



June 16, 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 Major Amendment Application
WQ0001026000, NRG Texas Power LLC
2012 Miller Cut off Road, La Porte, Texas 77571
CN 603207218; RN 100825389

To Whom It May Concern:

NRG Texas Power LLC (NRG) is submitting the enclosed application for a major amendment of Texas Pollutant Discharge Elimination System (TPDES) permit No. WQ0001026000 re-authorizing wastewater discharge from the S.R. Bertron Electrical Generating Station.

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

- Industrial Administrative Report 1.0;
- Industrial Administrative Report 1.1;
- SPIF;
- Industrial Technical Report 1.0;
- Worksheets 1.0, 2.0, 4.0, and 5.0;
- Core Data Form;
- USGS Map;
- Affected Landowners Map and Landowners Labels (CD);
- Flow Diagram and Water Balance;
- Site Drawing; and
- Supporting Attachments.

If you have any questions regarding this renewal application, please contact Mr. Carl Burch, NRG Environmental Manager, at 713-537-2333.

Sincerely,

NRG Texas Power LLC

Carl Burch

Environmental Manager, Regulatory Compliance

cc: Amanda Ragatz, ERM

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: WQ0001026000

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.: WQ0001026000 Expiration Date: 10/1/2018

EPA ID No.: TX0006378

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

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

c. If applying for an **amendment** or **modification** of a permit, describe the request in detail: NRG is requesting an Interim Phase be added to the permit for the period the facility is not operating, which includes the addition of Outfalls 002, 003, and 004. During the Interim Phase, NRG requests the Final Phase reporting requirements for Outfalls 001, 101, 201, 301, 401, 51A, and 51B be suspended. NRG requests all outfalls require monitoring only when discharging. NRG will notify TCEQ prior to reactivation of the facility. Additional details are provided in the Technical Report under Question 13. Permit Change Requests.

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: 07000524

Check or money order amount: \$2,050.00

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

ePAY Voucher number:

Mailed Check or money order number:

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: CN603207218
- 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 Director, Environmental Services

Credential:

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
- 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:

Title:

Credential:

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

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: Carl Burch

Credential:

Organization Name: NRG Texas Power LLC
Regulatory Compliance

Title: Environmental Manager,

Mailing Address: 910 Louisiana, 7th Floor

City/State/ZIP Code: Houston, TX 77002

Phone No.: 713-537-2333

Fax No.:

E-mail: carl.burch@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: Jennifer Falline Credential: [REDACTED]
Organization Name: NRG Texas Power LLC Title: Environmental Specialist II
Mailing Address: 7705 W Bay Road City/State/ZIP Code: Baytown, TX 77523
Phone No.: 281-383-4254 Fax No.: [REDACTED] E-mail: Jennifer.falline@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: Carl Burch Credential: [REDACTED]
Organization Name: NRG Texas Power LLC Title: Environmental Manager
Regulatory Compliance
Mailing Address: 910 Louisiana, 7th Floor City/State/ZIP Code: Houston, TX 77002
Phone No.: 713-537-2333 Fax No.: [REDACTED] E-mail: carl.burch@nrg.com

b. Mr. ☐ Ms. ☒ First/Last Name: Jennifer Falline Credential: [REDACTED]
Organization Name: NRG Texas Power LLC Title: Environmental Specialist II
Mailing Address: 7705 W Bay Road City/State/ZIP Code: Baytown, TX 77523
Phone No.: 281-383-4254 Fax No.: [REDACTED] E-mail: Jennifer.falline@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: Robert B. Bland Credential: [REDACTED]
Organization Name: NRG Texas Power LLC Title: Plant Manager
Mailing Address: 845 Sens Rd City/State/ZIP Code: La Porte, TX 77571
Phone No.: 281-867-2138 Fax No.: [REDACTED] E-mail: albert.smith@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: Jennifer Falline Credential: [REDACTED]
Organization Name: NRG Texas Power LLC Title: Environmental Specialist II
Mailing Address: 7705 W Bay Road City/State/ZIP Code: Baytown, TX 77523
Phone No.: 281-383-4254 Fax No.: [REDACTED] E-mail: Jennifer.falline@nrg.com

DMR data must be submitted through the [NetDMR](https://www.tceq.texas.gov/permitting/netdmr)² system. An electronic reporting account can be

² <https://www.tceq.texas.gov/permitting/netdmr>

established once the facility has obtained the permit number.

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

a. Individual Publishing the Notices

Mr. ☐ Ms. ☒ First/Last Name: Jennifer Falline Credential: [REDACTED]
Organization Name: NRG Texas Power LLC Title: Environmental Specialist II
Mailing Address: 7705 W Bay Road City/State/ZIP Code: Baytown, TX 77523
Phone No.: 281-383-4254 Fax No.: [REDACTED] E-mail: Jennifer.falline@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: Jennifer.falline@nrg.com
☐ Fax: [REDACTED]
☐ Regular Mail (USPS)

Mailing Address: [REDACTED] City/State/ZIP Code: [REDACTED]

c. Contact in the Notice

Mr. ☐ Ms. ☒ First/Last Name: Jennifer Falline Credential: [REDACTED]
Organization Name: NRG Texas Power LLC Title: Environmental Specialist II
Phone No.: 281-383-4254 Fax No.: [REDACTED] E-mail: Jennifer.falline@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: La Porte Branch Library Location within the building: [REDACTED]
Physical Address of Building: 600 S Broadway St.
City: La Porte 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): **RN100825389**
- b. Name of project or site (the name known by the community where located): S.R. Bertron Electrical 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: 2012 Miller Cut Off Road City/State/ZIP Code: La Porte, TX 77571
 Phone No.: Fax No.: E-mail:
 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: City/State/ZIP Code:
 Phone No.: Fax No.: E-mail:

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:

City/State/ZIP Code:

Phone No.:

Fax No.:

E-mail:

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): La Porte, TX

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:

- b. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

If **yes**, provide the following:

- Acct. No.:
- Amt. due:

- c. Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

If **yes**, provide the following:

- Enforcement Order No.:
- Amt. due:

11. SIGNATURE PAGE (Instructions, Page 29)

Permit No: WQ0001026000

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 Director, Environmental Services

Signature: C.R.E.

(Use blue ink)

Date: 12 June 20

Subscribed and Sworn to before me by the said Craig Eckberg

on this 12

day of June

, 20 20

My commission expires on the 25

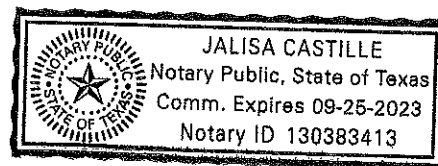
day of September

, 20 23

J. Castille
Notary Public

[SEAL]

Montgomery
County, Texas



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

INDUSTRIAL ADMINISTRATIVE REPORT 1.1

The following information is required for **new** and **amendment** applications.

1. AFFECTED LANDOWNER INFORMATION (Instructions, Pages 30-32)

a. Attach a landowners map or drawing, with scale, as applicable. Check the box next to each item to confirm it has been provided.

- ☒ The applicant's property boundaries.
- ☒ The facility site boundaries within the applicant's property boundaries.
- ☐ The distance the buffer zone falls into adjacent properties and the property boundaries of the landowners located within the buffer zone.
- ☒ The property boundaries of all landowners surrounding the applicant's property. (**Note:** if the application is a major amendment for a lignite mine, the map must include the property boundaries of all landowners adjacent to the new facility (ponds).)
- ☒ The point(s) of discharge and highlighted discharge route(s) clearly shown for one mile downstream.
- ☐ The property boundaries of the landowners located on both sides of the discharge route for one full stream mile downstream of the point of discharge.
- ☒ The property boundaries of the landowners along the watercourse for a one-half mile radius from the point of discharge if the point of discharge is into a lake, bay, estuary, or affected by tides.
- ☐ The boundaries of the effluent disposal site (e.g., irrigation area or subsurface drainfield site) and all evaporation/holding ponds within the applicant's property.
- ☐ The property boundaries of all landowners surrounding the applicant's property boundaries where the effluent disposal site is located.
- ☐ The boundaries of the sludge land application site (for land application of sewage sludge for beneficial use) and the property boundaries of landowners within one-quarter mile of the applicant's property boundaries where the sewage sludge land application site is located.
- ☐ The property boundaries of landowners within one-half mile in all directions from the applicant's property boundaries where the sewage sludge disposal site (e.g., sludge surface disposal site or sludge monofill) is located.

Attachment: D

b. Check the box next to the format of the landowners list:

- ☒ Readable/Writeable CD ☐ Four sets of labels

c. ☒ Check this box to confirm a separate list with the landowners' names and mailing addresses cross-referenced to the landowners map has been attached.

Attachment: D

d. Provide the source of the landowners' names and mailing addresses: Harris County Appraisal District

e. As required by *Texas Water Code § 5.115*, is any permanent school fund land affected by this application?

- ☐ Yes ☒ No

If **yes**, provide the location and foreseeable impacts and effects this application has on the land(s): N/A

2. ORIGINAL PHOTOGRAPHS (Instructions, Page 32)

Provide original ground level photographs. Indicate with checkmarks that the following information is provided.

- ☐ At least one original photograph of the new or expanded treatment unit location.
- ☒ At least two photographs of the existing/proposed point of discharge and as much area downstream (photo 1) and upstream (photo 2) as can be captured. If the discharge is to an open water body (e.g., lake, bay), the point of discharge should be in the right or left edge of each photograph showing the open water and with as much area on each respective side of the discharge as can be captured.
- ☐ At least one photograph of the existing/proposed effluent disposal site.
- ☒ A plot plan or map showing the location and direction of each photograph.

Attachment: E

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.: WQ0001026000

EPA ID No.: TX0006378

3. Address of the project (location description that includes street/highway, city/vicinity, and county):
2012 Miller Cut Off Road, La Porte, TX 77571, 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: Jennifer Falline

Title: Environmental Specialist II

Credential:

Organization Name: NRG Texas Power LLC

Mailing Address: 7705 W Bay Road

City/State/ZIP Code: Baytown, TX 77523

Phone No.: 281-383-4254

Fax No.: _____

E-mail:

Jennifer.falline@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: Directly to San Jacinto Bay in Segment No. 2427 of the Bays and Estuaries
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: The facility is a steam electric generating station with infrastructure and treatment systems already in place.

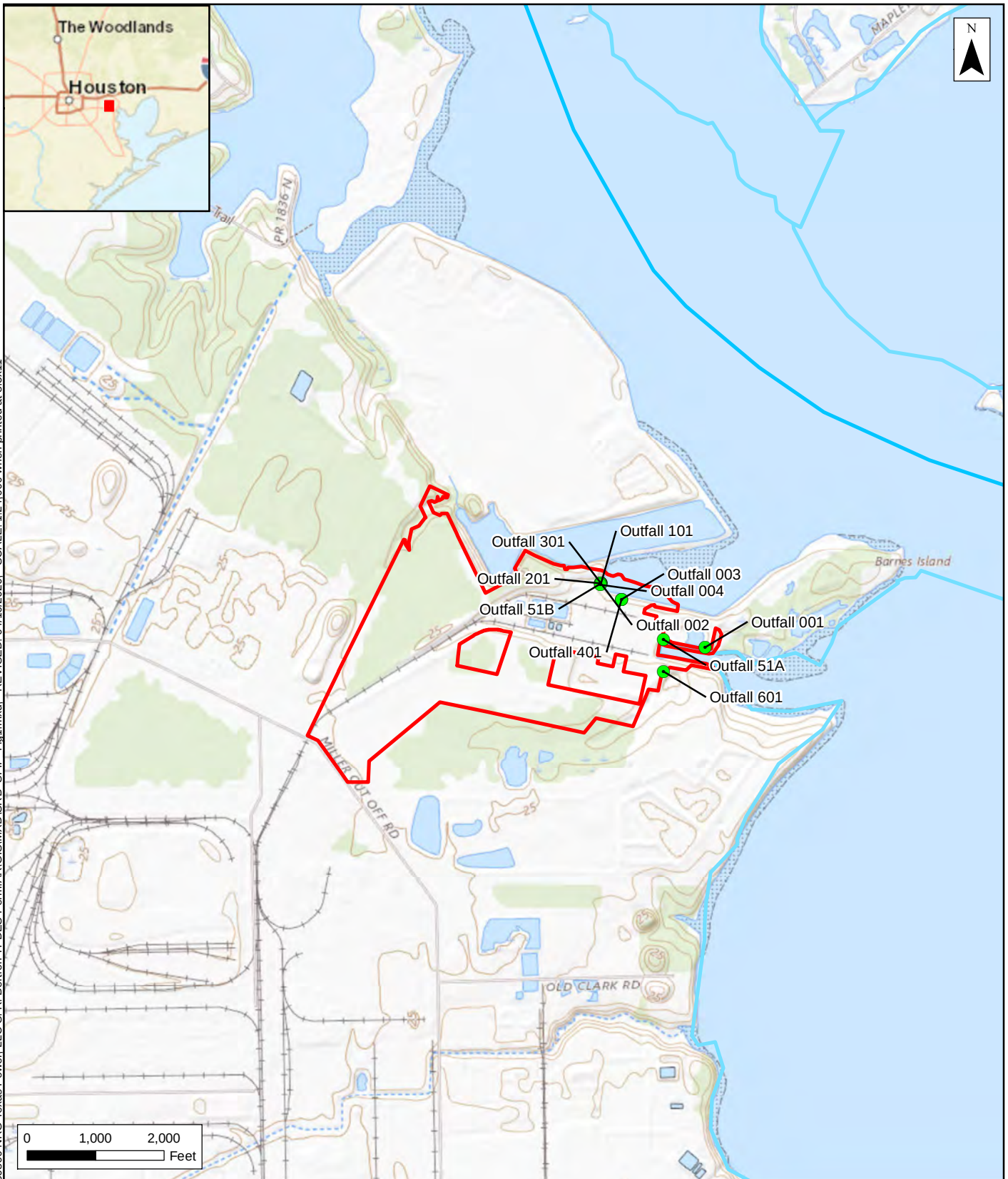
THE FOLLOWING ITEMS APPLY ONLY TO APPLICATIONS FOR NEW TPDES PERMITS AND MAJOR AMENDMENTS TO TPDES PERMITS

13. List construction dates of all buildings and structures on the property: The plant was built in the early 1950s.
14. Provide a brief history of the property, and name of the architect/builder, if known: Unit 2 began Generation on April 1, 1956; Unit 1 on March 1, 1958; Unit 3 on April 1, 1959; and Unit 4 on March 15, 1960. The builder was Riley Striker Corporation with Ebasco performing the engineering.

USGS Figure
SPIF Attachment A

May 2020
Project No. 0550860

Environmental Resources Management
CityCentre Four
840 West Sam Houston Parkway North, Suite 600
Houston, Texas 77024-3920
281-600-1000



Legend

- S.R. Bertron Property Boundary
- Outfall
- TCEQ Stream Segment

SPIF Figure
La Porte 1:24,000 USGS Quadrangle
 TPDES Permit Renewal
 NRG Texas Power LLC
 La Porte, Texas

Original Photographs
SPIF Attachment B

May 2020
Project No. 0550860

Environmental Resources Management
CityCentre Four
840 West Sam Houston Parkway North, Suite 600
Houston, Texas 77024-3920
281-600-1000

Client: NRG Texas Power LLC		Project Number: 0550860	
TPDES Permit Number: WQ0001026000		Location: S.R. Bertron Electrical Generating Station	
Photograph ID: 1			
Feature: Units 1 and 2			
Date: 4/22/2020			
Comments: Photo taken from north street level			

Client: NRG Texas Power LLC		Project Number: 0550860	
TPDES Permit Number: WQ0001026000		Location: S.R. Bertron Electrical Generating Station	
Photograph ID: 1			
Feature: Units 3 and 4			
Date: 4/22/2020			
Comments: Photo taken from north street level			

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](https://www.tceq.texas.gov/permitting/wastewater/industrial/TPDES_industrial_wastewater_steps.html)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).

S.R. Bertron Electrical Generating Station is a steam electric generating facility consisting of two (2) gas and oil fired drum units and steam generators capable of producing 292 MW. The facility is not currently in operation. Units 3 and 4 were retired on January 17, 2018 and Units 1 and 2 continue to remain mothballed with no current plans to restart.

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

See Attachment F

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 No. 74-82-8)	Steam	Electricity
Water (CAS No. 7732-18-5)		

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: G

- 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 48201C0930M and 48201C0935M, Effective 1/6/2017

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: A portion of the facility property is located in Zone AE with elevations ranging from 12 to 14 MSL. The facility is protected by a hurricane levee designed for the 100-year flood level and hurricane associated storm surge.

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 H

- 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: 1

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)	T	C	C	C
Associated Outfall Number	101	301	301	301
Liner Type (C) (I) (S) or (A)	I	C	I	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	Y	Y	Y	Y
Length (ft)	204	189	115	184
Width (ft)	85	150	110	150
Max Depth From Water Surface (ft), Not Including Freeboard	10	10	10	10
Freeboard (ft)	2	2	2	2
Surface Area (acres)	0.4	0.65	0.29	0.63
Storage Capacity (gallons)	680,000	1,280,000	350,000	1,240,000
40 CFR Part 257, Subpart D, Y/N	N	N	N	N
Date of Construction	Early 1950s	Early 1950s	Early 1950s	Early 1950s

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	29.726111	-95.056389
101	29.728333	-95.060556
201	29.728333	-95.060556
301	29.728333	-95.060556
401	29.727778	-95.059722
51A	29.726389	-95.058056
51B	29.728333	-95.060556
601	29.725278	-95.058056
002	29.728333	-95.060556
003	29.727778	-95.059722
004	29.728333	-95.060556

Outfall Location Description

Outfall Number	Location Description
001	Monitoring pier where once-through cooling water enters discharge canal
101	Intake forebay
201	Intake forebay
301	Intake forebay
401	Intake forebay
51A	Discharge canal
51B	Intake forebay
601	Approximate location of point where effluent enters intake forebay
002	Exit of the ditch after the discharges from Outfalls 101, 201, and 301 commingle prior to discharge to the idle cooling water intake system
003	Exit of the idle cooling tower basin prior to discharge to the idle cooling water intake system
004	Intake forebay

Description of Sampling Points (if different from Outfall location)

Outfall Number	Description of Sampling Point
001	Where once-through cooling water and PMEs discharge from the canal prior to San Jacinto Bay
101	Where low volume wastewater is discharged from the treatment facility prior to mixing with any other waste streams
201	Where low volume wastewater is discharged downstream of the filter units and prior to mixing with any other waste streams
301	Where metal cleaning wastes are discharged (immediately downstream of the filter units) prior to mixing with any other waste streams
401	Where low volume wastewater is discharged from the cooling tower basin and prior to mixing with any other waste streams

Outfall Number	Description of Sampling Point
51A	Where low volume wastewater is discharged from the treatment facilities, prior to entering the discharge canal
51B	Where low volume wastewater is discharged from the treatment facilities, prior to entering the cooling water intake forebay
601	Where treated domestic wastewater is discharged from the domestic wastewater treatment plant prior to mixing with any other waste streams
002	Where metal cleaning and low volume wastewater from Outfalls 101, 201, and 301 is discharged downstream of the filter units prior to mixing with any other waste streams
003	Where low volume wastewater is discharged downstream of the filter units and prior to mixing with any other waste streams
004	Where low volume wastewater is discharged from the treatment facilities, prior to entering the cooling water intake forebay

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	740.2	740.2	N/A	N/A	N/A
101	Intermittent	Intermittent	N/A	N/A	N/A
201	Intermittent	Intermittent	N/A	N/A	N/A
301	Intermittent	Intermittent	N/A	N/A	N/A
401	Intermittent	Intermittent	N/A	N/A	N/A
51A	Intermittent	Intermittent	N/A	N/A	N/A
51B	Intermittent	Intermittent	N/A	N/A	N/A
601	Intermittent	Intermittent	N/A	N/A	N/A
002	N/A	N/A	Intermittent	Intermittent	N/A
003	N/A	N/A	Intermittent	Intermittent	N/A
004	Intermittent	Intermittent	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	Y	N	Pump curve/hours
101	Y	N	Estimate
201	Y	N	Estimate
301	Y	N	Estimate
401	N	Y	Estimate
51A	Y	N	Estimate
51B	Y	N	Estimate
601	N	Y	Estimate
002	Y	N	Estimate
003	N	Y	Estimate

Outfall Number	Pumped Discharge? Y/N	Gravity Discharge? Y/N	Type of Flow Measurement Device Used
004	Y	N	Estimate

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	N	Y	N	24	31	12
101	Y	N	N	Variable	Variable	Variable
201	Y	N	N	Variable	Variable	Variable
301	Y	N	N	Variable	Variable	Variable
401	Y	N	N	Variable	Variable	Variable
51A	Y	N	N	Variable	Variable	Variable
51B	Y	N	N	Variable	Variable	Variable
601	Y	N	N	Variable	Variable	Variable
002	Y	N	N	Variable	Variable	Variable
003	Y	N	N	Variable	Variable	Variable
004	Y	N	N	Variable	Variable	Variable

Wastestream Contributions

Outfall No.: 001

Contributing Wastestreams	Volume (MGD)	% of Total Flow
Once-through cooling water	183.91*	99
Previously monitored effluents from outfalls 101, 201, 301, 401 and 51B	Variable	<1
Stormwater	Variable	<0.1

*Two year average of Daily Average Flow prior to mothballing

Outfall No.: 101

Contributing Wastestreams	Volume (MGD)	% of Total Flow
Low volume wastewater primarily boiler blowdown	0.199*	99.9
Miscellaneous low volume wastewater	Variable	<0.1

Contributing Wastestreams	Volume (MGD)	% of Total Flow
*Two year average of Daily Average Flow prior to mothballing		

Outfall No.: 201

Contributing Wastestreams	Volume (MGD)	% of Total Flow
Low volume wastewater including:		
Demineralized regenerate	0.138*	99
Lab drains	<0.001	<0.1
Miscellaneous low volume wastewater	Variable	<1
Stormwater	Variable	<1
*Two year average of Daily Average Flow prior to mothballing		

Attachment: J

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: N/A

- 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	1	*	*
Boilers	4	**	**
* cooling towers for auxiliary cooling only; cooling towers are not currently being used as facility is not operational			
**boiler blowdown is discharged as low volume waste			

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 K

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:**
- 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.

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: N/A

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

Attachment: N/A

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.o** 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)

Radioactive Material	Concentration (pCi/L)

- 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)

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				
Owner				
Operator				

- 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:

- 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: [REDACTED]

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*: [REDACTED]

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: [REDACTED]

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.

NRG is requesting an Interim Phase be added to the permit for the period the facility is not operating. During the Interim Phase, NRG requests the Final Phase reporting requirements for Outfalls 001, 101, 201, 301, 401, 51A and 51B be suspended. NRG is not requesting any changes to the effluent limitations and monitoring requirements for Outfall 601 during the Interim Phase. During the Interim Phase, flows for the outfalls will consist of the following: Outfall 001-stormwater commingled with previously monitored effluents (from internal Outfall 51A) and treated domestic wastewater from Internal Outfall 601; Outfall 51A-stormwater commingled with de minimis quantities of legacy low volume waste sources. NRG is requesting the additional of Outfalls 002, 003, and 004 for the Interim Phase. Outfall 002 will consist of discharges from the idle internal Outfalls 101, 201, and 301. Outfall 003 will consist of discharges from the idle cooling tower basin (Outfall 401) prior to discharge to the idle cooling water intake system. Outfall 004 will consist of discharges from Outfall 51B, stormwater commingled with de minimis quantities of legacy low volume waste sources. NRG requests all outfalls require monitoring only when discharging. NRG will notify TCEQ prior to reactivation of the facility to request the phase changes for Outfalls 001 and 51A and activation of Outfalls 101, 201, 301, 401, and 51B.

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 L

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
Once-through Cooling Water	423	13b(1)	1956
Low Volume Waste Sources	423	12b(3)	1956
Metal Cleaning Waste Treatment	423	13e	1956

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

(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): N/A
- 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:** N/A

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:** S.R. Bertron is currently not operating and therefore is not required to submit analytical data for the major amendment with renewal application package.

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.: N/A

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)				
CBOD (5-day)				
Chemical oxygen demand				
Total organic carbon				
Dissolved oxygen				
Ammonia nitrogen				
Total suspended solids				
Nitrate nitrogen				
Total organic nitrogen				
Total phosphorus				
Oil and grease				
Total residual chlorine				
Total dissolved solids				
Sulfate				
Chloride				
Fluoride				
Total alkalinity (mg/L as CaCO ₃)				
Temperature (°F)				
pH (standard units)				

Table 2 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)
Aluminum, total					2.5
Antimony, total					5
Arsenic, total					0.5
Barium, total					3
Beryllium, total					0.5
Cadmium, total					1
Chromium, total					3
Chromium, hexavalent					3
Chromium, trivalent					N/A
Copper, total					2
Cyanide, available					2/10
Lead, total					0.5
Mercury, total					0.005/0.0005
Nickel, total					2
Selenium, total					5
Silver, total					0.5

Pollutant	Sample 1 (µg/L)	Sample 2 (µg/L)	Sample 3 (µg/L)	Sample 4 (µg/L)	MAL (µg/L)
Thallium, total					0.5
Zinc, total					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.: 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)*
Acrylonitrile					50
Anthracene					10
Benzene					10
Benzidine					50
Benzo(a)anthracene					5
Benzo(a)pyrene					5
Bis(2-chloroethyl)ether					10
Bis(2-ethylhexyl)phthalate					10
Bromodichloromethane [Dichlorobromomethane]					10
Bromoform					10
Carbon tetrachloride					2
Chlorobenzene					10
Chlorodibromomethane [Dibromochloromethane]					10
Chloroform					10
Chrysene					5
m-Cresol [3-Methylphenol]					10
o-Cresol [2-Methylphenol]					10
p-Cresol [4-Methylphenol]					10
1,2-Dibromoethane					10
m-Dichlorobenzene [1,3-Dichlorobenzene]					10
o-Dichlorobenzene [1,2-Dichlorobenzene]					10
p-Dichlorobenzene [1,4-Dichlorobenzene]					10
3,3'-Dichlorobenzidine					5
1,2-Dichloroethane					10
1,1-Dichloroethene [1,1-Dichloroethylene]					10

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

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

Pollutant	Sample 1	Sample 2	Sample 3	Sample 4	MAL
Tributyltin (µg/L)					0.010
Enterococci (cfu or MPN/100 mL)					N/A
<i>E. coli</i> (cfu or MPN/100 mL)					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 [Fenprothrin]					—
Demeton					0.20
Diazinon					0.5/0.1
Dicofol [Kelthane]					1
Dieldrin					0.02
Diuron					0.090
Endosulfan I (<i>alpha</i>)					0.01
Endosulfan II (<i>beta</i>)					0.02
Endosulfan sulfate					0.1
Endrin					0.02
Guthion [Azinphos methyl]					0.1
Heptachlor					0.01
Heptachlor epoxide					0.01
Hexachlorocyclohexane (<i>alpha</i>)					0.05
Hexachlorocyclohexane (<i>beta</i>)					0.05
Hexachlorocyclohexane (<i>gamma</i>) [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.: N/A

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)	☐	☐					—
Nitrate-Nitrite (as N)	☐	☐					—
Sulfide (as S)	☐	☐					—
Sulfite (as SO ₃)	☐	☐					—
Surfactants	☐	☐					—
Boron, total	☐	☐					20
Cobalt, total	☐	☐					0.3
Iron, total	☐	☐					7
Magnesium, total	☐	☐					20
Manganese, total	☐	☐					0.5
Molybdenum, total	☐	☐					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.: N/A : 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
Acrylonitrile					50
Benzene					10
Bromoform					10
Carbon tetrachloride					2
Chlorobenzene					10
Chlorodibromomethane					10
Chloroethane					50
2-Chloroethylvinyl ether					10
Chloroform					10
Dichlorobromomethane [Bromodichloromethane]					10
1,1-Dichloroethane					10
1,2-Dichloroethane					10
1,1-Dichloroethylene [1,1-Dichloroethene]					10
1,2-Dichloropropane					10
1,3-Dichloropropylene [1,3-Dichloropropene]					10
Ethylbenzene					10
Methyl bromide [Bromomethane]					50
Methyl chloride [Chloromethane]					50
Methylene chloride [Dichloromethane]					20
1,1,2,2-Tetrachloroethane					10
Tetrachloroethylene [Tetrachloroethene]					10
Toluene					10
1,2-Trans-dichloroethylene [1,2-Trans-dichloroethene]					10
1,1,1-Trichloroethane					10
1,1,2-Trichloroethane					10
Trichloroethylene [Trichloroethene]					10
Vinyl chloride					10

* Indicate units if different from µg/L.

Table 9 for Outfall No.: N/A : Acid CompoundsSamples 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
2,4-Dichlorophenol					10
2,4-Dimethylphenol					10
4,6-Dinitro-o-cresol					50
2,4-Dinitrophenol					50
2-Nitrophenol					20
4-Nitrophenol					50
p-Chloro-m-cresol					10
Pentachlorophenol					5
Phenol					10
2,4,6-Trichlorophenol					10

* Indicate units if different from µg/L.

Table 10 for Outfall No.: N/A : Base/Neutral CompoundsSamples 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 (Ronnell) 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/ASamples 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 ☐ NoIf **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 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: ~190 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:

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

- | | |
|--|---|
| ☐ Lake or Pond | ☐ Man-Made Channel or Ditch |
| • Surface area (acres): <input type="text"/> | ☐ Stream or Creek |
| • Average depth of the entire water body (feet): <input type="text"/> | ☐ Freshwater Swamp or Marsh |
| • Average depth of water body within a 500-foot radius of the discharge point (feet): <input type="text"/> | ☐ Tidal Stream, Bayou, or Marsh |
| | ☐ Open Bay |
| | ☐ Other, specify: <input type="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:

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

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:

f. General observations of the water body during normal dry weather conditions:

Date and time of observation:

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

- ☐ Yes ☐ No

If **yes**, describe how:

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 | ☐ urban runoff |
| ☐ agricultural runoff | ☐ septic tanks |
| ☐ upstream discharges | ☐ other, specify: <input type="text"/> |
- b. Uses of water body observed or evidence of such uses (check all that apply):
- | | | |
|---|--|---|
| ☐ livestock watering | ☐ fishing | ☐ picnic/park activities |
| ☐ non-contact recreation | ☐ industrial water supply | ☐ other, specify: <input type="text"/> |
| ☐ domestic water supply | ☐ irrigation withdrawal | <input type="text"/> |
| ☐ contact recreation | ☐ navigation | |
- 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: Waste Management Coastal Plains

TCEQ Permit/Registration Number: MSW #17214

County where disposal site is located: Brazoria

c. Method of sewage sludge transportation: ☒ truck ☐ train ☐ pipe ☐ other:

TCEQ Hauler Registration Number: Specialized Waste Systems, TCEQ #41514; Performance Contractors, Inc. TXD980899851

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.

Copy of Payment Information
Attachment A

May 2020
Project No. 0550860

Environmental Resources Management
CityCentre Four
840 West Sam Houston Parkway North, Suite 600
Houston, Texas 77024-3920
281-600-1000

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: WQ0001026000

1. Check or Money Order Number: 07000524
2. Check or Money Order Amount: \$2,050.00
3. Date of Check or Money Order: 05/12/2020
4. Name on Check or Money Order: NRG Texas Power LLC

5. APPLICATION INFORMATION

Name of Project or Site: S.R. Bertron Electrical Generating Station

Physical Address of Project or Site: 2012 Miller Cut Off Road, La Porte, TX 77571

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
043020	04/30/2020	1700084696	\$2,050.00	0.00	\$2,050.00

CHECK NUMBER	DATE	VENDOR NUMBER	VENDOR NAME	TOTAL AMOUNT
07000524	05/12/20	0000239689	TEXAS COMMISSION ON ENVIRONMENTAL	\$2,050.00
Refer to above check number and voucher number when inquiring about your payment				0010



Bank Of New York Mellon
Pittsburgh, PA 15262

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

60-160
433

Date: 05/12/2020
Check Number: 07000524
Vendor Number: 0000239689

PAY Two thousand fifty and 00/100 Dollars

**TO THE
ORDER OF**

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

Pay Exactly
*****\$2,050.00

AUTHORIZED SIGNATURE
**VOID WITHOUT SIGNATURE
VOID AFTER NINETY DAYS**

⑈07000524⑈ ⑆043301601⑆ 185⑈0904⑈

Core Data Form

Attachment B

May 2020

Project No. 0550860

Environmental Resources Management

CityCentre Four

840 West Sam Houston Parkway North, Suite 600

Houston, Texas 77024-3920

281-600-1000



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)		3. Regulated Entity Reference Number (if issued)
CN 603207218		RN 100825389

[Follow this link to search for CN or RN numbers in Central Registry**](#)

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)		5/1/2020	
☐ 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)	
800836540		32033232003		342019301	
10. DUNS Number (if applicable)					
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, 7 th Floor			
City		Houston		State TX ZIP 77002 ZIP + 4	
16. Country Mailing Information (if outside USA)				17. E-Mail Address (if applicable)	
				carl.burch@nrg.com	
18. Telephone Number		19. Extension or Code		20. Fax Number (if applicable)	
(713) 537-2333				() -	

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.)	
S.R. Bertron Electrical Generating Station	

23. Street Address of the Regulated Entity: (No PO Boxes)	2012 Miller Cut Off Road							
	City	La Porte	State	TX	ZIP	77571	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	
La Porte					TX		77571	
27. Latitude (N) In Decimal:		29.727			28. Longitude (W) In Decimal:		-95.06	
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				22112				
33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)								
Steam electric generating station								
34. Mailing Address:		845 Sens Rd						
		City	La Porte	State	TX	ZIP	77571	ZIP + 4
35. E-Mail Address:		robert.bland@nrg.com						
36. Telephone Number			37. Extension or Code			38. Fax Number (if applicable)		
(281) 867-2138						() -		

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.

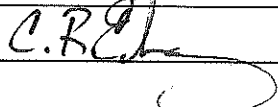
☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☒ Waste Water	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:
WQ0001026000				

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
(409) 599-6766		() -	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.

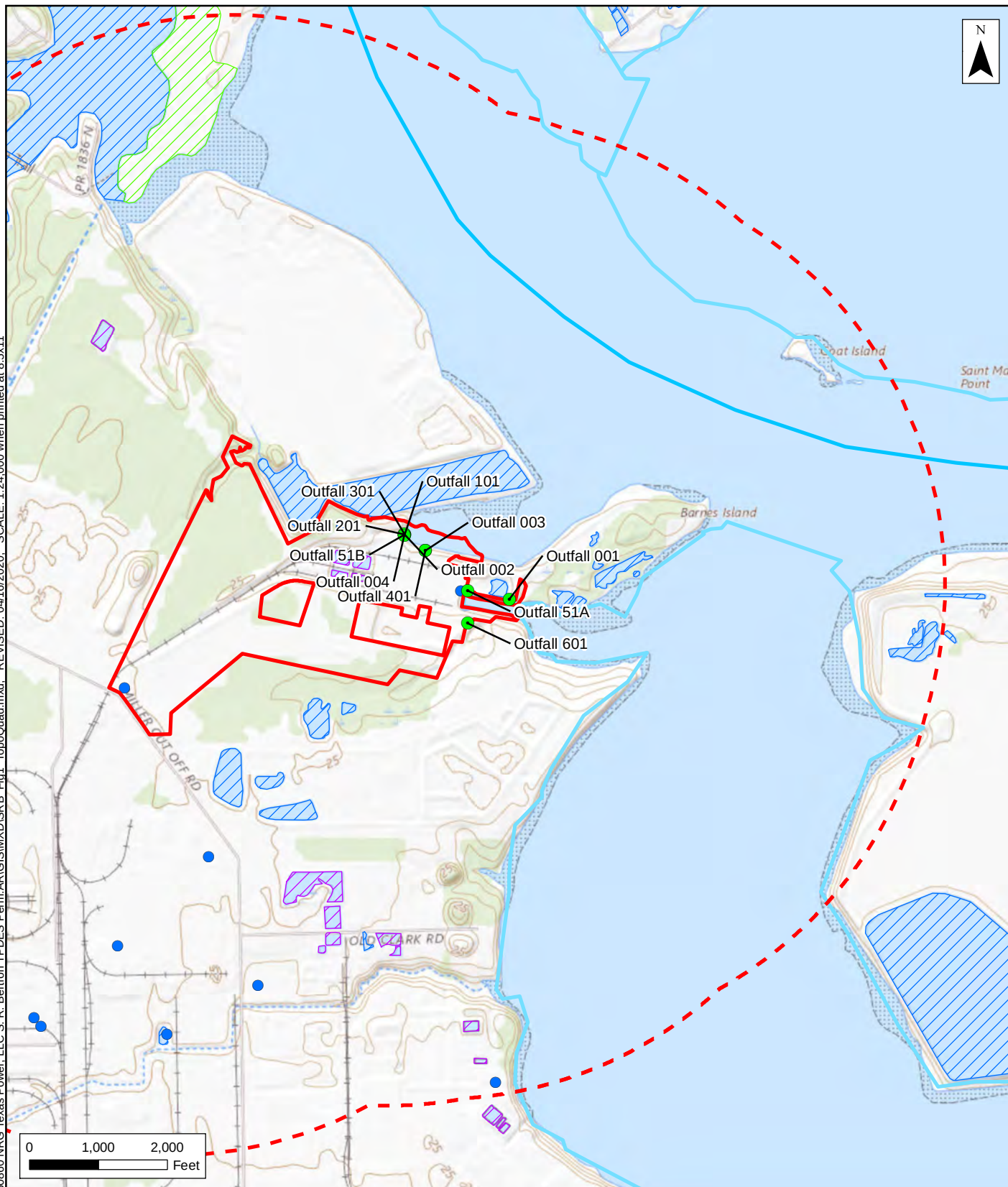
Company:	NRG Texas Power LLC	Job Title:	Senior Director, Environmental Services
Name (In Print):	Craig Eckberg	Phone:	(713) 537-2776
Signature:		Date:	12 June 20

USGS Figure
Attachment C

May 2020
Project No. 0550860

Environmental Resources Management
CityCentre Four
840 West Sam Houston Parkway North, Suite 600
Houston, Texas 77024-3920
281-600-1000

\\usshou501\Data\Houston\Projects\0550860 NRG Texas Power, LLC S. R. Bertron TPDES Perm AR\GIS\MXD\SRB_Fig1_TopoQuad.mxd, REVISED: 04/16/2020, SCALE: 1:24,000 when printed at 8.5x11

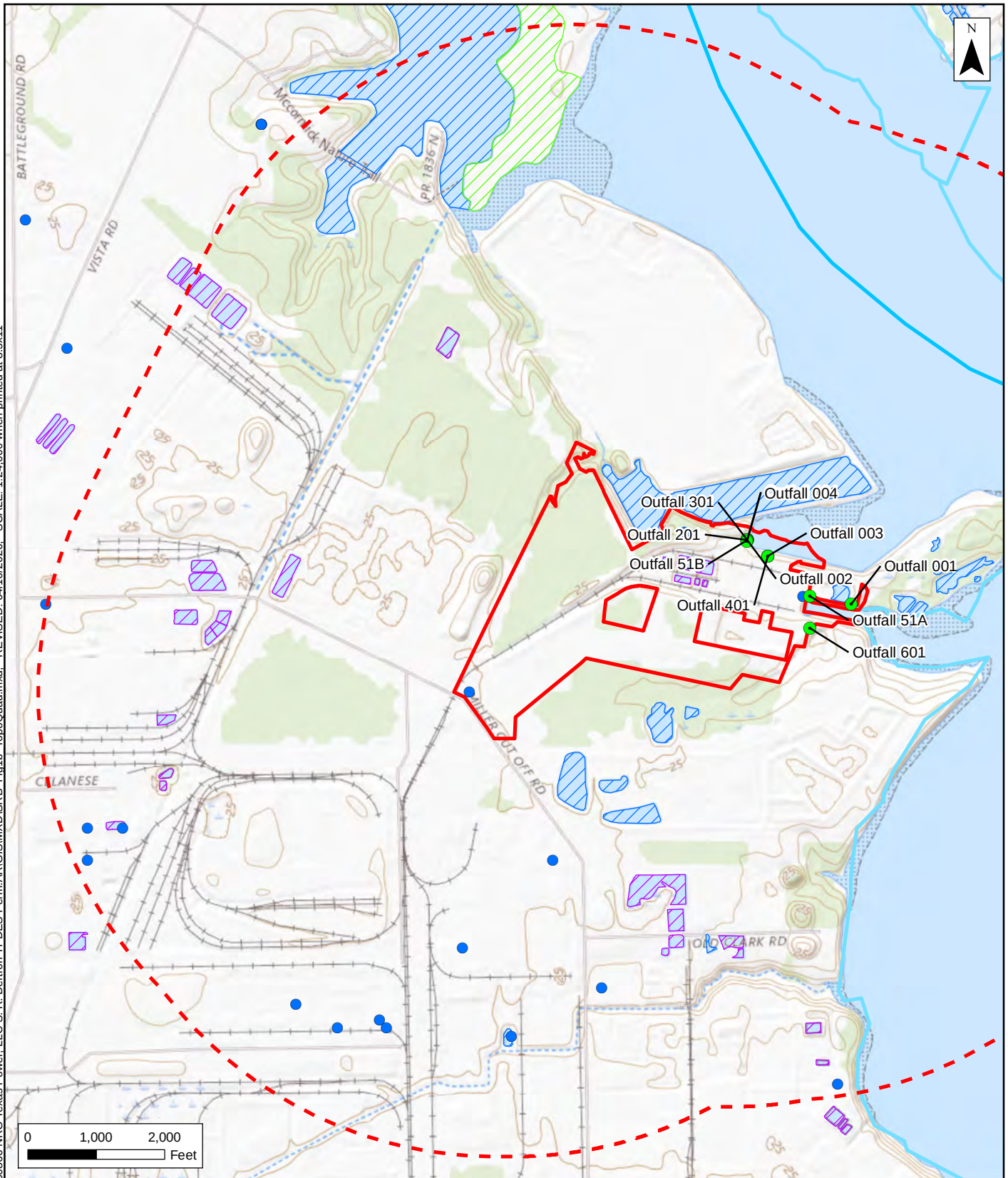


Legend

- | | |
|--------------------------------|---------------------|
| S.R. Bertron Property Boundary | SwampMarsh |
| 1-mile radius | TCEQ Stream Segment |
| Outfall | TWDB Water Wells |
| LakePond | |
| Reservoir | |

Figure 1a
La Porte 1:24,000 USGS Quadrangle
TPDES Permit Renewal
NRG Texas Power LLC
La Porte, Texas

\\usshous01\Data\Houston\Projects\0550860 NRG Texas Power, LLC S. R. Bertron TPDES Perm. AR\GIS\MXD\SRB_Fig1b_TopoQuad.mxd, REVISED: 04/16/2020, SCALE: 1:24,000 when printed at 8.5x11



Legend

- | | |
|---|---|
| S.R. Bertron Property Boundary | SwampMarsh |
| 1-mile radius | TCEQ Stream Segment |
| ● Outfall | ● TWDB Water Wells |
| LakePond | |
| Reservoir | |

Figure 1b
La Porte 1:24,000 USGS Quadrangle
 TPDES Permit Renewal
 NRG Texas Power LLC
 La Porte, Texas

Landowner Information

Attachment D

May 2020

Project No. 0550860

Environmental Resources Management

CityCentre Four
840 West Sam Houston Parkway North, Suite 600
Houston, Texas 77024-3920
281-600-1000

\\usshouf01\Data\Houston\Projects\0550860 NRG Texas Power, LLC S. R. Bertron TPDES Perm AR\GIS\MXD\Adj landowner.mxd, REVISED: 04/16/2020, SCALE: 1:18,000 when printed at 8.5x11



Legend

- S.R. Bertron Property Boundary
- Outfall
- Adjacent landowner

Adjacent Landowner Figure

TPDES Permit Renewal
NRG Texas Power LLC
S.R. Bertron
La Porte, Texas

Environmental Resources Management
www.erm.com



MapID	Owner	Contact
1	BATTLEGROUND OIL SPECIALTY	BATTLEGROUND OIL SPECIALTY TERMINAL COMPANY LLC PROP TAX DEPT PO BOX 4372 HOUSTON TX 77210-4372
2	CENTERPOINT ENERGY HOU ELE	CENTERPOINT ENERGY HOU ELE PROPERTY TAX DEPT 38TH FLR PO BOX 1475 HOUSTON TX 77251-1475
3	ENTERPRISE REFINED PRODUCTS COMPANY LLC	ENTERPRISE REFINED PRODUCTS COMPANY LLC PO BOX 4018 HOUSTON TX 77210-4018
4	EQUISTAR CHEMICALS LP	EQUISTAR CHEMICALS LP 1221 MCKINNEY ST STE 1600 HOUSTON TX 77010-2006
5	EXXON PIPELINE 00650	EXXON PIPELINE 00650 PO BOX 53 HOUSTON TX 77001-0053
6	PORT OF HOUSTON AUTHORITY	PORT OF HOUSTON AUTHORITY 111 EAST LOOP N HOUSTON TX 77029-4326

Source: Harris County Appraisal District

BATTLEGROUND OIL SPECIALTY
TERMINAL COMPANY LLC
PROP TAX DEPT
PO BOX 4372
HOUSTON TX 77210-4372

CENTERPOINT ENERGY HOU ELE
PROPERTY TAX DEPT 38TH FLR
PO BOX 1475
HOUSTON TX 77251-1475

ENTERPRISE REFINED PRODUCTS
COMPANY LLC
PO BOX 4018
HOUSTON TX 77210-4018

EQUISTAR CHEMICALS LP
1221 MCKINNEY ST STE 1600
HOUSTON TX 77010-2006

EXXON PIPELINE 00650
PO BOX 53
HOUSTON TX 77001-0053

PORT OF HOUSTON AUTHORITY
111 EAST LOOP N
HOUSTON TX 77029-4326

Original Photographs
Attachment E

May 2020
Project No. 0550860

Environmental Resources Management
CityCentre Four
840 West Sam Houston Parkway North, Suite 600
Houston, Texas 77024-3920
281-600-1000

\\ushouf01\Data\Houston\Projects\0550860 NRG Texas Power, LLC S. R. Bertron TPDES Perm.ARG\SMXD\SRB Photo Location.mxd, REVISED: 04/23/2020, SCALE: 1:6,000 when printed at 8.5x11



Legend

- Outfall
- Photograph ID

Photo Location Figure

TPDES Permit Renewal
NRG Texas Power LLC
S.R. Bertron
La Porte, Texas

Environmental Resources Management
www.erm.com



Client: NRG Texas Power LLC		Project Number: 0550860	
TPDES Permit Number: WQ0001026000		Location: S.R. Bertron Electrical Generating Station	
Photograph ID: 1			
Feature: Outfall 001			
Date: 4/22/2020			
Comments: Photo taken facing west			

Client: NRG Texas Power LLC		Project Number: 0550860	
TPDES Permit Number: WQ0001026000		Location: S.R. Bertron Electrical Generating Station	
Photograph ID: 2			
Feature: Outfall 001			
Date: 4/22/2020			
Comments: Photo taken facing east			

Client: NRG Texas Power LLC		Project Number: 0550860	
TPDES Permit Number: WQ0001026000		Location: S.R. Bertron Electrical Generating Station	
Photograph ID: 3			
Feature: Outfalls 002 (right) and 004 (left)			
Date: 4/21/2020			
Comments: Photo taken facing west			

Client: NRG Texas Power LLC		Project Number: 0550860	
TPDES Permit Number: WQ0001026000		Location: S.R. Bertron Electrical Generating Station	
Photograph ID: 4			
Feature: Outfall 003			
Date: 4/21/2020			
Comments: Close-up of Outfall 003			

Client: NRG Texas Power LLC		Project Number: 0550860	
TPDES Permit Number: WQ0001026000		Location: S.R. Bertron Electrical Generating Station	
Photograph ID: 5			
Feature: Outfall 003			
Date: 4/21/2020			
Comments: Photo taken facing east			

Client: NRG Texas Power LLC		Project Number: 0550860	
TPDES Permit Number: WQ0001026000		Location: S.R. Bertron Electrical Generating Station	
Photograph ID: 6			
Feature: Outfall 004			
Date: 4/21/2020			
Comments: Close-up of Outfall 004			



Client: NRG Texas Power LLC		Project Number: 0550860	
TPDES Permit Number: WQ0001026000		Location: S.R. Bertron Electrical Generating Station	
Photograph ID: 7			
Feature: Outfall 004			
Date: 4/21/2020			
Comments: Photo taken facing south			

Wastewater Generating Processes
Attachment F

May 2020
Project No. 0550860

Environmental Resources Management
CityCentre Four
840 West Sam Houston Parkway North, Suite 600
Houston, Texas 77024-3920
281-600-1000

Attachment F

Technical Report

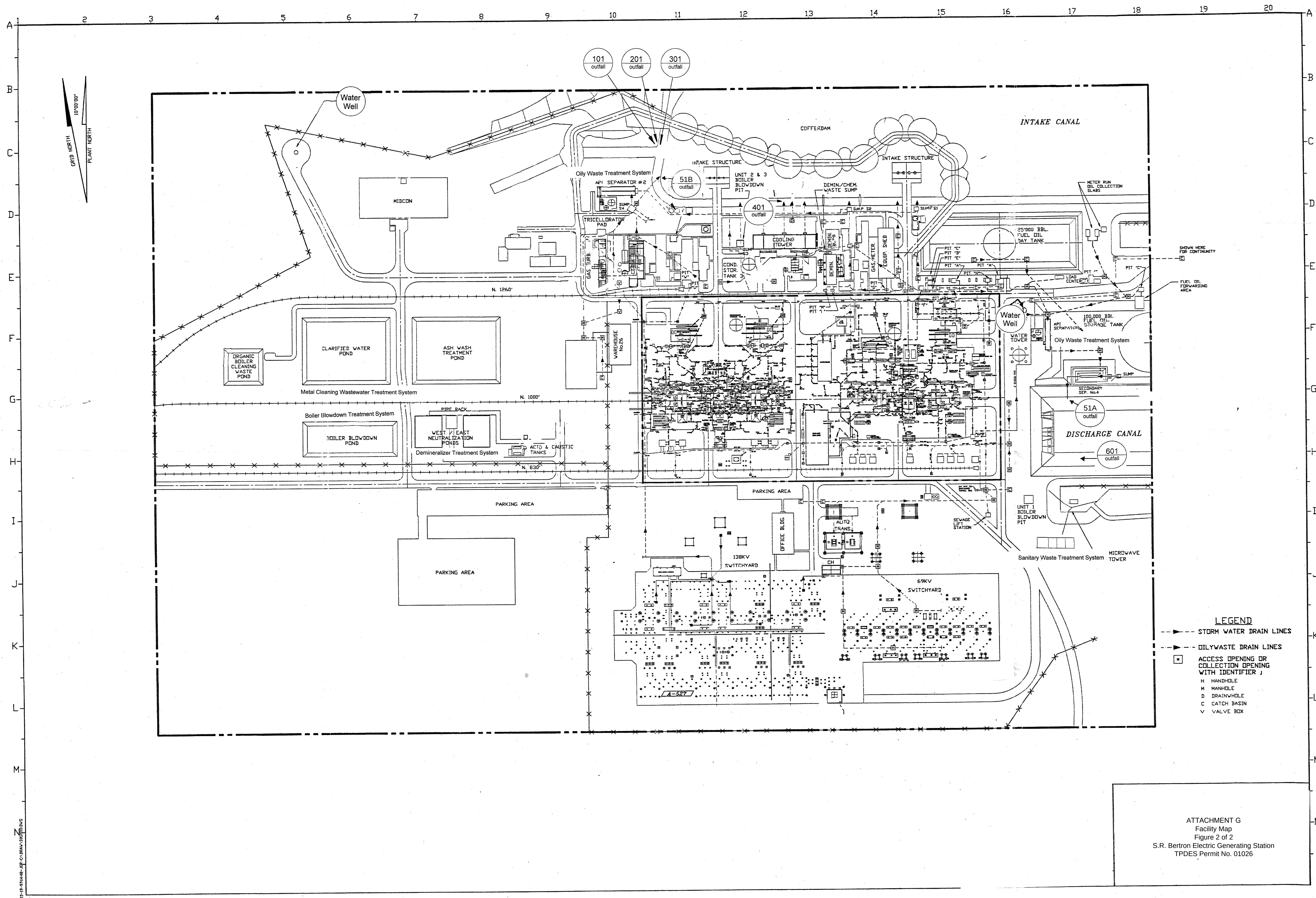
1.b. Describe all wastewater-generating processes at the facility.

The wastewater generated during operation of the S.R. Bertron Electric Generating Station results from the electrical generating process and includes several wastewater streams. The major source of wastewater is once-through non-contact cooling water used to remove heat from the four steam-electric generating units at the facility. Other wastewaters include demineralizer regeneration wastewater, boiler blowdown, metal cleaning wastewater, various low volume wastewaters and domestic sewage. The demineralizer regeneration wastewater is from the demineralizing process used to provide water without impurities for the steam generation process. The demineralizer contains resin beads that need to be regenerated (cleaned of impurities) by washing with an acid solution and a caustic solution. Boiler blowdown results from releasing water from the boiler to maintain boiler water chemistry. Demineralizer regeneration wastewater is treated at the chemical waste treatment system along with boiler blowdown and equipment cleaning wastewater. Metal cleaning wastewater is produced when cleaning equipment, primarily the boiler, and can be from a chemical cleaning or a non-chemical metal cleaning. Low volume wastewater that may or may not contain oil, results from drainage in production areas, washing equipment, basin cleanings, blowdown from service water systems, and other miscellaneous activities that generate low volume wastewater. The water is then transported to one of two oily wastewater treatment systems 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. Also onsite is a domestic sewage treatment system that includes chlorine disinfection. All discharges are to Segment 2427 – San Jacinto Bay. The facility is not currently operating. The only potential discharges are treated domestic wastewater and stormwater that could potentially get mixed in with the treated domestic wastewater.

Facility and Stormwater Discharge Map
Attachment G

May 2020
Project No. 0550860

Environmental Resources Management
CityCentre Four
840 West Sam Houston Parkway North, Suite 600
Houston, Texas 77024-3920
281-600-1000



Treatment Processes

Attachment H

May 2020

Project No. 0550860

Environmental Resources Management

CityCentre Four

840 West Sam Houston Parkway North, Suite 600

Houston, Texas 77024-3920

281-600-1000

Attachment H Technical Report

- 2.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.

System and Outfall	Unit Dimensions	Processes
Once-Through Cooling Water System Outfall 001	Discharge Canal	Heat Dissipation
Boiler Blowdown Treatment System Outfall 101	Collection Sumps	Filtration*
	Boiler Blowdown Pond ≈ 204ft x 85ft x 10ft = 680,000 gallons	Aeration* Neutralization*
	Neutralization Basin No.1 ≈ 76ft x 62ft x 6ft = 150,000 gallons	Neutralization* Mixing*
	Neutralization Basin No.2 ≈ 76ft x 62ft x 6ft = 150,000 gallons	Neutralization* Mixing*
	Cartridge Filters	Filtration
Demineralizer Treatment System Outfall 201	Neutralization Basin No.1 ≈ 76ft x 62ft x 6ft = 150,000 gallons	Neutralization* Mixing*
	Neutralization Basin No.2 ≈ 76ft x 62ft x 6ft = 150,000 gallons	Neutralization* Mixing*
	Cartridge Filters	Filtration
Metal Cleaning Waste Treatment System Outfall 301	Ash Wash Pond ≈ 189ft x 150ft x 10ft. = 1,280,000 gal.	Equalization
	Organic Boiler Cleaning Waste Pond ≈ 115ft x 110ft x 10ft = 350,000 gal.	Equalization
	Clarified Water Pond ≈ 184ft x 150ft x 10ft = 1,240,000 gal.	Equalization
	Neutralization Basin No.1 ≈ 76ft x 62ft x 6ft = 150,000 gallons	Coagulation* Chemical Precipitation* Sedimentation* Neutralization* Mixing*
	Neutralization Basin No.2 ≈ 76ft x 62ft x 6ft = 150,000 gallons	Coagulation* Chemical Precipitation* Sedimentation* Neutralization* Mixing*
	Cartridge Filters	Filtration

* Treatment process may be used based on influent characteristics.

System and Outfall	Unit Dimensions	Processes
Auxiliary Cooling Tower System Outfall 401	Cooling Tower Basin	Heat Dissipation
Oily Waste Treatment System Outfall 51A	API Separator "A" 74ft x 10.5ft x 5.5ft	Sedimentation Flotation Skimming*
	Tricellulator "A" 12.5 ft diameter x 10ft	Dissolved Air Flotation Skimming* Flocculation*
	Secondary Separator	Sedimentation Flotation Skimming*
Oily Waste Treatment System Outfall 51B	API Separator "B" 74ft x 10.5ft x 10ft	Sedimentation Flotation Skimming*
	Tricellulator "B" 17 ft diameter x 10ft	Dissolved Air Flotation Skimming* Flocculation*
Sanitary Waste Treatment System Outfall 601	Surge Pit 9ft x 10ft x 11ft.	Screening Equalization
	Aeration Chamber 9ft x 10ft x 11ft	Activated Sludge
	Clarifier 4.5ft x 10ft x 11ft.	Sedimentation
	Digester	Aerobic Digestion
	Chlorine Contact Chamber	Disinfection

* Treatment process may be used based on influent characteristics

Water Balance

Attachment I

May 2020

Project No. 0550860

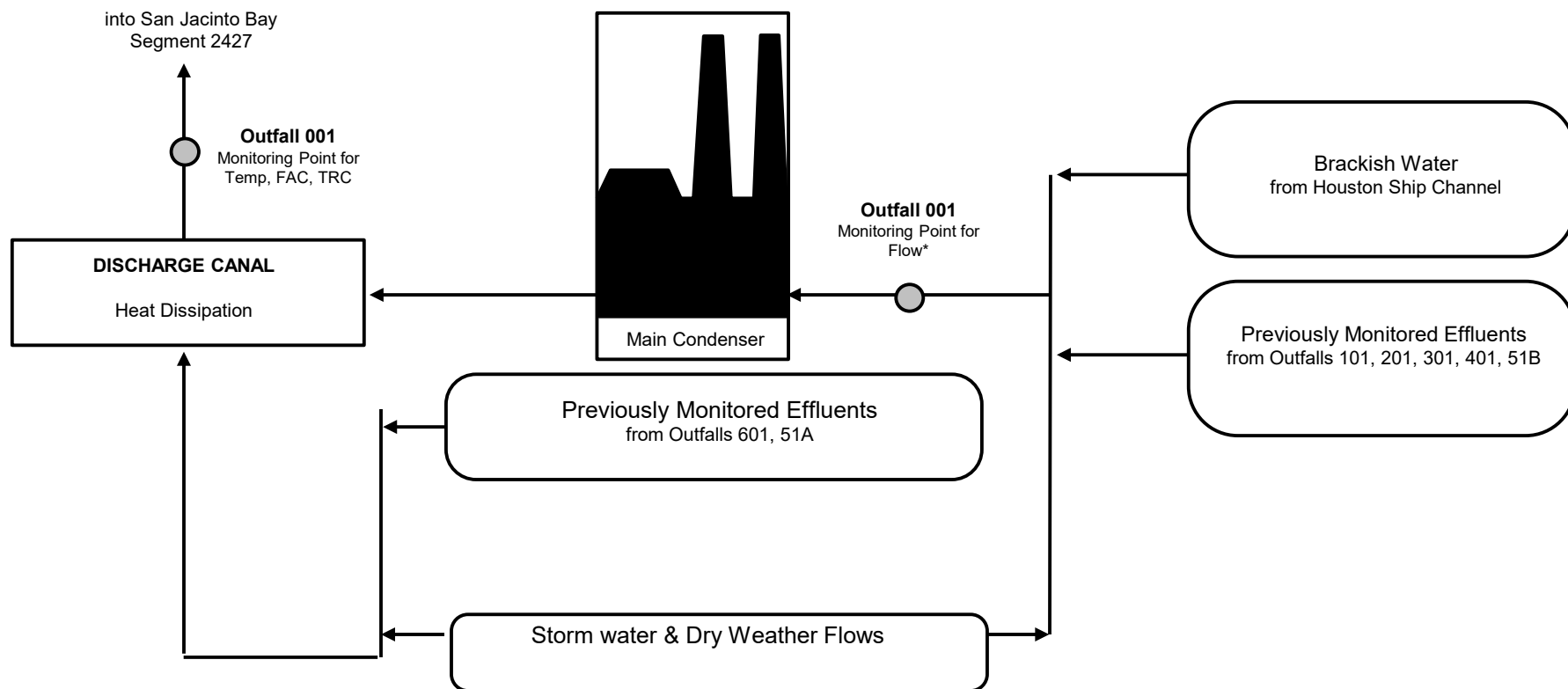
Environmental Resources Management

CityCentre Four

840 West Sam Houston Parkway North, Suite 600

Houston, Texas 77024-3920

281-600-1000



- * Continuous discharge
- * Two year average of DLY AVG Flow = 184 MGD

APPENDIX TR-2b

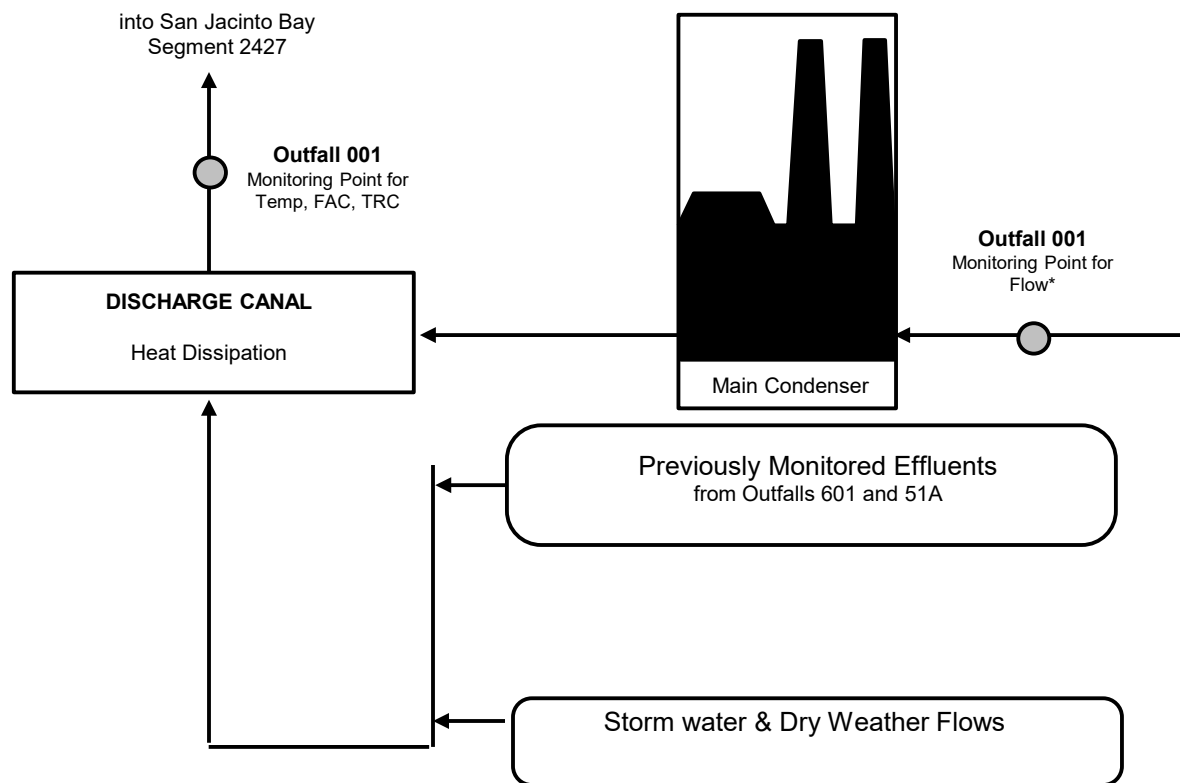
Figure TR-2b-1

Simplified Process Flow Diagram
Outfall 001 – Final Phase
Once Through Cooling Water System
Once Through Cooling Water

S. R. Bertron Electric Generating Station
TPDES Permit No. 01026

May 2020

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- * Continuous discharge
- * Two year average of DLY AVG Flow = 184 MGD

APPENDIX TR-2b

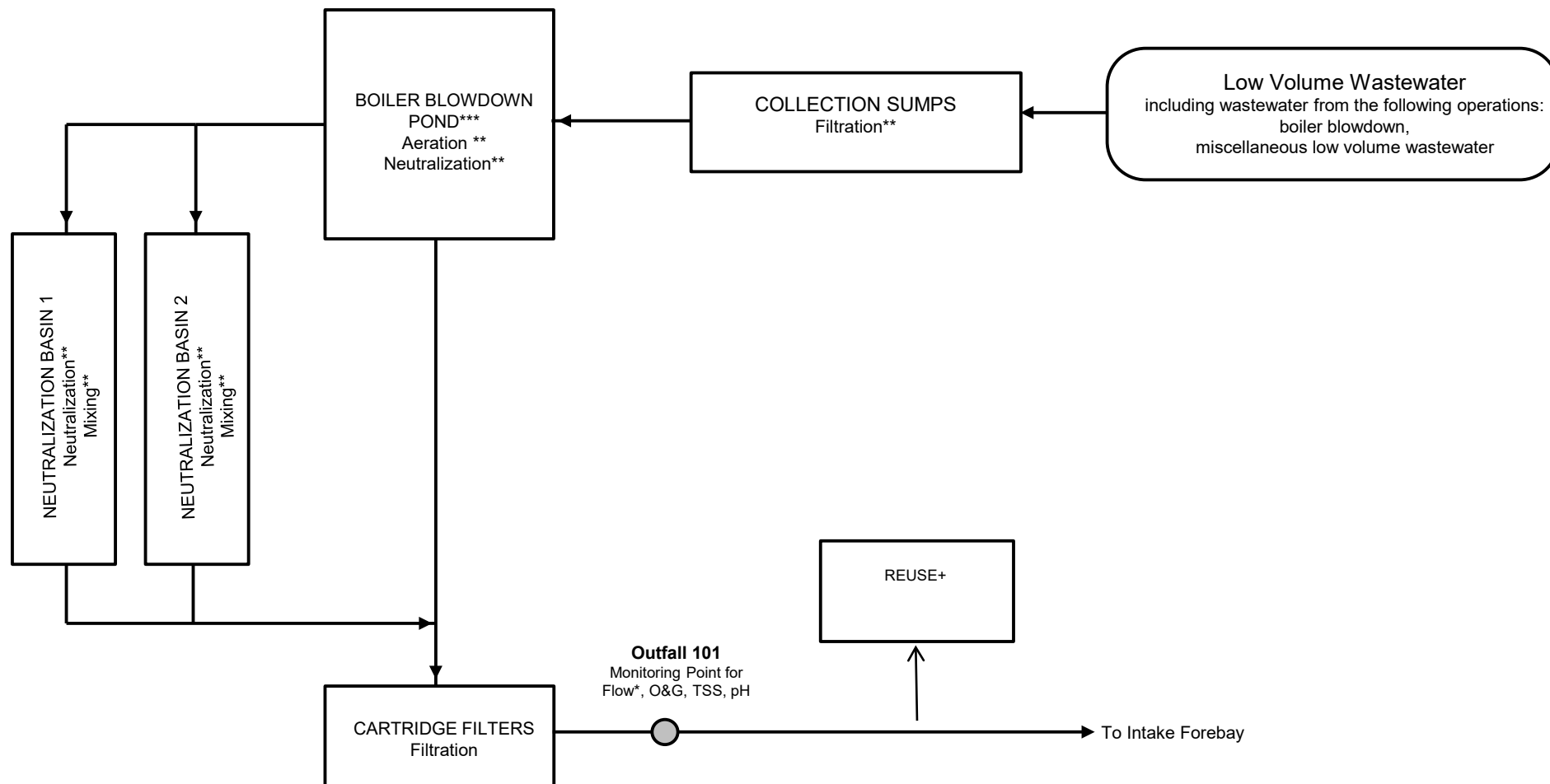
Figure TR-2b-2

Simplified Process Flow Diagram
 Outfall 001 – Interim Phase
 Once Through Cooling Water System
 Once Through Cooling Water

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Intermittent discharge

* Two year average of DLY AVG Flow = 0.199 MGD

** Treatment used as needed based on influent quality

*** Rainwater falling on ponds is collected

+ Reuse possibilities include fire protection system, cooling tower makeup, landscape irrigation, etc.

APPENDIX TR-2b

Figure TR-2b-3

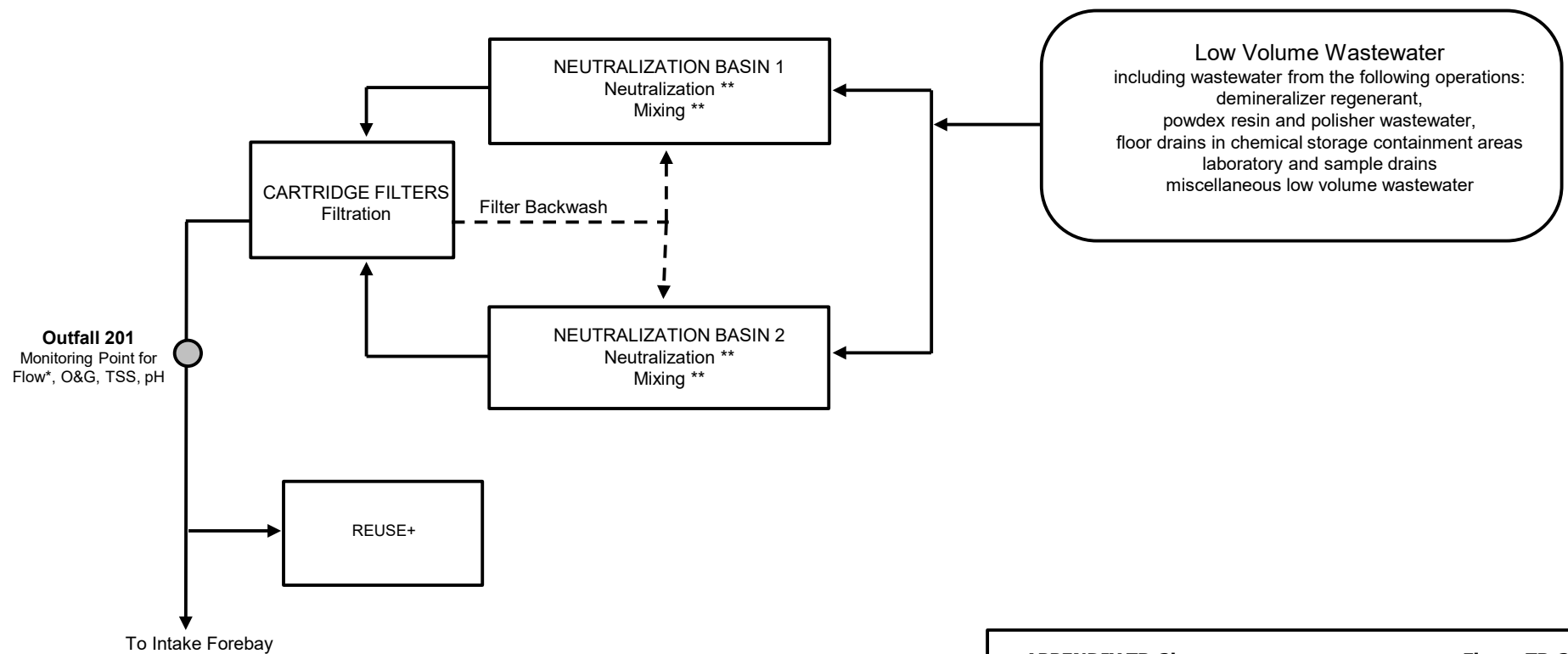
Simplified Process Flow Diagram Outfall 101 – Final Phase Boiler Blowdown Treatment System Low Volume Wastewater

S. R. Bertron Electric Generating Station

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- * Intermittent discharge
- * Two year average of DLY AVG Flow = 0.138 MGD
- ** Treatment used as needed based on influent quality
- + Reuse possibilities include fire protection system, cooling tower makeup, landscape irrigation, etc.

APPENDIX TR-2b

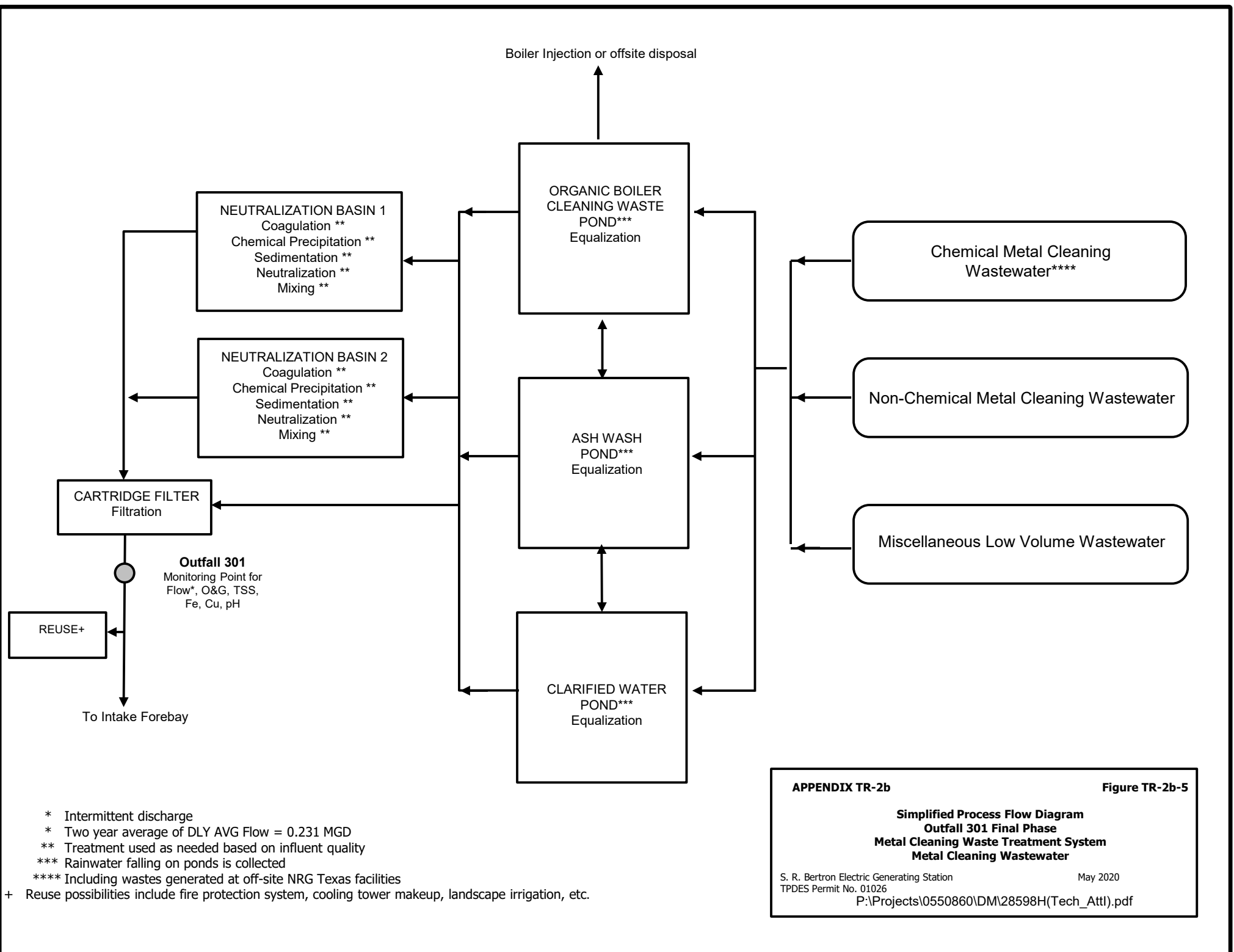
Figure TR-2b-4

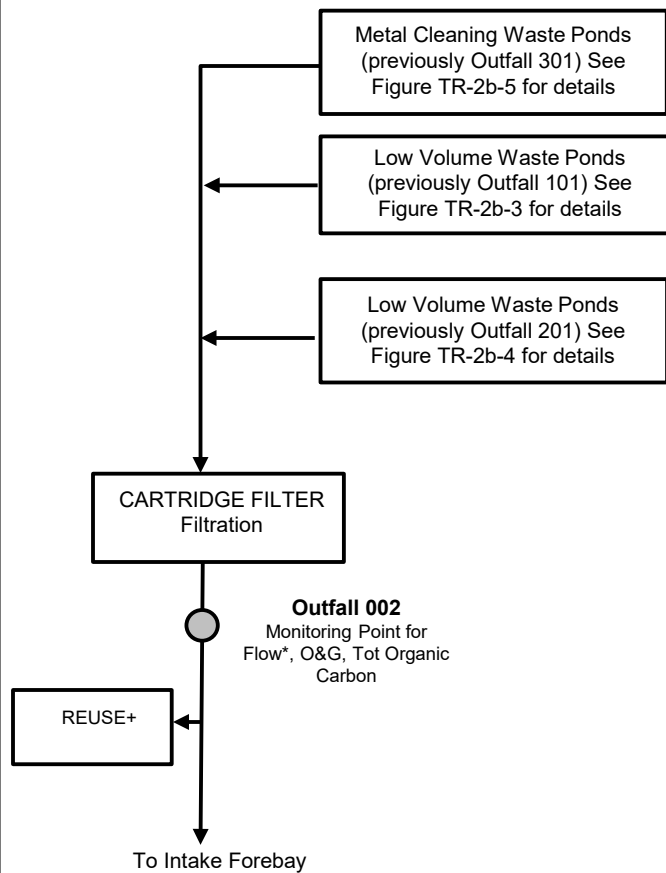
Simplified Process Flow Diagram Outfall 201 – Final Phase Demineralizer Treatment System Low Volume Wastewater

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- * Intermittent discharge
- * Two year average of DLY AVG Flow = 0.430 MGD
- ** Treatment used as needed based on influent quality
- *** Rainwater falling on ponds is collected
- **** Including wastes generated at off-site NRG Texas facilities
- + Reuse possibilities include fire protection system, cooling tower makeup, landscape irrigation, etc.

APPENDIX TR-2b

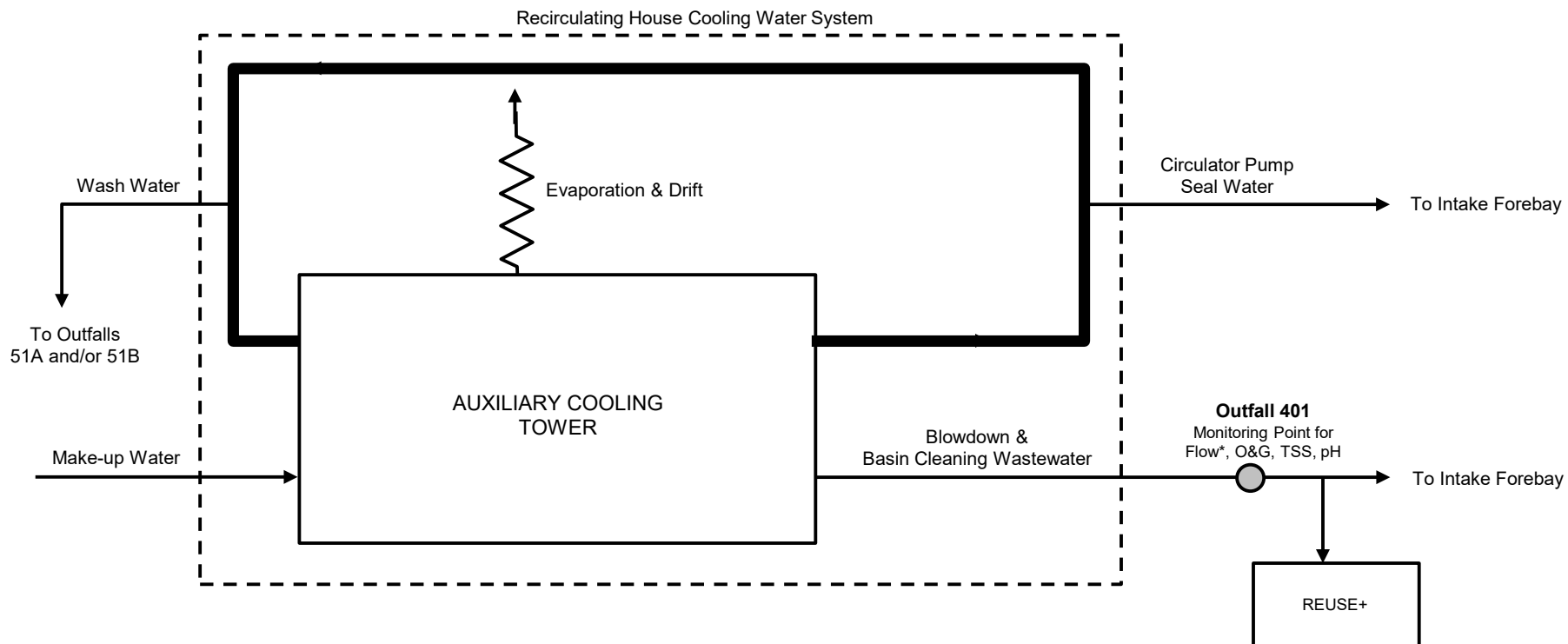
Figure TR-2b-6

Simplified Process Flow Diagram Outfall 002 - Interim Phase Metal Cleaning Waste Treatment System Metal Cleaning Wastewater

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* Intermittent discharge

* Two year average of DLY AVG Flow = 0.000 MGD

+ Reuse possibilities include fire protection system, cooling tower makeup, landscape irrigation, etc.

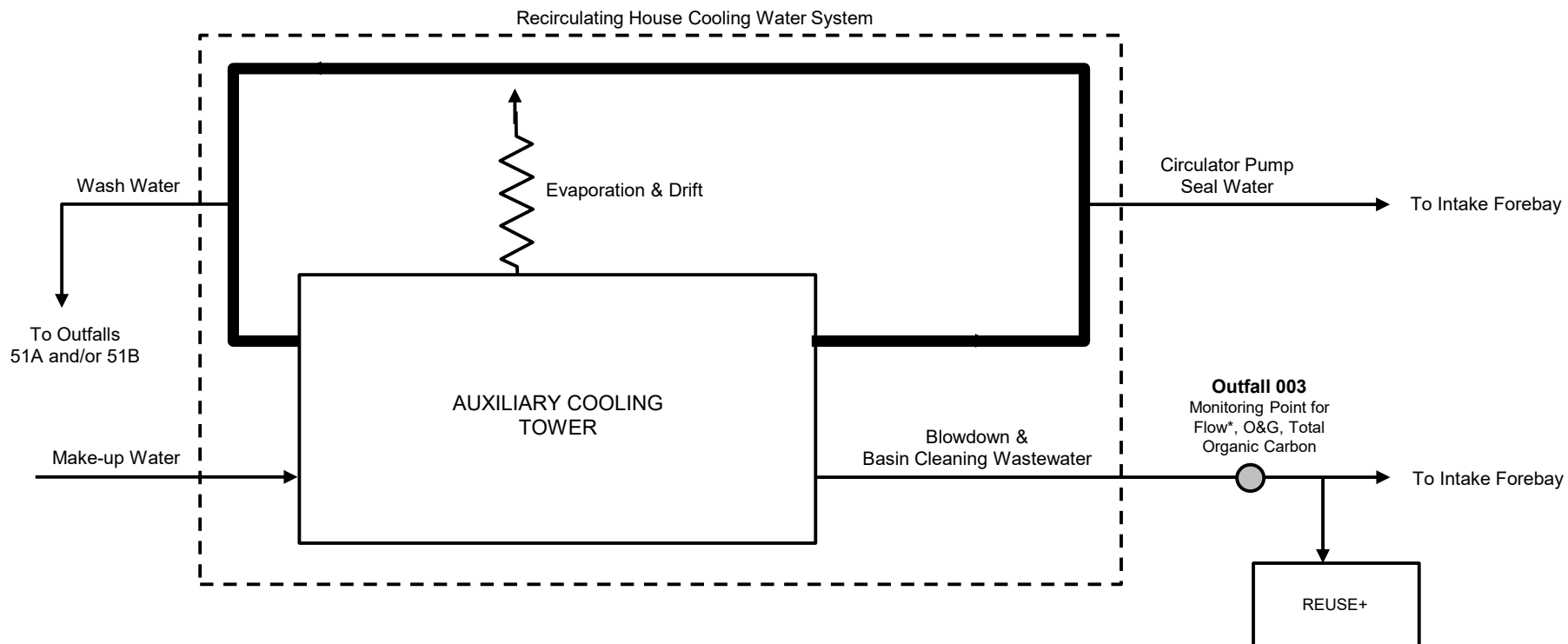
APPENDIX TR-2b

Figure TR-2b-7

Simplified Process Flow Diagram Outfall 401 – Final Phase Recirculating House Cooling Water System Low Volume Wastewater

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* Intermittent discharge

* Two year average of DLY AVG Flow = 0.000 MGD

+ Reuse possibilities include fire protection system, cooling tower makeup, landscape irrigation, etc.

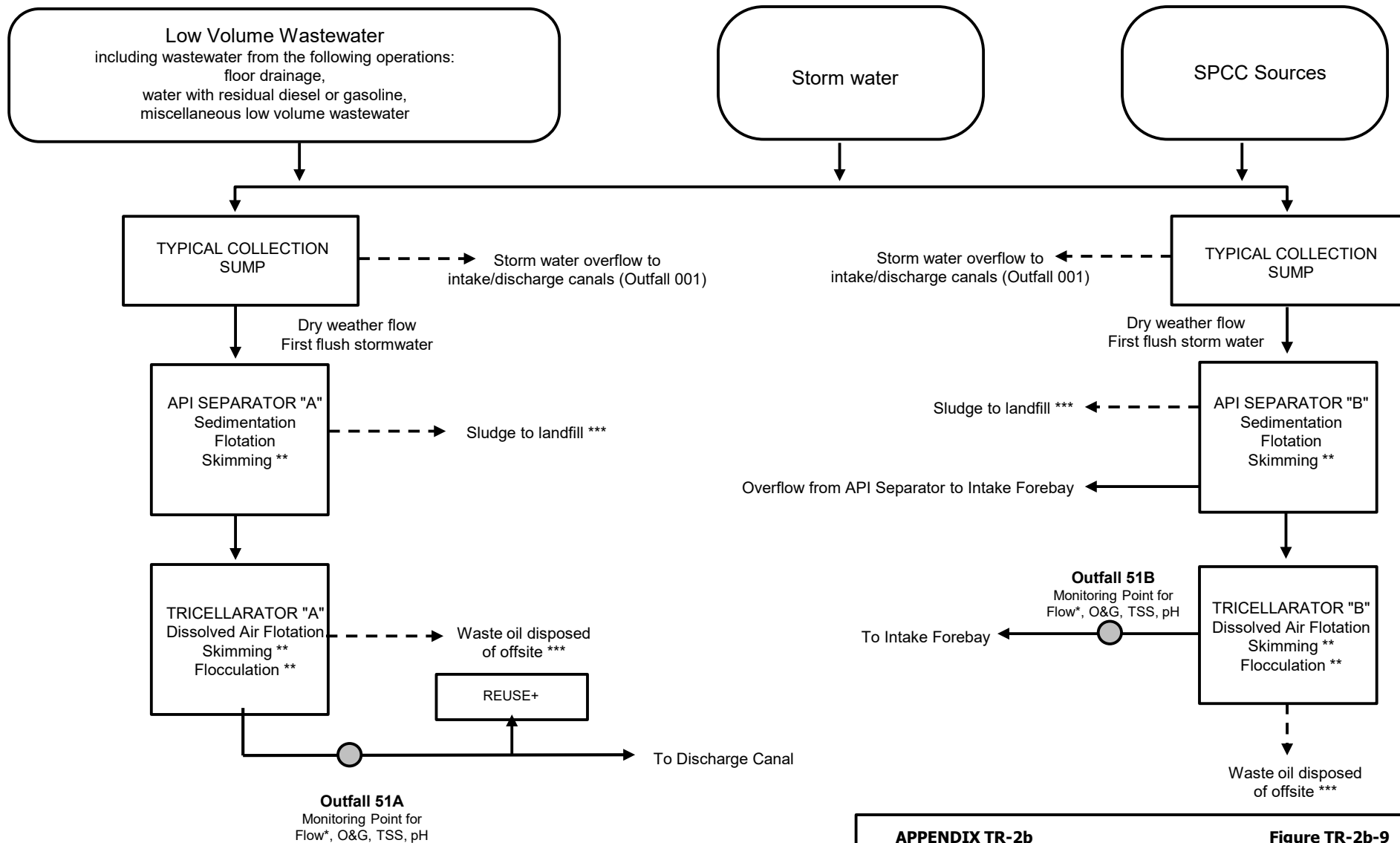
APPENDIX TR-2b

Figure TR-2b-8

Simplified Process Flow Diagram Outfall 003 – Interim Phase Recirculating House Cooling Water System Low Volume Wastewater

S. R. Bertron Electric Generating Station
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- * Intermittent discharge
- * 51A two year daily average flow = 0.027 and 51B two year average flow = 0.048 MGD
- ** Treatment used as needed based on influent quality
- *** Sludge and waste oil removed from all of the treatment units as needed
- + Reuse possibilities include fire protection system, cooling tower makeup, landscape irrigation, etc.

APPENDIX TR-2b

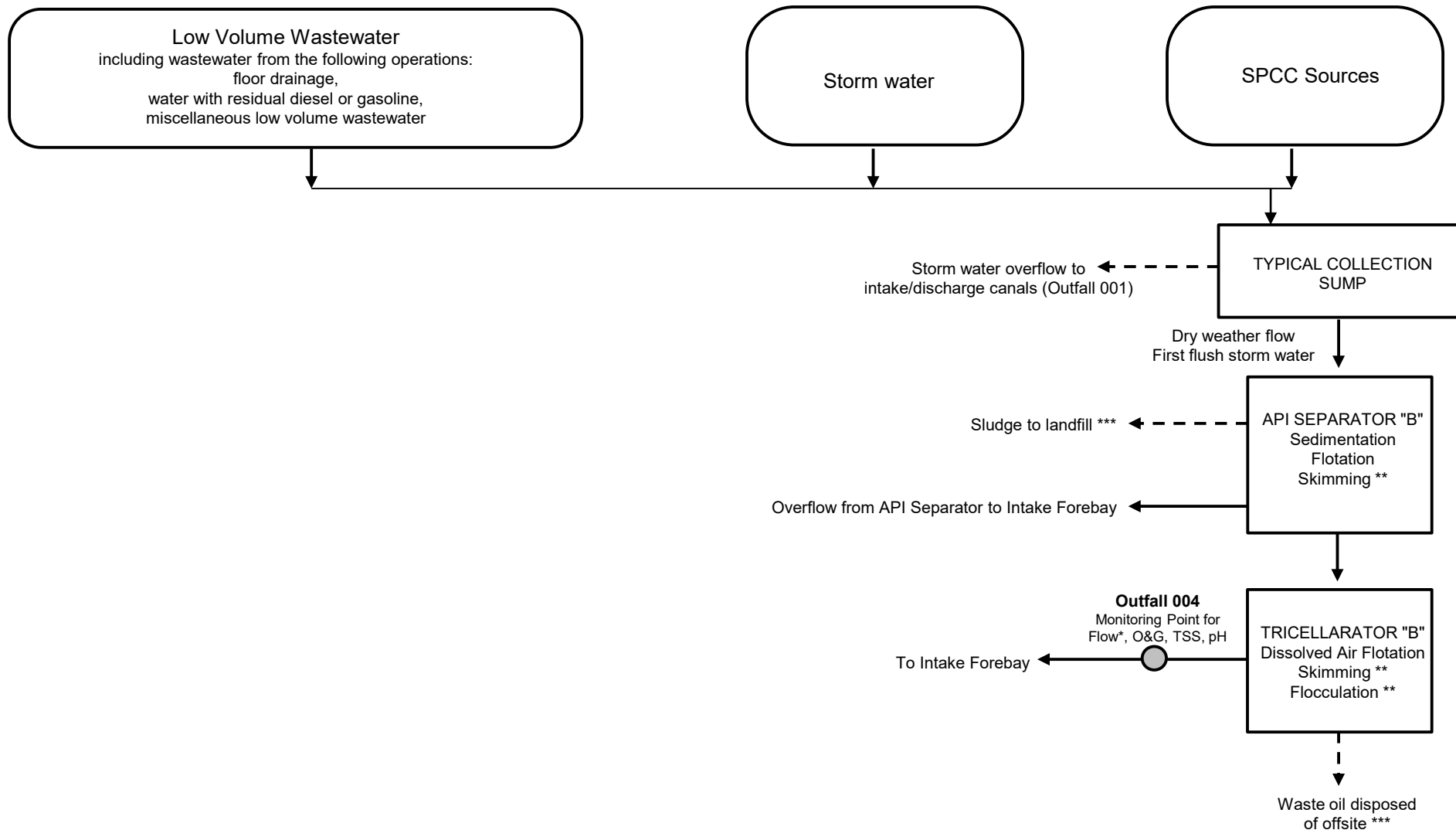
Figure TR-2b-9

Simplified Process Flow Diagram Outfalls 51A and 51B – Final Phase Oily Waste Treatment Systems Low Volume Wastewater

S. R. Bertron Electric Generating Station
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APPENDIX TR-2b

Figure TR-2b-10

Simplified Process Flow Diagram Outfall 004 – Interim Phase Oily Waste Treatment Systems Low Volume Wastewater

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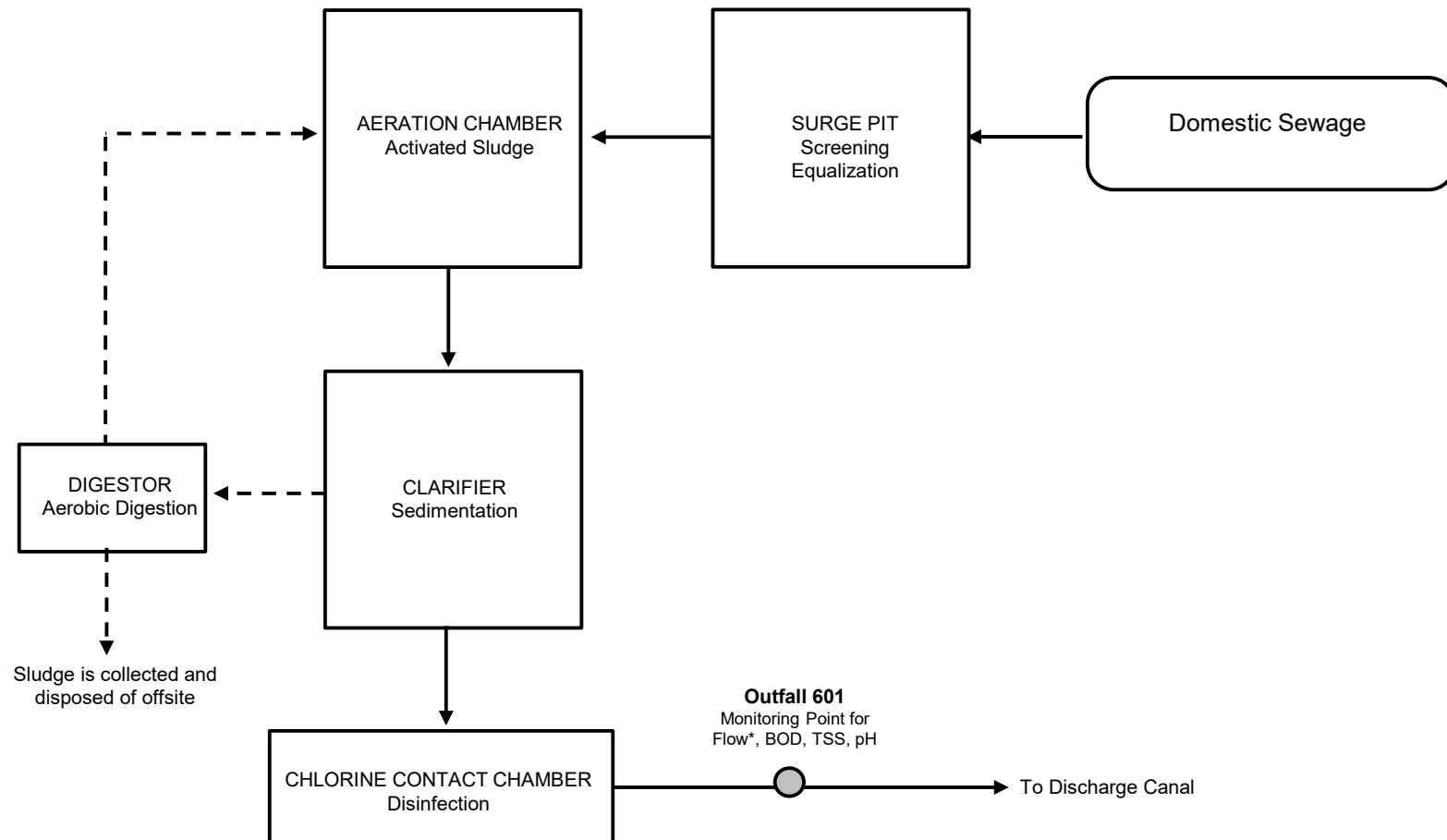
* Intermittent discharge

* 51A two year daily average flow = 0.027 and 51B two year average flow = 0.048 MGD

** Treatment used as needed based on influent quality

*** Sludge and waste oil removed from all of the treatment units as needed

+ Reuse possibilities include fire protection system, cooling tower makeup, landscape irrigation, etc.



- * Intermittent discharge
- * Two year average of DLY AVG Flow = 0.010 MGD

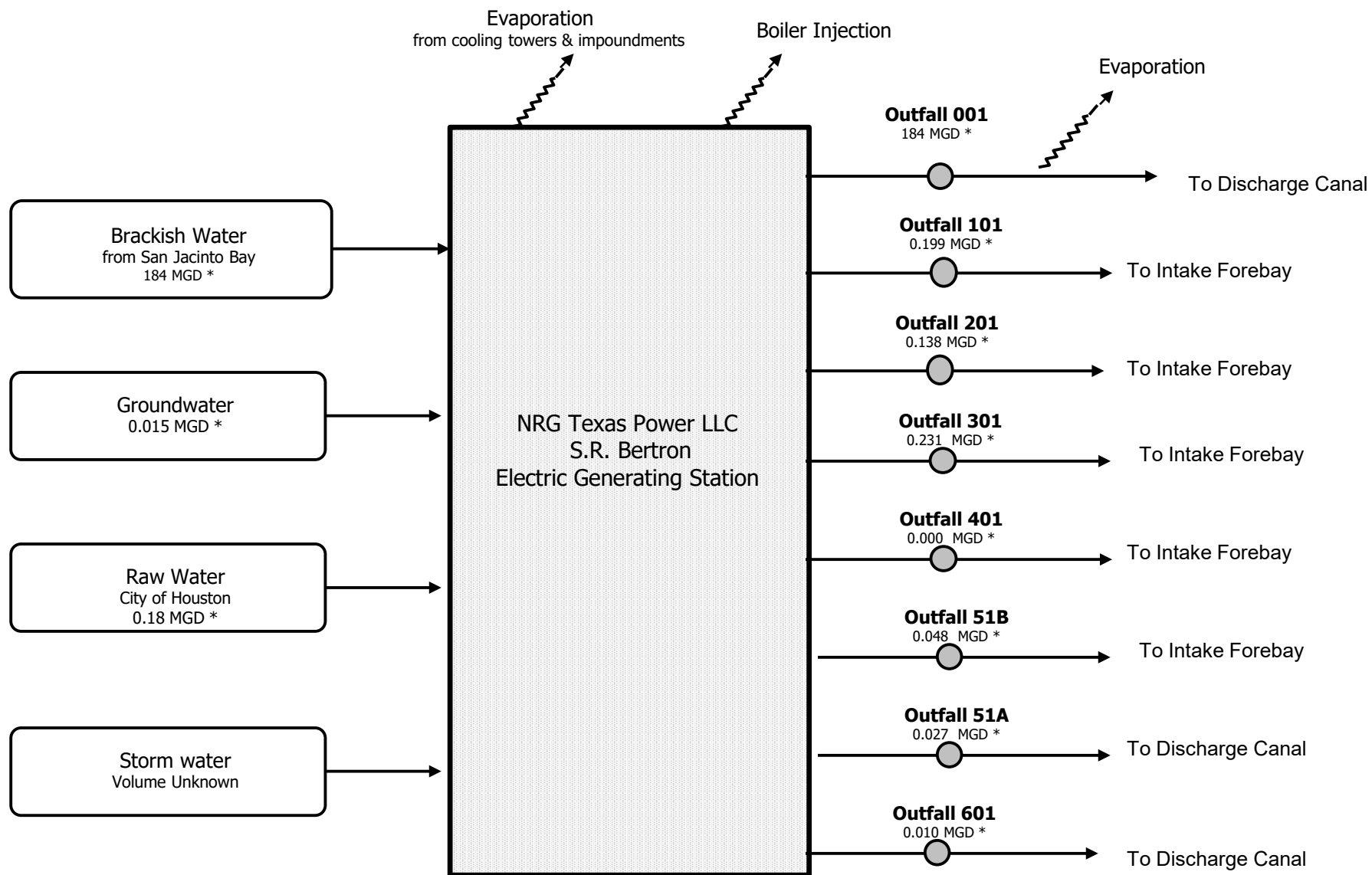
APPENDIX TR-2b

Figure TR-2b-11

Simplified Process Flow Diagram Outfall 601 Final & Interim Phase Sanitary Waste Treatment System Domestic Sewage

S. R. Bertron Electric Generating Station
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Notes:

* Two year average of DLY AVG Flow

APPENDIX TR-2b

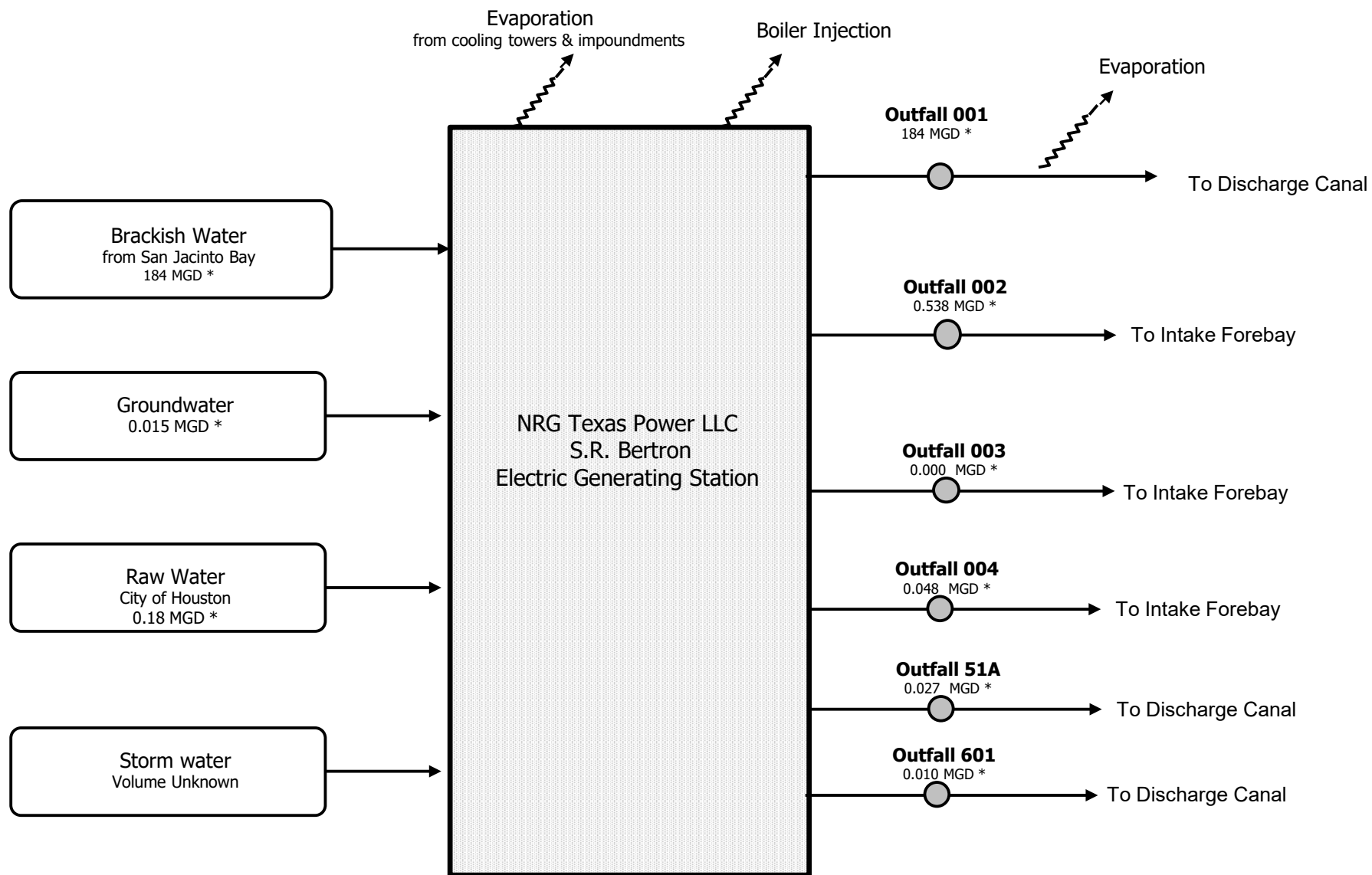
Figure TR-2b-12

Simplified Water Balance – Final Phase

S.R. Bertron Electric Generating Station
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Notes:

* Two year average of DLY AVG Flow

APPENDIX TR-2b

Figure TR-2b-13

Simplified Water Balance – Interim Phase

S.R. Bertron Electric Generating Station
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Additional Outfall Wastestream Contributions
Attachment J

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281-600-1000

Attachment J
Technical Report

Wastestream Contributions

Outfall No.: 301

Contributing Wastestreams	Volume (MGD)	% of Total Flow
Chemical & non-chemical metal cleaning wastewater	Minimal	<0.1
Miscellaneous low volume wastewater	Variable	<1
Stormwater	Variable	99
Total	0.231*	
*Two year average of Daily Average Flow prior to mothballing		

Outfall No.: 401

Contributing Wastestreams	Volume (MGD)	% of Total Flow
House recirculating wastewater	0*	99
Stormwater	Variable	<1
*Two year average of Daily Average Flow prior to mothballing		

Outfall No.: 51A

Contributing Wastestreams	Volume (MGD)	% of Total Flow
Floor drainage	0.0268*	99
Miscellaneous low volume wastewater	Variable	<1
Stormwater	Variable	<1
*Two year average of Daily Average Flow prior to mothballing		

Outfall No.: 51B

Contributing Wastestreams	Volume (MGD)	% of Total Flow
Floor drainage	0.0477*	99
Miscellaneous low volume wastewater	Variable	<1
Stormwater	Variable	<1
*Two year average of Daily Average Flow prior to mothballing		

Attachment J
Technical Report

Outfall No.: 601

Contributing Wastestreams	Volume (MGD)	% of Total Flow
Domestic wastewater	0.0104*	99
Stormwater	Variable	<0.1

*Two year average of Daily Average Flow prior to mothballing

Outfall No.: 002

Contributing Wastestreams	Volume (MGD)	% of Total Flow
Stormwater	Variable	99
De minimis quantities of legacy low volume waste sources	Minimal	<0.1

Outfall No.: 003

Contributing Wastestreams	Volume (MGD)	% of Total Flow
Stormwater	Variable	99
De minimis quantities of legacy low volume waste sources	Minimal	<0.1

Outfall No.: 004

Contributing Wastestreams	Volume (MGD)	% of Total Flow
Stormwater	Variable	99
De minimis quantities of legacy low volume waste sources	Minimal	<0.1

Stormwater Management
Attachment K

May 2020
Project No. 0550860

Environmental Resources Management
CityCentre Four
840 West Sam Houston Parkway North, Suite 600
Houston, Texas 77024-3920
281-600-1000

Attachment K

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 areas is discharged through permitted outfalls. All storm water drainage from non-production areas is discharged under Multi-Sector General Permit TXR05V801; TCEQ has granted the site "Inactive" status as of April 2017. For production areas, at least the first flush of storm water runoff from Spill Prevention, Control, and Countermeasure (SPCC) sources and production equipment areas is collected and treated by the Oily Waste Treatment systems (Outfalls 51A and 51B). Oil is not stored onsite; the only oil present is what is in each of the Power Transformers. 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 relative to the transformers.

Process/Non-Process Wastewater Flows
Attachment L

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281-600-1000

Attachment L
Technical Report

3. Process/Non-Process Wastewater Flows: Provide a breakdown of process wastewater flow(s) and non-process wastewater flow(s) as directed.

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

1. Process Wastewater
 - A. Chemical Metal Cleaning Wastewater
 - B. Coal Pile Runoff*
 - C. Ash Management Area Runoff*
2. Non-Process Wastewater
 - A. Utility Wastewater
 - 1) Once Through Cooling Water
 - 2) Cooling Tower Blowdown
 - 3) Non-Chemical Metal Cleaning Wastewater
 - 4) Low Volume Wastewater, including flows from the following sources:
 - a. Floor Drainage
 - b. Boiler Blowdown
 - c. Ion Exchange Water Treatment Systems
 - d. Reverse Osmosis Water Treatment Systems
 - e. Recirculating Service Water Systems
 - f. Wet Scrubber Air Pollution Control Systems*
 - g. Laboratory and Sampling Streams
 - h. Cooling Tower Basin Cleaning Wastes
 - B. Domestic Wastewater
 - C. Air Conditioning Condensate