheet 3.1	☐	☒	Affected Landowners Map	☐	☒
Worksheet 3.2	☐	☒	Landowner Disk or Labels	☐	☒
Worksheet 3.3	☐	☒	Flow Diagram	☒	☐
Worksheet 4.0	☒	☐	Site Drawing	☒	☐
Worksheet 4.1	☐	☒	Original Photographs	☒	☐
Worksheet 5.0	☒	☐	Solids Management Program	☐	☒
Worksheet 6.0	☐	☒	Water Balance	☒	☐
Worksheet 7.0	☐	☒			

For Commission Use Only:
Segment Number: _____ County: _____ Expiration Date: _____
Proposed/Current Permit Number: _____ Region: _____

INDUSTRIAL ADMINISTRATIVE REPORT 1.0

The following information **is required** for **all** applications for TPDES permits and TLAPs.

1. TYPE OF APPLICATION AND FEES (Instructions, Page 21)

a. Permit No.: WQ0001031000 Expiration Date: February 5, 2021

EPA ID No.: TX0006386

b. Check the box next to the appropriate application type.

- ☐ New TPDES permit
- ☐ Major amendment with renewal
- ☐ Renewal with changes
- ☐ Minor amendment without renewal
- ☐ Stormwater only discharge
- ☐ New TLAP permit
- ☐ Major amendment without renewal
- ☒ Renewal without changes
- ☐ Minor modification without renewal

c. If applying for an **amendment** or **modification** of a permit, describe the request in detail: N/A

d. Application Fee

Check the box next to the amount submitted for the application fee:

EPA Classification	New	Major Amendment (With or Without Renewal)	Renewal (With or Without Changes)	Minor Amendment/ Minor Modification (Without Renewal)
Minor facility not subject to EPA categorical effluent guidelines (*40 CFR Parts 400-471*)	☐ $350	☐ $350	☐ $315	☐ $150
Minor facility subject to EPA categorical effluent guidelines (*40 CFR Parts 400-471*)	☐ $1,250	☐ $1,250	☐ $1,215	☐ $150
Major facility	N/A *	☐ $2,050	☒ $2,015	☐ $450

* All facilities are designated as minors until formally classified as a major by EPA.

e. Payment Information:

Mailed Check or money order number: 07000865

Check or money order amount: $2,015.00

Named printed on check or money order: NRG Texas Power LLC

ePAY Voucher number: Click to enter text

Copy of voucher attached? ☐ Yes **Attachment**: A

2. APPLICANT INFORMATION (Instructions, Pages 21-22)

a. Facility Owner (Owner of the facility must apply for the permit.)

- Provide the legal name of the entity (applicant) applying for this permit: NRG Texas Power LLC

  (The legal name must be spelled exactly as filed with the TX SOS, Texas Comptroller of Public Accounts, County, or in the legal documents forming the entity.)

- If the applicant is currently a customer with the TCEQ, provide the Customer Number, which can be located using the TCEQ's Central Registry Customer Search[1]: **CN**603207218

- Provide the name and title of the person signing the application. The person must be an executive official meeting signatory requirements in *30 TAC § 305.44*.

  Mr. ☒ Ms. ☐ First/Last Name: Craig Eckberg

  Title: Senior Environmental Director Credential: As the Sr. Director of Environmental Services, Mr. Craig Eckberg performs policy or decision-making functions for the corporation and therefore meets the signatory requirements in 30 TAC § 305.44.

b. Co-applicant Information

- Provide the legal name of the co-applicant applying for this permit, if applicable: N/A

  (The legal name must be spelled exactly as filed with the TX SOS, Texas Comptroller of Public Accounts, County, or in the legal documents forming the entity.)

- If the co-applicant is currently a customer with the TCEQ, provide the Customer Number, which can be located using the TCEQ's Central Registry Customer Search: **CN**N/A

- Provide the name and title of the person signing the application. The person must be an executive official meeting signatory requirements in *30 TAC § 305.44*.

  Mr. ☐ Ms. ☐ First/Last Name: N/A

  Title: Click to enter text Credential: Click to enter text

- Provide a brief description of the need for a co-permittee: N/A

c. Core Data Form

Complete the Core Data Form for each customer and include as an attachment. If the customer type selected on the Core Data Form is **Individual**, complete **Attachment 1** of the Administrative Report.

Attachment: B

3. APPLICATION CONTACT INFORMATION (Instructions, Page 22)

If the TCEQ needs additional information regarding this application, who should be contacted?

a. Mr. ☐ Ms. ☒ First/Last Name: Mary Larsen Credential: Click to enter text

Organization Name: NRG Texas Power LLC Title: Senior Environmental Specialist

Mailing Address: 16301 Tomball Pkwy City/State/ZIP Code: Houston, TX 77064

Phone No.: 281-897-2604 Fax No.: Click to enter text E-mail: Mary.Larsen@nrg.com

Check one or both: ☒ Administrative Contact ☒ Technical Contact

[1] http://www15.tceq.texas.gov/crpub/index.cfm?fuseaction=cust.CustSearch

b. Mr. ☒ Ms. ☐ First/Last Name: James Gay Credential: Click to enter text.

Organization Name: NRG Texas Power LLC Title: Senior Environmental Specialist

Mailing Address: 910 Louisiana St City/State/ZIP Code: Houston, TX 77002

Phone No.: 281-433-2035 Fax No.: Click to enter text. E-mail: James.Gay@nrg.com

Check one or both: ☒ Administrative Contact ☒ Technical Contact

Attachment: N/A

4. PERMIT CONTACT INFORMATION (Instructions, Page 22)

Provide two names of individuals that can be contacted throughout the permit term.

a. Mr. ☐ Ms. ☒ First/Last Name: Mary Larsen Credential: Click to enter text.

Organization Name: NRG Texas Power LLC Title: Senior Environmental Specialist

Mailing Address: 16301 Tomball Pkwy City/State/ZIP Code: Houston, TX 77064

Phone No.: 281-897-2604 Fax No.: Click to enter text. E-mail: Mary.Larsen@nrg.com

b. Mr. ☒ Ms. ☐ First/Last Name: James Gay Credential: Click to enter text.

Organization Name: NRG Texas Power LLC Title: Senior Environmental Specialist

Mailing Address: 910 Louisiana St City/State/ZIP Code: Houston, TX 77002

Phone No.: 281-433-2035 Fax No.: Click to enter text. E-mail: James.Gay@nrg.com

Attachment: N/A

5. BILLING CONTACT INFORMATION (Instructions, Page 22)

The permittee is responsible for paying the annual fee. The annual fee will be assessed to permits **in effect on September 1 of each year**. *The TCEQ will send a bill to the address provided in this section. The permittee is responsible for terminating the permit when it is no longer needed (form TCEQ-20029).*

Provide the complete mailing address where the annual fee invoice should be mailed and the name and phone number of the permittee's representative responsible for payment of the invoice.

Mr. ☐ Ms. ☒ First/Last Name: Mary Larsen Credential: Click to enter text.

Organization Name: NRG Texas Power LLC Title: Senior Environmental Specialist

Mailing Address: 16301 Tomball Pkwy City/State/ZIP Code: Houston, TX 77064

Phone No.: 281-897-2604 Fax No.: Click to enter text. E-mail: Mary.Larsen@nrg.com

6. DMR/MER CONTACT INFORMATION (Instructions, Page 22)

Provide the name and mailing address of the person delegated to receive and submit DMRs or MERs.

Mr. ☐ Ms. ☒ First/Last Name: Mary Larsen Credential: Click to enter text.

Organization Name: NRG Texas Power LLC Title: Senior Environmental Specialist

Mailing Address: 16301 Tomball Pkwy City/State/ZIP Code: Houston, TX 77064

Phone No.: 281-897-2604 Fax No.: Click to enter text. E-mail: Mary.Larsen@nrg.com

DMR data must be submitted through the NetDMR[2] system. An electronic reporting account can be established once the facility has obtained the permit number.

[2] https://www.tceq.texas.gov/permitting/netdmr

7. NOTICE INFORMATION (Instructions, Pages 23-24)

a. Individual Publishing the Notices

Mr. ☐ Ms. ☒ First/Last Name: Mary Larsen Credential: Click to enter text.

Organization Name: NRG Texas Power LLC Title: Senior Environmental Specialist

Mailing Address: 16301 Tomball Pkwy City/State/ZIP Code: Houston, TX 77064

Phone No.: 281-897-2604 Fax No.: Click to enter text. E-mail: Mary.Larsen@nrg.com

b. Method for Receiving Notice of Receipt and Intent to Obtain a Water Quality Permit Package (only for NORI, NAPD will be sent via regular mail)

☒ E-mail: Mary.Larsen@nrg.com

☐ Fax: Click to enter text.

☐ Regular Mail (USPS)

Mailing Address: Click to enter text. City/State/ZIP Code: Click to enter text.

c. Contact in the Notice

Mr. ☐ Ms. ☒ First/Last Name: Mary Larsen Credential: Click to enter text.

Organization Name: NRG Texas Power LLC Title: Senior Environmental Specialist

Phone No.: 281-897-2604 Fax No.: Click to enter text. E-mail: Mary.Larsen@nrg.com

d. Public Place Information

If the facility or outfall is located in more than one county, provide a public viewing place for each county.

Public building name: North Channel Branch Library Location within the building: Click to enter text.

Physical Address of Building: 15741 Wallisville Rd

City: Houston County: Harris

e. Bilingual Notice Requirements:

This information **is required** for **new, major amendment, and renewal applications**. It is not required for minor amendment or minor modification applications.

This section of the application is only used to determine if alternative language notices will be needed. Complete instructions on publishing the alternative language notices will be in your public notice package.

Please call the bilingual/ESL coordinator at the nearest elementary and middle schools and obtain the following information to determine whether an alternative language notices are required.

1. Is a bilingual education program required by the Texas Education Code at the elementary or middle school nearest to the facility or proposed facility?

   ☒ Yes ☐ No

   If **no**, publication of an alternative language notice is not required; **skip to** Item 8 (REGULATED ENTITY AND PERMITTED SITE INFORMATION.)

2. Are the students who attend either the elementary school or the middle school enrolled in a bilingual education program at that school?

☒ Yes ☐ No

3. Do the students at these schools attend a bilingual education program at another location?

   ☐ Yes ☒ No

4. Would the school be required to provide a bilingual education program but the school has waived out of this requirement under 19 TAC §89.1205(g)?

   ☐ Yes ☒ No

5. If the answer is yes to question 1, 2, 3, or 4, public notices in an alternative language are required. Which language is required by the bilingual program? Spanish

8. REGULATED ENTITY AND PERMITTED SITE INFORMATION (Instructions Pages 24-25)

If the site of your business is part of a larger business site, a Regulated Entity Number (RN) may already be assigned for the larger site. Use the RN assigned for the larger site. Search the TCEQ's Central Registry[3] to determine the RN or to see if the larger site may already be registered as a regulated site:

If the site is found, provide the assigned RN and the information for the site to be authorized through this application below. The site information for this authorization may vary from the larger site information.

a. TCEQ issued Regulated Entity Number (RN): **RN**100542851

b. Name of project or site (the name known by the community where located): Greens Bayou Electric Generating Station

c. Is the location address of the facility in the existing permit the same?

   ☒ Yes ☐ No

d. If the facility is located in Bexar, Comal, Hays, Kinney, Medina, Travis, Uvalde, or Williamson County, additional information concerning protection of the Edwards Aquifer may be required.

e. Owner of treatment facility: NRG Texas Power LLC

   Ownership of Facility: ☐ Public ☒ Private ☐ Both ☐ Federal

f. Owner of land where treatment facility is or will be:

   Mr. ☐ Ms. ☐ First/Last or Organization Name: NRG Texas Power LLC

   Mailing Address: 12070 Beaumont Hwy City/State/ZIP Code: Houston, TX 77049

   Phone No.: Click to enter text Fax No.: Click to enter text E-mail: Click to enter text

   If not the same as the facility owner, there must be a long-term lease agreement in effect for at least six years. In some cases, a lease may not suffice - see instructions. **Attachment:** N/A

g. Owner of effluent TLAP disposal site (if applicable):

   Mr. ☐ Ms. ☐ First/Last or Organization Name: N/A

   Mailing Address: Click to enter text City/State/ZIP Code: Click to enter text

   Phone No.: Click to enter text Fax No.: Click to enter text E-mail: Click to enter text

[3] http://www15.tceq.texas.gov/crpub/index.cfm?fuseaction=regent.RNSearch

If not the same as the facility owner, there must be a long-term lease agreement in effect for at least six years. **Attachment**: N/A

h. Owner of sewage sludge disposal site (if applicable):

Mr. ☐ Ms. ☐ First/Last or Organization Name: N/A

Mailing Address: Click to enter text. City/State/ZIP Code: Click to enter text.

Phone No.: Click to enter text. Fax No.: Click to enter text. E-mail: Click to enter text.

If not the same as the facility owner, there must be a long-term lease agreement in effect for at least six years. **Attachment**: N/A

(This information is required only if authorization is sought in the permit for sludge disposal on property owned or controlled by the applicant.)

9. TDPES DISCHARGE/TLAP DISPOSAL INFORMATION (Instructions, Pages 25-28)

a. Is the facility located on or does the treated effluent cross American Indian Land?

☐ Yes ☒ No

b. Attach an **original** full size USGS Topographic Map (or an 8.5"×11" **reproduced** portion for renewal or amendment applications) with all required information. Check the box next to each item below to confirm it has been included on the map.

- ☒ One-mile radius and three-miles downstream information
- ☒ Applicant's property boundaries
- ☐ Treatment facility boundaries
- ☒ Labeled point(s) of discharge and highlighted discharge route(s)
- ☐ Effluent disposal site boundaries
- ☒ All wastewater ponds
- ☐ Sewage sludge disposal site
- ☐ New and future construction
- ☒ Attachment: C

c. Is the location of the sewage sludge disposal site in the existing permit accurate?

☐ Yes ☐ No ☒ N/A

If **no**, or a **new** application, please give an accurate description: N/A

d. Are the point(s) of discharge and the discharge route(s) in the existing permit correct?

☒ Yes ☐ No ☐ N/A

If **no**, or a **new or amendment** applications, provide an accurate description: N/A

e. City nearest the outfall(s): Houston

f. County in which the outfalls(s) is/are located: Harris

g. Is or will the treated wastewater discharge to a city, county, or state highway right-of-way, or a flood control district drainage ditch?

☐ Yes ☒ No

If **yes**, indicate by a check mark if: ☐ Authorization granted ☐ Authorization pending

For **new and amendment** applications, provide copies of letters that show proof of contact and the approval letter upon receipt.

Attachment: N/A

h. For all applications involving an average daily discharge of 5 MGD or more, provide the names of all counties located within 100 statute miles downstream of the point(s) of discharge. N/A

i. For **TLAPs**, is the location of the effluent disposal site in the existing permit accurate?

☐ Yes ☐ No ☒ N/A

If **no**, or if this a **new or amendment** application, provide an accurate description: N/A

j. City nearest the disposal site: N/A

k. County in which the disposal site is located: N/A

l. Disposal Site Latitude: N/A Longitude: N/A

m. For **TLAPs**, describe how effluent is/will be routed from the treatment facility to the disposal site: N/A

n. For **TLAPs**, identify the nearest watercourse to the disposal site to which rainfall runoff might flow if not contained: N/A

10. MISCELLANEOUS INFORMATION (Instructions, Page 28)

a. Did any person formerly employed by the TCEQ represent your company and get paid for service regarding this application?

☐ Yes ☒ No

If **yes**, list each person: Click to enter text.

b. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

If **yes**, provide the following:

- Acct. No.: Click to enter text.
- Amt. due: Click to enter text.

c. Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

If **yes**, provide the following:

- Enforcement Order No.: Click to enter text.
- Amt. due: Click to enter text.

11. SIGNATURE PAGE (Instructions, Page 29)

Permit No: WQ0001031000

Applicant Name: NRG Texas Power LLC

Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I further certify that I am authorized under 30 Texas Administrative Code §305.44 to sign and submit this document, and can provide documentation in proof of such authorization upon request.

Signatory name (typed or printed): Craig Eckberg

Signatory title: Senior Environmental Director

Signature: C.R.E. Date: 5 Aug 20

(Use blue ink)

Subscribed and Sworn to before me by the said CRAIG R. ECKBERG

on this 5TH day of AUGUST, 20 20.

My commission expires on the 16 day of MAY, 2024.

Wayne A. Halberg
Notary Public

WAYNE A. HALBERG
Notary Public, State of Texas
Comm. Expires 05-16-2024
Notary ID 126523360

[SEAL]

MONTGOMERY
County, Texas

If co-applicants are necessary, each entity must submit an original, separate signature page.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

FOR AGENCIES REVIEWING INDUSTRIAL TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ONLY:

Application type: ____Renewal _____Major Amendment _____Minor Amendment _____New

County: _____ Segment Number: _____

Admin Complete Date: _____

Agency Receiving SPIF:

_____ Texas Historical Commission _____ U.S. Fish and Wildlife

_____ Texas Parks and Wildlife Department _____ U.S. Army Corps of Engineers

This form applies to TPDES permit applications only. (Instructions, Page 33)

The SPIF must be completed as a separate document. The TCEQ will mail a copy of the SPIF to each agency as required by the TCEQ agreement with EPA. If any of the items are not completely addressed or further information is needed, you will be contacted to provide the information before the permit is issued. Each item must be completely addressed.

Do not refer to a response of any item in the permit application form. Each attachment must be provided with this form separately from the administrative report of the application. The application will not be declared administratively complete without this form being completed in its entirety including all attachments.

The following applies to all applications:

1. Permittee Name: NRG Texas Power LLC

2. Permit No.: WQ0001031000 EPA ID No.: TX0006386

3. Address of the project (location description that includes street/highway, city/vicinity, and county): 12070 Beaumont Hwy, Houston, TX 77049, Harris County

4. Provide the name, address, phone and fax number, and email address of an individual that can be contacted to answer specific questions about the property.

   First/Last Name: Mary Larsen Title: Senior Environmental Specialist Credential: Click to enter text

   Organization Name: NRG Texas Power LLC

   Mailing Address: 16301 Tomball Pkwy City/State/ZIP Code: Houston, TX 77064

   Phone No.: 281-897-2604 Fax No.: Click to enter text E-mail: Mary.Larsen@nrg.com

5. List the county in which the facility is located: Harris

6. If the property is publicly owned and the owner is different than the permittee/applicant, please list the owner of the property: N/A

7. Provide a description of the effluent discharge route. The discharge route must follow the flow of effluent from the point of discharge to the nearest major watercourse (from the point of discharge to a classified segment as defined in *30 TAC Chapter 307*). If known, please identify the classified segment number: via Outfall 001 to Spring Gully; thence to the Greens Bayou portion of the Houston Ship Channel (tidal); and via Outfall 002 to the Greens Bayou portion of the Houston Ship Channel (tidal); thence to Houston Ship Channel Tidal in Segment No. 1006 of the San Jacinto River Basin

8. Please provide a separate 7.5-minute USGS quadrangle map with the project boundaries plotted and a general location map showing the project area. Please highlight the discharge route from the point of discharge for a distance of one mile downstream. (This map is required in addition to the map in the administrative report.)

   Attachment: SPIF Attachment A

9. Provide original photographs of any structures 50 years or older on the property.

   Attachment: SPIF Attachment B

10. Does your project involve any of the following? Check all that apply.

    ☐ Proposed access roads, utility lines, construction easements

    ☐ Visual effects that could damage or detract from a historic property's integrity

    ☐ Vibration effects during construction or as a result of project design

    ☐ Additional phases of development that are planned for the future

    ☐ Sealing caves, fractures, sinkholes, other karst features

    ☐ Disturbance of vegetation or wetlands

11. List proposed construction impact (surface acres to be impacted, depth of excavation, sealing of caves, or other karst features): N/A

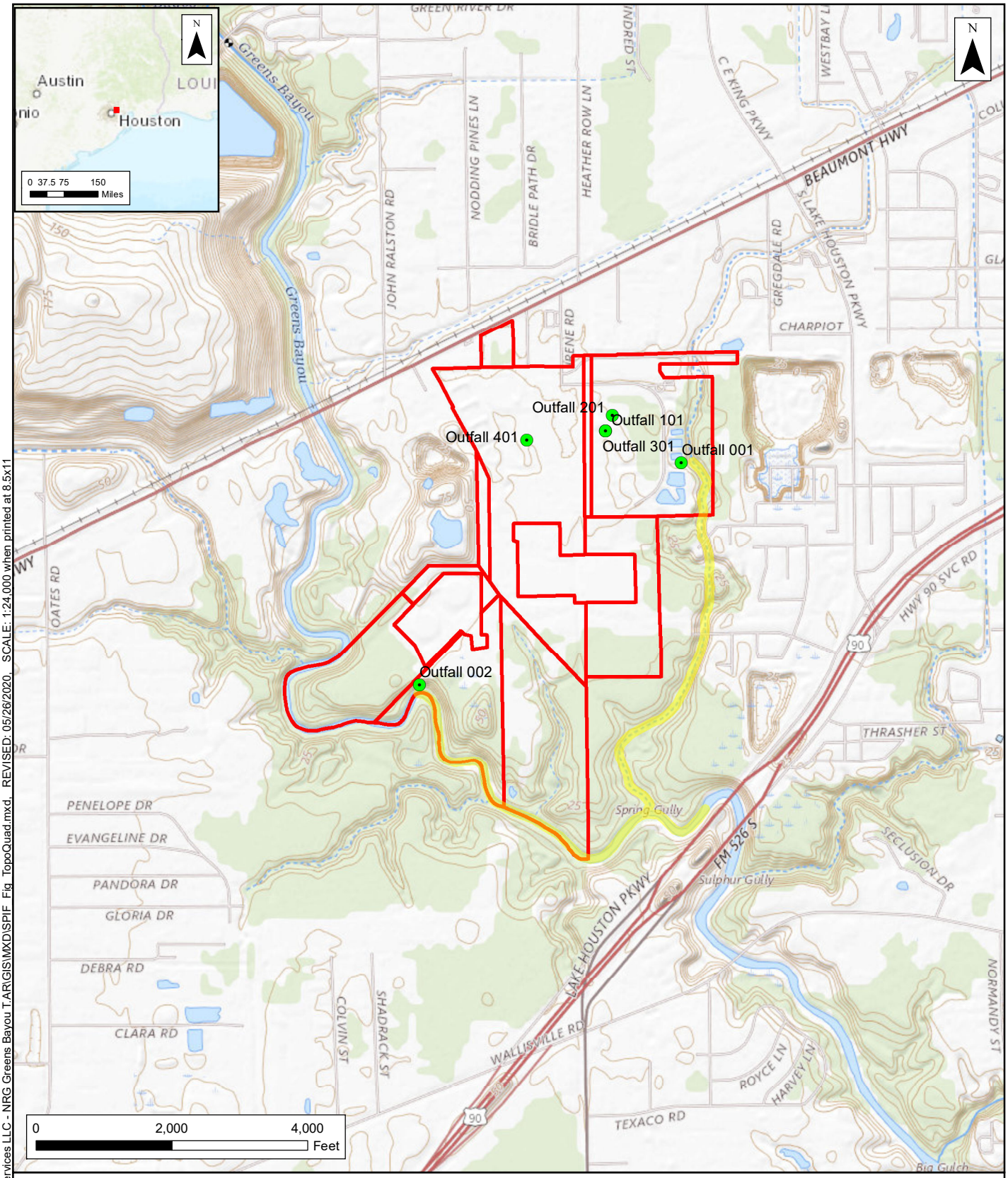
12. Describe existing disturbances, vegetation, and land use: Electric Generating Station

THE FOLLOWING ITEMS APPLY ONLY TO APPLICATIONS FOR NEW TPDES PERMITS AND MAJOR AMENDMENTS TO TPDES PERMITS

13. List construction dates of all buildings and structures on the property: N/A

14. Provide a brief history of the property, and name of the architect/builder, if known: N/A

SPIF ATTACHMENT A FIGURE



Legend

- Property Boundary
- Outfall
- Discharge route

SPIF Figure
Jacinto City
1:24,000 USGS Quadrangles
TPDES Permit Renewal
NRG Texas Power LLC
Houston, Texas

Environmental Resources Management
www.erm.com

H:\Projects\0547924 NRG Energy Services LLC - NRG Greens Bayou T.AR\GIS\MXD\SPIF Fig TopoQuad.mxd, REVISED: 05/26/2020, SCALE: 1:24,000 when printed at 8.5x11

Source: Esri - USGS Topoographic Map; WGS 1984 Web Mercator Auxiliary Sphere

SPIF ATTACHMENT B PHOTOS

Photo 1: Units 1 - 4, facing south.

Photo 2: Unit 5, facing north.

Photo 3: Unit 5 Cooling Tower, facing northwest.

Photo 4: Gas Turbines 70s and 80s, facing northeast.

Photo 5: Gas Turbine 73, facing northeast.

Photo 6: Gas Turbines 81-82, facing west.

Photo 7: Gas Turbines 83-84 Cooling Skid, facing east.

Photo 8: Gas Turbine 84, facing north.

Photo 9: Gas Turbines 81-84 Cooling Skid, facing northeast.

Photo 10: Tricellerator, facing southwest.

Photo 11: Greens Bayou aerial view, facing south.

Photo 12: Greens Bayou aerial view, facing east.

TECHNICAL REPORT 1.0
INDUSTRIAL

The following information **is required** for all applications for a TLAP or an individual TPDES discharge permit.

For additional information or clarification on the requested information, refer to the Instructions for Completing the Industrial Wastewater Permit Application[1] available on the TCEQ website.

If more than one outfall is included in the application, provide applicable information for each individual outfall. **If an item does not apply to the facility, enter N/A** to indicate that the item has been considered. Include separate reports or additional sheets as **clearly cross-referenced attachments** and provide the attachment number in the space provided for the item the attachment addresses.

NOTE: This application is for an industrial wastewater permit only. Additional authorizations from the TCEQ Waste Permits Division or the TCEQ Air Permits Division may be needed.

1. FACILITY/SITE INFORMATION (Instructions, Pages 34-35)

a. Describe the general nature of the business and type(s) of industrial and commercial activities. Include all applicable SIC codes (up to 4).

Greens Bayou Electric Generating Station is a facility designed to generate electricity from a steam-electric generating unit and several simple cycle gas turbines. The primary SIC Code is 4911.

b. Describe all wastewater-generating processes at the facility.

See Attachment D

[1] https://www.tceq.texas.gov/permitting/wastewater/industrial/TPDES_industrial_wastewater_steps.html

c. Provide a list of raw materials, major intermediates, and final products handled at the facility.

Materials List

Raw Materials	Intermediate Products	Final Products
Natural Gas (CAS #74-82-8)	Steam	Electricity

Attachment: N/A

d. Attach a facility map (drawn to scale) with the following information:

- Production areas, maintenance areas, materials-handling areas, waste-disposal areas, and water intake structures.
- The location of each unit of the WWTP including the location of wastewater collection sumps, impoundments, outfalls, and sampling points, if significantly different from outfall locations.

Attachment: E

e. Is this a new permit application for an existing facility?

☐ Yes ☒ No

If **yes**, provide background discussion: N/A

f. Is/will the treatment facility/disposal site be located above the 100-year frequency flood level.

☒ Yes ☐ No

List source(s) used to determine 100-year frequency flood plain: FIRM 48201C0705M, eff. 01/06/2017

If **no**, provide the elevation of the 100-year frequency flood plain and describe what protective measures are used/proposed to prevent flooding (including tail water and rainfall run-on controls) of the treatment facility and disposal area: N/A

Attachment: N/A

g. For **new** or **major amendment** permit applications, will any construction operations result in a discharge of fill material into a water in the state?

☐ Yes ☐ No ☒ N/A (renewal only)

h. If **yes** to Item 1.g, has the applicant applied for a USACE CWA Chapter 404 Dredge and Fill permit?

☐ Yes ☐ No

If **yes**, provide the permit number: N/A

If **no**, provide an approximate date of application submittal to the USACE: N/A

2. TREATMENT SYSTEM (Instructions, Page 35)

a. List any physical, chemical, or biological treatment process(es) used/proposed to treat wastewater at this facility. Include a description of each treatment process, starting with initial treatment and finishing with the outfall/point of disposal.

See Attachment F

b. Attach a flow schematic **with a water balance** showing all sources of water and wastewater flow into the facility, wastewater flow into and from each treatment unit, and wastewater flow to each outfall/point of disposal.

Attachment: G

3. IMPOUNDMENTS (Instructions, Pages 35-37)

Does the facility use or plan to use any wastewater impoundments (e.g., lagoons or ponds?)

☒ Yes ☐ No

If **no**, proceed to Item 4. If **yes**, complete **Item 3.a** for **existing** impoundments and **Items 3.a - 3.e** for **new or proposed** impoundments. **NOTE:** See instructions, Pages 35-37, for additional information on the attachments required by Items 3.a – 3.e.

a. Complete the table with the following information for each existing, new, or proposed impoundment:

Use Designation: Indicate the use designation for each impoundment as Treatment (**T**), Disposal (**D**), Containment (**C**), or Evaporation (**E**).

Associated Outfall Number: Provide an outfall number if a discharge occurs or will occur.

Liner Type: Indicate the liner type as Compacted clay liner (**C**), In-situ clay liner (**I**), Synthetic/plastic/rubber liner (**S**), or Alternate liner (**A**). **NOTE:** See instructions for further detail on liner specifications. If an alternate liner (A) is selected, include an attachment that provides a description of the alternate liner and any additional technical information necessary for an evaluation.

Leak Detection System: If any leak detection systems are in place/planned, enter **Y** for yes. Otherwise, enter **N** for no.

Groundwater Monitoring Wells and Data: If groundwater monitoring wells are in place/planned, enter **Y** for yes. Otherwise, enter **N** for no. Attach any existing groundwater monitoring data.

Dimensions: Provide the dimensions, freeboard, surface area, storage capacity of the impoundments, and the maximum depth (not including freeboard). For impoundments with irregular shapes, submit surface area instead of length and width.

Compliance with 40 CFR Part 257, Subpart D: If the impoundment is required to be in compliance with 40 CFR Part 257, Subpart D, enter **Y** for yes. Otherwise, enter **N** for no.

Date of Construction: Enter the date construction of the impoundment commenced (mm/dd/yy).

Impoundment Information

Parameter	Pond #1	Pond #2	Pond #3	Pond #4
Use Designation: (T) (D) (C) or (E)	C	C	C	C
Associated Outfall Number	N/A	N/A	N/A	N/A
Liner Type (C) (I) (S) or (A)	C	C	C	C
Alt. Liner Attachment Reference	N/A	N/A	N/A	N/A
Leak Detection System, Y/N	N	N	N	N
Groundwater Monitoring Wells, Y/N	N	N	N	N
Groundwater Monitoring Data Attachment	N/A	N/A	N/A	N/A
Pond Bottom Located Above The Seasonal High-Water Table, Y/N	Unknown	Unknown	Unknown	Unknown
Length (ft)	175	175	Irregular	Irregular
Width (ft)	99	88	Irregular	Irregular
Max Depth From Water Surface (ft), Not Including Freeboard	8	8	8	8
Freeboard (ft)	2	2	2	2
Surface Area (acres)	0.4	0.35	1	1
Storage Capacity (gallons)	1.03 MG	0.9 MG	1.6 MG	1.5 MG
40 CFR Part 257, Subpart D, Y/N	N	N	N	N
Date of Construction	Unknown	Unknown	Unknown	Unknown

Impoundment Information

Parameter	Pond #	Pond #	Pond #	Pond #
Use Designation: (T) (D) (C) or (E)				
Associated Outfall Number				
Liner Type (C) (I) (S) or (A)				
Alt. Liner Attachment Reference				
Leak Detection System, Y/N				
Groundwater Monitoring Wells, Y/N				
Groundwater Monitoring Data Attachment				
Pond Bottom Located Above The Seasonal High-Water Table, Y/N				
Length (ft)				
Width (ft)				
Max Depth From Water Surface (ft), not including freeboard				
Freeboard (ft)				
Surface Area (acres)				
Storage Capacity (gallons)				
40 CFR Part 257, Subpart D, Y/N				
Date of Construction				

Attachment: N/A

The following information (**Items 3.b – 3.e**) is required only for **new or proposed** impoundments.

b. For new or proposed impoundments, attach any available information on the following items. If attached, check **yes** in the appropriate box. Otherwise, check **no** or **not yet designed**.

i. Liner data

☐ Yes ☐ No ☐ Not yet designed

ii. Leak detection system or groundwater monitoring data

☐ Yes ☐ No ☐ Not yet designed

iii. Groundwater impacts

☐ Yes ☐ No ☐ Not yet designed

NOTE: Item b.iii is required if the bottom of the pond is not above the seasonal high-water table in the shallowest water-bearing zone.

Attachment: N/A

For TLAP applications: Items 3.c – 3.e are **not required**, continue to Item 4.

c. Attach a USGS map or a color copy of original quality and scale which accurately locates and identifies all known water supply wells and monitor wells within ½-mile of the impoundments.

Attachment: N/A

d. Attach copies of State Water Well Reports (e.g., driller's logs, completion data, etc.), and data on depths to groundwater for all known water supply wells including a description of how the depths to groundwater were obtained.

Attachment: N/A

e. Attach information pertaining to the groundwater, soils, geology, pond liner, etc. used to assess the potential for migration of wastes from the impoundments or the potential for contamination of groundwater or surface water.

Attachment: N/A

4. OUTFALL/DISPOSAL METHOD INFORMATION (Instructions, Pages 38-39)

Complete the following tables to describe the location and wastewater discharge or disposal operations for each outfall for discharge operations and for each point of disposal for TLAP operations.

If there are more outfalls/points of disposal at the facility than the spaces provided, copies of pages 6 and/or numbered accordingly (i.e., page 6a, 6b, etc.) may be used to provide information on the additional outfalls.

For TLAP applications: Indicate the disposal method and each individual irrigation area **I**, evaporation pond **E**, or subsurface drainage system **S** by providing the appropriate letter designation for the disposal method followed by a numerical designation for each disposal area in the space provided for **Outfall** number (e.g. **E1** for evaporation pond 1, **I2** for irrigation area No. 2, etc.).

Outfall Latitude and Longitude

Outfall Number	Latitude-decimal degrees	Longitude-decimal degrees
001	29.822380	-95.214349
002	29.814591	-95.225417
101	29.823611	-95.218056
201	29.824167	-95.217778
301	29.823611	-95.218056
401	29.825000	-95.225833

Outfall Location Description

Outfall Number	Location Description
001	End of pipe sample location
002	End of pipe
101	Sample point
201	Sample point
301	Sample point
401	Sample point

Description of Sampling Points (if different from Outfall location)

Outfall Number	Description of Sampling Point
001	N/A
002	Sample point
101	N/A
201	N/A
301	N/A
401	N/A

Outfall Flow Information – Permitted and Proposed

Outfall Number	Permitted Daily Avg Flow (MGD)	Permitted Daily Max Flow (MGD)	Proposed Daily Avg Flow (MGD)	Proposed Daily Max Flow (MGD)	Anticipated Discharge Date (mm/dd/yy)
001	Report	Report	N/A	N/A	N/A
002	Report	Report	N/A	N/A	N/A
101	Report	Report	N/A	N/A	N/A
201	3.0	5.0	N/A	N/A	N/A
301	Report	Report	N/A	N/A	N/A
401	Report	Report	N/A	N/A	N/A

Outfall Discharge – Method and Measurement

Outfall Number	Pumped Discharge? Y/N	Gravity Discharge? Y/N	Type of Flow Measurement Device Used
001	N	Y	Totalizer
002	Y	N	Totalizer
101	Y	N	Totalizer
201	Y	N	Totalizer
301	Y	N	Totalizer
401	Y	N	Totalizer

Outfall Discharge – Flow Characteristics

Outfall Number	Intermittent Discharge? Y/N	Continuous Discharge? Y/N	Seasonal Discharge? Y/N	Discharge Duration (hrs/day)	Discharge Duration (days/mo)	Discharge Duration (mo/yr)
001	Y	N	N	*	*	*
002	Y	N	N	*	*	*
101	Y	N	N	*	*	*
201	Y	N	N	*	*	*
301	Y	N	N	*	*	*
401	Y	N	N	*	*	*
*Flow variable						

Wastestream Contributions

Outfall No.: <u>001</u>

Contributing Wastestreams	Volume (MGD)	% of Total Flow
Outfall 101	0.007**	2.0
Outfall 201	0.000***	0.0
Outfall 301	0.008**	2.3
Outfall 401	0.002**	0.6
Stormwater	Variable	95.1
Total	0.347	100
**2-year average (5/01/18-4/30/20)		
*** Unit 5's retirement ceased flows through Outfall 201 in Aug. 2017		

Outfall No.: <u>002</u>

Contributing Wastestreams	Volume (MGD)	% of Total Flow
Floor drainage	0.020**	95.2
Stormwater	Variable	4.8
Total	0.021	100
**2-year average (5/01/18-4/30/20)		

Outfall No.: 101

Contributing Wastestreams	Volume (MGD)	% of Total Flow
Metal cleaning wastes	0.00014**	2
Stormwater	Variable	98
Total	0.007	100
**2-year average (5/01/18-4/30/20)		

Attachment: H

5. BLOWDOWN AND ONCE-THROUGH COOLING WATER DISCHARGES (Instructions, Page 39)

a. Does the facility use/propose to use any cooling towers which discharge blowdown or other wastestreams to the outfall(s)?

☒ Yes ☐ No

NOTE: If the facility uses or plans to use cooling towers, Item 12 **is required**.

b. Does the facility use or plan to use any boilers that discharge blowdown or other wastestreams to the outfall(s)?

☒ Yes ☐ No

c. Does or will the facility discharge once-through cooling water to the outfall(s)?

☐ Yes ☒ No

NOTE: If the facility uses or plans to use once-through cooling water, Item 12 **is required**.

d. If **yes** to Items 5.a, 5.b, **or** 5.c, attach the SDS with the following information for each chemical additive.

- Manufacturers Product Identification Number
- Product use (e.g., biocide, fungicide, corrosion inhibitor, etc.)
- Chemical composition including CASRN for each ingredient
- Classify product as non-persistent, persistent, or bioaccumulative
- Product or active ingredient half-life
- Frequency of product use (e.g., 2 hours/day once every two weeks)
- Product toxicity data specific to fish and aquatic invertebrate organisms
- Concentration of whole product or active ingredient, as appropriate, in wastestream.

Attach a summary of this information in addition to the submittal of the SDS for each specific wastestream and the associated chemical additives and specify which outfalls are affected.

Attachment: I

e. Cooling Towers and Boilers

If **yes** to either Item 5.a **or** 5.b, complete the following table.

Cooling Towers and Boilers

Type of Unit	Number of Units	Dly Avg Blowdown (gallons/day)	Dly Max Blowdown (gallons/day)
Cooling Towers	2	0.458	1.512
Boilers	1	0.005	0.036

6. STORMWATER MANAGEMENT (Instructions, Pages 39-40)

Are there any existing/proposed outfalls which discharge stormwater associated with industrial activities, as defined at *40 CFR § 122.26(b)(14)*, commingled with any other wastestream?

☒ Yes ☐ No

If **yes**, briefly describe the industrial processes and activities that occur outdoors or in some manner which may result in exposure of the activities or materials to stormwater: See Attachment J

7. DOMESTIC SEWAGE, SEWAGE SLUDGE, AND SEPTAGE MANAGEMENT AND DISPOSAL (Instructions, Page 40)

a. Check the box next to the appropriate method of domestic sewage and domestic sewage sludge treatment or disposal. Complete Worksheet 5.0 or Item 7.b if directed to do so.

☐ Domestic sewage is routed (i.e., connected to or transported to) to a WWTP permitted to receive domestic sewage for treatment, disposal, or both. **Complete Item 7.b**.

☐ Domestic sewage is disposed of by an on-site septic tank and drainfield system. **Complete Item 7.b**.

☐ Domestic and industrial treatment sludge **ARE commingled** prior to use or disposal.

☒ Industrial wastewater and domestic sewage are treated separately, and the respective sludge **IS NOT commingled** prior to sludge use or disposal. **Complete Worksheet 5.0**.

☐ Facility is a POTW. **Complete Worksheet 5.0**.

☐ Domestic sewage is not generated on-site.

☐ Other (e.g., portable toilets), specify and **Complete Item 7.b**: Click to enter text

b. Provide the name and TCEQ, NPDES, or TPDES Permit No. of the waste-disposal facility which receives the domestic sewage/septage. If hauled by motorized vehicle, provide the name and TCEQ Registration No. of the hauler.

Domestic Sewage Plant/Hauler Name

Plant/Hauler Name	Permit/Registration No.
WCA Needville	96322
Specialized Waste Systems	40514

8. IMPROVEMENTS OR COMPLIANCE/ENFORCEMENT REQUIREMENTS (Instructions, Page 40)

a. Is the permittee currently required to meet any implementation schedule for compliance or enforcement?

☐ Yes ☒ No

b. Has the permittee completed or planned for any improvements or construction projects?

☐ Yes ☒ No

c. If **yes** to either 8.a **or** 8.b, provide a brief summary of the requirements and a status update: N/A

9. TOXICITY TESTING (Instructions, Page 41)

Have any biological tests for acute or chronic toxicity been made on any of the discharges or on a receiving water in relation to the discharge within the last three years?

☒ Yes ☐ No

If **yes**, identify the tests and describe their purposes: 24-hour acute and 7-day chronic biomonitoring is conducted.

Additionally, attach a copy of all tests performed which **have not** been submitted to the TCEQ or EPA.

Attachment: All test results have been submitted to TCEQ

10. OFF-SITE/THIRD PARTY WASTES (Instructions, Page 41)

a. Does or will the facility receive wastes from off-site sources for treatment at the facility, disposal on-site via land application, or discharge via a permitted outfall?

☐ Yes ☒ No

If **no**, proceed to Item 11. If **yes**, provide responses to Items 10.b through 10.d below.

b. Attach the following information to the application:

- List of wastes received (including volumes, characterization, and capability with on-site wastes).
- Identify the sources of wastes received (including the legal name and addresses of the generators).
- Description of the relationship of waste source(s) with the facility's activities.

Attachment: N/A

c. Is or will wastewater from another TCEQ, NPDES, or TPDES permitted facility commingled with this facility's wastewater after final treatment and prior to discharge via the final outfall/point of disposal?

☐ Yes ☐ No

If **yes**, provide the name, address, and TCEQ, NPDES, or TPDES permit number of the contributing facility and a copy of any agreements or contracts relating to this activity.

Attachment: N/A

d. Is this facility a POTW that accepts/will accept process wastewater from any SIU and has/is required to have an approved pretreatment program under the NPDES/TPDES program?

☐ Yes ☐ No

If **yes**, **Worksheet 6.0** of this application **is required**.

11. RADIOACTIVE MATERIALS (Instructions, Pages 41-42)

a. Are/will radioactive materials be mined, used, stored, or processed at this facility?

☐ Yes ☒ No

If **yes**, use the following table to provide the results of one analysis of the effluent for all radioactive materials that may be present. Provide results in pCi/L.

Radioactive Materials Mined, Used, Stored, or Processed

Radioactive Material	Concentration (pCi/L)
N/A	

b. Does the applicant or anyone at the facility have any knowledge or reason to believe that radioactive materials may be present in the discharge, including naturally occurring radioactive materials in the source waters or on the facility property?

☐ Yes ☒ No

If **yes**, use the following table to provide the results of one analysis of the effluent for all radioactive materials that may be present. Provide results in pCi/L. Do not include information provided in response to Item 11.a.

Radioactive Materials Present in the Discharge

Radioactive Material	Concentration (pCi/L)
N/A	

12. COOLING WATER (Instructions, Pages 42-43)

a. Does the facility use or propose to use water for cooling purposes?

☒ Yes ☐ No

If **no**, stop here. If **yes**, complete Items 12.b thru 12.f.

b. Cooling water is/will be obtained from a groundwater source (e.g., on-site well).

☒ Yes ☐ No

If **yes**, stop here. If **no**, continue.

c. Cooling Water Supplier

i. Provide the name of the owner(s) and operator(s) for the CWIS that supplies or will supply water for cooling purposes to the facility.

Cooling Water Intake Structure(s) Owner(s) and Operator(s)

CWIS ID	Unknown			
Owner	City of Houston			
Operator	City of Houston			

ii. Cooling water is/will be obtained from a Public Water Supplier (PWS)

☒ Yes ☐ No

If **no**, continue. If **yes**, provide the PWS Registration No. and stop here: 1011057 (Currently in Inactive status as employee count is below 25)

iii. Cooling water is/will be obtained from an Independent Supplier

☐ Yes ☐ No

If **no**, proceed to Item 12.d. If **yes,** contact the Industrial Permits Team to determine what application materials are required. Attach copies of the correspondence with the TCEQ and any required application materials, as stipulated in the correspondence with the TCEQ.

Attachment: N/A

d. 316(b) General Criteria

i. The CWIS(s) have or will have a cumulative design intake flow of 2 MGD or greater

☐ Yes ☐ No

ii. At least 25% of the total water withdrawn by the CWIS is/will be used exclusively for cooling purposes on an annual average basis

☐ Yes ☐ No

iii. The facility withdraws/proposes to withdraw water for cooling purposes from surface waters that meet the definition of Waters of the United States in *40 CFR § 122.2*.

☐ Yes ☐ No

If **no**, provide an explanation of how the waterbody does not meet the definition of Waters of the United States in *40 CFR § 122.2*: N/A

If **yes** to all three questions in Item 12.d, the facility is subject to 316(b). Proceed to Item 12.f.

If **no** to any of the questions in Item 12.d, the facility does not meet the minimum criteria to be subject to the full requirements of 316(b). Proceed to Item 12.e.

e. The facility is **not subject** to 316(b) **and uses/proposes to use cooling towers**.

☐ Yes ☐ No

If **yes**, stop here. If **no**, complete Worksheet 11.0, Items 1(a), 1(b)(i-iii) and (vi), 2(b)(i), and 3(a) to allow for a determination based upon BPJ.

f. Phase I vs Phase II Facilities

i. Existing facility (Phase II)

☐ Yes ☐ No

If **yes**, complete Worksheets 11.0 through 11.3, as applicable. Otherwise, continue.

ii. New Facility – (Phase I)

☐ Yes ☐ No

If **yes**, check the box next to the facility's compliance track selection, attach the requested information, and complete Worksheet 11.0, Items 2 and 3, and Worksheet 11.2:

☐ Track I - AIF greater than 2 MGD, but less than 10 MGD
- Attach information required by *40 CFR §§ 125.86(b)(2)-(4)*.

☐ Track I - AIF greater than 10 MGD
- Attach information required by *40 CFR § 125.86(b)*.

☐ Track II
- Attach information required by *40 CFR § 125.86(c)*.

Attachment: N/A

NOTE: Item 13 is required only for existing permitted facilities.

13. PERMIT CHANGE REQUESTS (Instructions, Pages 43-44)

a. Is the facility requesting a **major amendment** of an existing permit?

☐ Yes ☒ No

If **yes**, list each request individually and provide the following information: 1) detailed information regarding the scope of each request and 2) a justification for each request. Attach any supplemental information or additional data to support each request.

N/A

b. Is the facility requesting any **minor amendments** to the permit?

☐ Yes ☒ No

If **yes**, list and discuss the requested changes.

N/A

c. Is the facility requesting any **minor modifications** to the permit?

☐ Yes ☒ No

If **yes**, list and discuss the requested changes.

N/A

WORKSHEET 1.0
EPA CATEGORICAL EFFLUENT GUIDELINES

This worksheet **is required** for all applications for TPDES permits for discharges of wastewaters subject to EPA categorical effluent limitation guidelines (ELGs).

1. CATEGORICAL INDUSTRIES (Instructions, Pages 47-48)

Is this facility subject to any of the 40 CFR categorical ELGs outlined on page 52 of the instructions?

☒ Yes ☐ No

If **no**, this worksheet is not required. If **yes**, provide the appropriate information in the table below.

40 CFR Effluent Guidelines

Industry	40 CFR Part
Steam electric power generating	423

2. PRODUCTION/PROCESS DATA (Instructions, Page 48)

a. **Production Data**

Provide the appropriate data for effluent guidelines with production-based effluent limitations.

Production Data

Subcategory	Actual Quantity/Day	Design Quantity/Day	Units
N/A			

b. **Organic Chemicals, Plastics, and Synthetic Fibers Manufacturing Data (40 CFR Part 414)**

Provide each applicable subpart and the percent of total production. Provide data for metal-bearing and cyanide-bearing wastestreams, as required by *40 CFR Part 414, Appendices A and B*.

Percentages of Total Production

Subcategory	Percent of Total Production	Appendix A and B - Metal	Appendix A – Cyanide
N/A			

c. **Refineries (40 CFR Part 419)**

Provide the applicable subcategory and a brief justification.

N/A

3. PROCESS/NON-PROCESS WASTEWATER FLOWS (Instructions, Page 48)

Provide a breakdown of wastewater flow(s) generated by the facility, including both process and non-process wastewater flow(s). Specify which wastewater flows are to be authorized for discharge under this permit and the disposal practices for wastewater flows, excluding domestic, which are not to be authorized for discharge under this permit.

See Attachment K

4. NEW SOURCE DETERMINATION (Instructions, Page 48)

Provide a list of all wastewater-generating processes subject to EPA categorical ELGs, identify the appropriate guideline Part and Subpart, and provide the date the process/construction commenced.

Wastewater-generating Processes Subject to Effluent Guidelines

Process	EPA Guideline: Part	EPA Guideline: Subpart	Date Process/ Construction Commenced
Low volume waste sources	423	12b(3)	1949
Cooling tower blowdown	423	13(d)(1)	1972
Metal cleaning waste treatment	423	13e	1949

WORKSHEET 2.0
POLLUTANT ANALYSES REQUIREMENTS

Worksheet 2.0 **is required** for all applications submitted for a TPDES permit. Worksheet 2.0 is not required for applications for a permit to dispose of all wastewater by land disposal or for discharges solely of stormwater associated with industrial activities.

1. LABORATORY ACCREDITATION (Instructions, Page 49)

Effective July 1, 2008, all laboratory tests performed must meet the requirements of *30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification* with the following general exemptions:

a. The laboratory is an in-house laboratory and is:
   i. periodically inspected by the TCEQ; or
   ii. located in another state and is accredited or inspected by that state; or
   iii. performing work for another company with a unit located in the same site; or
   iv. performing pro bono work for a governmental agency or charitable organization.

b. The laboratory is accredited under federal law.

c. The data are needed for emergency-response activities, and a laboratory accredited under the Texas Laboratory Accreditation Program is not available.

d. The laboratory supplies data for which the TCEQ does not offer accreditation.

Review *30 TAC Chapter 25* for specific requirements. The following certification statement shall be signed and submitted with every application. See Instructions, Page 32, for a list of approved signatories.

I, Craig Eckberg, certify that all laboratory tests submitted with this application meet the requirements of *30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification.*

C.B. 5 Aug 20

(Signature)

2. GENERAL TESTING REQUIREMENTS (Instructions, Pages 49-51)

a. Provide the date range of all sampling events conducted to obtain the analytical data submitted with this application (e.g., 05/01/2018-05/30/2018): 04/08/2020-05/04/2020

b. ☒ Check the box to confirm all samples were collected no more than 12 months prior to the date of application submittal.

c. Read the general testing requirements in the instructions for important information about sampling, test methods, and MALs. If a contact laboratory was used, attach a list which includes the name, contact information, and pollutants analyzed for each laboratory/firm. **Attachment:** L

3. SPECIFIC TESTING REQUIREMENTS (Instructions, Pages 51-62)

Attach correspondence from TCEQ approving submittal of less than the required number of samples, if applicable. **Attachment:** N/A

TABLE 1 and TABLE 2 (Instructions, Page 50)

Completion of Tables 1 and 2 **is required** for **all external outfalls** for all TPDES permit applications.

Table 1 for Outfall No.: 001

Samples are (check one): ☐ Composite ☒ Grab

Pollutant	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)
BOD (5-day)	<2.00	<2.00	5.44	<2.00
CBOD (5-day)	<2.00	<2.00	3.46	<2.00
Chemical oxygen demand	<15.0	<15.0	<15.0	25.0
Total organic carbon	3.56	4.60	2.55	7.98
Dissolved oxygen	8.00	7.45	7.03	7.66
Ammonia nitrogen	0.079	0.084	0.076	<0.050
Total suspended solids	4.11	4.83	24.0	19.8
Nitrate nitrogen	0.622	0.102	0.163	0.229
Total organic nitrogen	0.53	<0.50	<0.50	1.1
Total phosphorus	0.0940	0.0620	0.124	0.105
Oil and grease	<2.00	<2.00	<2.00	2.50
Total residual chlorine	0.05	0.02	0.02	0.05
Total dissolved solids	436	284	244	194
Sulfate	131	44.6	22.3	21.9
Chloride	24.7	27.8	24.7	15.9
Fluoride	0.252	0.321	0.421	0.230
Total alkalinity (mg/L as CaCO3)	162	209	214	126
Temperature (°F)	74	61	72	62
pH (standard units)	7.94	7.56	7.06	6.58

Table 2 for Outfall No.: 001

Samples are (check one): ☐ Composites ☒ Grabs

Pollutant	Sample 1 (µg/L)	Sample 2 (µg/L)	Sample 3 (µg/L)	Sample 4 (µg/L)	MAL (µg/L)
Aluminum, total	121	102	677	500	2.5
Antimony, total	<5	<5	<5	<5	5
Arsenic, total	4.36	3.39	5.54	3.85	0.5
Barium, total	77.7	114	114	93.7	3
Beryllium, total	<0.5	<0.5	<0.5	<0.5	0.5
Cadmium, total	<1	<1	<1	<1	1
Chromium, total	<3	<3	<3	<3	3
Chromium, hexavalent	0.345	<3	0.273	0.314	3
Chromium, trivalent	<4.00	<4.00	<4.00	<4.00	N/A
Copper, total	4.92	4.21	5.68	7.42	2
Cyanide, available	<2	<2	<2	<2	2/10
Lead, total	0.788	0.558	2.28	1.81	0.5
Mercury, total	0.0020	0.0016	0.0035	0.0052	0.005/0.0005
Nickel, total	<2	<2	<2	2.29	2
Selenium, total	<5	<5	<5	<5	5
Silver, total	<0.5	<0.5	<0.5	<0.5	0.5
Thallium, total	<0.5	<0.5	<0.5	<0.5	0.5
Zinc, total	13.9	10.9	20.8	27.8	5.0

TABLE 3 (Instructions, Page 50)

Completion of Table 3 **is required** for all **external outfalls** which discharge process wastewater.

Partial completion of Table 3 **is required** for all **external outfalls** which discharge non-process wastewater and stormwater associated with industrial activities commingled with other wastestreams (see instructions for additional guidance).

Table 3 for Outfall No.: 001

Samples are (check one): ☐ **Composites** ☒ **Grabs**

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
Acrylonitrile	<50	<50	<50	<50	50
Anthracene	<10	<10	<10	<10	10
Benzene	<10	<10	<10	<10	10
Benzidine	<50	<50	<50	<50	50
Benzo(a)anthracene	<5	<5	<5	<5	5
Benzo(a)pyrene	<5	<5	<5	<5	5
Bis(2-chloroethyl)ether	<10	<10	<10	<10	10
Bis(2-ethylhexyl)phthalate	<10	<10	<10	<10	10
Bromodichloromethane [Dichlorobromomethane]	<10	<10	<10	<10	10
Bromoform	<10	<10	<10	<10	10
Carbon tetrachloride	<2	<2	<2	<2	2
Chlorobenzene	<10	<10	<10	<10	10
Chlorodibromomethane [Dibromochloromethane]	<10	<10	<10	<10	10
Chloroform	<10	<10	<10	<10	10
Chrysene	<5	<5	<5	<5	5
m-Cresol [3-Methylphenol]	<10	<10	<10	<10	10
o-Cresol [2-Methylphenol]	<10	<10	<10	<10	10
p-Cresol [4-Methylphenol]	<10	<10	<10	<10	10
1,2-Dibromoethane	<10	<10	<10	<10	10
m-Dichlorobenzene [1,3-Dichlorobenzene]	<10	<10	<10	<10	10
o-Dichlorobenzene [1,2-Dichlorobenzene]	<10	<10	<10	<10	10
p-Dichlorobenzene [1,4-Dichlorobenzene]	<10	<10	<10	<10	10
3,3'-Dichlorobenzidine	<5	<5	<5	<5	5
1,2-Dichloroethane	<10	<10	<10	<10	10
1,1-Dichloroethene [1,1-Dichloroethylene]	<10	<10	<10	<10	10
Dichloromethane [Methylene chloride]	<20	<20	<20	<20	20
1,2-Dichloropropane	<10	<10	<10	<10	10
1,3-Dichloropropene [1,3-Dichloropropylene]	<10	<10	<10	<10	10

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
2,4-Dimethylphenol	<10	<10	<10	<10	10
Di-n-Butyl phthalate	<10	<10	<10	<10	10
Ethylbenzene	<10	<10	<10	<10	10
Fluoride	252	321	421	230	500
Hexachlorobenzene	<5	<5	<5	<5	5
Hexachlorobutadiene	<10	<10	<10	<10	10
Hexachlorocyclopentadiene	<10	<10	<10	<10	10
Hexachloroethane	<20	<20	<20	<20	20
Methyl ethyl ketone	<50	<50	<50	<50	50
Nitrobenzene	<10	<10	<10	<10	10
N-Nitrosodiethylamine	<20	<20	<20	<20	20
N-Nitroso-di-n-butylamine	<20	<20	<20	<20	20
Nonylphenol	<333	<333	<333	<333	333
Pentachlorobenzene	<20	<20	<20	<20	20
Pentachlorophenol	<5	<5	<5	<5	5
Phenanthrene	<10	<10	<10	<10	10
Polychlorinated biphenyls (PCBs) (**)	<0.2	<0.2	<0.2	<0.2	0.2
Pyridine	<20	<20	<20	<20	20
1,2,4,5-Tetrachlorobenzene	<20	<20	<20	<20	20
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	10
Tetrachloroethene [Tetrachloroethylene]	<10	<10	<10	<10	10
Toluene	<10	<10	<10	<10	10
1,1,1-Trichloroethane	<10	<10	<10	<10	10
1,1,2-Trichloroethane	<10	<10	<10	<10	10
Trichloroethene [Trichloroethylene]	<10	<10	<10	<10	10
2,4,5-Trichlorophenol	<50	<50	<50	<50	50
TTHM (Total trihalomethanes)	<10	<10	<10	<10	10
Vinyl chloride	<10	<10	<10	<10	10

(*) Indicate units if different from µg/L.
(**) Total of detects for PCB-1242, PCB-1254, PCB-1221, PCB-1232, PCB-1248, PCB-1260, and PCB-1016. If all non-detects, enter the highest non-detect preceded by a "<".

TABLE 4 (Instructions, Pages 50-51)

Partial completion of Table 4 **is required** for each **external outfall** based on the conditions below.

a. Tributyltin

Is this facility an industrial/commercial facility which currently or proposes to directly dispose of wastewater from the types of operations listed below or a domestic facility which currently or proposes to receive wastewater from the types of industrial/commercial operations listed below?

☐ Yes ☒ No

If **yes**, check the box next to each of the following criteria which apply and provide the appropriate testing results in Table 4 below (check all that apply).

☐ Manufacturers and formulators of tributyltin or related compounds.
☐ Painting of ships, boats and marine structures.
☐ Ship and boat building and repairing.
☐ Ship and boat cleaning, salvage, wrecking and scaling.
☐ Operation and maintenance of marine cargo handling facilities and marinas.
☐ Facilities engaged in wood preserving.
☐ Any other industrial/commercial facility for which tributyltin is known to be present, or for which there is any reason to believe that tributyltin may be present in the effluent.

b. Enterococci (discharge to saltwater)

i. This facility discharges/proposes to discharge directly into saltwater receiving waters **and** Enterococci bacteria are expected to be present in the discharge based on facility processes.

☐ Yes ☒ No

ii. Domestic wastewater is/will be discharged.

☐ Yes ☒ No

If **yes to either** question, provide the appropriate testing results in Table 4 below.

c. E. coli (discharge to freshwater)

i. This facility discharges/proposes to discharge directly into freshwater receiving waters **and** *E. coli* bacteria are expected to be present in the discharge based on facility processes.

☒ Yes ☐ No

ii. Domestic wastewater is/will be discharged.

☒ Yes ☐ No

If **yes to either** question, provide the appropriate testing results in Table 4 below.

Table 4 for Outfall No.: 001
Samples are (check one): ☐ **Composites** ☒ **Grabs**

Pollutant	Sample 1	Sample 2	Sample 3	Sample 4	MAL
Tributyltin (µg/L)	N/A	N/A	N/A	N/A	0.010
Enterococci (cfu or MPN/100 mL)	N/A	N/A	N/A	N/A	N/A
E. coli (cfu or MPN/100 mL)	26	12	<1	403	N/A

TABLE 5 (Instructions, Page 51)

Completion of Table 5 **is required** for all **external outfalls** which discharge process wastewater from a facility which manufactures or formulates pesticides or herbicides or other wastewaters which may contain pesticides or herbicides.

If this facility does not/will not manufacture or formulate pesticides or herbicides and does not/will not discharge other wastewaters which may contain pesticides or herbicides, check N/A.

☒ N/A

Table 5 for Outfall No.: N/A

Samples are (check one): ☐ **Composites** ☐ **Grabs**

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
Aldrin					0.01
Carbaryl					5
Chlordane					0.2
Chlorpyrifos					0.05
4,4'-DDD					0.1
4,4'-DDE					0.1
4,4'-DDT					0.02
2,4-D					0.7
Danitol [Fenpropathrin]					—
Demeton					0.20
Diazinon					0.5/0.1
Dicofol [Kelthane]					1
Dieldrin					0.02
Diuron					0.090
Endosulfan I (*alpha*)					0.01
Endosulfan II (*beta*)					0.02
Endosulfan sulfate					0.1
Endrin					0.02
Guthion [Azinphos methyl]					0.1
Heptachlor					0.01
Heptachlor epoxide					0.01
Hexachlorocyclohexane (*alpha*)					0.05
Hexachlorocyclohexane (*beta*)					0.05
Hexachlorocyclohexane (*gamma*) [Lindane]					0.05
Hexachlorophene					10
Malathion					0.1
Methoxychlor					2.0
Mirex					0.02
Parathion (ethyl)					0.1
Toxaphene					0.3
2,4,5-TP [Silvex]					0.3

* Indicate units if different from µg/L.

TABLE 6 (Instructions, Page 52)

Completion of Table 6 **is required** for all **external outfalls**.

Table 6 for Outfall No.: 001

Samples are (check one): ☐ **Composites** ☒ **Grabs**

Pollutants	Believed Present	Believed Absent	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)	MAL (µg/L)*
Bromide	☐	☒					400
Color (PCU)	☒	☐	30.0	30.0	75.0	75.0	—
Nitrate-Nitrite (as N)	☒	☐	0.622	<0.200	<0.200	0.229	—
Sulfide (as S)	☐	☒					—
Sulfite (as SO_3)	☐	☒					—
Surfactants	☒	☐	<0.0500	<0.0500	<0.0500	0.0510	—
Boron, total	☐	☒					20
Cobalt, total	☐	☒					0.3
Iron, total	☒	☐	0.208	0.246	0.790	0.485	7
Magnesium, total	☒	☐	4.450	7.200	5.060	4.380	20
Manganese, total	☒	☐	0.0465	0.0807	0.0587	0.0387	0.5
Molybdenum, total	☒	☐	0.00347	0.00317	0.00389	0.0264	1
Tin, total	☐	☒					5
Titanium, total	☐	☒					30

* Indicate units if different from µg/L.

TABLE 7 (Instructions, Page 52)

Check the box next to any of the industrial categories applicable to this facility. If no categories are applicable, check N/A. If GC/MS testing is required, check the box provided to confirm the testing results for the appropriate parameters are provided with the application.

☐ N/A

Table 7 for Applicable Industrial Categories

Industrial Category	40 CFR Part	Volatiles Table 8	Acids Table 9	Bases/Neutrals Table 10	Pesticides Table 11
☐ Adhesives and Sealants		☐ Yes	☐ Yes	☐ Yes	No
☐ Aluminum Forming	467	☐ Yes	☐ Yes	☐ Yes	No
☐ Auto and Other Laundries		☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Battery Manufacturing	461	☐ Yes	No	☐ Yes	No
☐ Coal Mining	434	No	No	No	No
☐ Coil Coating	465	☐ Yes	☐ Yes	☐ Yes	No
☐ Copper Forming	468	☐ Yes	☐ Yes	☐ Yes	No
☐ Electric and Electronic Components	469	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Electroplating	413	☐ Yes	☐ Yes	☐ Yes	No
☐ Explosives Manufacturing	457	No	☐ Yes	☐ Yes	No
☐ Foundries		☐ Yes	☐ Yes	☐ Yes	No
☐ Gum and Wood Chemicals - Subparts A,B,C,E	454	☐ Yes	☐ Yes	No	No
☐ Gum and Wood Chemicals - Subparts D,F	454	☐ Yes	☐ Yes	☐ Yes	No
☐ Inorganic Chemicals Manufacturing	415	☐ Yes	☐ Yes	☐ Yes	No
☐ Iron and Steel Manufacturing	420	☐ Yes	☐ Yes	☐ Yes	No
☐ Leather Tanning and Finishing	425	☐ Yes	☐ Yes	☐ Yes	No
☐ Mechanical Products Manufacturing		☐ Yes	☐ Yes	☐ Yes	No
☐ Nonferrous Metals Manufacturing	421,471	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Ore Mining - Subpart B	440	No	☐ Yes	No	No
☐ Organic Chemicals Manufacturing	414	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Paint and Ink Formulation	446,447	☐ Yes	☐ Yes	☐ Yes	No
☐ Pesticides	455	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Petroleum Refining	419	☐ Yes	No	No	No
☐ Pharmaceutical Preparations	439	☐ Yes	☐ Yes	☐ Yes	No
☐ Photographic Equipment and Supplies	459	☐ Yes	☐ Yes	☐ Yes	No
☐ Plastic and Synthetic Materials Manufacturing	414	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Plastic Processing	463	☐ Yes	No	No	No
☐ Porcelain Enameling	466	No	No	No	No
☐ Printing and Publishing		☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Pulp and Paperboard Mills - Subpart C	430	☐ *	☐ Yes	☐ *	☐ Yes
☐ Pulp and Paperboard Mills - Subparts F, K	430	☐ *	☐ Yes	☐ *	☐ *
☐ Pulp and Paperboard Mills - Subparts A, B, D, G, H	430	☐ Yes	☐ Yes	☐ *	☐ *
☐ Pulp and Paperboard Mills - Subparts I, J, L	430	☐ Yes	☐ Yes	☐ *	☐ Yes
☐ Pulp and Paperboard Mills - Subpart E	430	☐ Yes	☐ Yes	☐ Yes	☐ *
☐ Rubber Processing	428	☐ Yes	☐ Yes	☐ Yes	No
☐ Soap and Detergent Manufacturing	417	☐ Yes	☐ Yes	☐ Yes	No
☒ Steam Electric Power Plants	423	☒ Yes	☒ Yes	No	No
☐ Textile Mills (Not Subpart C)	410	☐ Yes	☐ Yes	☐ Yes	No
☐ Timber Products Processing	429	☐ Yes	☐ Yes	☐ Yes	☐ Yes

* Test if believed present.

TABLES 8, 9, 10, and 11 (Instructions, Page 52)

Completion of Tables 8, 9, 10, and 11 **is required** as specified in Table 7 for all **external outfalls** that contain process wastewater.

Completion of Tables 8, 9, 10, and 11 **may be required** for types of industry not specified in Table 7 for specific parameters that are believed to be present in the wastewater.

Table 8 for Outfall No.: 001 : Volatile Compounds

Samples are (check one): ☐ **Composites** ☒ **Grabs**

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
Acrolein	<50	<50	<50	<50	50
Acrylonitrile	<50	<50	<50	<50	50
Benzene	<10	<10	<10	<10	10
Bromoform	<10	<10	<10	<10	10
Carbon tetrachloride	<2	<2	<2	<2	2
Chlorobenzene	<10	<10	<10	<10	10
Chlorodibromomethane	<10	<10	<10	<10	10
Chloroethane	<50	<50	<50	<50	50
2-Chloroethylvinyl ether	<10	<10	<10	<10	10
Chloroform	<10	<10	<10	<10	10
Dichlorobromomethane [Bromodichloromethane]	<10	<10	<10	<10	10
1,1-Dichloroethane	<10	<10	<10	<10	10
1,2-Dichloroethane	<10	<10	<10	<10	10
1,1-Dichloroethylene [1,1-Dichloroethene]	<10	<10	<10	<10	10
1,2-Dichloropropane	<10	<10	<10	<10	10
1,3-Dichloropropylene [1,3-Dichloropropene]	<10	<10	<10	<10	10
Ethylbenzene	<10	<10	<10	<10	10
Methyl bromide [Bromomethane]	<50	<50	<50	<50	50
Methyl chloride [Chloromethane]	<50	<50	<50	<50	50
Methylene chloride [Dichloromethane]	<20	<20	<20	<20	20
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	10
Tetrachloroethylene [Tetrachloroethene]	<10	<10	<10	<10	10
Toluene	<10	<10	<10	<10	10
1,2-Trans-dichloroethylene [1,2-Trans-dichloroethene]	<10	<10	<10	<10	10
1,1,1-Trichloroethane	<10	<10	<10	<10	10
1,1,2-Trichloroethane	<10	<10	<10	<10	10
Trichloroethylene [Trichloroethene]	<10	<10	<10	<10	10
Vinyl chloride	<10	<10	<10	<10	10

* Indicate units if different from µg/L.

Table 9 for Outfall No.: 001 : Acid Compounds

Samples are (check one): ☐ Composites ☒ Grabs

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
2-Chlorophenol	<10	<10	<10	<10	10
2,4-Dichlorophenol	<10	<10	<10	<10	10
2,4-Dimethylphenol	<10	<10	<10	<10	10
4,6-Dinitro-o-cresol	<50	<50	<50	<50	50
2,4-Dinitrophenol	<50	<50	<50	<50	50
2-Nitrophenol	<20	<20	<20	<20	20
4-Nitrophenol	<50	<50	<50	<50	50
p-Chloro-m-cresol	<10	<10	<10	<10	10
Pentachlorophenol	<5	<5	<5	<5	5
Phenol	<10	<10	<10	<10	10
2,4,6-Trichlorophenol	<10	<10	<10	<10	10

* Indicate units if different from µg/L.

Table 10 for Outfall No.: N/A : Base/Neutral Compounds

Samples are (check one): ☐ Composites ☐ Grabs

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
Acenaphthene					10
Acenaphthylene					10
Anthracene					10
Benzidine					50
Benzo(a)anthracene					5
Benzo(a)pyrene					5
3,4-Benzofluoranthene [Benzo(b)fluoranthene]					10
Benzo(ghi)perylene					20
Benzo(k)fluoranthene					5
Bis(2-chloroethoxy)methane					10
Bis(2-chloroethyl)ether					10
Bis(2-chloroisopropyl)ether					10
Bis(2-ethylhexyl)phthalate					10
4-Bromophenyl phenyl ether					10
Butylbenzyl phthalate					10
2-Chloronaphthalene					10
4-Chlorophenyl phenyl ether					10
Chrysene					5
Dibenzo(a,h)anthracene					5
1,2-Dichlorobenzene [o-Dichlorobenzene]					10
1,3-Dichlorobenzene [m-Dichlorobenzene]					10
1,4-Dichlorobenzene [p-Dichlorobenzene]					10
3,3'-Dichlorobenzidine					5

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
Diethyl phthalate					10
Dimethyl phthalate					10
Di-n-butyl phthalate					10
2,4-Dinitrotoluene					10
2,6-Dinitrotoluene					10
Di-n-octyl phthalate					10
1,2-Diphenylhydrazine (as Azobenzene)					20
Fluoranthene					10
Fluorene					10
Hexachlorobenzene					5
Hexachlorobutadiene					10
Hexachlorocyclopentadiene					10
Hexachloroethane					20
Indeno(1,2,3-cd)pyrene					5
Isophorone					10
Naphthalene					10
Nitrobenzene					10
N-Nitrosodimethylamine					50
N-Nitrosodi-n-propylamine					20
N-Nitrosodiphenylamine					20
Phenanthrene					10
Pyrene					10
1,2,4-Trichlorobenzene					10

* Indicate units if different from µg/L.

Table 11 for Outfall No.: N/A : Pesticides

Samples are (check one): ☐ Composites ☐ Grabs

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
Aldrin					0.01
alpha-BHC [alpha-Hexachlorocyclohexane]					0.05
beta-BHC [beta-Hexachlorocyclohexane]					0.05
gamma-BHC [gamma-Hexachlorocyclohexane]					0.05
delta-BHC [delta-Hexachlorocyclohexane]					0.05
Chlordane					0.2
4,4'-DDT					0.02
4,4'-DDE					0.1
4,4'-DDD					0.1
Dieldrin					0.02
Endosulfan I (alpha)					0.01
Endosulfan II (beta)					0.02
Endosulfan sulfate					0.1

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
Endrin					0.02
Endrin aldehyde					0.1
Heptachlor					0.01
Heptachlor epoxide					0.01
PCB 1242					0.2
PCB 1254					0.2
PCB 1221					0.2
PCB 1232					0.2
PCB 1248					0.2
PCB 1260					0.2
PCB 1016					0.2
Toxaphene					0.3

* Indicate units if different from µg/L.

Attachment: N/A

TABLE 12 (DIOXINS/FURAN COMPOUNDS)

Complete of Table 12 **is required** for **external outfalls**, as directed below. (Instructions, Pages 53-54)

a. Indicate which compound(s) are manufactured or used at the facility and provide a brief description of the conditions of its/their presence at the facility (check all that apply).

- ☐ 2,4,5-trichlorophenoxy acetic acid (2,4,5-T) CASRN 93-76-5
- ☐ 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5-TP) CASRN 93-72-1
- ☐ 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate (Erbon) CASRN 136-25-4
- ☐ 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel) CASRN 299-84-3
- ☐ 2,4,5-trichlorophenol (TCP) CASRN 95-95-4
- ☐ hexachlorophene (HCP) CASRN 70-30-4
- ☒ None of the above

Description: N/A

b. Does the applicant or anyone at the facility know or have any reason to believe that 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) or any congeners of TCDD may be present in the effluent proposed for discharge?

☐ Yes ☒ No

Description: N/A

If **yes** to either Items a **or** b, complete Table 12 as instructed.

Table 12 for Outfall No.: N/A

Samples are (check one): ☐ **Composites** ☐ **Grabs**

Compound	Toxicity Equivalent Factors	Wastewater Concentration (ppq)	Wastewater Toxicity Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Toxicity Equivalents (ppt)	MAL (ppq)
2,3,7,8-TCDD	1					10
1,2,3,7,8-PeCDD	1.0					50
2,3,7,8-HxCDDs	0.1					50
1,2,3,4,6,7,8-HpCDD	0.01					50
2,3,7,8-TCDF	0.1					10
1,2,3,7,8-PeCDF	0.03					50
2,3,4,7,8-PeCDF	0.3					50
2,3,7,8-HxCDFs	0.1					50
2,3,4,7,8-HpCDFs	0.01					50
OCDD	0.0003					100
OCDF	0.0003					100
PCB 77	0.0001					500
PCB 81	0.0003					500
PCB 126	0.1					500
PCB 169	0.03					500
Total						

TABLE 13 (HAZARDOUS SUBSTANCES)

Complete Table 13 **is required** for all **external outfalls** as directed below. (Instructions, Page 54)

a. Are there any pollutants listed in the instructions (pages 55-62) believed present in the discharge?

☐ Yes ☒ No

b. Are there pollutants listed in Item 1.c. of Technical Report 1.0 which are believed present in the discharge and have not been analytically quantified elsewhere in this application?

☐ Yes ☒ No

If **yes** to either Items a **or** b, complete Table 13 as instructed.

Table 13 for Outfall No.: N/A

Samples are (check one): ☐ **Composites** ☐ **Grabs**

Pollutant	CASRN	Sample 1 (µg/L)	Sample 2 (µg/L)	Sample 3 (µg/L)	Sample 4 (µg/L)	Analytical Method

WORKSHEET 2.0
POLLUTANT ANALYSES REQUIREMENTS

Worksheet 2.0 **is required** for all applications submitted for a TPDES permit. Worksheet 2.0 is not required for applications for a permit to dispose of all wastewater by land disposal or for discharges solely of stormwater associated with industrial activities.

1. LABORATORY ACCREDITATION (Instructions, Page 49)

Effective July 1, 2008, all laboratory tests performed must meet the requirements of *30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification* with the following general exemptions:

a. The laboratory is an in-house laboratory and is:
   i. periodically inspected by the TCEQ; or
   ii. located in another state and is accredited or inspected by that state; or
   iii. performing work for another company with a unit located in the same site; or
   iv. performing pro bono work for a governmental agency or charitable organization.

b. The laboratory is accredited under federal law.

c. The data are needed for emergency-response activities, and a laboratory accredited under the Texas Laboratory Accreditation Program is not available.

d. The laboratory supplies data for which the TCEQ does not offer accreditation.

Review *30 TAC Chapter 25* for specific requirements. The following certification statement shall be signed and submitted with every application. See Instructions, Page 32, for a list of approved signatories.

I, Craig Eckberg, certify that all laboratory tests submitted with this application meet the requirements of *30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification.*

C.R. Eck 5Aug20

(Signature)

2. GENERAL TESTING REQUIREMENTS (Instructions, Pages 49-51)

a. Provide the date range of all sampling events conducted to obtain the analytical data submitted with this application (e.g., 05/01/2018-05/30/2018): 04/08/2020-05/04/2020

b. ☒ Check the box to confirm all samples were collected no more than 12 months prior to the date of application submittal.

c. Read the general testing requirements in the instructions for important information about sampling, test methods, and MALs. If a contact laboratory was used, attach a list which includes the name, contact information, and pollutants analyzed for each laboratory/firm. **Attachment:** L

3. SPECIFIC TESTING REQUIREMENTS (Instructions, Pages 51-62)

Attach correspondence from TCEQ approving submittal of less than the required number of samples, if applicable. **Attachment:** N/A

TABLE 1 and TABLE 2 (Instructions, Page 50)

Completion of Tables 1 and 2 **is required** for **all external outfalls** for all TPDES permit applications.

Table 1 for Outfall No.: 002

Samples are (check one): ☐ **Composite** ☒ **Grab**

Pollutant	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)
BOD (5-day)	<2.00	<2.00	<2.00	<2.00
CBOD (5-day)	<2.00	<2.00	<2.00	<2.00
Chemical oxygen demand	<15.0	<15.0	<15.0	<15.0
Total organic carbon	2.38	2.30	2.38	2.30
Dissolved oxygen	7.40	6.51	9.17	6.29
Ammonia nitrogen	0.057	0.081	0.10	<0.050
Total suspended solids	<2.00	<2.00	<2.00	<2.00
Nitrate nitrogen	0.686	0.512	0.326	0.679
Total organic nitrogen	2.1	<0.50	<0.50	0.69
Total phosphorus	<0.0500	0.0680	<0.0500	0.0570
Oil and grease	<2.00	<2.00	<2.00	2.08
Total residual chlorine	0.06	0.03	0.03	0.03
Total dissolved solids	106	142	148	128
Sulfate	8.79	9.19	9.07	8.18
Chloride	12.2	14.9	14.4	11.2
Fluoride	0.130	0.180	0.219	0.196
Total alkalinity (mg/L as CaCO3)	97.6	119	118	88.8
Temperature (°F)	77	67	76	80
pH (standard units)	7.96	8.05	7.28	6.81

Table 2 for Outfall No.: 002

Samples are (check one): ☐ **Composites** ☒ **Grabs**

Pollutant	Sample 1 (µg/L)	Sample 2 (µg/L)	Sample 3 (µg/L)	Sample 4 (µg/L)	MAL (µg/L)
Aluminum, total	21.1	30.7	14.0	27.5	2.5
Antimony, total	<5	<5	<5	<5	5
Arsenic, total	1.84	2.99	2.60	1.96	0.5
Barium, total	64.4	88.6	69.5	69.7	3
Beryllium, total	<0.5	<0.5	<0.5	<0.5	0.5
Cadmium, total	<1	<1	<1	<1	1
Chromium, total	<3	<3	<3	<3	3
Chromium, hexavalent	0.278	<0.500	0.411	0.523	3
Chromium, trivalent	<4.00	<4.00	<4.00	<4.00	N/A
Copper, total	5.97	10.8	6.51	8.18	2
Cyanide, available	<2	<2	<2	<2	2/10
Lead, total	4.25	7.50	0.970	8.34	0.5
Mercury, total	0.019	0.016	0.0066	0.019	0.005/0.0005
Nickel, total	<2	<2	<2	<2	2

Pollutant	Sample 1 (µg/L)	Sample 2 (µg/L)	Sample 3 (µg/L)	Sample 4 (µg/L)	MAL (µg/L)
Selenium, total	<5	<5	<5	<5	5
Silver, total	<0.5	<0.5	<0.5	<0.5	0.5
Thallium, total	<0.5	<0.5	<0.5	<0.5	0.5
Zinc, total	128	67.6	29.1	276	5.0

TABLE 3 (Instructions, Page 50)

Completion of Table 3 **is required** for all **external outfalls** which discharge process wastewater.

Partial completion of Table 3 **is required** for all **external outfalls** which discharge non-process wastewater and stormwater associated with industrial activities commingled with other wastestreams (see instructions for additional guidance).

Table 3 for Outfall No.: 002

Samples are (check one): ☐ **Composites** ☒ **Grabs**

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
Acrylonitrile	<50	<50	<50	<50	50
Anthracene	<10	<10	<10	<10	10
Benzene	<10	<10	<10	<10	10
Benzidine	<50	<50	<50	<50	50
Benzo(a)anthracene	<5	<5	<5	<5	5
Benzo(a)pyrene	<5	<5	<5	<5	5
Bis(2-chloroethyl)ether	<10	<10	<10	<10	10
Bis(2-ethylhexyl)phthalate	<10	<10	<10	<10	10
Bromodichloromethane [Dichlorobromomethane]	<10	<10	<10	<10	10
Bromoform	<10	<10	<10	<10	10
Carbon tetrachloride	<2	<2	<2	<2	2
Chlorobenzene	<10	<10	<10	<10	10
Chlorodibromomethane [Dibromochloromethane]	<10	<10	<10	<10	10
Chloroform	<10	<10	<10	<10	10
Chrysene	<5	<5	<5	<5	5
m-Cresol [3-Methylphenol]	<10	<10	<10	<10	10
o-Cresol [2-Methylphenol]	<10	<10	<10	<10	10
p-Cresol [4-Methylphenol]	<10	<10	<10	<10	10
1,2-Dibromoethane	<10	<10	<10	<10	10
m-Dichlorobenzene [1,3-Dichlorobenzene]	<10	<10	<10	<10	10
o-Dichlorobenzene [1,2-Dichlorobenzene]	<10	<10	<10	<10	10
p-Dichlorobenzene [1,4-Dichlorobenzene]	<10	<10	<10	<10	10

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
3,3'-Dichlorobenzidine	<5	<5	<5	<5	5
1,2-Dichloroethane	<10	<10	<10	<10	10
1,1-Dichloroethene [1,1-Dichloroethylene]	<10	<10	<10	<10	10
Dichloromethane [Methylene chloride]	<20	<20	<20	<20	20
1,2-Dichloropropane	<10	<10	<10	<10	10
1,3-Dichloropropene [1,3-Dichloropropylene]	<10	<10	<10	<10	10
2,4-Dimethylphenol	<10	<10	<10	<10	10
Di-n-Butyl phthalate	<10	<10	<10	<10	10
Ethylbenzene	<10	<10	<10	<10	10
Fluoride	130	180	219	196	500
Hexachlorobenzene	<5	<5	<5	<5	5
Hexachlorobutadiene	<10	<10	<10	<10	10
Hexachlorocyclopentadiene	<10	<10	<10	<10	10
Hexachloroethane	<20	<20	<20	<20	20
Methyl ethyl ketone	<50	<50	<50	<50	50
Nitrobenzene	<10	<10	<10	<10	10
N-Nitrosodiethylamine	<20	<20	<20	<20	20
N-Nitroso-di-n-butylamine	<20	<20	<20	<20	20
Nonylphenol	<333	<333	<333	<333	333
Pentachlorobenzene	<20	<20	<20	<20	20
Pentachlorophenol	<5	<5	<5	<5	5
Phenanthrene	<10	<10	<10	<10	10
Polychlorinated biphenyls (PCBs) (**)	<0.2	<0.2	<0.2	<0.2	0.2
Pyridine	<20	<20	<20	<20	20
1,2,4,5-Tetrachlorobenzene	<20	<20	<20	<20	20
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	10
Tetrachloroethene [Tetrachloroethylene]	<10	<10	<10	<10	10
Toluene	<10	<10	<10	<10	10
1,1,1-Trichloroethane	<10	<10	<10	<10	10
1,1,2-Trichloroethane	<10	<10	<10	<10	10
Trichloroethene [Trichloroethylene]	<10	<10	<10	<10	10
2,4,5-Trichlorophenol	<50	<50	<50	<50	50
TTHM (Total trihalomethanes)	<10	<10	<10	<10	10
Vinyl chloride	<10	<10	<10	<10	10

(*) Indicate units if different from µg/L.

(**) Total of detects for PCB-1242, PCB-1254, PCB-1221, PCB-1232, PCB-1248, PCB-1260, and PCB-1016. If all non-detects, enter the highest non-detect preceded by a "<".

TABLE 4 (Instructions, Pages 50-51)

Partial completion of Table 4 **is required** for each **external outfall** based on the conditions below.

a. Tributyltin

Is this facility an industrial/commercial facility which currently or proposes to directly dispose of wastewater from the types of operations listed below or a domestic facility which currently or proposes to receive wastewater from the types of industrial/commercial operations listed below?

☐ Yes ☒ No

If **yes**, check the box next to each of the following criteria which apply and provide the appropriate testing results in Table 4 below (check all that apply).

☐ Manufacturers and formulators of tributyltin or related compounds.
☐ Painting of ships, boats and marine structures.
☐ Ship and boat building and repairing.
☐ Ship and boat cleaning, salvage, wrecking and scaling.
☐ Operation and maintenance of marine cargo handling facilities and marinas.
☐ Facilities engaged in wood preserving.
☐ Any other industrial/commercial facility for which tributyltin is known to be present, or for which there is any reason to believe that tributyltin may be present in the effluent.

b. Enterococci (discharge to saltwater)

i. This facility discharges/proposes to discharge directly into saltwater receiving waters **and** Enterococci bacteria are expected to be present in the discharge based on facility processes.

☐ Yes ☒ No

ii. Domestic wastewater is/will be discharged.

☐ Yes ☒ No

If **yes to either** question, provide the appropriate testing results in Table 4 below.

c. E. coli (discharge to freshwater)

i. This facility discharges/proposes to discharge directly into freshwater receiving waters **and** *E. coli* bacteria are expected to be present in the discharge based on facility processes.

☒ Yes ☐ No

ii. Domestic wastewater is/will be discharged.

☒ Yes ☐ No

If **yes to either** question, provide the appropriate testing results in Table 4 below.

Table 4 for Outfall No.: 002

Samples are (check one): ☐ **Composites** ☒ **Grabs**

Pollutant	Sample 1	Sample 2	Sample 3	Sample 4	MAL
Tributyltin (µg/L)	N/A	N/A	N/A	N/A	0.010
Enterococci (cfu or MPN/100 mL)	N/A	N/A	N/A	N/A	N/A
E. coli (cfu or MPN/100 mL)	52	1550	<1	1200	N/A

TABLE 5 (Instructions, Page 51)

Completion of Table 5 **is required** for all **external outfalls** which discharge process wastewater from a facility which manufactures or formulates pesticides or herbicides or other wastewaters which may contain pesticides or herbicides.

If this facility does not/will not manufacture or formulate pesticides or herbicides and does not/will not discharge other wastewaters which may contain pesticides or herbicides, check N/A.

☒ N/A

Table 5 for Outfall No.: Click to enter text.

Samples are (check one): ☐ **Composites** ☐ **Grabs**

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
Aldrin					0.01
Carbaryl					5
Chlordane					0.2
Chlorpyrifos					0.05
4,4'-DDD					0.1
4,4'-DDE					0.1
4,4'-DDT					0.02
2,4-D					0.7
Danitol [Fenpropathrin]					—
Demeton					0.20
Diazinon					0.5/0.1
Dicofol [Kelthane]					1
Dieldrin					0.02
Diuron					0.090
Endosulfan I (*alpha*)					0.01
Endosulfan II (*beta*)					0.02
Endosulfan sulfate					0.1
Endrin					0.02
Guthion [Azinphos methyl]					0.1
Heptachlor					0.01
Heptachlor epoxide					0.01
Hexachlorocyclohexane (*alpha*)					0.05
Hexachlorocyclohexane (*beta*)					0.05
Hexachlorocyclohexane (*gamma*) [Lindane]					0.05
Hexachlorophene					10
Malathion					0.1
Methoxychlor					2.0
Mirex					0.02
Parathion (ethyl)					0.1
Toxaphene					0.3

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
2,4,5-TP [Silvex]					0.3

* Indicate units if different from µg/L.

TABLE 6 (Instructions, Page 52)

Completion of Table 6 **is required** for all **external outfalls**.

Table 6 for Outfall No.: 002

Samples are (check one): ☐ **Composites** ☒ **Grabs**

Pollutants	Believed Present	Believed Absent	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)	MAL (µg/L)*
Bromide	☐	☒					400
Color (PCU)	☒	☐	10.0	10.0	10.0	15.0	—
Nitrate-Nitrite (as N)	☒	☐	0.686	0.512	0.326	0.735	—
Sulfide (as S)	☐	☒					—
Sulfite (as SO_3)	☐	☒					—
Surfactants	☒	☐	<0.0500	0.0530	<0.0500	<0.0500	—
Boron, total	☒	☐	0.0457	0.0609	0.0488	0.0437	20
Cobalt, total	☐	☒					0.3
Iron, total	☒	☐	<0.007	<0.007	<0.007	<0.007	7
Magnesium, total	☒	☐	1.620	2.380	1.890	1.690	20
Manganese, total	☒	☐	0.00523	0.0279	0.00508	0.0159	0.5
Molybdenum, total	☒	☐	0.00169	0.00210	0.00196	0.00159	1
Tin, total	☒	☐	<0.005	<0.005	<0.005	<0.005	5
Titanium, total	☐	☒					30

* Indicate units if different from µg/L.

TABLE 7 (Instructions, Page 52)

Check the box next to any of the industrial categories applicable to this facility. If no categories are applicable, check N/A. If GC/MS testing is required, check the box provided to confirm the testing results for the appropriate parameters are provided with the application.

☐ N/A

Table 7 for Applicable Industrial Categories

Industrial Category	40 CFR Part	Volatiles Table 8	Acids Table 9	Bases/Neutrals Table 10	Pesticides Table 11
☐ Adhesives and Sealants		☐ Yes	☐ Yes	☐ Yes	No
☐ Aluminum Forming	467	☐ Yes	☐ Yes	☐ Yes	No
☐ Auto and Other Laundries		☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Battery Manufacturing	461	☐ Yes	No	☐ Yes	No
☐ Coal Mining	434	No	No	No	No
☐ Coil Coating	465	☐ Yes	☐ Yes	☐ Yes	No
☐ Copper Forming	468	☐ Yes	☐ Yes	☐ Yes	No
☐ Electric and Electronic Components	469	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Electroplating	413	☐ Yes	☐ Yes	☐ Yes	No
☐ Explosives Manufacturing	457	No	☐ Yes	☐ Yes	No
☐ Foundries		☐ Yes	☐ Yes	☐ Yes	No
☐ Gum and Wood Chemicals - Subparts A,B,C,E	454	☐ Yes	☐ Yes	No	No
☐ Gum and Wood Chemicals - Subparts D,F	454	☐ Yes	☐ Yes	☐ Yes	No
☐ Inorganic Chemicals Manufacturing	415	☐ Yes	☐ Yes	☐ Yes	No
☐ Iron and Steel Manufacturing	420	☐ Yes	☐ Yes	☐ Yes	No
☐ Leather Tanning and Finishing	425	☐ Yes	☐ Yes	☐ Yes	No
☐ Mechanical Products Manufacturing		☐ Yes	☐ Yes	☐ Yes	No
☐ Nonferrous Metals Manufacturing	421,471	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Ore Mining - Subpart B	440	No	☐ Yes	No	No
☐ Organic Chemicals Manufacturing	414	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Paint and Ink Formulation	446,447	☐ Yes	☐ Yes	☐ Yes	No
☐ Pesticides	455	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Petroleum Refining	419	☐ Yes	No	No	No
☐ Pharmaceutical Preparations	439	☐ Yes	☐ Yes	☐ Yes	No
☐ Photographic Equipment and Supplies	459	☐ Yes	☐ Yes	☐ Yes	No
☐ Plastic and Synthetic Materials Manufacturing	414	☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Plastic Processing	463	☐ Yes	No	No	No
☐ Porcelain Enameling	466	No	No	No	No
☐ Printing and Publishing		☐ Yes	☐ Yes	☐ Yes	☐ Yes
☐ Pulp and Paperboard Mills - Subpart C	430	☐ *	☐ Yes	☐ *	☐ Yes
☐ Pulp and Paperboard Mills - Subparts F, K	430	☐ *	☐ Yes	☐ *	☐ *
☐ Pulp and Paperboard Mills - Subparts A, B, D, G, H	430	☐ Yes	☐ Yes	☐ *	☐ *
☐ Pulp and Paperboard Mills - Subparts I, J, L	430	☐ Yes	☐ Yes	☐ *	☐ Yes
☐ Pulp and Paperboard Mills - Subpart E	430	☐ Yes	☐ Yes	☐ Yes	☐ *
☐ Rubber Processing	428	☐ Yes	☐ Yes	☐ Yes	No
☐ Soap and Detergent Manufacturing	417	☐ Yes	☐ Yes	☐ Yes	No
☒ Steam Electric Power Plants	423	☒ Yes	☒ Yes	No	No
☐ Textile Mills (Not Subpart C)	410	☐ Yes	☐ Yes	☐ Yes	No

Industrial Category	40 CFR Part	Volatiles Table 8	Acids Table 9	Bases/Neutrals Table 10	Pesticides Table 11
☐ Timber Products Processing	429	☐ Yes	☐ Yes	☐ Yes	☐ Yes

* Test if believed present.

TABLES 8, 9, 10, and 11 (Instructions, Page 52)

Completion of Tables 8, 9, 10, and 11 **is required** as specified in Table 7 for all **external outfalls** that contain process wastewater.

Completion of Tables 8, 9, 10, and 11 **may be required** for types of industry not specified in Table 7 for specific parameters that are believed to be present in the wastewater.

Table 8 for Outfall No.: 002 : Volatile Compounds

Samples are (check one): ☐ Composites ☒ Grabs

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
Acrolein	<50	<50	<50	<50	50
Acrylonitrile	<50	<50	<50	<50	50
Benzene	<10	<10	<10	<10	10
Bromoform	<10	<10	<10	<10	10
Carbon tetrachloride	<2	<2	<2	<2	2
Chlorobenzene	<10	<10	<10	<10	10
Chlorodibromomethane	<10	<10	<10	<10	10
Chloroethane	<50	<50	<50	<50	50
2-Chloroethylvinyl ether	<10	<10	<10	<10	10
Chloroform	<10	<10	<10	<10	10
Dichlorobromomethane [Bromodichloromethane]	<10	<10	<10	<10	10
1,1-Dichloroethane	<10	<10	<10	<10	10
1,2-Dichloroethane	<10	<10	<10	<10	10
1,1-Dichloroethylene [1,1-Dichloroethene]	<10	<10	<10	<10	10
1,2-Dichloropropane	<10	<10	<10	<10	10
1,3-Dichloropropylene [1,3-Dichloropropene]	<10	<10	<10	<10	10
Ethylbenzene	<10	<10	<10	<10	10
Methyl bromide [Bromomethane]	<50	<50	<50	<50	50
Methyl chloride [Chloromethane]	<50	<50	<50	<50	50
Methylene chloride [Dichloromethane]	<20	<20	<20	<20	20
1,1,2,2-Tetrachloroethane	<10	<10	<10	<10	10
Tetrachloroethylene [Tetrachloroethene]	<10	<10	<10	<10	10
Toluene	<10	<10	<10	<10	10
1,2-Trans-dichloroethylene [1,2-Trans-dichloroethene]	<10	<10	<10	<10	10
1,1,1-Trichloroethane	<10	<10	<10	<10	10
1,1,2-Trichloroethane	<10	<10	<10	<10	10
Trichloroethylene [Trichloroethene]	<10	<10	<10	<10	10
Vinyl chloride	<10	<10	<10	<10	10

* Indicate units if different from µg/L.

Table 9 for Outfall No.: 002 : Acid Compounds

Samples are (check one): ☐ Composites ☒ Grabs

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
2-Chlorophenol	<10	<10	<10	<10	10
2,4-Dichlorophenol	<10	<10	<10	<10	10
2,4-Dimethylphenol	<10	<10	<10	<10	10
4,6-Dinitro-o-cresol	<50	<50	<50	<50	50
2,4-Dinitrophenol	<50	<50	<50	<50	50
2-Nitrophenol	<20	<20	<20	<20	20
4-Nitrophenol	<50	<50	<50	<50	50
p-Chloro-m-cresol	<10	<10	<10	<10	10
Pentachlorophenol	<5	<5	<5	<5	5
Phenol	<10	<10	<10	<10	10
2,4,6-Trichlorophenol	<10	<10	<10	<10	10

* Indicate units if different from µg/L.

Table 10 for Outfall No.: N/A : Base/Neutral Compounds

Samples are (check one): ☐ Composites ☐ Grabs

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
Acenaphthene					10
Acenaphthylene					10
Anthracene					10
Benzidine					50
Benzo(a)anthracene					5
Benzo(a)pyrene					5
3,4-Benzofluoranthene [Benzo(b)fluoranthene]					10
Benzo(ghi)perylene					20
Benzo(k)fluoranthene					5
Bis(2-chloroethoxy)methane					10
Bis(2-chloroethyl)ether					10
Bis(2-chloroisopropyl)ether					10
Bis(2-ethylhexyl)phthalate					10
4-Bromophenyl phenyl ether					10
Butylbenzyl phthalate					10
2-Chloronaphthalene					10
4-Chlorophenyl phenyl ether					10
Chrysene					5
Dibenzo(a,h)anthracene					5
1,2-Dichlorobenzene [o-Dichlorobenzene]					10

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
1,3-Dichlorobenzene [m-Dichlorobenzene]					10
1,4-Dichlorobenzene [p-Dichlorobenzene]					10
3,3'-Dichlorobenzidine					5
Diethyl phthalate					10
Dimethyl phthalate					10
Di-n-butyl phthalate					10
2,4-Dinitrotoluene					10
2,6-Dinitrotoluene					10
Di-n-octyl phthalate					10
1,2-Diphenylhydrazine (as Azobenzene)					20
Fluoranthene					10
Fluorene					10
Hexachlorobenzene					5
Hexachlorobutadiene					10
Hexachlorocyclopentadiene					10
Hexachloroethane					20
Indeno(1,2,3-cd)pyrene					5
Isophorone					10
Naphthalene					10
Nitrobenzene					10
N-Nitrosodimethylamine					50
N-Nitrosodi-n-propylamine					20
N-Nitrosodiphenylamine					20
Phenanthrene					10
Pyrene					10
1,2,4-Trichlorobenzene					10

* Indicate units if different from µg/L.

Table 11 for Outfall No.: N/A : Pesticides

Samples are (check one): ☐ Composites ☐ Grabs

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
Aldrin					0.01
alpha-BHC [alpha-Hexachlorocyclohexane]					0.05
beta-BHC [beta-Hexachlorocyclohexane]					0.05
gamma-BHC [gamma-Hexachlorocyclohexane]					0.05
delta-BHC [delta-Hexachlorocyclohexane]					0.05
Chlordane					0.2
4,4'-DDT					0.02
4,4'-DDE					0.1

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
4,4'-DDD					0.1
Dieldrin					0.02
Endosulfan I (alpha)					0.01
Endosulfan II (beta)					0.02
Endosulfan sulfate					0.1
Endrin					0.02
Endrin aldehyde					0.1
Heptachlor					0.01
Heptachlor epoxide					0.01
PCB 1242					0.2
PCB 1254					0.2
PCB 1221					0.2
PCB 1232					0.2
PCB 1248					0.2
PCB 1260					0.2
PCB 1016					0.2
Toxaphene					0.3

* Indicate units if different from µg/L.

Attachment: N/A

TABLE 12 (DIOXINS/FURAN COMPOUNDS)

Complete of Table 12 **is required** for **external outfalls**, as directed below. (Instructions, Pages 53-54)

a. Indicate which compound(s) are manufactured or used at the facility and provide a brief description of the conditions of its/their presence at the facility (check all that apply).

- ☐ 2,4,5-trichlorophenoxy acetic acid (2,4,5-T) CASRN 93-76-5
- ☐ 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5-TP) CASRN 93-72-1
- ☐ 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate (Erbon) CASRN 136-25-4
- ☐ 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel) CASRN 299-84-3
- ☐ 2,4,5-trichlorophenol (TCP) CASRN 95-95-4
- ☐ hexachlorophene (HCP) CASRN 70-30-4
- ☒ None of the above

Description: N/A

b. Does the applicant or anyone at the facility know or have any reason to believe that 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) or any congeners of TCDD may be present in the effluent proposed for discharge?

☐ Yes ☒ No

Description: N/A

If **yes** to either Items a **or** b, complete Table 12 as instructed.

Table 12 for Outfall No.: N/A

Samples are (check one): ☐ **Composites** ☐ **Grabs**

Compound	Toxicity Equivalent Factors	Wastewater Concentration (ppq)	Wastewater Toxicity Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Toxicity Equivalents (ppt)	MAL (ppq)
2,3,7,8-TCDD	1					10
1,2,3,7,8-PeCDD	1.0					50
2,3,7,8-HxCDDs	0.1					50
1,2,3,4,6,7,8-HpCDD	0.01					50
2,3,7,8-TCDF	0.1					10
1,2,3,7,8-PeCDF	0.03					50
2,3,4,7,8-PeCDF	0.3					50
2,3,7,8-HxCDFs	0.1					50
2,3,4,7,8-HpCDFs	0.01					50
OCDD	0.0003					100
OCDF	0.0003					100
PCB 77	0.0001					500
PCB 81	0.0003					500
PCB 126	0.1					500
PCB 169	0.03					500
Total						

TABLE 13 (HAZARDOUS SUBSTANCES)

Complete Table 13 **is required** for all **external outfalls** as directed below. (Instructions, Page 54)

a. Are there any pollutants listed in the instructions (pages 55-62) believed present in the discharge?

☐ Yes ☒ No

b. Are there pollutants listed in Item 1.c. of Technical Report 1.0 which are believed present in the discharge and have not been analytically quantified elsewhere in this application?

☐ Yes ☒ No

If **yes** to either Items a **or** b, complete Table 13 as instructed.

Table 13 for Outfall No.: N/A

Samples are (check one): ☐ **Composites** ☐ **Grabs**

Pollutant	CASRN	Sample 1 (µg/L)	Sample 2 (µg/L)	Sample 3 (µg/L)	Sample 4 (µg/L)	Analytical Method

Pollutant	CASRN	Sample 1 (µg/L)	Sample 2 (µg/L)	Sample 3 (µg/L)	Sample 4 (µg/L)	Analytical Method

WORKSHEET 4.0
RECEIVING WATERS

This worksheet **is required** for all TPDES permit applications.

1. DOMESTIC DRINKING WATER SUPPLY (Instructions, Page 74)

a. There is a surface water intake for domestic drinking water supply located within 5 (five) miles downstream from the point/proposed point of discharge.

☐ Yes ☒ No

If **no**, stop here and proceed to Item 2. If **yes**, provide the following information:

i. The legal name of the owner of the drinking water supply intake: N/A

v. The distance and direction from the outfall to the drinking water supply intake: N/A

b. Locate and identify the intake on the USGS 7.5-minute topographic map provided for Administrative Report 1.0.

☐ Check this box to confirm the above requested information is provided.

2. DISCHARGE INTO TIDALLY INFLUENCED WATERS (Instructions, Page 74)

If the discharge is to tidally influenced waters, complete this section. Otherwise, proceed to Item 3.

a. Width of the receiving water at the outfall: 70 feet

b. Are there oyster reefs in the vicinity of the discharge?

☐ Yes ☒ No

If **yes**, provide the distance and direction from the outfall(s) to the oyster reefs: N/A

c. Are there sea grasses within the vicinity of the point of discharge?

☐ Yes ☒ No

If **yes**, provide the distance and direction from the outfall(s) to the grasses: N/A

3. CLASSIFIED SEGMENT (Instructions, Page 74)

The discharge is/will be directly into (or within 300 feet of) a classified segment.

☐ Yes ☒ No

If **yes**, stop here. It is not necessary to complete Items 4 and 5 of this worksheet or Worksheet 4.1.

If **no**, complete Items 4 and 5 and Worksheet 4.1 may be required.

4. DESCRIPTION OF IMMEDIATE RECEIVING WATERS (Instructions, Page 75)

a. Name of the immediate receiving waters: Spring Gully

b. Check the appropriate description of the immediate receiving waters:

☐ Lake or Pond
- Surface area (acres): Click to enter text.
- Average depth of the entire water body (feet): Click to enter text.
- Average depth of water body within a 500-foot radius of the discharge point (feet): Click to enter text.

☐ Man-Made Channel or Ditch
☒ Stream or Creek
☐ Freshwater Swamp or Marsh
☐ Tidal Stream, Bayou, or Marsh
☐ Open Bay
☐ Other, specify: Click to enter text.

If **Man-Made Channel or Ditch** or **Stream or Creek** were selected above, provide responses to Items 4.c – 4.g below:

c. For **existing discharges**, check the description below that best characterizes the area **upstream** of the discharge.

For **new discharges**, check the description below that best characterizes the area **downstream** of the discharge.

☒ Intermittent (dry for at least one week during most years)
☐ Intermittent with Perennial Pools (enduring pools containing habitat to maintain aquatic life uses)
☐ Perennial (normally flowing)

Check the source(s) of the information used to characterize the area upstream (existing discharge) or downstream (new discharge):

☐ USGS flow records
☒ personal observation
☐ historical observation by adjacent landowner(s)
☐ other, specify: Click to enter text.

d. List the names of all perennial streams that join the receiving water within three miles downstream of the discharge point: None

e. The receiving water characteristics change within three miles downstream of the discharge (e.g., natural or man-made dams, ponds, reservoirs, etc.).

☐ Yes ☒ No

If **yes**, describe how: N/A

f. General observations of the water body during normal dry weather conditions: Upstream of discharge point there was minimal water, which was clear and surrounding area is grass. Near the discharge point the water was flowing from the discharge. The water was clear and the area is heavily vegetated with trees and bushes, which continues downstream.

Date and time of observation: 4/30/2020 at 11am

g. The water body was influenced by stormwater runoff during observations.

☐ Yes ☒ No

If **yes**, describe how: N/A

5. GENERAL CHARACTERISTICS OF WATER BODY (Instructions, Page 75)

a. Is the receiving water upstream of the existing discharge or proposed discharge site influenced by any of the following (check all that apply):

- ☐ oil field activities
- ☐ agricultural runoff
- ☐ upstream discharges
- ☒ urban runoff
- ☐ septic tanks
- ☐ other, specify: Click to enter text

b. Uses of water body observed or evidence of such uses (check all that apply):

- ☐ livestock watering
- ☐ non-contact recreation
- ☐ domestic water supply
- ☐ contact recreation
- ☐ fishing
- ☐ industrial water supply
- ☐ irrigation withdrawal
- ☐ navigation
- ☐ picnic/park activities
- ☐ other, specify: Click to enter text

c. Description which best describes the aesthetics of the receiving water and the surrounding area (check only one):

- ☐ **Wilderness:** outstanding natural beauty; usually wooded or un-pastured area: water clarity exceptional
- ☐ **Natural Area:** trees or native vegetation common; some development evident (from fields, pastures, dwellings); water clarity discolored
- ☒ **Common Setting:** not offensive, developed but uncluttered; water may be colored or turbid
- ☐ **Offensive:** stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

WORKSHEET 4.0
RECEIVING WATERS

This worksheet **is required** for all TPDES permit applications.

1. DOMESTIC DRINKING WATER SUPPLY (Instructions, Page 74)

a. There is a surface water intake for domestic drinking water supply located within 5 (five) miles downstream from the point/proposed point of discharge.

☐ Yes ☒ No

If **no**, stop here and proceed to Item 2. If **yes**, provide the following information:

i. The legal name of the owner of the drinking water supply intake: N/A

v. The distance and direction from the outfall to the drinking water supply intake: N/A

b. Locate and identify the intake on the USGS 7.5-minute topographic map provided for Administrative Report 1.0.

☐ Check this box to confirm the above requested information is provided.

2. DISCHARGE INTO TIDALLY INFLUENCED WATERS (Instructions, Page 74)

If the discharge is to tidally influenced waters, complete this section. Otherwise, proceed to Item 3.

a. Width of the receiving water at the outfall: 70 feet

b. Are there oyster reefs in the vicinity of the discharge?

☐ Yes ☒ No

If **yes**, provide the distance and direction from the outfall(s) to the oyster reefs: N/A

c. Are there sea grasses within the vicinity of the point of discharge?

☐ Yes ☒ No

If **yes**, provide the distance and direction from the outfall(s) to the grasses: N/A

3. CLASSIFIED SEGMENT (Instructions, Page 74)

The discharge is/will be directly into (or within 300 feet of) a classified segment.

☒ Yes ☐ No

If **yes**, stop here. It is not necessary to complete Items 4 and 5 of this worksheet or Worksheet 4.1.

If **no**, complete Items 4 and 5 and Worksheet 4.1 may be required.

4. DESCRIPTION OF IMMEDIATE RECEIVING WATERS (Instructions, Page 75)

a. Name of the immediate receiving waters: Click to enter text.

b. Check the appropriate description of the immediate receiving waters:

- ☐ Lake or Pond
  - Surface area (acres): Click to enter text.
  - Average depth of the entire water body (feet): Click to enter text.
  - Average depth of water body within a 500-foot radius of the discharge point (feet): Click to enter text.
- ☐ Man-Made Channel or Ditch
- ☐ Stream or Creek
- ☐ Freshwater Swamp or Marsh
- ☐ Tidal Stream, Bayou, or Marsh
- ☐ Open Bay
- ☐ Other, specify: Click to enter text.

If **Man-Made Channel or Ditch** or **Stream or Creek** were selected above, provide responses to Items 4.c – 4.g below:

c. For **existing discharges**, check the description below that best characterizes the area **upstream** of the discharge.

For **new discharges**, check the description below that best characterizes the area **downstream** of the discharge.

- ☐ Intermittent (dry for at least one week during most years)
- ☐ Intermittent with Perennial Pools (enduring pools containing habitat to maintain aquatic life uses)
- ☐ Perennial (normally flowing)

Check the source(s) of the information used to characterize the area upstream (existing discharge) or downstream (new discharge):

- ☐ USGS flow records
- ☐ personal observation
- ☐ historical observation by adjacent landowner(s)
- ☐ other, specify: Click to enter text.

d. List the names of all perennial streams that join the receiving water within three miles downstream of the discharge point: Click to enter text.

e. The receiving water characteristics change within three miles downstream of the discharge (e.g., natural or man-made dams, ponds, reservoirs, etc.).

☐ Yes ☐ No

If **yes**, describe how: Click to enter text.

f. General observations of the water body during normal dry weather conditions: Click to enter text.

Date and time of observation: Click to enter text.

g. The water body was influenced by stormwater runoff during observations.

☐ Yes ☐ No

If **yes**, describe how: Click to enter text.

5. GENERAL CHARACTERISTICS OF WATER BODY (Instructions, Page 75)

a. Is the receiving water upstream of the existing discharge or proposed discharge site influenced by any of the following (check all that apply):

- ☐ oil field activities
- ☐ agricultural runoff
- ☐ upstream discharges
- ☐ urban runoff
- ☐ septic tanks
- ☐ other, specify: Click to enter text.

b. Uses of water body observed or evidence of such uses (check all that apply):

- ☐ livestock watering
- ☐ non-contact recreation
- ☐ domestic water supply
- ☐ contact recreation
- ☐ fishing
- ☐ industrial water supply
- ☐ irrigation withdrawal
- ☐ navigation
- ☐ picnic/park activities
- ☐ other, specify: Click to enter text.

c. Description which best describes the aesthetics of the receiving water and the surrounding area (check only one):

- ☐ **Wilderness:** outstanding natural beauty; usually wooded or un-pastured area: water clarity exceptional
- ☐ **Natural Area:** trees or native vegetation common; some development evident (from fields, pastures, dwellings); water clarity discolored
- ☐ **Common Setting:** not offensive, developed but uncluttered; water may be colored or turbid
- ☐ **Offensive:** stream does not enhance aesthetics; cluttered; highly developed; dumping areas; water discolored

WORKSHEET 5.0
SEWAGE SLUDGE MANAGEMENT AND DISPOSAL

The following information **is required** for all TPDES permit applications that meet the conditions as outlined in Technical Report 1.0, Item 7.

1. SEWAGE SLUDGE SOLIDS MANAGEMENT PLAN (Instructions, Page 78)

a. Is this a new permit application or an amendment permit application?

☐ Yes ☒ No

b. Does or will the facility discharge in the Lake Houston watershed?

☐ Yes ☒ No

If **yes** to either Item 1.a **or** 1.b, attach a solids management plan.

Attachment: N/A

2. SEWAGE SLUDGE MANAGEMENT AND DISPOSAL (Instructions, Pages 78-79)

a. Check the box next to the sludge disposal method(s) authorized under the facility's existing permit (check all that apply).

☒ Permitted landfill
☐ Marketing and distribution by the permittee, attach Form TCEQ-00551
☐ Registered land application site, attach Form TCEQ-00565
☐ Processed by the permittee, attach Form TCEQ-00744
☐ Surface disposal site (sludge monofill), attach Form TCEQ-00744
☐ Transported to another WWTP
☐ Beneficial land application, attach Form TCEQ-10451
☐ Incineration, attach Form TCEQ-00744

Based on the selection(s) made above, complete and attach the required TCEQ forms as directed. Failure to submit the required TCEQ form will result in delays in processing the application

Attachment: N/A

b. Provide the following information for each disposal site:

Disposal site name: WCA Needville

TCEQ Permit/Registration Number: 96322

County where disposal site is located: Fort Bend

c. Method of sewage sludge transportation: ☒ truck ☐ train ☐ pipe ☐ other: Click to enter text.

TCEQ Hauler Registration Number: Specialized Waste Systems, ID No. 40514

Sludge is transported as a: ☐ liquid ☐ semi-liquid ☒ semi-solid ☐ solid

d. Purpose of land application: ☐ reclamation ☐ soil conditioning ☒ N/A

e. If sewage sludge is transported to another WWTP for treatment, attach a written statement or copy of contractual agreements confirming that the WWTP identified above will accept and be responsible for the sludge from this facility for the life of the permit (at least 5 years).

Attachment: N/A

3. AUTHORIZATION FOR SEWAGE SLUDGE DISPOSAL (Instructions, Page 79)

a. If this is a new or major amendment application which requests authorization of a new sewage sludge disposal method, check the new sewage disposal method(s) requested for authorization (check all that apply):

- ☐ Marketing and distribution by the permittee, attach Form TCEQ-00551
- ☐ Processed by the permittee, attach Form TCEQ-00744
- ☐ Surface disposal site (sludge monofill), attach Form TCEQ-00744
- ☐ Beneficial land application, attach Form TCEQ-10451
- ☐ Incineration, attach Form TCEQ-00744

Based on the selection(s) made above, complete and attach any required TCEQ forms, as directed. Failure to submit the required TCEQ form will result in delays in processing the application

Attachment: N/A

NOTE: New authorization for beneficial land application, incineration, processing, or disposal in the TPDES permit or TLAP **requires a major amendment to the permit**. New authorization for composting may require a major amendment to the permit. See the instructions to determine if a major amendment is required or if authorization for composting can be added through the renewal process.

ATTACHMENT A COPY OF PAYMENT INFORMATION

WATER QUALITY PERMIT

PAYMENT SUBMITTAL FORM

Use this form to submit the Application Fee, if mailing the payment.

- Complete items 1 through 5 below.
- Staple the check or money order in the space provided at the bottom of this document.
- Do not mail this form with the application form.
- Do not mail this form to the same address as the application.
- Do not submit a copy of the application with this form as it could cause duplicate permit entries.

Mail this form and the check or money order to:

BY REGULAR U.S. MAIL

Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
P.O. Box 13088
Austin, Texas 78711-3088

BY OVERNIGHT/EXPRESS MAIL

Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
12100 Park 35 Circle
Austin, Texas 78753

Fee Code: WQP **Permit No: WQ000**1031000

1. Check or Money Order Number: 07000865
2. Check or Money Order Amount: $2,015.00
3. Date of Check or Money Order: 07/29/2020
4. Name on Check or Money Order: NRG Texas Power LLC
5. APPLICATION INFORMATION

   Name of Project or Site: Greens Bayou Electric Generating Station

   Physical Address of Project or Site: 12070 Beaumont Hwy, Houston, TX 77049

   If the check is for more than one application, attach a list which includes the name of each Project or Site (RE) and Physical Address, exactly as provided on the application.

Staple Check or Money Order in This Space

NRG Texas Power LLC

REFERENCE NUMBER	DATE	VOUCHER	GROSS AMOUNT	DISCOUNT	NET AMOUNT
071620	07/16/2020	1700088022	$2,015.00	0.00	$2,015.00

VCZ081

CHECK NUMBER	DATE	VENDOR NUMBER	VENDOR NAME	TOTAL AMOUNT
07000865	07/29/20	0000239689	TEXAS COMMISSION ON ENVIRONMENTAL	$2,015.00

Refer to above check number and voucher number when inquiring about your payment 0023

nrg

Bank Of New York Mellon
Pittsburgh, PA 15262

60-160
433

Date: 07/29/2020
Check Number: 07000865
Vendor Number: 0000239689

NRG Texas Power LLC
804 Carnegie Center,
Princeton, NJ 08540

PAY *Two thousand fifteen and 00/100 Dollars*

Pay Exactly
*****$2,015.00

TO THE ORDER OF

TEXAS COMMISSION ON ENVIRONMENTAL Q
PO BOX 13089
AUSTIN TX 78711-3089

AUTHORIZED SIGNATURE

VOID WITHOUT SIGNATURE
VOID AFTER NINETY DAYS

⑈07000865⑈ ⑆043301601⑆ 185⑈0904⑈

ATTACHMENT B CORE DATA FORM

TCEQ Use Only

TCEQ Core Data Form

For detailed instructions regarding completion of this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission (*If other is checked please describe in space provided.*)

☐ New Permit, Registration or Authorization (*Core Data Form should be submitted with the program application.*)

☒ Renewal (*Core Data Form should be submitted with the renewal form*) ☐ Other

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number *(if issued)*
CN **603207218**		RN **100542851**

SECTION II: Customer Information

4. General Customer Information | 5. Effective Date for Customer Information Updates (mm/dd/yyyy)

☐ New Customer ☒ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)* | *If new Customer, enter previous Customer below:*

NRG Texas Power LLC

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number *(if applicable)*
800836540	320332	342019301	168456049

11. Type of Customer: ☒ Corporation ☐ Individual Partnership: ☐ General ☐ Limited
Government: ☐ City ☐ County ☐ Federal ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees
☐ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☒ 501 and higher

13. Independently Owned and Operated?
☒ Yes ☐ No

14. Customer Role (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following*

☐ Owner ☐ Operator ☒ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ Voluntary Cleanup Applicant ☐ Other:

15. Mailing Address: 910 Louisiana St

City	Houston	State	TX	ZIP	77002	ZIP + 4	

16. Country Mailing Information *(if outside USA)* | 17. E-Mail Address *(if applicable)*

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(281) 433-2035		( ) -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected below this form should be accompanied by a permit application)*

☐ New Regulated Entity ☐ Update to Regulated Entity Name ☒ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated in order to meet TCEQ Agency Data Standards (removal of organizational endings such as Inc, LP, or LLC).

22. Regulated Entity Name *(Enter name of the site where the regulated action is taking place.)*

Greens Bayou Electric Generating Station

23. Street Address of the Regulated Entity: *(No PO Boxes)*	12070 Beaumont Hwy							
	City	Houston	**State**	TX	**ZIP**	77049	**ZIP + 4**	
24. County	Harris							

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:	N/A				
26. Nearest City			**State**	**Nearest ZIP Code**	
Houston			TX	77049	
27. Latitude (N) In Decimal:	29.822380		**28. Longitude (W) In Decimal:**	-95.214349	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
4911			

33. What is the Primary Business of this entity? *(Do not repeat the SIC or NAICS description.)*

Generation of electricity

34. Mailing Address:	**16301 Tomball Pkwy**							
	City	**Houston**	**State**	**TX**	**ZIP**	**77064**	**ZIP + 4**	
35. E-Mail Address:	**Mary.Larsen@nrg.com**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(281) 897-2604		**( ) -**

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☒ Waste Water	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:
	WQ0001031000			

SECTION IV: Preparer Information

40. Name:	Amanda Ragatz	**41. Title:**	Senior Consultant, Scientist

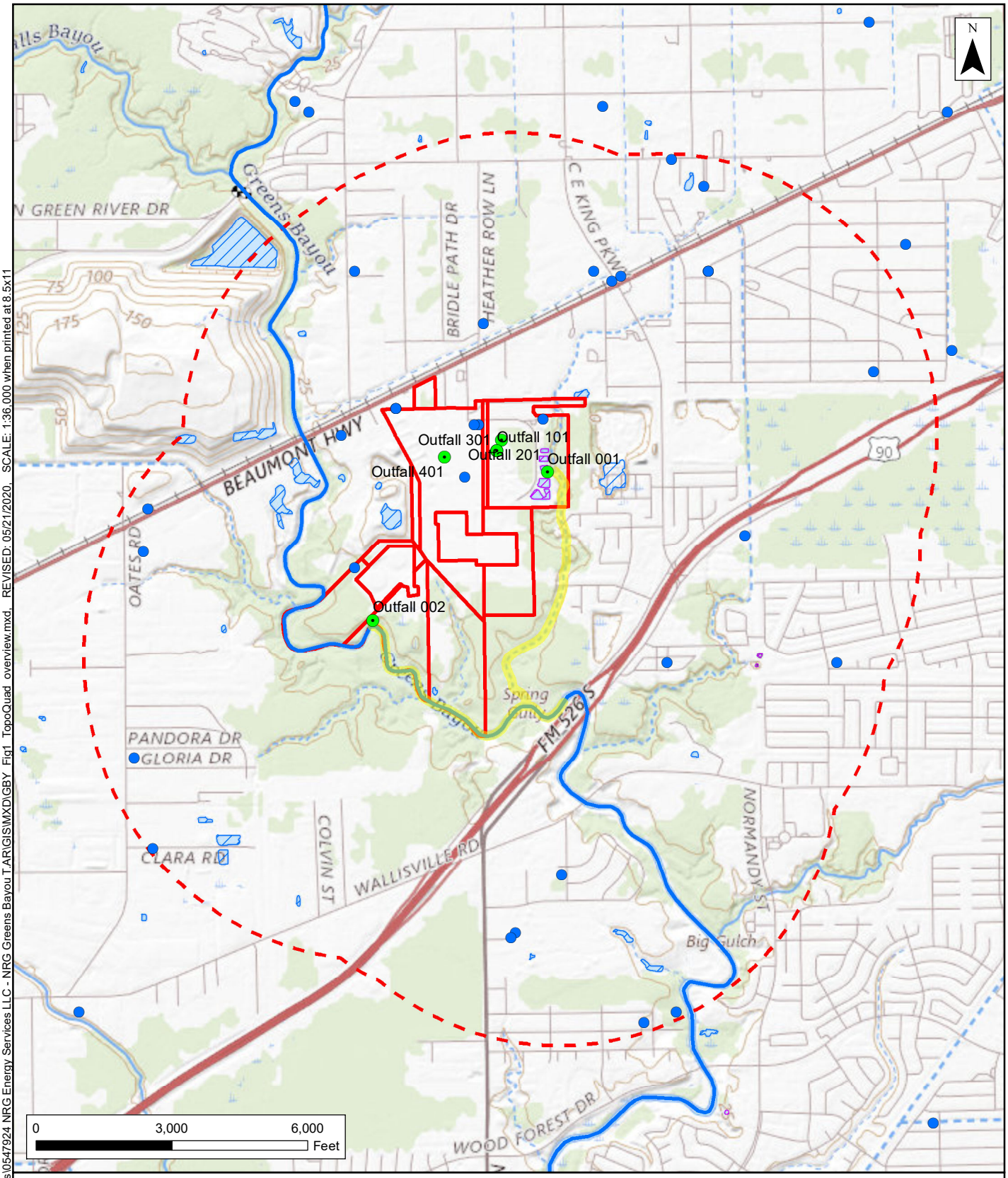
42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(314) 551-7099		**( ) -**	amanda.ragatz@erm.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	NRG Texas Power LLC	**Job Title:**	Director, Environmental Services
Name *(In Print):*	Craig Eckberg	**Phone:**	**(713)** 537- **2776**
Signature:	C.R.E.	**Date:**	5Aug20

ATTACHMENT C USGS FIGURE



\\USBDCFS02\Data\Houston\Projects\0547924 NRG Energy Services LLC - NRG Greens Bayou TAR\GIS\MXD\GBY_Fig1_TopoQuad_overview.mxd, REVISED: 05/21/2020, SCALE: 1:36,000 when printed at 8.5x11

Legend

- Property Boundary
- Outfall
- Discharge route
- TCEQ Classified Segment
- TWDB Water Wells
- LakePond
- Reservoir

USGS Figure Overview
Jacinto CIty
1:24,000 USGS Quadrangles
TPDES Permit Renewal
NRG Texas Power LLC
Houston,Texas

Environmental Resources Management
www.erm.com
ERM

Source: Esri - USGS Topoographic Map; WGS 1984 Web Mercator Auxiliary Sphere

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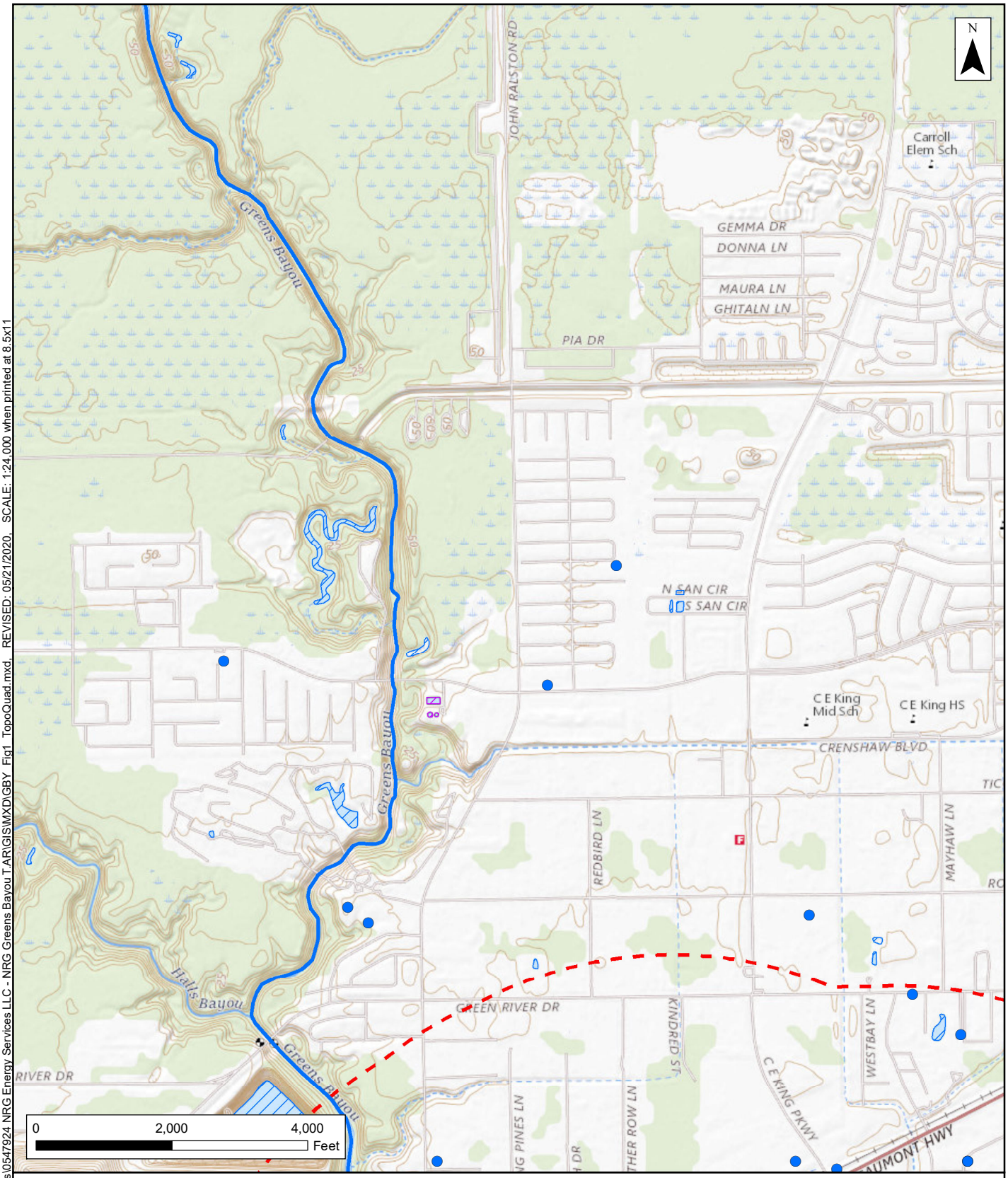
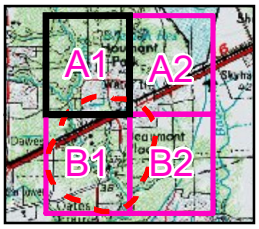


\\USBDCFS02\Data\Houston\Projects\0547924 NRG Energy Services LLC - NRG Greens Bayou T:\ARI\GIS\MXD\GBY_Fig1_TopoQuad.mxd, REVISED: 05/21/2020, SCALE: 1:24,000 when printed at 8.5x11

Legend

- Property Boundary
- Outfall
- Discharge route
- TCEQ Classified Segment
- TWDB Water Wells
- LakePond
- Reservoir



USGS Figure A1
Jacinto CIty
1:24,000 USGS Quadrangles
TPDES Permit Renewal
NRG Texas Power LLC
Houston,Texas

Environmental Resources Management
www.erm.com

Source: Esri - USGS Topoographic Map; WGS 1984 Web Mercator Auxiliary Sphere

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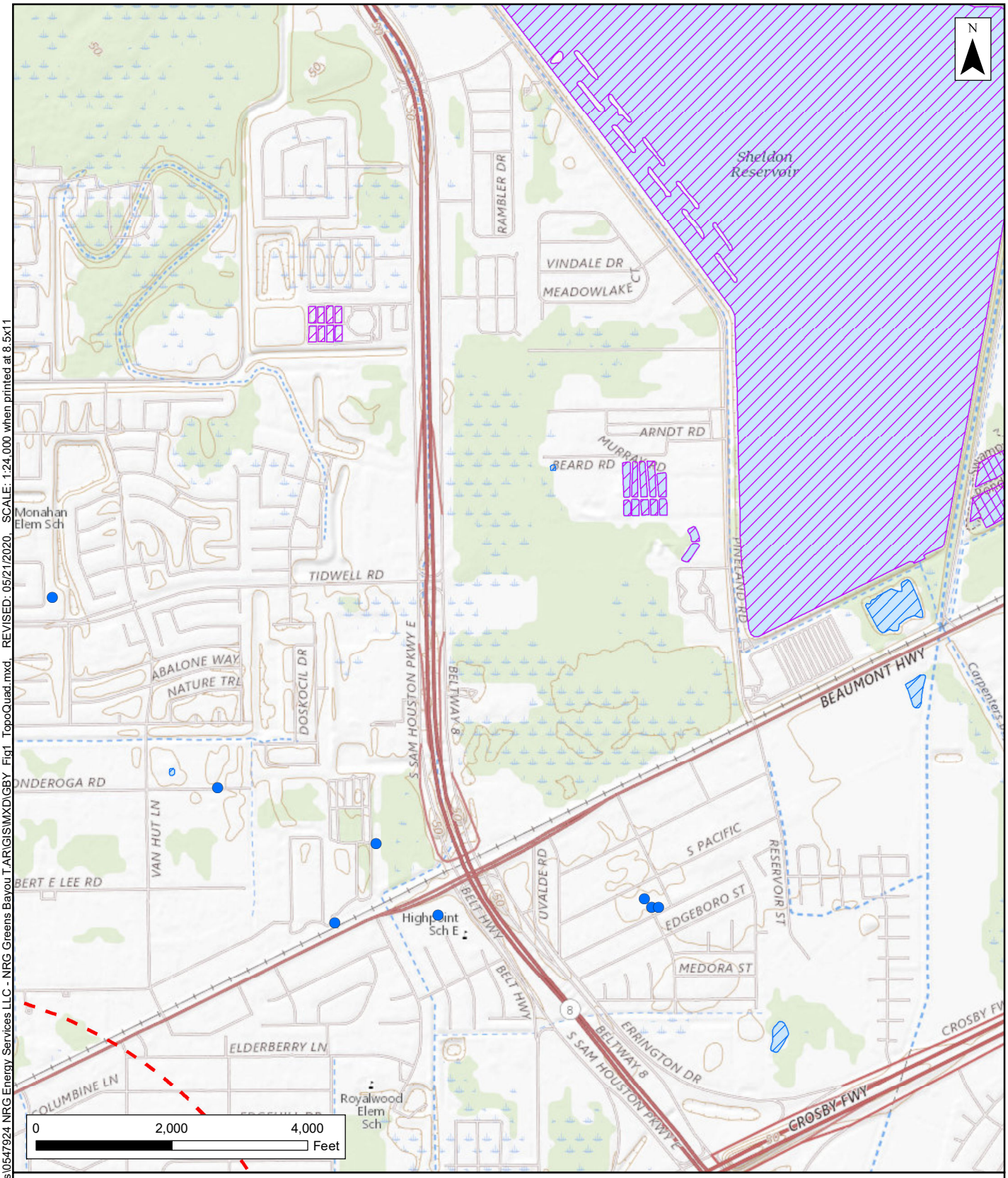
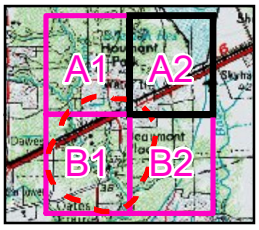


Legend

- Property Boundary
- Outfall
- Discharge route
- TWDB Water Wells
- LakePond
- Reservoir



USGS Figure A2
Jacinto CIty
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Houston,Texas

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Source: Esri - USGS Topoographic Map; WGS 1984 Web Mercator Auxiliary Sphere

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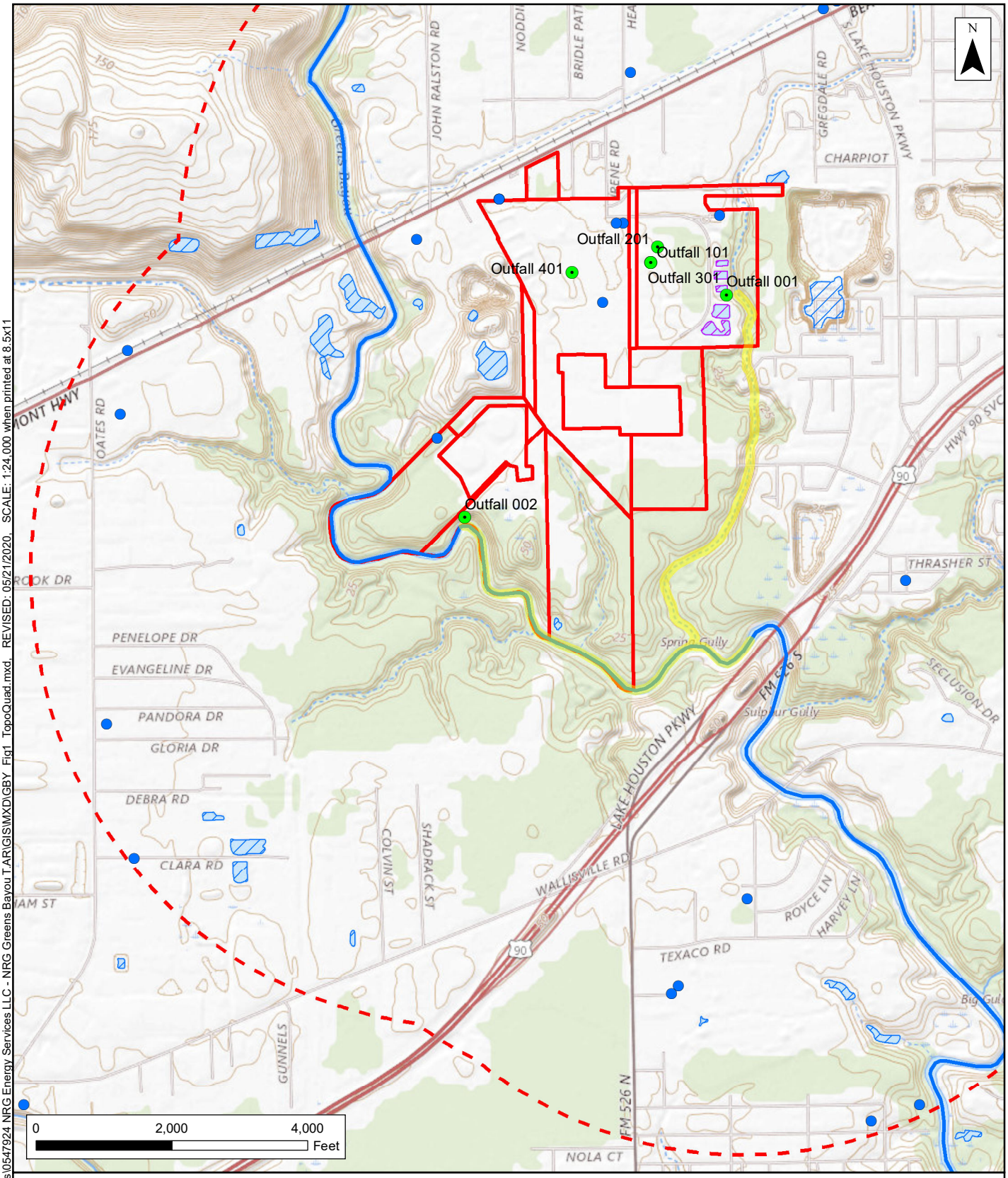
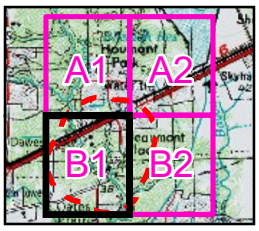


Legend

- Property Boundary
- Outfall
- Discharge route
- TCEQ Classified Segment
- TWDB Water Wells
- LakePond
- Reservoir



USGS Figure B1
Jacinto CIty
1:24,000 USGS Quadrangles
TPDES Permit Renewal
NRG Texas Power LLC
Houston,Texas

Environmental Resources Management
www.erm.com

Source: Esri - USGS Topoographic Map; WGS 1984 Web Mercator Auxiliary Sphere

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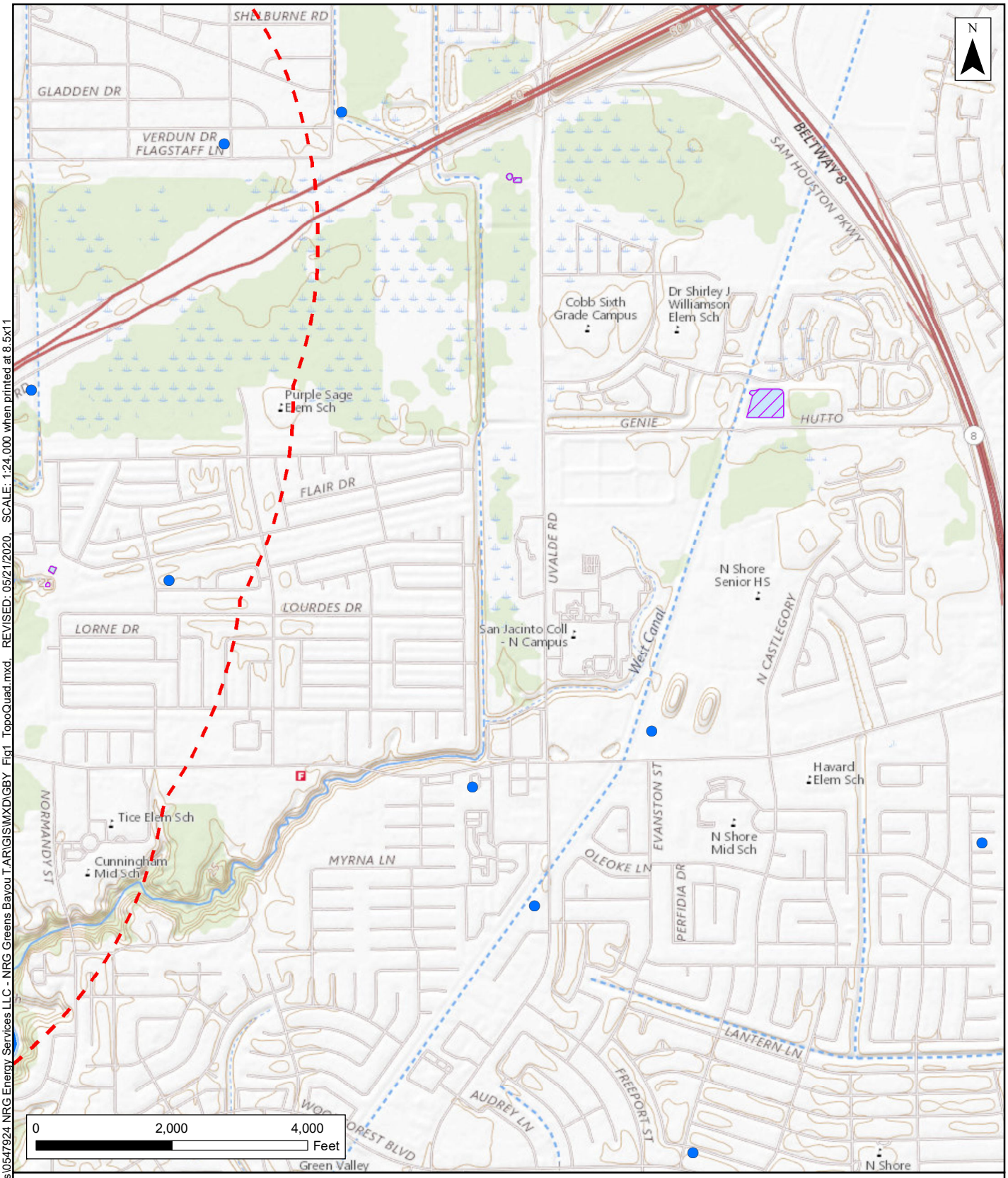
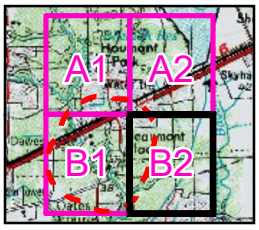


Legend

- Property Boundary
- Outfall
- Discharge route
- TCEQ Classified Segment
- TWDB Water Wells
- Reservoir



USGS Figure B2
Jacinto CIty
1:24,000 USGS Quadrangles
TPDES Permit Renewal
NRG Texas Power LLC
Houston,Texas

Environmental Resources Management
www.erm.com

Source: Esri - USGS Topoographic Map; WGS 1984 Web Mercator Auxiliary Sphere

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ATTACHMENT D WASTE-WATER GENERATING PROCESSES

Attachment D
Technical Report

1. Describe the wastewater-generating processes.

Wastewater is produced at the Greens Bayou Electric Generating Station through several processes resulting from the generation of electricity.

Cooling Tower Blowdown

The major source of the wastewater is cooling tower blowdown. Cooling tower blowdown is water from the cooling tower that is discharged to reduce concentrations of impurities in the water that would cause corrosion of the heat exchangers.

Low Volume Wastewater

Low volume wastewater discharges include boiler blowdown, demineralizer regeneration waste, laboratory drains, filtrate from drying beds, floor drains and SPCC sources and their associated oily water treatment system discharges. Boiler blowdown is water from the steam boiler that is released to reduce concentrations of impurities in the water that would cause corrosion and boiler tube failure. Demineralizer regeneration wastewater results from demineralizing service water to purify and treat it before being used in the boilers. Regeneration of the demineralizer resin beds produces an acidic and caustic wastewater that is treated at the chemical waste treatment system along with boiler blowdown and equipment cleaning wastewater. The floor drain system captures condensate and water from production and maintenance areas that have the potential to have oil or grease contamination. The water is then transported to the oily waste treatment system where the oil is separated from the water. The first flush of storm water from some production and storage areas is also treated in one of the oily waste systems with other non-process storm water flow directed through the designated storm water outfalls.

Metal Cleaning Waste

Chemical and non-chemical metal cleaning wastes are generated on-site and treated in the Chemical Waste Treatment System. These wastestreams result from the cleaning, both by chemical means and non-chemical means, of metal process equipment.

Domestic Sewage

Also on-site is a domestic sewage treatment system that includes chlorine disinfection.

ATTACHMENT E FACILITY MAP

SH. 1 OF 1
01031

SPCC TREATMENT SYSTEM

SANITARY WASTE TREATMENT SYSTEM

OUTFALL 002

PROPERTY LINE FOR TEPPCO FOPL ASSETS

HL&P PROPERTY LINE

WATER WELL No. 3

FUEL OIL STORAGE TANK No. 7 400,000 BBL.

FUEL OIL STORAGE TANK No. 6 400,000 BBL.

PIPELINE METERING STATION

EAST-WEST BASE LINE

25' EASEMENT TO HL&P Co. FOR R.R. SPUR

S.P.R.R.

U.S. HWY. 90

WATER WELL No. 2

FUEL OIL STORAGE TANK No. 5 200,000 BBL.

Greens Bayou

HL&P PROPERTY LINE

PROPERTY LINE FOR CENTERPOINT SWITCHYARD

CLARIFIER TREATMENT SYSTEM OUTFALL 201

NORTH-SOUTH BASE LINE

138 KV SWITCHYARD

69 KV SWITCHYARD

63 KV & 138 KV NORTH-SOUTH BASE LINE W-248'

CONTROL HOUSE

PARKING AREA

GUARD HOUSE

WAREHOUSE

BOILER No.5

COOLING TOWER UNIT 1

COOLING TOWER UNIT 2

COOLING TOWER UNIT 3

COOLING TOWER UNIT 4

COOLING TOWER UNIT 5

SETTLING BASIN

WATER TANK

SERVICE BLDG.

CITY WATER STORAGE TANK

SCRAPER TRAP

SEP.

PLANT ENTRANCE ROAD

IRENE ST.

GREENS BAYOU PLANT HEADER STATION METER & REGULATION SITE

KINDER MORGAN GAS METER SITE "B"

EASE. TO ENERGY TRANSFER Co. FOR GAS METER SITE

EASE. TO UNITED TEXAS TRANSMISSION Co.

RADIO TOWER

SLUDGE DRYING BEDS

EASE. TO HOU. & REF. Co. FOR HEATER SITE

EASE. TO HOU. & REF. Co. FOR VENT & EMERGENCY BASIN

FOR DETAILS IN THIS AREA SEE DWG. G0-G-0003

345 KV SWITCHYARD

345 KV & 138 KV EAST LINE S-903.5'

345 KV NORTH-SOUTH BASE LINE E-370'

N-S BASE LINE E-1470

E-W BASE LINE N-1493

PARKWAY SUB.

WATER WELL No. 4

MOOSE GATE

SPRING GULLEY

CONC. CROSSING PAD

SEE FORE BAY INSERT FOR CONT. OF PLANT PLOT PLAN (THIS DWG.)

BOILER WATER TREATMENT PONDS

OUTFALL 001

HL&P PROPERTY LINE

CHEMICAL WASTE TREATMENT SYSTEM OUTFALLS 101 & 301

FORE BAY INSERT

UVALDE

ACCESS ROAD ALONG TRANSMISSION LINE ROUTE FROM PLANT

BRIDGE

CITY OF HOUSTON CANAL

INTAKE STRUCTURE

ENTRANCE CHANNEL & WEIR

LEGEND :

NOTE : ITEMS IN LEGEND N.T.S. FOR VISIBILITY

- (3 U) DRAINAGE OUTFALL DESIGNATION
- SWALE
- HEADWALLS & WINGWALLS AS NOTED
- OVERFLOW SUMP W/PUMPS
- PIPING & CULVERTS AS NOTED
- PIPING W/VALVE
- CATCH BASINS
- DITCHES
- LARGE DITCHES
- CONCRETE PAVED DITCHES AS NOTED
- ACCESS ROUTE / ROAD
- RAIN WATER SUMP PUMPED TO LOCATION AS NOTED
- CONTINUATION (NOT END OF LINE)
- MANHOLE

ABBREVIATIONS

GP - GALVANIZED PIPE
CSP - CARBON STEEL PIPE
CMP - CORRIGATED METAL PIPE
RCP - REINFORCED CONCRETE PIPE
PVC - POLY-VINYL CHLORINATED PIPE
PEP - POLY ETHYLENE PIPE
U - UNCONTROLLED
C - CONTROLLED

~200 0 200 400 600 800 1000
SCALE IN FEET

FACILITY / GENERAL LOCATION MAP
GREENS BAYOU
ELECTRIC GENERATING STATION
TPDES PERMIT No. 01031

NRG TEXAS POWER, LLC
HOUSTON, TEXAS

DRAWN 11-1-07	JGR	SCALE AS NOTED	
CHECKED		DRAWING NUMBER	
APPROVED		01031	
APPROVED		SH. 1 OF 1	
BSK ID		FILE NAME: 01031.DWG	

NO.	DATE	REVISION	BY	CHK.	APP.	APP.
2	4/22/02	ISSUED FOR 2002 CONTINGENCY PLAN PLT-010011	MFB			
3	08-03-07	ISSUED FOR CONTINGENCY PLAN UPDATE	JGR			

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Appendix TR-1e
Figure 1 of 1

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ATTACHMENT F TREATMENT PROCESSES

Attachment F
Technical Report

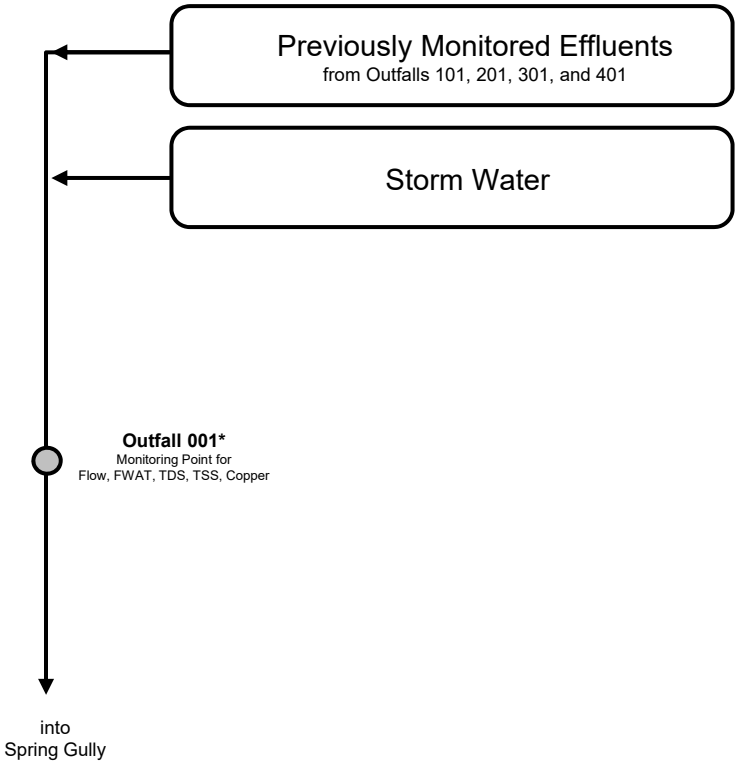
2.a. List any physical, chemical, and/or biological treatment process that you use for the treatment of wastewater at your facility. Include a description of each treatment process starting with initial treatment and finishing with the discharge point.

Treatment System	Outfall	Unit Dimensions	Treatment Processes
Previously Monitored Effluent and Stormwater	001	Ditch	None
Chemical Waste Treatment System Metal Cleaning Wastewater	101	Organic Pond ~175 ft x 88 ft x 8 ft ~600,000 gallons	Equalization
		Horseshoe Ash Pond ~1,500,000 gallons	Equalization
		Inorganic Basin	Equalization
		Clarified Ash Pond ~1,600,000 gallons	Equalization
		Rapid Mixing Tank ~475 gallons	Chemical Precipitation * Neutralization* Mixing*
		Settling Tank ~12,100 gallons	Sedimentation
		Effluent Tank ~935 gallons	Neutralization* Mixing*
Clarifier Treatment System Cooling Tower Blowdown	201**	Clarifier ~750,000 gallons	Mixing* Sedimentation Coagulation* Flocculation*
		Sludge Drying Beds ~7,160 yards	Drying Beds*
Chemical Waste Treatment System Low Volume Wastewater	301	Acid Retention Basin	Equalization
		Boiler Blowdown Pond ~175 ft x 99 ft x 8 ft ~675,000 gallons	Equalization
		Rapid Mixing Tank ~475 gallons	Chemical Precipitation* Neutralization* Mixing*
		Coagulation Tank ~2,950 gallons	Coagulation* Mixing*
		Settling Tank ~12,100 gallons	Sedimentation
		Effluent Tank ~935 gallons	Neutralization* Mixing*
Floor Drainage and SPCC Treatment System Low Volume Wastewater	002	Mixing Tank ~1,100 gallons	Mixing*
		Coagulation Tank ~5,000 gallons	Mixing* Coagulation*
		Settling Tank ~21,000 gallons	Sedimentation
		API Separator ~24,500 gallons	Flotation Sedimentation Skimming*

		Tricellerator ~19,200 gallons	Dissolved Air Flotation Skimming Flocculation* Coagulation*
Sanitary Waste Treatment System Domestic Sewage	401	Septic Tank ~9,500 gallons	Anaerobic Treatment
		Filter Bed	Slow Sand Filtration
		Chlorine Contact Chamber	Disinfection

*Treatment process may be used based on influent characteristics
** Last recorded discharge was on 8/23/2017. Flows ceased via Outfall 201 due to the retirement of GBY Generating Unit No. 5.

ATTACHMENT G FLOW SCHEMATIC AND WATER BALANCE



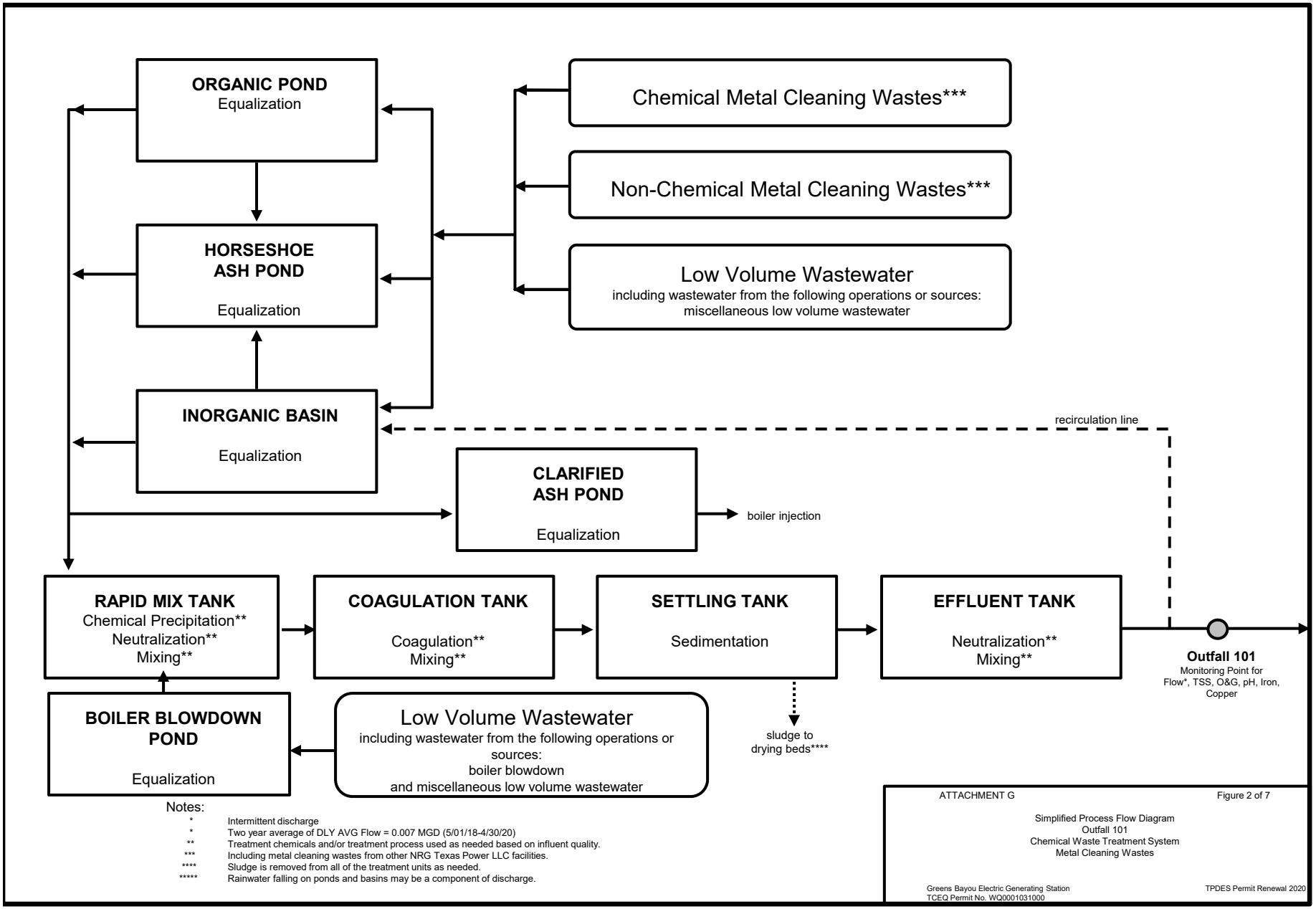
ATTACHMENT G Figure 1 of 7

Simplified Process Flow Diagram
Outfall 001
Previously Monitored Effluent and Storm Water

Greens Bayou Electric Generating Station
TPDES Permit Renewal Application 2020
TCEQ Permit No. WQ0001031000

Notes:

- *** Intermittent discharge**
- *** Two year average of DLY AVG Flow = 0.347 MGD**



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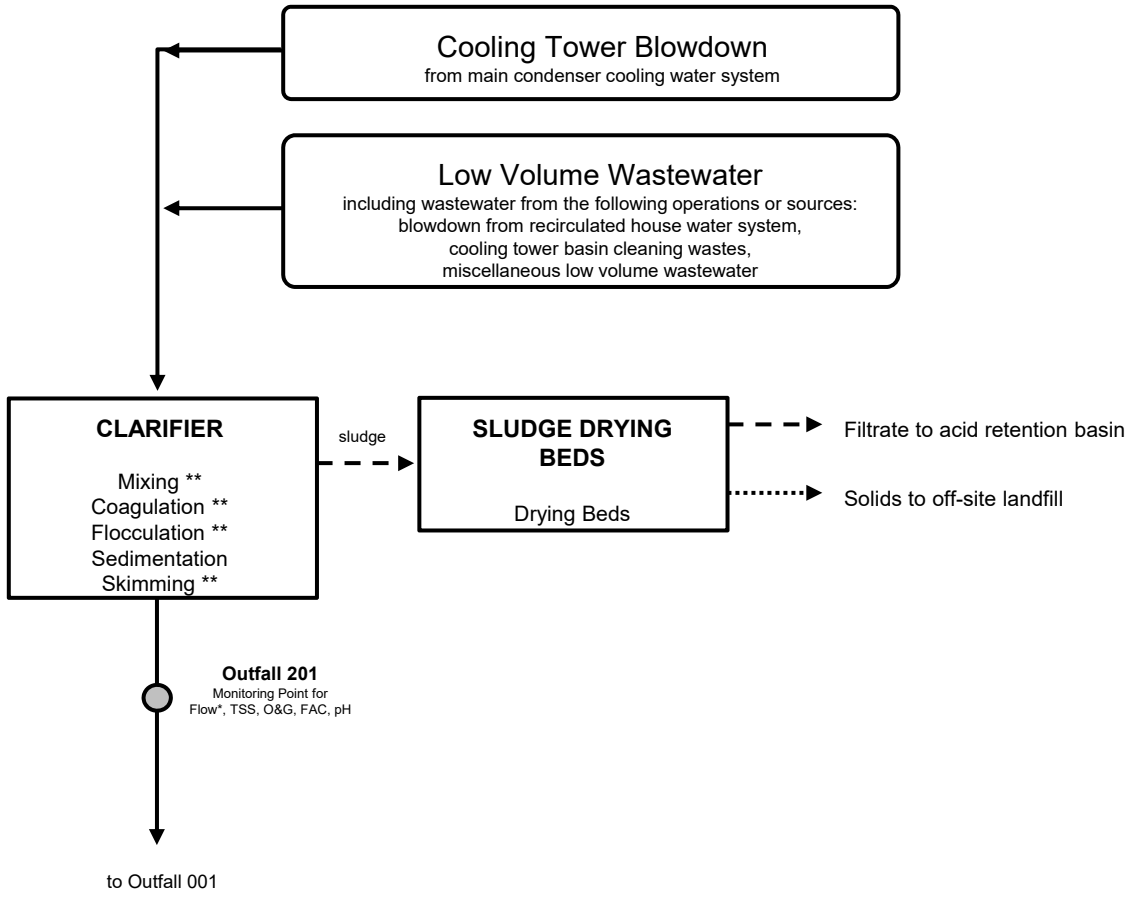

Notes:

* Intermittent discharge

* Two year average of DLY AVG Flow = 0.509 MGD (9/01/15-8/31/17)

** Treatment chemicals and/or process used as needed based on influent quality.

ATTACHMENT G

Figure 3 of 7

Simplified Process Flow Diagram
Outfall 201
Clarifier Treatment System
Cooling Tower Blowdown

Greens Bayou Electric Generating Station
TCEQ Permit No. WQ0001031000

TPDES Permit Renewal 2020

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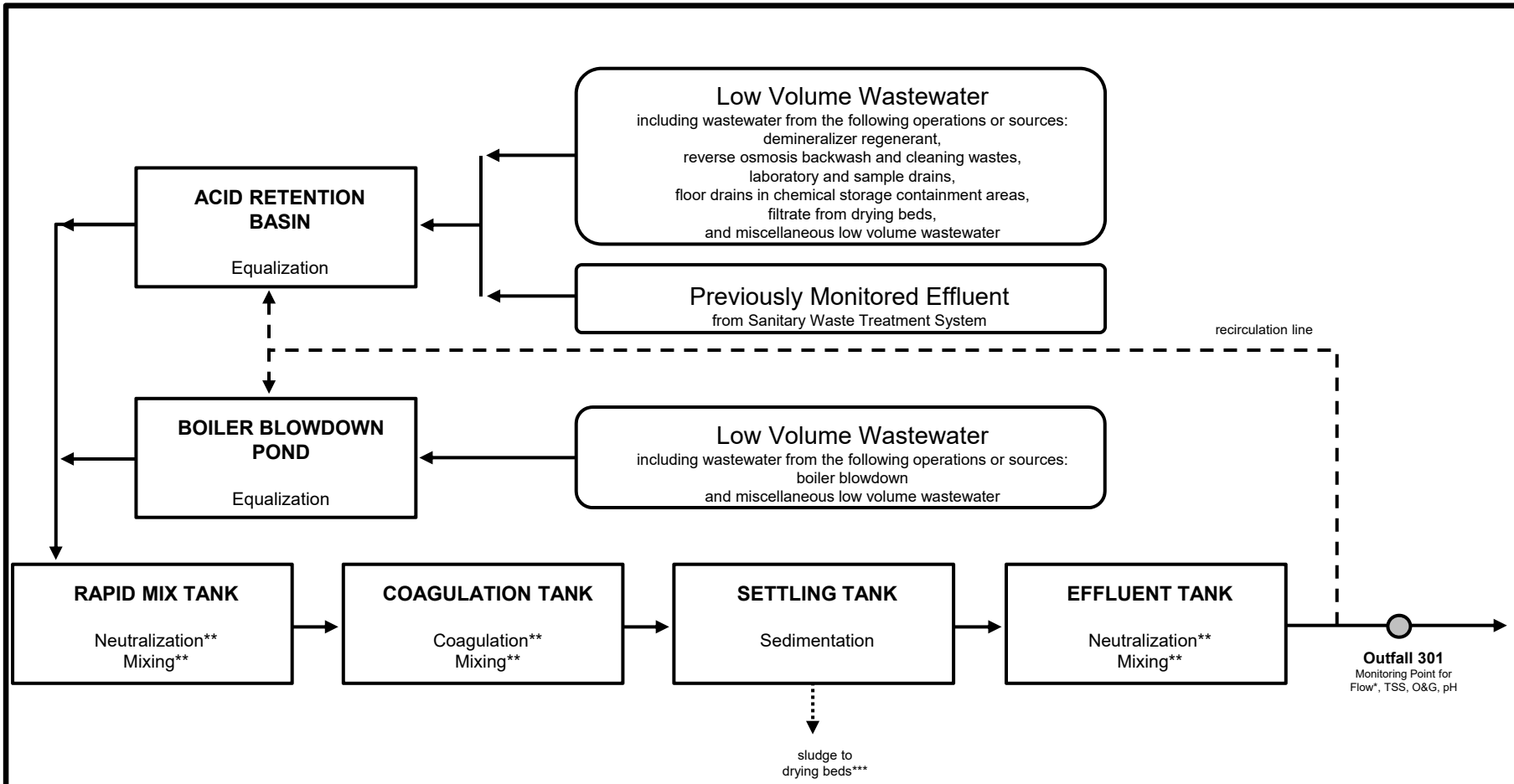

Notes:

*	Intermittent discharge
*	Two year average of DLY AVG Flow = 0.008 MGD (5/01/18-4/30/20)
**	Treatment chemicals and/or treatment process used as needed based on influent quality.
***	Sludge removed from all of the treatment units as needed.
****	Rainwater falling on ponds and basins may be a component of discharge.

ATTACHMENT G

Figure 4 of 7

Simplified Process Flow Diagram
Outfall 301
Chemical Waste Treatment System
Low Volume Wastewater

Greens Bayou Electric Generating Station
TCEQ Permit No. WQ0001031000

TPDES Permit Renewal 2020

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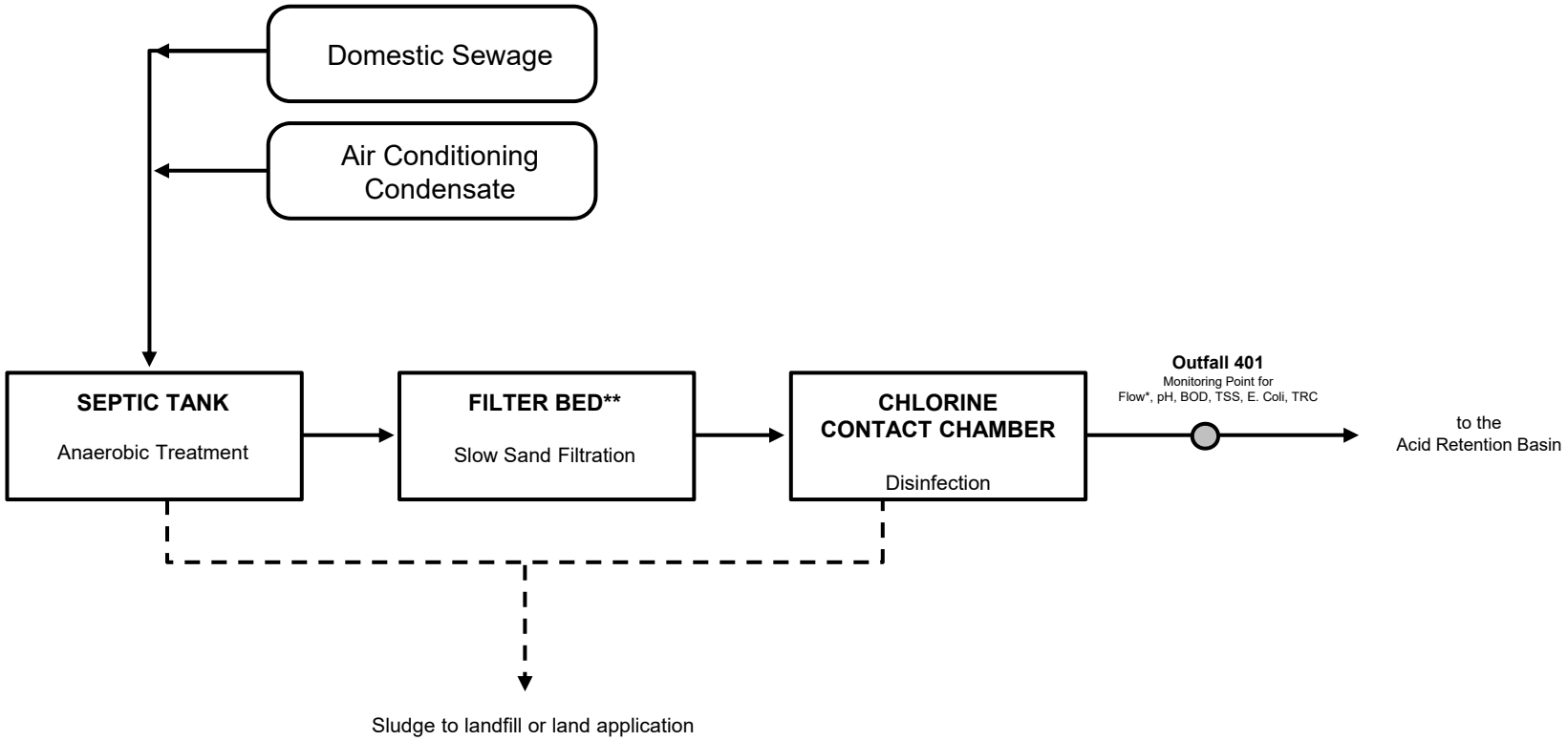

Notes:

* Intermittent discharge
* Two year average of DLY AVG Flow = 0.002 MGD (5/01/18-4/30/20)
** Rainwater falling on the filter bed may be a component of discharge.
** Filter media periodically replaced and disposed.

ATTACHMENT G

Figure TR 5 of 7

Simplified Process Flow Diagram
Outfall 401
Sanitary Waste Treatment System
Domestic Sewage

Greens Bayou Electric Generating Station
TCEQ Permit No. WQ0001031000

TPDES Permit Renewal 2020

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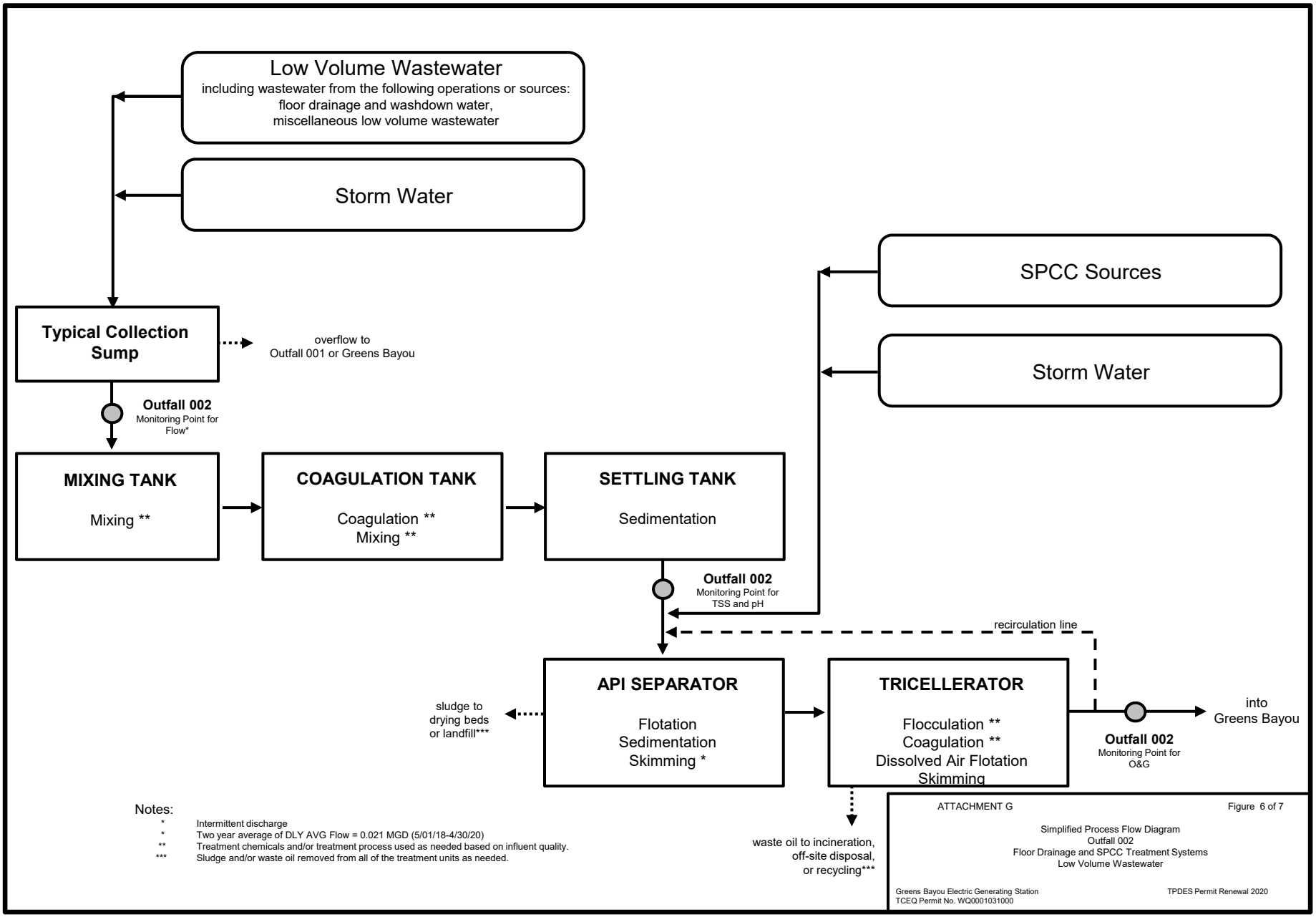

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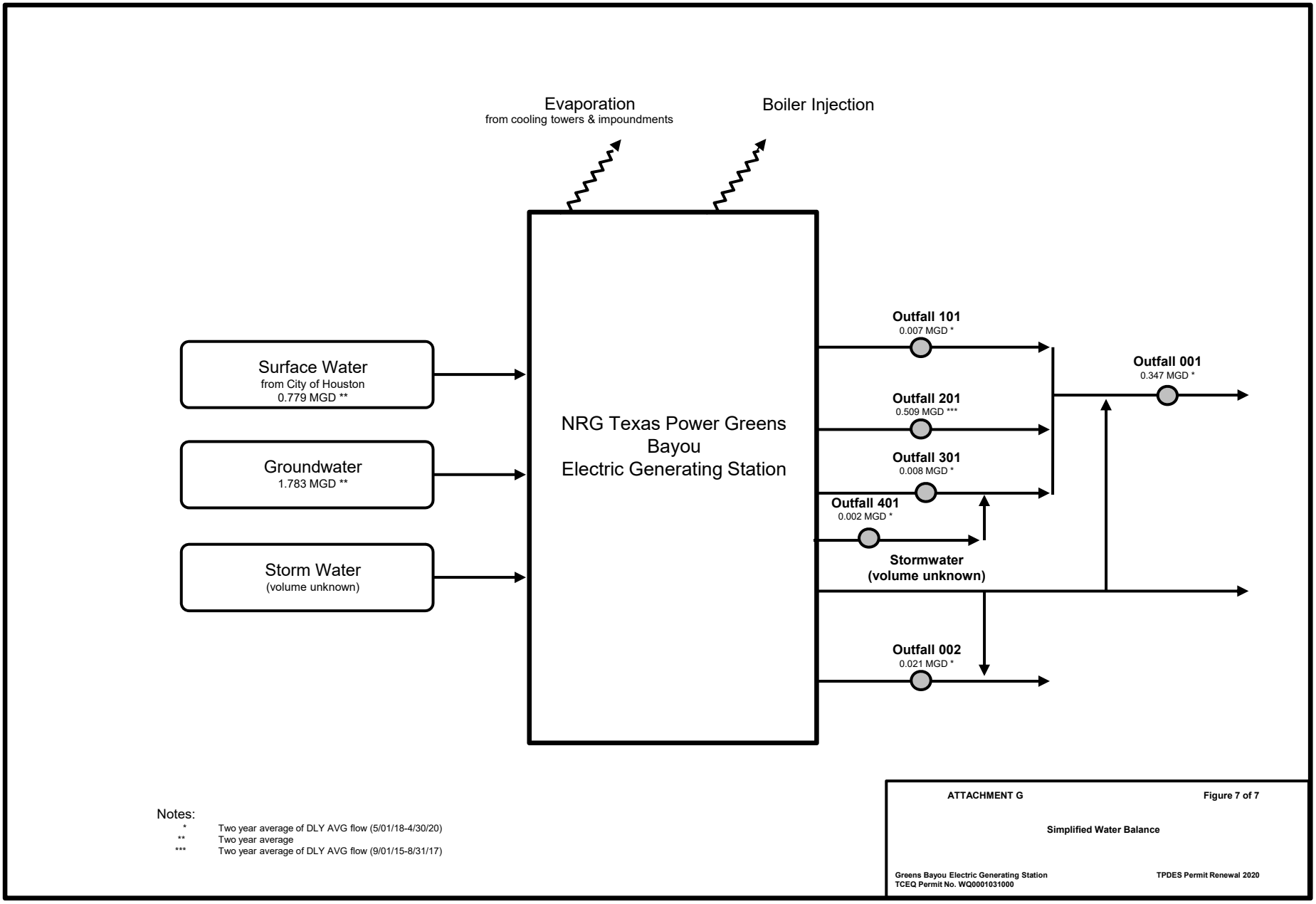

Notes:

* Two year average of DLY AVG flow (5/01/18-4/30/20)

** Two year average

*** Two year average of DLY AVG flow (9/01/15-8/31/17)

ATTACHMENT G **Figure 7 of 7**

Simplified Water Balance

Greens Bayou Electric Generating Station
TCEQ Permit No. WQ0001031000

TPDES Permit Renewal 2020

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ATTACHMENT H ADDITIONAL OUTFALL WASTESTREAM CONTRIBUTIONS

Attachment H
Technical Report

Wastestream Contributions

Outfall No.: 201

Contributing Wastestreams	Volume (MGD)	% of Total Flow
Cooling tower blowdown treatment system	0.458**	90
Low volume wastewater	0.05**	9.8
Stormwater	Variable	0.2
Total	0.509	100
** 2- year average (9/01/2015-8/31/2017) prior to Unit 5's retirement ceased flows through Outfall 201		

Outfall No.: 301

Contributing Wastestreams	Volume (MGD)	% of Total Flow
Demineralizer water treatment	0.0072**	90
Lab drain	0.0004**	5
Boiler blowdown	0.0004**	5
Stormwater	Variable	<1
Total	0.008	100
**2-year average (5/01/18-4/30/20)		

Outfall No.: 401

Contributing Wastestreams	Volume (MGD)	% of Total Flow
Sanitary Waste Treatment System	0.0019**	99
Stormwater	Variable	1
Total	0.002	100
**2-year average (5/01/18-4/30/20)		

ATTACHMENT I CHEMICAL SUMMARY AND SDS FOR COOLING WATER DISCHARGES

Attachment I
Technical Report

Does the facility use/propose to use any cooling towers which discharge blowdown or other wastestreams to the outfall(s)?

☒ Yes ☐ No

NOTE: If the facility uses or plans to use cooling towers, Item 12 **is required**.

a. Does the facility use or plan to use any boilers that discharge blowdown or other wastestreams to the outfall(s)?

☒ Yes ☐ No

b. Does or will the facility discharge once-through cooling water to the outfall(s)?

☐ Yes ☒ No

NOTE: If the facility uses or plans to use once-through cooling water, Item 12 **is required**.

With the retirement of Unit 5, cooling tower and boiler chemicals are no longer used. The remaining gas turbines have individual glycol cooling skids.

ATTACHMENT J STORMWATER MANAGEMENT

Attachment J
Technical Report

6. If yes, briefly describe the industrial processes and activities that occur outdoors or in some manner which may result in exposure of the activities or materials to stormwater:

All storm water drainage from production and non-production areas is discharged through permitted outfalls. Oil storage procedures are detailed in the facility's Spill Prevention, Control, and Countermeasure (SPCC) Plan. Large storage tanks are located within earthen and/or concrete dike secondary containment. Tanks of acid and caustic are located within secondary containment or curbed areas for spill control. Outdoor storage of equipment is limited to items that will not significantly affect storm water quality. Potential storm water contamination sources and best management practices for storm water runoff are addressed in the facility's SPCC Plan. TCEQ granted the site “Inactive” status as of June 2017 (see attached).

NRG Energy, Inc.
1000 Main Street
Houston, Texas 77002

June 5, 2017

Certified Mail–Delivery Confirmation Signature Required

Mr. Richard A. Hyde, PE
Executive Director (MC109)
Texas Commission on Environmental Quality
12100 Park 35 Circle
Austin, Texas 78753

Re: **NRG Greens Bayou Electric Generating Station**
TPDES Permit TXR05V800
Inactive Facility Notification

Dear Mr. Hyde:

This letter serves as notification of the inactive status and waiver from stormwater monitoring requirements at the NRG Greens Bayou Electric Generating Station (GBY) as provided by TPDES Industrial Stormwater Multi-Sector General Permit TXR050000.

Effective June 1, 2017, steam electric generating unit GBY 5 has been placed in "mothball status" and there will no electricity generated using this traditional steam boiler unit unless the unit is returned to active service. With GBY Unit 5 in mothballed status, the only generating equipment in operation at this facility are six gas turbine electric generating units that are not dual-fuel facilities and do not include steam boilers.

With GBY Unit 5 mothballed, we believe this plant is deemed an inactive facility. Therefore, upon written notice to the Executive Director of this status, Part III, D.4 (b) of the Industrial Stormwater Multi-Sector General Permit waives requirements for industrial facilities described in Part II, A.1 to sample, inspect, examine, or otherwise monitor stormwater discharges.

NRG understands that it must notify the Executive Director in writing at least 48 hours before commencing industrial activities at GBY Unit 5 and transferring to active status.

If you have any questions or require additional information, please do not hesitate to contact me at gene.fisseler@nrg.com or 832.357.5758.

Sincerely,

Gene Fisseler
Water Resources Director

ATTACHMENT K PROCESS/NON-PROCESS WASTEWATER FLOWS

Attachment K
Technical Report

6. Provide a breakdown of wastewater flow(s) generated by the facility, including both process and non-process wastewater flow(s). Specify which wastewater flows are to be authorized for discharge under this permit and the disposal practices for wastewater flows, excluding domestic, which are not to be authorized for discharge under this permit.

For Steam Electric Generating Stations (Not all waste streams are generated at this facility):

1. Process Wastewater
    a. Chemical Metal Cleaning Wastewater
2. Non-Process Wastewater
    a. Utility Wastewater
        i. Cooling Tower Blowdown
        ii. Non-Chemical Metal Cleaning Wastewater
        iii. Low Volume Wastewater, including flows from the following sources:
            1. Floor Drainage
            2. Boiler Blowdown
            3. Ion Exchange Water Treatment Systems
            4. Recirculating Service Water Systems
            5. Laboratory and Sampling Streams
            6. Cooling Tower Basin Cleaning Wastes
    b. Domestic Wastewater
    c. Air Conditioning Condensate

ATTACHMENT L LABORATORY INFORMATION

Attachment L
Technical Report

Dissolved oxygen, total residual chlorine, temperature and pH were analyzed on-site at Greens Bayou

E. coli analyses were performed by:
Envirodyne Laboratories, Inc.
11011 Brooklet Dr., #230
Houston, Texas 77099
281-568-7880

Mercury and cyanide analyses were performed by:
ALS Environmental - Holland
3352 128th Avenue
Holland, Michigan 49424
616-399-6070

Hexavalent chromium analyses were performed by:
Pace Analytical
12065 Lebanon Road
Mount Juliet, Tennessee 37122
615-758-5858

All other analyses were performed by:
ALS Environmental
10450 Stancliff Rd. Suite 210
Houston, Texas 77099
281-530-5656