TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

TCEQ INDUSTRIAL WASTEWATER PERMIT APPLICATION

INDUSTRIAL ADMINISTRATIVE REPORT

Complete and submit this checklist with the application.

APPLICANT NAME: Kirby Inland Marine, LP

PERMIT NUMBER: WQ0004992000

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.: WQ000Kirby Inland Marine, LP Expiration Date: 5/01/2020

EPA ID No.: TX000080139

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

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

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

d. Application Fee

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

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

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

e. Payment Information:

Mailed Check or money order number: 671333

Check or money order amount: $1,215.00

Named printed on check or money order: Kirby Inland Marine / Kirby Offshore Marine

ePAY Voucher number:

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

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: Kirby Inland Marine, LP

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

- If the applicant is currently a customer with the TCEQ, provide the Customer Number, which can be located using the TCEQ's Central Registry Customer Search[1]: **CN**600611206

- 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 Foret

  Title: Vice President Credential: N/A

b. Co-applicant Information

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

  (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: Attachment 2

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: Steven Caruselle Credential: N/A

Organization Name: Kirby Inland Marine, LP. Title: General Manager Facilities

Mailing Address: 18350 Market Street City/State/ZIP Code: Channelview, TX. 77530

Phone No.: 713-435-1825 Fax No.: N/A E-mail: steven.caruselle@kirbycorp.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: Collin MacAllister Credential: N/A

Organization Name: Kirby Inland Marine, LP. Title: Supervisor

Mailing Address: 18350 Market Street City/State/ZIP Code: Channelview, TX. 77530

Phone No.: 713-435-1629 Fax No.: N/A E-mail: Collin.macallister@kirbycorp.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: Collin MacAllister Credential: N/A

Organization Name: Kirby Inland Marine, LP. Title: Supervisor

Mailing Address: 18350 Market Street City/State/ZIP Code: Channelview, TX. 77530

Phone No.: 713-435-1629 Fax No.: N/A E-mail: Collin.macallister@kirbycorp.com

b. Mr. ☒ Ms. ☐ First/Last Name: Steven Caruselle Credential: N/A

Organization Name: Kirby Inland Marine, LP. Title: General Manager Facilities

Mailing Address: 18350 Market Street City/State/ZIP Code: Channelview, TX. 77530

Phone No.: 713-435-1825 Fax No.: N/A E-mail: steven.caruselle@kirbycorp.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: Donna Shannon Credential: N/A

Organization Name: Kirby Inland Marine, LP. Title: Administrative Assistant

Mailing Address: 18350 Market Street City/State/ZIP Code: Channelview, TX. 77530

Phone No.: 713-435-1804 Fax No.: N/ E-mail: donna.shannon@kirbycorp.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: Steven Caruselle Credential: N/A

Organization Name: Kirby Inland Marine, LP. Title: General Manager Facilities

Mailing Address: 18350 Market Street City/State/ZIP Code: Channelview TX. 77530

Phone No.: 713-435-1825 Fax No.: N/A E-mail: steven.caruselle@kirbycorp.com

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

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

a. Individual Publishing the Notices

Mr. ☒ Ms. ☐ First/Last Name: Collin MacAllister Credential: N/A

Organization Name: Kirby Inland Marine, LP. Title: Supervisor

Mailing Address: 18350 Market Street City/State/ZIP Code: Channelview TX. 77530

Phone No.: 713-435-1629 Fax No.: N/A E-mail: Collin.macallister@kirbycorp.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: Collin.macallister@kirbycorp.com

☐ Fax:

☒ Regular Mail (USPS)

Mailing Address: 18350 Market Street City/State/ZIP Code: Channelview, TX. 77530

c. Contact in the Notice

Mr. ☒ Ms. ☐ First/Last Name: Steven Caruselle Credential: N/A

Organization Name: Kirby Inland Marine, LP. Title: General Manager Facilities

Phone No.: 713-435-1825 Fax No.: N/A E-mail: steven.caruselle@kirbycorp.com

d. Public Place Information

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

Public building name: North Channel Branch Library Location within the building: Reference Section

Physical Address of Building: 15741 Wallisville Road

City: Houston County: Harris

e. Bilingual Notice Requirements:

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

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

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

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

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

☒ Yes ☐ No

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

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

   ☒ Yes ☐ No

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

   ☐ Yes ☒ No

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

   ☐ Yes ☒ No

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

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

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

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

a. TCEQ issued Regulated Entity Number (RN): **RN**102204211

b. Name of project or site (the name known by the community where located): Kirby Gate 5 Barge Cleaning Facility

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: Kirby Inland Marine, LP.

   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: Kirby Inland Marine, LP.

   Mailing Address: 55 Waugh Drive Suite 1000 City/State/ZIP Code: Houston TX. 77007

   Phone No.: 713-435-1825 Fax No.: N/A E-mail: steven.caruselle@kirbycorp.com

   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):

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

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

Mailing Address: N/A City/State/ZIP Code: N/A

Phone No.: N/A Fax No.: N/A E-mail: N/A

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: N/A City/State/ZIP Code: N/A

Phone No.: N/A Fax No.: N/A E-mail: N/A

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: Attachment 3

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): Channelview

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: N/A

b. Do you owe any fees to the TCEQ?

☐ Yes ☒ No

If **yes**, provide the following:

- Acct. No.: N/A
- Amt. due: N/A

c. Do you owe any penalties to the TCEQ?

☐ Yes ☒ No

If **yes**, provide the following:

- Enforcement Order No.: N/A
- Amt. due: N/A

11. SIGNATURE PAGE (Instructions, Page 29)

Permit No: WQ0004992000

Applicant Name: Kirby Inland Marine, LP.

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 Foret

Signatory title: Vice President

Signature: _____ Date: 10/3/19

(Use blue ink)

Subscribed and Sworn to before me by the said Craig Foret

on this 4th day of October, 20 19.

My commission expires on the 28th day of February, 20 22.

Barbara Lynn Murray

Notary Public *[SEAL]*

Harris

County, Texas

BARBARA LYNN MURRAY
Notary ID #125601106
My Commission Expires
February 28, 2022

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

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

FOR AGENCIES REVIEWING INDUSTRIAL TPDES WASTEWATER PERMIT APPLICATIONS

TCEQ USE ONLY:

Application type: ____Renewal _____Major Amendment _____Minor Amendment _____New

County: _____ Segment Number: _____

Admin Complete Date: _____

Agency Receiving SPIF:

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

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

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

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

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

The following applies to all applications:

1. Permittee Name: Kirby Inland Marine, LP.
2. Permit No.: WQ0004992000 EPA ID No.: TXoTXR000080139
3. Address of the project (location description that includes street/highway, city/vicinity, and county): 16538 De Zavalla Rd. Channelview TX 77530
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: Steven Caruselle Title: General Manager Facilities Credential: N/A

   Organization Name: Kirby Inland Marine

   Mailing Address: 18350 Market Street City/State/ZIP Code: Channelview TX. 77530

   Phone No.: 713-435-1825 Fax No.: N/A E-mail: steven.caruselle@kirbycorp.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: Discharge is directly to the Houston Ship Channel Tidal (Buffalo Bayou) Segment Number 1006

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: Attachment 4

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

   Attachment: N/A

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: Industrial facility for barge cleaning

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

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

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

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: WQ0004992000**

1. Check or Money Order Number:
2. Check or Money Order Amount: $1,215.00
3. Date of Check or Money Order:
4. Name on Check or Money Order:
5. APPLICATION INFORMATION

   Name of Project or Site: Kirby Gate 5 Barge Cleaning Facility

   Physical Address of Project or Site: 16538 De Zavalla Rd. Channelview TX. 77530

   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

Attachment 5

ATTACHMENT 1

INDIVIDUAL INFORMATION

1. Individual information (Instructions, Page 33)

Complete this attachment if the facility applicant or co-applicant is an individual. Make additional copies of this attachment if both are individuals.

Prefix (Mr., Ms., or Miss): N/A

Full legal name (first, middle, and last): N/A

Driver's License or State Identification Number: N/A

Date of Birth: N/A

Mailing Address: N/A

City, State, and Zip Code: N/A

Phone No.: N/A

Fax No.: N/A

E-mail Address: N/A

CN: N/A

For Commission Use Only:
Customer Number:
Regulated Entity Number:
Permit Number:

Attachment 2

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

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

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

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

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number *(if issued)*
CN 600611206		RN 102204211

SECTION II: Customer Information

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

☐ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership

☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

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

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

Kirby Inland Marine, LP.

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number *(if applicable)*
0800055697	17410740140	74-107401	00-793-1223

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: 18350 Market Street

City	Channelview	State	TX	ZIP	77530	ZIP + 4	

16. Country Mailing Information *(if outside USA)*

17. E-Mail Address *(if applicable)*

steven.caruselle@kirbycorp.com

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(713) 435-1825		( ) -

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.)*

Barge Cleaning Facility

23. Street Address of the Regulated Entity: *(No PO Boxes)*	16538 DeZavalla Rd.							
	City	Channelview	**State**	TX	**ZIP**	77530	**ZIP + 4**	
24. County	Harris							

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:	

26. Nearest City	**State**	**Nearest ZIP Code**

27. Latitude (N) In Decimal:	29.758333		**28. Longitude (W) In Decimal:**	95.096944	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	45	30	95	5	49

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)
4491		488320	

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

Barge Degassing

34. Mailing Address:	**18350 Market Street**							
	City	**Channelview**	**State**	**TX**	**ZIP**	**77530**	**ZIP + 4**	

35. E-Mail Address:	**steven.caruselle@kirbycorp.com**	
36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(713) 435-1825		**( ) -**

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:
	WQ0004992000			

SECTION IV: Preparer Information

40. Name:	Steven Caruselle	**41. Title:**	General Manager Facilities

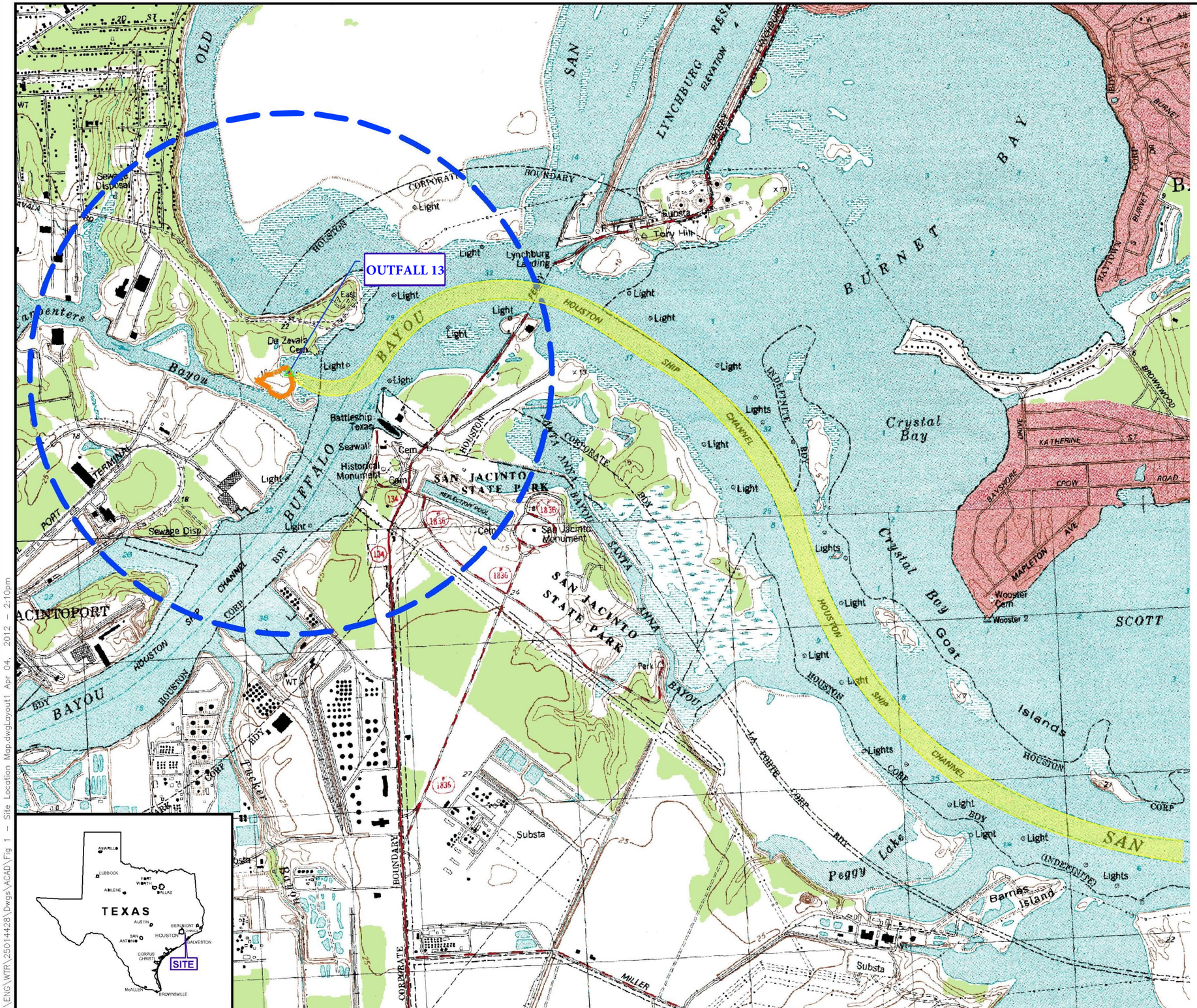
42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(713) 435-1825		( ) -	steven.caruselle@kirbycorp.com

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:	Kirby Corporation	**Job Title:**	Vice President	
Name*(In Print)* **:**	Craig Foret		**Phone:**	(713) 435-1634
Signature:			**Date:**	10/3/19

Attachment 3



North

0 500 1000 2000 4000

Approximate Scale in Feet

Legend:

- Legal Boundary
- 1 Mile Radius
- Outfall 13
- Approximately 3 Miles Down Stream

SOURCE:

U.S.G.S 7.5 MINUTE SERIES TOPOGRAPHIC MAP.
LA PORTE AND HIGHLAND TEXAS (1982), QUADRANGLES.

URS
10550 RICHMOND AVENUE, SUITE 155
HOUSTON, TEXAS 77042
PH: (713) 914-6699
FAX: (713) 789-8404

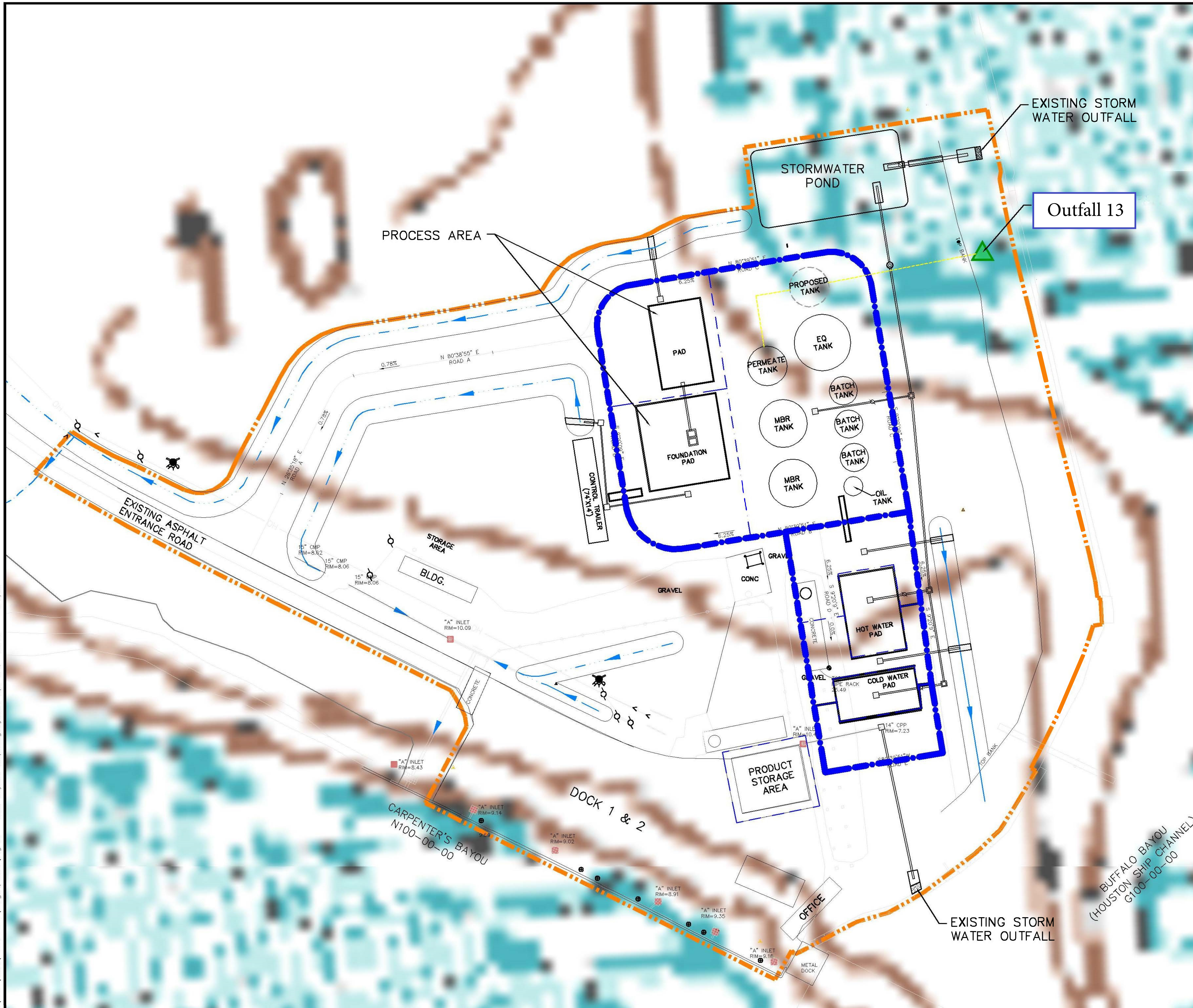
Title: **SITE LOCATION MAP**

Project: KIRBY GATE 5 BARGE CLEANING FACILITY
CHANNELVIEW,HARRIS COUNTY, TEXAS

Client: **KIRBY INLAND MARINE LP,**

Scale:	Drawn by:	Date:	Project No.:	File Name:	Figure:
AS SHOWN	CLK	04/04/12	25014428	Site Location Map.dwg	1
	Updated by: CWM	05/09/17			

K:\ENG\WTR\25014428\Dwgs\ACAD\Fig 1 - Site Location Map.dwg Layout1 Apr 04, 2012 - 2:10pm



EXISTING STORM WATER OUTFALL
STORMWATER POND
Outfall 13
PROCESS AREA
PROPOSED TANK
EQ TANK
PERMEATE TANK
BATCH TANK
MBR TANK
BATCH TANK
BATCH TANK
MBR TANK
OIL TANK
PAD
FOUNDATION PAD
CONTROL TRAILER (74'X14')
EXISTING ASPHALT ENTRANCE ROAD
STORAGE AREA
BLDG.
GRAVEL
CONC
HOT WATER PAD
COLD WATER PAD
PRODUCT STORAGE AREA
DOCK 1 & 2
CARPENTER'S BAYOU N100-00-00
OFFICE
METAL DOCK
EXISTING STORM WATER OUTFALL
BUFFALO BAYOU (HOUSTON SHIP CHANNEL) G100-00-00
North
0 17.5 35 70 140
Approximate Scale in Feet
Legend:
Legal Boundary
Wastewater Treatment Unit Boundary
Outfall 13
Flow Direction

URS

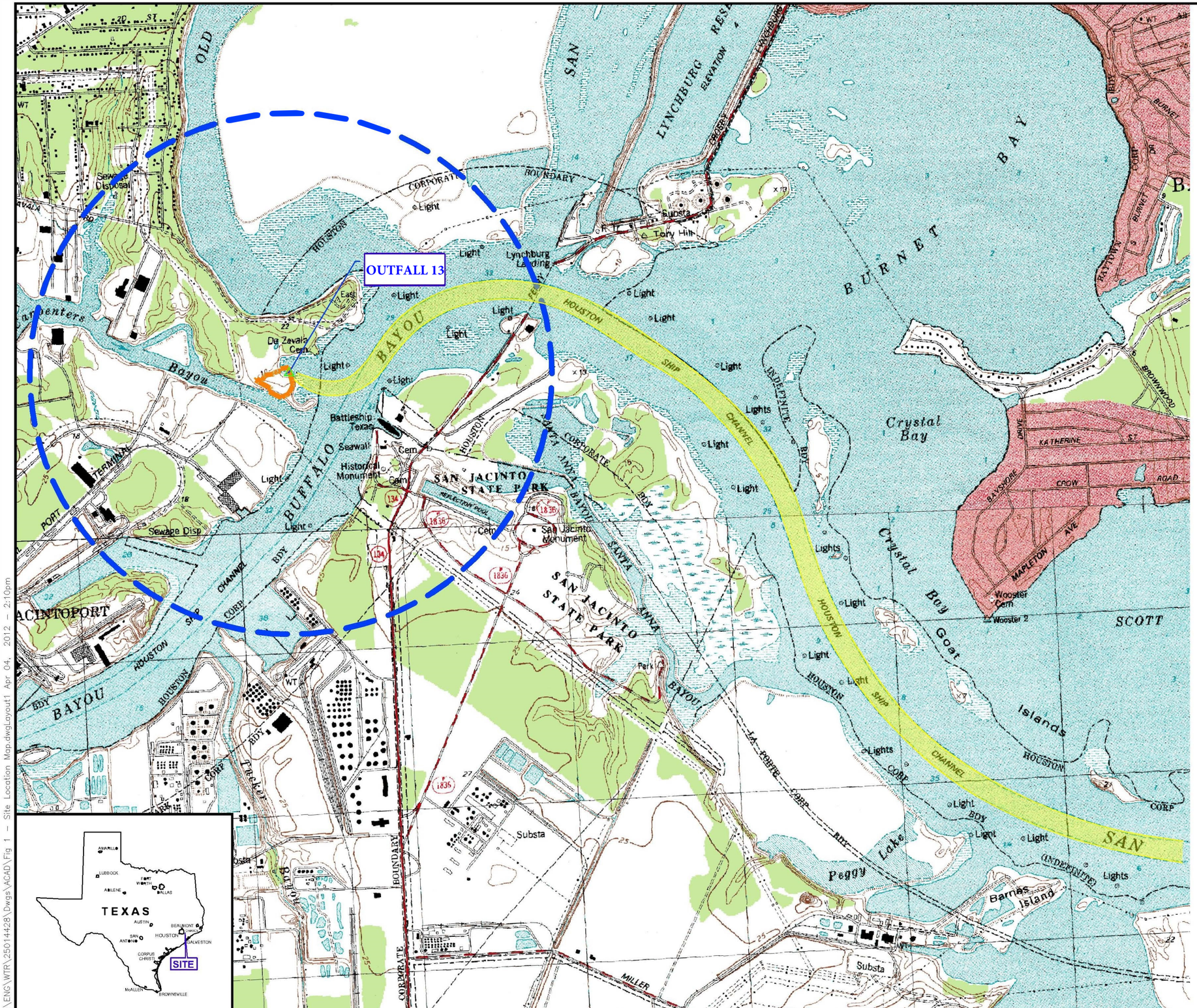
10550 RICHMOND AVENUE, SUITE 155
HOUSTON, TEXAS 77042
PH: (713) 914-6699
FAX: (713) 789-8404

Title:	SITE LAYOUT MAP
Project:	KIRBY GATE 5 BARGE CLEANING FACILITY CHANNELVIEW, HARRIS COUNTY, TEXAS
Client:	KIRBY INLAND MARINE LP,

Scale:	Drawn by:	Date:	Project No.:	File Name:	Figure:
As Shown	CLK	04/04/12	25014428	Site Map.dwg	2
	Updated by: CWM	05/09/17			

K:\ENG\WTR\25014428\Dwgs\ACAD\Fig 2 - Site Layout Map.dwgLayout1 Apr 04, 2012 - 2:07pm

Attachment 4



North

0 500 1000 2000 4000

Approximate Scale in Feet

Legend:

- Legal Boundary
- 1 Mile Radius
- Outfall 13
- Approximately 3 Miles Down Stream

SOURCE:

U.S.G.S 7.5 MINUTE SERIES TOPOGRAPHIC MAP.
LA PORTE AND HIGHLAND TEXAS (1982), QUADRANGLES.

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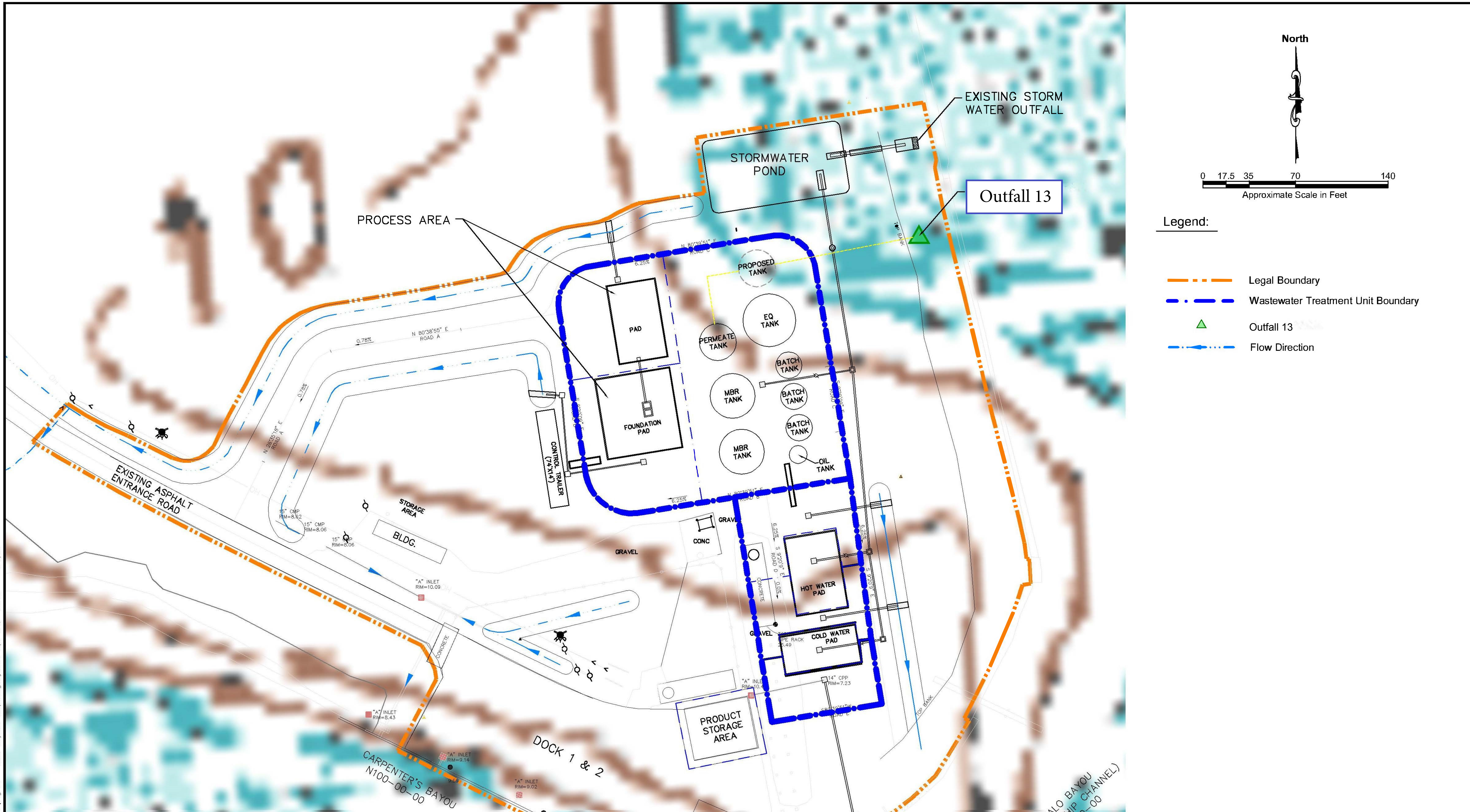
CHANNELVIEW,HARRIS COUNTY, TEXAS

Client: **KIRBY INLAND MARINE LP,**

Scale:	Drawn by:	Date:	Project No.:	File Name:	Figure:
AS SHOWN	CLK	04/04/12	25014428	Site Location Map.dwg	1
	Updated by: CWM	05/09/17			

K:\ENG\WTR\25014428\Dwgs\ACAD\Fig 1 - Site Location Map.dwg Layout1 Apr 04, 2012 - 2:10pm



EXISTING STORM WATER OUTFALL
STORMWATER POND
Outfall 13
PROCESS AREA
PROPOSED TANK
EQ TANK
PERMEATE TANK
PAD
BATCH TANK
MBR TANK
BATCH TANK
FOUNDATION PAD
BATCH TANK
MBR TANK
OIL TANK
CONTROL TRAILER (74'x14')
EXISTING ASPHALT ENTRANCE ROAD
STORAGE AREA
BLDG.
GRAVEL
CONC
HOT WATER PAD
COLD WATER PAD
PRODUCT STORAGE AREA
DOCK 1 & 2
CARPENTER'S BAYOU N100-00-00
OFFICE
EXISTING STORM WATER OUTFALL
BUFFALO BAYOU (HOUSTON SHIP CHANNEL) G100-00-00
North
0 17.5 35 70 140
Approximate Scale in Feet
Legend:
Legal Boundary
Wastewater Treatment Unit Boundary
Outfall 13
Flow Direction

K:\ENG\WTR\25014428\Dwgs\ACAD\Fig 2 - Site Layout Map.dwgLayout1 Apr 04, 2012 - 2:07pm

URS

10550 RICHMOND AVENUE, SUITE 155
HOUSTON, TEXAS 77042
PH: (713) 914-6699
FAX: (713) 789-8404

Title: **SITE LAYOUT MAP**

Project: KIRBY GATE 5 BARGE CLEANING FACILITY
CHANNELVIEW, HARRIS COUNTY, TEXAS

Client: KIRBY INLAND MARINE LP,

Scale:	Drawn by:	Date:	Project No.:	File Name:	Figure:
As Shown	CLK	04/04/12	25014428	Site Map.dwg	2
	Updated by: CWM	05/09/17			

Attachment 5

TECHNICAL REPORT 1.0
INDUSTRIAL

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

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

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

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

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

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

Kirby Inland Marine operates a fleet of inland tank barges and towing vessels. The facility's primary purpose is to provide conventional tank barge cleaning services after barges are unloaded elsewhere. This permit is to renew our permit.

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

Wastewater produced from the barge washing process is simultaneously removed by waste water pumps and routed to the Waste Water Treatment Unit (WWTU). Pumps route the wash water from the Barge Cleaning Unit through a solid settling knock-out pot and then a clarifier box into a transfer tank. Wash water from the clarifier transfer tank is routed to one of three batch tanks where it is held for evaluation prior to entering the Oil Water Separator and then Equalization Tank, which provides a three day retention time allowing for thorough mixing and pH adjustment. Water is then routed to the small Dissolved Air Flotation (DAF) unit where finer solids are removed via chemical and mechanical manipulation. Next, water is routed to membrane biological reactors (MBR),where microorganisms consume the organics within the water. Processed, clean water is routed to the bigger DAF unit to separate the microorganisms from the permeate water which is transferred to the permeate tank while microorganisms are routed back to the MBR. From the permeate tank, water is either transferred across the WWTU to be used in the barge washing process again or discharged into the Houston Ship Channel (after analytical testing).

[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
N/A	N/A	N/A

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: Attachment 6

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: FEMA FIRM 48201C0740M

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: The facility is located primarily in a Floodway Area Zone AE with an elevation of 11 feet msl. All structures associated with the WWTU are elevated above the 100 year flood plain. Additionally, the WWTU tank farm presents tertiary containment in the event of tank failure or a significant rain event; significant rain fall or other liquid can be routed to a holding pond to prevent structural damage. All other process areas associated with the WWTU are either covered to prevent excessive rain intrusion or routed back into the treatment system via a series of sumps located in each process area. In addition, wastewater treatment can be remotely controlled in the event of high water.

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.

Wastewater produced from the barge washing process is simultaneously removed by waste water pumps and routed to the Waste Water Treatment Unit (WWTU). Pumps route the wash water from the Barge Cleaning Unit through a solid settling knock-out pot and then a clarifier box into a transfer tank. Wash water from the clarifier transfer tank is routed to one of three batch tanks where it is held for evaluation prior to entering the Oil Water Separator and then Equalization Tank, which provides a three day retention time allowing for thorough mixing and pH adjustment. Water is then routed to the small Dissolved Air Flotation (DAF) unit where finer solids are removed via chemical and mechanical manipulation. Next, water is routed to one of two membrane biological reactors (MBR), where microorganisms consume the organics within the water. Processed, clean water is routed to the bigger DAF unit to separate the microorganisms from the permeate water which is transferred to the permeate tank while microorganisms are routed back to the MBR. From the permeate tank, water is either transferred across the WWTU to be used in the barge washing process again or to a holding tank for discharge. Sampling for continuous discharge is conducted twice a week by a 3rd party lab while on-site pH testing is done daily for discharge into the Houston Ship Channel via a 4 inch pipe to Outfall 013.

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: Attachment 7

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

Impoundment Information

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

Parameter	Pond #	Pond #	Pond #	Pond #
40 CFR Part 257, Subpart D, Y/N	N/A			
Date of Construction	N/A			

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/0r 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
013	29.759267	-95.095892

Outfall Location Description

Outfall Number	Location Description
013	The outfall is located above the mean high water line on Houston Ship Channel Tidal (Segment 1006) just north of Carpenter's Bayou

Description of Sampling Points (if different from Outfall location)

Outfall Number	Description of Sampling Point
013	The sampling point is the permeate tank in the WWTU.

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)
013		0.1			

Outfall Discharge – Method and Measurement

Outfall Number	Pumped Discharge? Y/N	Gravity Discharge? Y/N	Type of Flow Measurement Device Used
013	Y	N	Foxboro Flow Meter

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)
013	Y	Y	N	24	30	12

Wastestream Contributions

Outfall No.: 013

Contributing Wastestreams	Volume (MGD)	% of Total Flow
Process (barge cleaning) wastewater	0.1	100

Outfall No.: N/A

Contributing Wastestreams	Volume (MGD)	% of Total Flow
N/A	N/A	N/A

Outfall No.:

Contributing Wastestreams	Volume (MGD)	% of Total Flow
N/A	N/A	N/A

Attachment: N/A

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:

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	N/A		
Boilers	N/A		

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: N/

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.
Harris County FWSD6	10184-01

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 6.0** of this application **is required**.

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

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

☐ Yes ☒ No

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

Radioactive Materials Mined, Used, Stored, or Processed

Radioactive Material	Concentration (pCi/L)
N/A	

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

☐ Yes ☒ No

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

Radioactive Materials Present in the Discharge

Radioactive Material	Concentration (pCi/L)
N/A	

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

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

☐ Yes ☒ No

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

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

☐ Yes ☐ No

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

c. Cooling Water Supplier

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

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

CWIS ID				
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:

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*:

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:

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

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

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

☐ Yes ☒ No

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

N/A

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

☐ Yes ☒ No

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

N/A

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

☐ Yes ☒ No

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

N/A

WORKSHEET 1.0
EPA CATEGORICAL EFFLUENT GUIDELINES

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

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

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

☒ Yes ☐ No

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

40 CFR Effluent Guidelines

Industry	40 CFR Part
Transportation Equipment Cleaning	442

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
40 CFR 442 C	3000	100000	Gallons

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.

Attachment 8

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
Barge Cleaning	442	C	May 2011

WORKSHEET 2.0
POLLUTANT ANALYSES REQUIREMENTS

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

1. LABORATORY ACCREDITATION (Instructions, Page 49)

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

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

b. The laboratory is accredited under federal law.

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

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

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

I, Craig Foret, 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): 5/23/2017 – 6/22/2017

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:** Attachment 9 & 10

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

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

TABLE 1 and TABLE 2 (Instructions, Page 50)

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

Table 1 for Outfall No.: 013

Samples are (check one): ☐ Composite ☒ Grab

Pollutant	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)
BOD (5-day)	<2	<2	5.77	4.62
CBOD (5-day)	<2	<2	<2	2.83
Chemical oxygen demand	167	184	224	178
Total organic carbon	56.1	37.6	69.3	55.3
Dissolved oxygen	5.9	3.3	4.2	5.6
Ammonia nitrogen	0.19	<0.04	0.878	0.407
Total suspended solids	3	4.8	2.9	3.1
Nitrate nitrogen	<0.01	<0.01	0.232	0.145
Total organic nitrogen	5.8	2.3	6.4	5.8
Total phosphorus	2.42	1.77	0.96	0.387
Oil and grease	<1.16	<1.19	<1.15	<1.16
Total residual chlorine	0.11	27.7	0.05	0.17
Total dissolved solids	898	828	2.9	1088
Sulfate	177	94.2	268	352
Chloride	175	169	158	126
Fluoride	0.551	0.523	0.487	0.503
Total alkalinity (mg/L as CaCO3)	256	340	305	196
Temperature (°F)	78.44	32.072	85.46	88.34
pH (standard units)	7.14	7.3	7.2	7.11

Table 2 for Outfall No.: 013

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	0.03	0.038	0.025	0.04	2.5
Antimony, total	0.0045	0.0041	0.0044	0.0037	5
Arsenic, total	0.019	0.016	0.014	0.011	0.5
Barium, total	0.021	0.021	0.052	0.062	3
Beryllium, total	<0.0001	<0.0001	<0.0001	<0.0001	0.5
Cadmium, total	<0.0001	<0.0001	<0.0001	<0.0001	1
Chromium, total	0.00091	0.000708	0.0014	0.0015	3
Chromium, hexavalent	<0.002	<0.002	<0.002	<0.002	3
Chromium, trivalent	<0.01	<0.01	<0.01	<0.01	N/A
Copper, total	0.001	0.0011	0.0016	0.0026	2
Cyanide, available	<0.006	<0.006	<0.006	<0.006	2/10
Lead, total	<0.0001	<0.0001	0.000351	<0.0001	0.5
Mercury, total	0.00097	0.00103	0.00141	0.00172	0.005/0.0005
Nickel, total	0.028	0.019	0.023	0.024	2
Selenium, total	<0.0007	<0.0007	<0.0007	<0.0007	5
Silver, total	<0.0001	<0.0001	<0.0001	<0.0001	0.5
Thallium, total	<0.0001	<0.0001	<0.0001	<0.0001	0.5
Zinc, total	0.0094	0.016	0.02	0.0084	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.: 013

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	<0.003	<0.003	<0.003	<0.003	50
Anthracene	<0.002	<0.002	<0.002	<0.002	10
Benzene	<0.001	<0.001	<0.001	<0.001	10
Benzidine	<0.013	<0.013	<0.013	<0.013	50
Benzo(a)anthracene	<0.002	<0.002	<0.002	<0.002	5
Benzo(a)pyrene	<0.002	<0.002	<0.002	<0.002	5
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.001	<0.001	10
Bis(2-ethylhexyl)phthalate	<0.002	<0.002	<0.002	<0.002	10
Bromodichloromethane [Dichlorobromomethane]	<0.001	<0.001	<0.001	<0.001	10
Bromoform	<0.001	<0.001	<0.001	<0.001	10
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	2
Chlorobenzene	<0.001	<0.001	<0.001	<0.001	10
Chlorodibromomethane [Dibromochloromethane]	<0.001	<0.001	<0.001	<0.001	10
Chloroform	<0.001	<0.001	<0.001	<0.001	10
Chrysene	<0.002	<0.002	<0.002	<0.002	5
m-Cresol [3-Methylphenol]	<0.004	<0.004	<0.004	<0.004	10
o-Cresol [2-Methylphenol]	<0.006	<0.006	<0.006	<0.006	10
p-Cresol [4-Methylphenol]	<0.004	<0.004	<0.004	<0.004	10
1,2-Dibromoethane	<0.001	<0.001	<0.001	<0.001	10
m-Dichlorobenzene [1,3-Dichlorobenzene]	<0.001	<0.001	<0.001	<0.001	10
o-Dichlorobenzene [1,2-Dichlorobenzene]	<0.001	<0.001	<0.001	<0.001	10
p-Dichlorobenzene [1,4-Dichlorobenzene]	<0.001	<0.001	<0.001	<0.001	10
3,3'-Dichlorobenzidine	<0.005	<0.005	<0.005	<0.005	5
1,2-Dichloroethane	<0.001	<0.001	<0.001	<0.001	10
1,1-Dichloroethene [1,1-Dichloroethylene]	<0.001	<0.001	<0.001	<0.001	10
Dichloromethane [Methylene chloride]	<0.001	<0.001	<0.001	<0.001	20
1,2-Dichloropropane	<0.001	<0.001	<0.001	<0.001	10
1,3-Dichloropropene [1,3-Dichloropropylene]	<0.001	<0.001	<0.001	<0.001	10

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
2,4-Dimethylphenol	<0.004	<0.004	<0.004	<0.004	10
Di-n-Butyl phthalate	<0.002	<0.002	<0.002	<0.002	10
Ethylbenzene	<0.001	<0.001	<0.001	<0.001	10
Fluoride	0.551	0.523	0.487	0.503	500
Hexachlorobenzene	<0.002	<0.002	<0.002	<0.002	5
Hexachlorobutadiene	<0.003	<0.003	<0.003	<0.003	10
Hexachlorocyclopentadiene	<0.002	<0.002	<0.002	<0.002	10
Hexachloroethane	<0.002	<0.002	<0.002	<0.002	20
Methyl ethyl ketone	<0.001	<0.001	<0.001	<0.001	50
Nitrobenzene	<0.002	<0.002	<0.002	<0.002	10
N-Nitrosodiethylamine	<0.003	<0.003	<0.003	<0.003	20
N-Nitroso-di-n-butylamine	<0.02	<0.02	<0.02	<0.02	20
Nonylphenol	<5	<5	<5	<5	333
Pentachlorobenzene	<0.003	<0.003	<0.003	<0.003	20
Pentachlorophenol	<0.002	<0.002	<0.002	<0.002	5
Phenanthrene	<0.002	<0.002	<0.002	<0.002	10
Polychlorinated biphenyls (PCBs) (**)	<0.35	<0.35	<0.35	<0.35	0.2
Pyridine	<0.01	<0.01	<0.01	<0.01	20
1,2,4,5-Tetrachlorobenzene	<0.003	<0.003	<0.003	<0.003	20
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.001	<0.001	10
Tetrachloroethene [Tetrachloroethylene]	<0.001	<0.001	<0.001	<0.001	10
Toluene	<0.001	<0.001	<0.001	<0.001	10
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	<0.001	10
1,1,2-Trichloroethane	<0.001	<0.001	<0.001	<0.001	10
Trichloroethene [Trichloroethylene]	<0.001	<0.001	<0.001	<0.001	10
2,4,5-Trichlorophenol	<0.003	<0.003	<0.003	<0.003	50
TTHM (Total trihalomethanes)	<0.002	<0.002	<0.002	<0.002	10
Vinyl chloride	<0.001	<0.001	<0.001	<0.001	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.: 013

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

Pollutant	Sample 1	Sample 2	Sample 3	Sample 4	MAL
Tributyltin (µg/L)	<0.05	<0.05	<0.05	<0.05	0.010
Enterococci (cfu or MPN/100 mL)	N/A				N/A
E. coli (cfu or MPN/100 mL)	N/A				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	N/A				0.01
Carbaryl	N/A				5
Chlordane	N/A				0.2
Chlorpyrifos	N/A				0.05
4,4'-DDD	N/A				0.1
4,4'-DDE	N/A				0.1
4,4'-DDT	N/A				0.02
2,4-D	N/A				0.7
Danitol [Fenpropathrin]	N/A				—
Demeton	N/A				0.20
Diazinon	N/A				0.5/0.1
Dicofol [Kelthane]	N/A				1
Dieldrin	N/A				0.02
Diuron	N/A				0.090
Endosulfan I (*alpha*)	N/A				0.01
Endosulfan II (*beta*)	N/A				0.02
Endosulfan sulfate	N/A				0.1
Endrin	N/A				0.02
Guthion [Azinphos methyl]	N/A				0.1
Heptachlor	N/A				0.01
Heptachlor epoxide	N/A				0.01
Hexachlorocyclohexane (*alpha*)	N/A				0.05
Hexachlorocyclohexane (*beta*)	N/A				0.05
Hexachlorocyclohexane (*gamma*) [Lindane]	N/A				0.05
Hexachlorophene	N/A				10
Malathion	N/A				0.1
Methoxychlor	N/A				2.0
Mirex	N/A				0.02
Parathion (ethyl)	N/A				0.1
Toxaphene	N/A				0.3
2,4,5-TP [Silvex]	N/A				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.: 013

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 SO3)	☐	☒					—
Surfactants	☒	☐	0.22	0.27	<0.10	0.18	—
Boron, total	☐	☒					20
Cobalt, total	☐	☒					0.3
Iron, total	☒	☐	0.792	0.514	0.871	0.696	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.: 013 : 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	N/A				50
Acrylonitrile	N/A				50
Benzene	<0.001	<0.001	<0.001	<0.001	10
Bromoform	N/A				10
Carbon tetrachloride	N/A				2
Chlorobenzene	N/A				10
Chlorodibromomethane	N/A				10
Chloroethane	N/A				50
2-Chloroethylvinyl ether	N/A				10
Chloroform	N/A				10
Dichlorobromomethane [Bromodichloromethane]	N/A				10
1,1-Dichloroethane	N/A				10
1,2-Dichloroethane	N/A				10
1,1-Dichloroethylene [1,1-Dichloroethene]	N/A				10
1,2-Dichloropropane	N/A				10
1,3-Dichloropropylene [1,3-Dichloropropene]	N/A				10
Ethylbenzene	<0.001	<0.001	<0.001	<0.001	10
Methyl bromide [Bromomethane]	N/A				50
Methyl chloride [Chloromethane]	N/A				50
Methylene chloride [Dichloromethane]	N/A				20
1,1,2,2-Tetrachloroethane	N/A				10
Tetrachloroethylene [Tetrachloroethene]	N/A				10
Toluene	<0.001	<0.001	<0.001	<0.001	10
1,2-Trans-dichloroethylene [1,2-Trans-dichloroethene]	N/A				10
1,1,1-Trichloroethane	N/A				10
1,1,2-Trichloroethane	N/A				10
Trichloroethylene [Trichloroethene]	N/A				10
Vinyl chloride	N/A				10

* Indicate units if different from µg/L.

Table 9 for Outfall No.: : Acid Compounds

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

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

* Indicate units if different from µg/L.

Table 10 for Outfall No.: 013 : Base/Neutral Compounds

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

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

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
Diethyl phthalate	N/A				10
Dimethyl phthalate	N/A				10
Di-n-butyl phthalate	N/A				10
2,4-Dinitrotoluene	N/A				10
2,6-Dinitrotoluene	N/A				10
Di-n-octyl phthalate	N/A				10
1,2-Diphenylhydrazine (as Azobenzene)	N/A				20
Fluoranthene	N/A				10
Fluorene	N/A				10
Hexachlorobenzene	N/A				5
Hexachlorobutadiene	N/A				10
Hexachlorocyclopentadiene	N/A				10
Hexachloroethane	N/A				20
Indeno(1,2,3-cd)pyrene	N/A				5
Isophorone	N/A				10
Naphthalene	<0.002	<0.002	<0.002	<0.002	10
Nitrobenzene	N/A				10
N-Nitrosodimethylamine	N/A				50
N-Nitrosodi-n-propylamine	N/A				20
N-Nitrosodiphenylamine	N/A				20
Phenanthrene	N/A				10
Pyrene	N/A				10
1,2,4-Trichlorobenzene	N/A				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	N/A				0.01
alpha-BHC [alpha-Hexachlorocyclohexane]	N/A				0.05
beta-BHC [beta-Hexachlorocyclohexane]	N/A				0.05
gamma-BHC [gamma-Hexachlorocyclohexane]	N/A				0.05
delta-BHC [delta-Hexachlorocyclohexane]	N/A				0.05
Chlordane	N/A				0.2
4,4'-DDT	N/A				0.02
4,4'-DDE	N/A				0.1
4,4'-DDD	N/A				0.1
Dieldrin	N/A				0.02
Endosulfan I (alpha)	N/A				0.01
Endosulfan II (beta)	N/A				0.02
Endosulfan sulfate	N/A				0.1

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

* Indicate units if different from µg/L.

Attachment: N/A

TABLE 12 (DIOXINS/FURAN COMPOUNDS)

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

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

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

Description: N/A

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

☐ Yes ☒ No

Description: N/A

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

Table 12 for Outfall No.: N/A

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

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

TABLE 13 (HAZARDOUS SUBSTANCES)

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

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

☒ Yes ☐ No

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

☒ Yes ☐ No

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

Table 13 for Outfall No.: 013

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
Allyl alcohol	107-18-6	<5	<5	<5	<5	SW-846 8015D
Amyl acetate	628-63-7	<0.002	<0.002	<0.002	<0.002	EPA 624
Butyl acetate	540-88-5	<0.002	<0.002	<0.002	<0.002	EPA 624
Styrene	100-42-5	<0.001	<0.001	<0.001	<0.001	EPA 624
Cyclohexane	110-82-7	<0.001	<0.001	<0.001	<0.001	EPA 625

Pollutant	CASRN	Sample 1 (µg/L)	Sample 2 (µg/L)	Sample 3 (µg/L)	Sample 4 (µg/L)	Analytical Method
Methyl methacrylate	80-62-6	<0.002	<0.002	<0.002	<0.002	EPA 624
Vinyl acetate	108-05-4	<0.001	<0.001	<0.001	<0.001	EPA 624
Xylene	1330-20-7	<0.002	<0.002	<0.002	<0.002	EPA 624

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:

iii. The distance and direction from the outfall to the drinking water supply intake:

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: 675 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
  - Surface area (acres):
  - Average depth of the entire water body (feet):
  - Average depth of water body within a 500-foot radius of the discharge point (feet):
- ☐ Man-Made Channel or Ditch
- ☐ Stream or Creek
- ☐ Freshwater Swamp or Marsh
- ☐ Tidal Stream, Bayou, or Marsh
- ☐ Open Bay
- ☐ Other, specify:

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
- ☐ agricultural runoff
- ☐ upstream discharges
- ☐ urban runoff
- ☐ septic tanks
- ☐ other, specify:

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

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

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 7.0
STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITIES

This worksheet **is required** for all TPDES permit applications requesting individual permit coverage for discharges consisting of **either**: 1) solely of stormwater discharges associated with industrial activities, as defined in *40 CFR § 122.26(b)(14)(i-xi)*, **or** 2) stormwater discharges associated with industrial activities and any of the listed allowable non-stormwater discharges, as defined in the MSGP (TXR05000), Part II, Section A, Item 6.

Discharges of stormwater as defined in *40 CFR § 122.26 (b)(13)* are not required to obtain authorization under a TPDES permit (see exceptions at *40 CFR §§ 122.26(a)(1)* and *(9)*). Authorization for discharge may be required from a local municipal separate storm sewer system.

1. APPLICABILITY (Instructions, Page 83)

Do discharges from any of the existing/proposed outfalls consist either 1) solely of stormwater discharges associated with industrial activities **or** 2) stormwater discharges associated with industrial activities and any of the allowable non-stormwater discharges?

☒ Yes ☐ No

If **no**, stop here. If **yes**, proceed as directed.

2. STORMWATER OUTFALL COVERAGE (Instructions, Page 84)

List each existing/proposed stormwater outfall at the facility and indicate which type of authorization covers or is proposed to cover discharges.

Authorization coverage

Outfall	Authorized Under MSGP	Authorized Under Individual Permit
001-012	☒	☐
	☐	☐
	☐	☐
	☐	☐
	☐	☐
	☐	☐
	☐	☐
	☐	☐
	☐	☐
	☐	☐

If **all** existing/proposed outfalls which discharge stormwater associated with industrial activities (and any of the allowable non-stormwater discharges) are **authorized under the MSGP**, **stop** here.

If **seeking authorization** for any outfalls which discharge stormwater associated with industrial activities (and any of the allowable non-stormwater discharges) **under an individual permit**, **proceed**.

NOTE: The following information is required for each existing/proposed stormwater outfall for which the facility is seeking individual permit authorization under this application.

3. SITE MAP (Instructions, Page 84)

Attach a site map or maps (drawn to scale) of the entire facility with the following information.

- the location of each stormwater outfall to be covered by the permit
- an outline of the drainage area that is within the facility's boundary and that contributes stormwater to each outfall to be covered by the permit
- connections or discharge points to municipal separate storm sewer systems
- locations of all structures (e.g. buildings, garages, storage tanks)
- structural control devices that are designed to reduce pollution in discharges of stormwater associated with industrial activities
- process wastewater treatment units (including ponds)
- bag house and other air treatment units exposed to stormwater (stormwater runoff, snow melt runoff, and surface runoff and drainage)
- landfills; scrapyards; surface water bodies (including wetlands)
- vehicle and equipment maintenance areas
- physical features of the site that may influence discharges of stormwater associated with industrial activities or contribute a dry weather flow
- locations where spills or leaks of reportable quality (as defined in *30 TAC § 327.4*) have occurred during the three years before this application was submitted to obtain coverage under an individual permit
- processing areas, storage areas, material loading/unloading areas, and other locations where significant materials are exposed to stormwater (stormwater runoff, snow melt runoff, and surface runoff and drainage)

☐ Check the box to confirm all the above information was provided on the facility site map(s).

Attachment:

4. FACILITY/SITE INFORMATION (Instructions, Pages 84-85)

a. Provide the area of impervious surface and the total area drained by each stormwater outfall requested for authorization by this permit application.

Impervious Surfaces

Outfall	Area of Impervious Surface (include units)	Total Area Drained (include units)

b. Provide the following local area rainfall information and the source of the information.

Wettest month:

Average rainfall for wettest month (total inches):

25-year, 24-hour rainfall (inches):

Source:

c. Attach an inventory, or list, of materials currently handled at the facility that may be exposed to precipitation. **Attachment:**

d. Attach narrative descriptions of the industrial processes and activities involving the materials in the above-listed inventory that occur outdoors or in some manner that may result in exposure of the materials to precipitation or runoff (see instructions for guidance). **Attachment:**

e. Describe any BMPs and controls the facility uses/proposes to prevent or effectively reduce pollution in stormwater discharges from the facility:

5. LABORATORY ACCREDITATION CERTIFICATION (Instructions, Page 85)

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)

6. POLLUTANT ANALYSIS (Instructions, Pages 85-88)

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):

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

c. Complete Table 17 as directed on page 90 of the Instructions.

Table 14 Pollutant Analysis for Outfall No.:

Pollutant	Grab Sample* Maximum (mg/L)	Composite Sample** Maximum (mg/L)	Grab Sample* Average (mg/L)	Composite Sample** Average (mg/L)	Number of Storm Events Sampled	MAL (mg/L)
pH (standard units)	(max)	—	(min)	—		—
Total suspended solids						—
Chemical oxygen demand						—
Total organic carbon						—
Oil and grease						—
Arsenic, total						0.0005
Barium, total						0.003
Cadmium, total						0.001
Chromium, total						0.003
Chromium, trivalent						—
Chromium, hexavalent						0.003
Copper, total						0.002
Lead, total						0.0005
Mercury, total						0.000005
Nickel, total						0.002
Selenium, total						0.005
Silver, total						0.0005
Zinc, total						0.005

* Taken during first 30 minutes of storm event
** Flow-weighted composite sample

d. Complete Table 18 as directed on pages 90-92 of the Instructions.

Table 15 Pollutant Analysis for Outfall No.:

Pollutant	Grab Sample* Maximum (mg/L)	Composite Sample** Maximum (mg/L)	Grab Sample* Average (mg/L)	Composite Sample** Average (mg/L)	Number of Storm Events Sampled

Pollutant	Grab Sample* Maximum (mg/L)	Composite Sample** Maximum (mg/L)	Grab Sample* Average (mg/L)	Composite Sample** Average (mg/L)	Number of Storm Events Sampled

* Taken during first 30 minutes of storm event
** Flow-weighted composite sample

Attachment:

7. STORM EVENT DATA (Instructions, Page 88)

Provide the following data for the storm event(s) which resulted in the maximum values for the analytical data submitted:

Date of storm event:

Duration of storm event (minutes):

Total rainfall during storm event (inches):

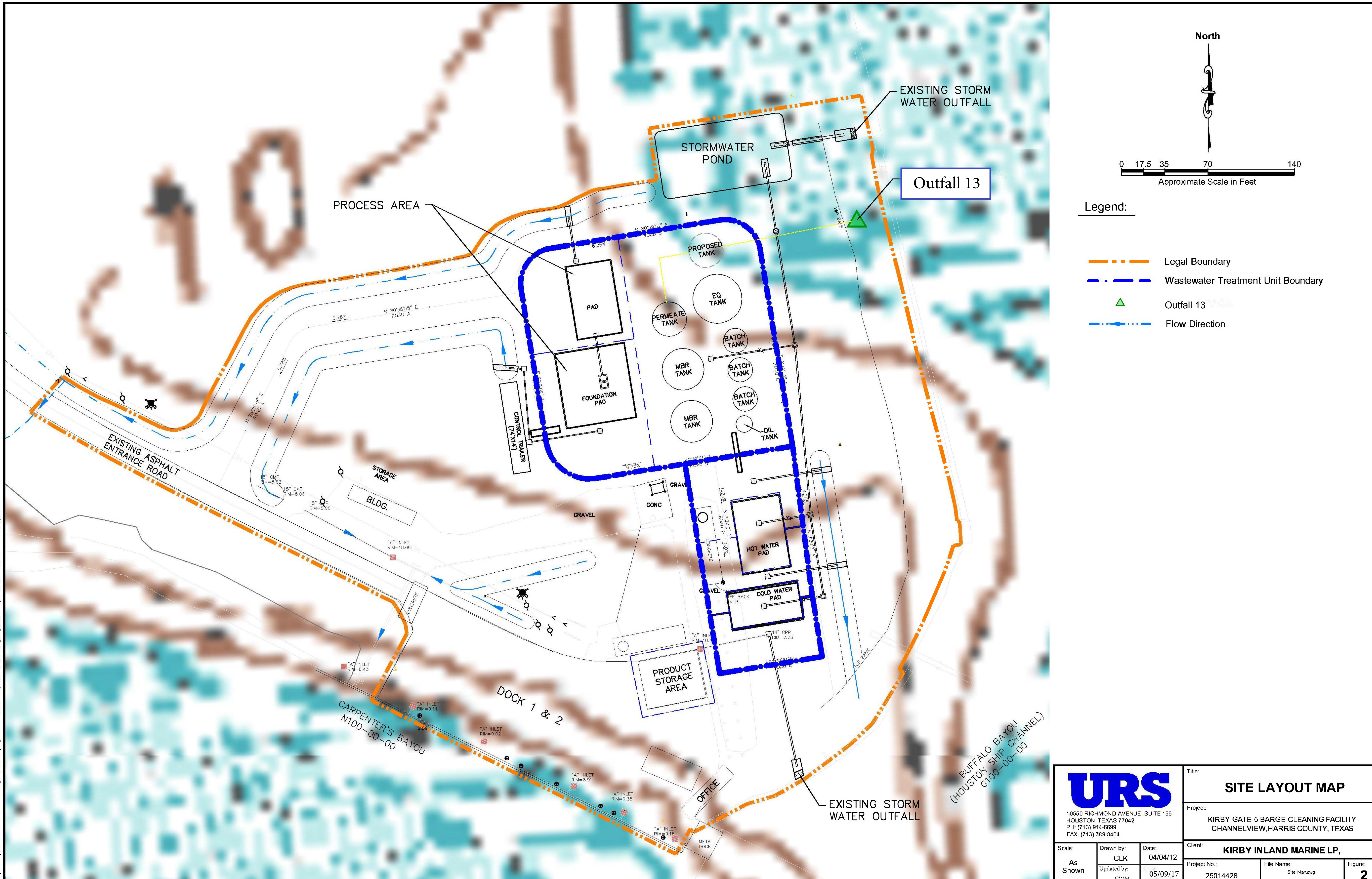
Number of hours the between beginning of the storm measured and the end of the previous measurable storm event (hours):

Maximum flow rate during rain event (gallons/minute):

Total stormwater flow from rain event (gallons):

Provide a description of the method of flow measurement or estimate:

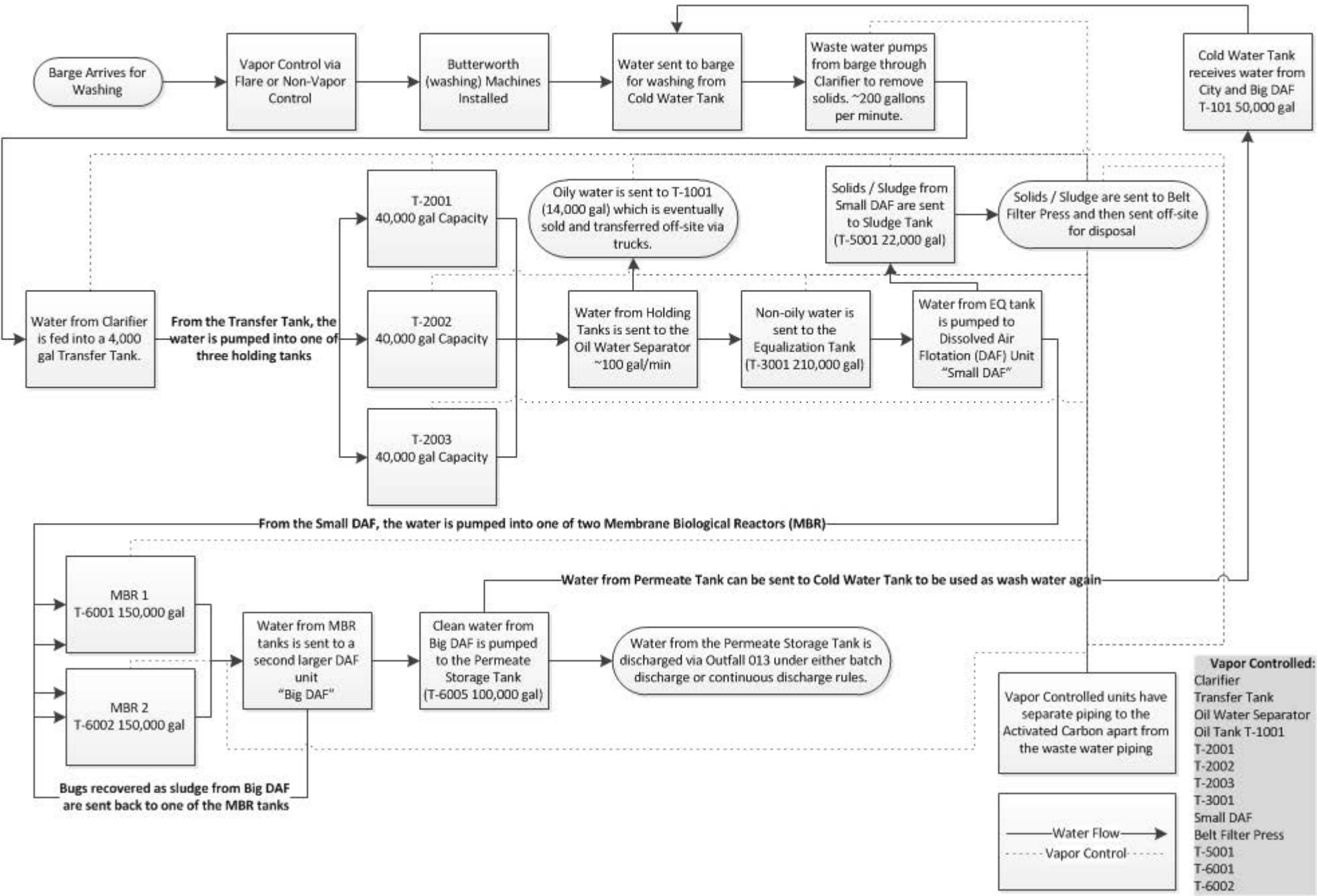
Attachment 6



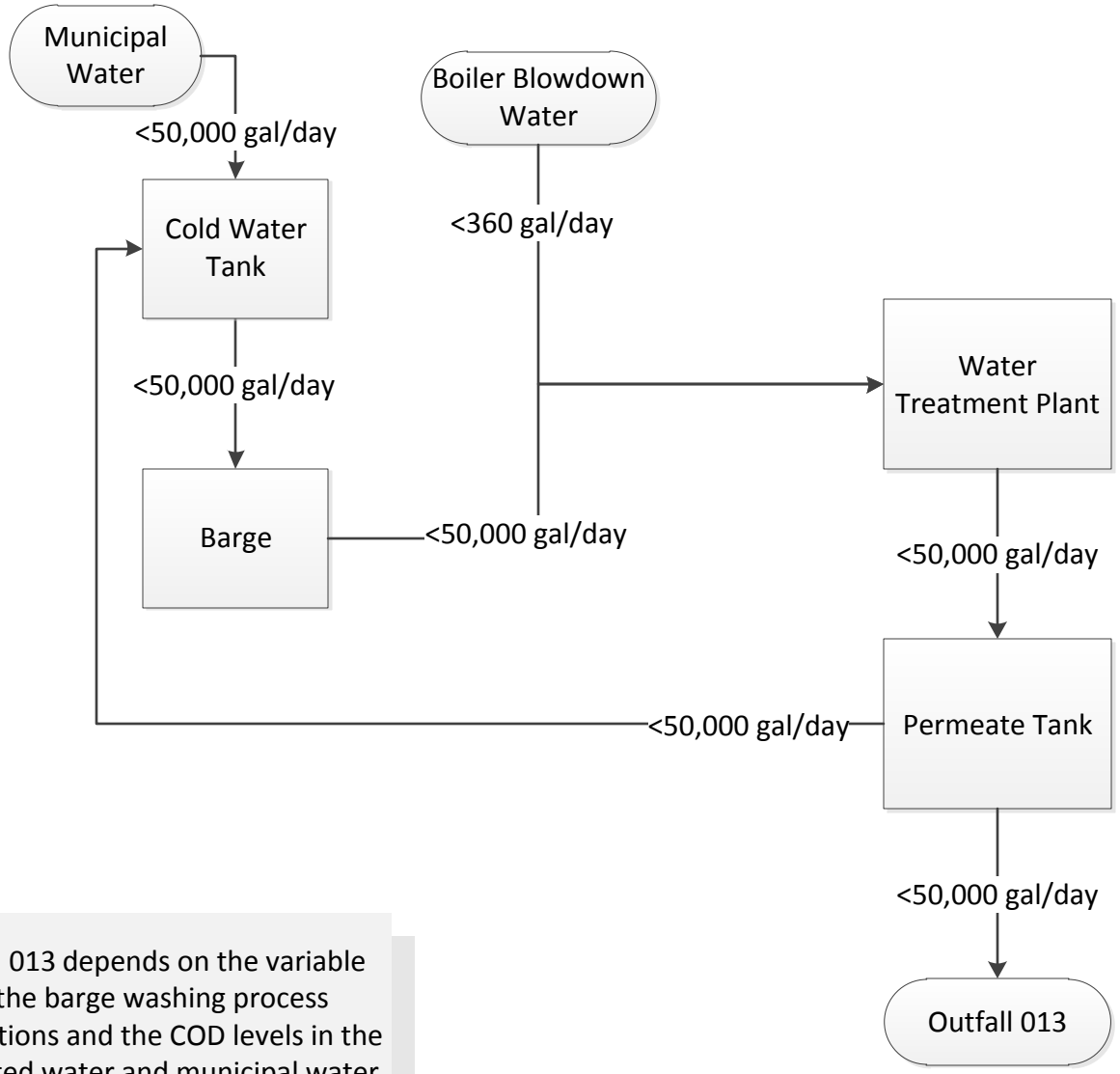
EXISTING STORM WATER OUTFALL
STORMWATER POND
Outfall 13
PROCESS AREA
PROPOSED TANK
EQ TANK
PERMEATE TANK
PAD
BATCH TANK
MBR TANK
FOUNDATION PAD
BATCH TANK
BATCH TANK
MBR TANK
OIL TANK
CONTROL TRAILER (74'x14')
EXISTING ASPHALT ENTRANCE ROAD
STORAGE AREA
BLDG.
GRAVEL
CONC
HOT WATER PAD
COLD WATER PAD
PRODUCT STORAGE AREA
DOCK 1 & 2
CARPENTER'S BAYOU N100-00-00
OFFICE
EXISTING STORM WATER OUTFALL
BUFFALO BAYOU (HOUSTON SHIP CHANNEL) G100-00-00
North
0 17.5 35 70 140
Approximate Scale in Feet
Legend:
Legal Boundary
Wastewater Treatment Unit Boundary
Outfall 13
Flow Direction
URS
10550 RICHMOND AVENUE, SUITE 155
HOUSTON, TEXAS 77042
PH: (713) 914-6699
FAX: (713) 789-8404
Title:
SITE LAYOUT MAP
Project:
KIRBY GATE 5 BARGE CLEANING FACILITY
CHANNELVIEW,HARRIS COUNTY, TEXAS
Client:
KIRBY INLAND MARINE LP,
Scale: As Shown
Drawn by: CLK
Updated by: CWM
Date: 04/04/12
05/09/17
Project No.: 25014428
File Name: Site Map.dwg
Figure: 2

Attachment 7

Kirby Inland Marine, LP Waste Water Treatment
Plant Process Flow Diagram
Capacity: 65,000 – 100,000 gallons per day



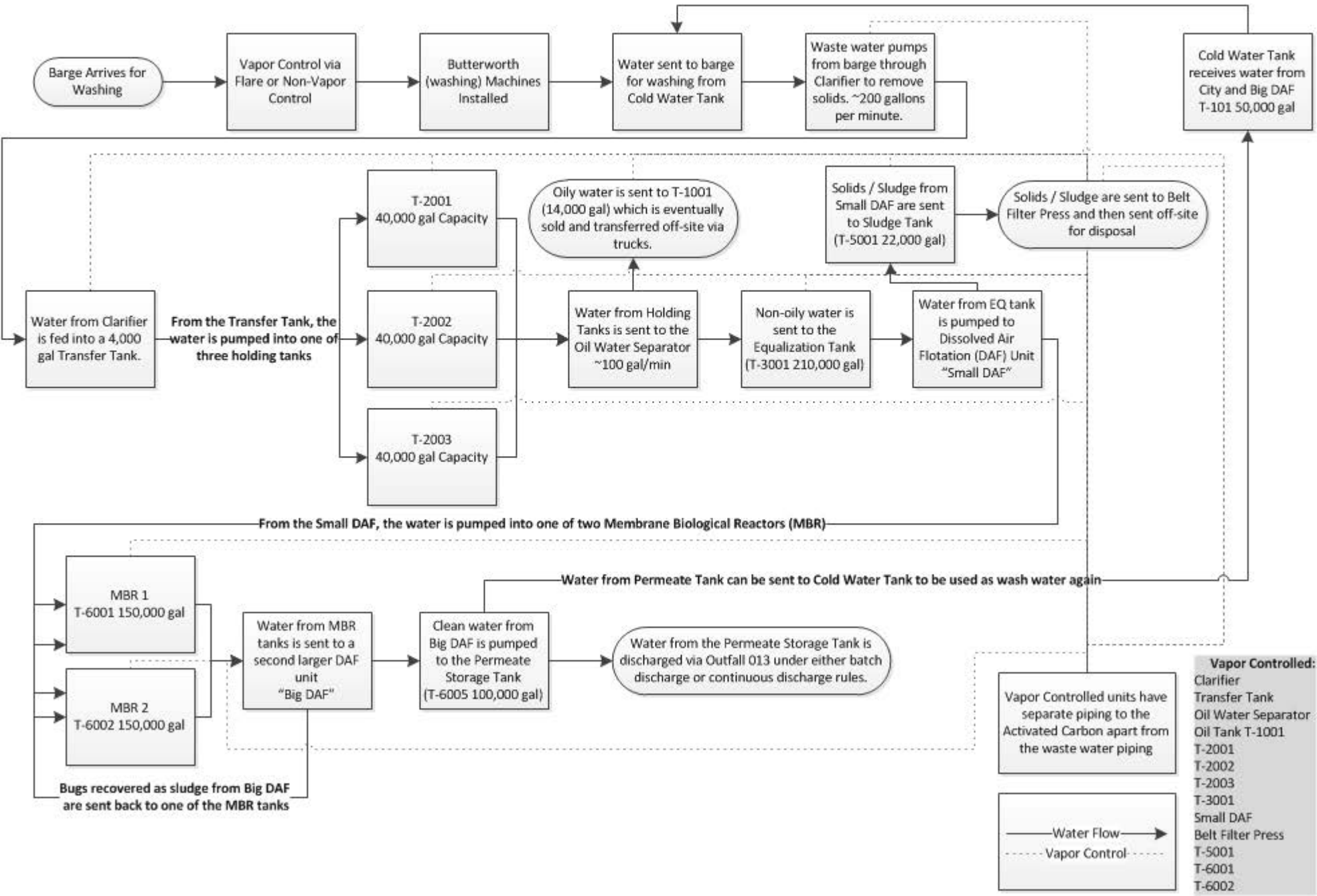
Water Balance Diagram



Amount discharged to Outfall 013 depends on the variable workload associated with the barge washing process dependent upon market conditions and the COD levels in the Water Treatment Plant. Treated water and municipal water in the Permeate Tank is either discharged to Outfall 013 or re-used in the barge washing process. Water levels used range from an average of 15,000 gallons per day to around 50,000 gallons per day.

Attachment 8

Kirby Inland Marine, LP Waste Water Treatment
Plant Process Flow Diagram
Capacity: 65,000 – 100,000 gallons per day



Attachment 9

Attachment 10

All samples were collected as GRAB samples by A&B Labs. All of the testing except for Surfactants, Tributyltin, and Mercury was conducted by A&B Labs. Detail for each lab is listed below:

Surfactants:

Envirodyne Laboratories, Inc.
11011 Brooklet Dr., #230
Houston, TX 77099
281.568.7880
www.envirodyne.com

Sample #1 – 5/31/2017 09:50
Sample #2 – 6/08/2017 13:45
Sample #3 – 6/14/2017 16:25
Sample #3 – 6/22/2017 08:45

Mercury:

Summit Environmental Technologies Inc.
3310 Win St. Cuyahoga Falls, Ohio 44223
330-253-8211
www.settek.com
Sample #1 – 5/23/2017 14:45
Sample #2 – 5/31/2017 09:50
Sample #3 – 6/8/2017 13:45
Sample #4 – 6/14/2017 16:25

Tributyltin:

ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
360-577-7222
www.alsglobal.com

Sample #1 – 5/23/2017 14:45
Sample #2 – 5/31/2017 09:50
Sample #3 – 6/14/2017 16:25
Sample #4 – 6/22/2017 13:20

ALL OTHER TESTS:

A&B Labs
10100 East Freeway, Suite 100
Houston, TX 77029
713-453-6060
www.ablabs.com

Sample #1 – 5/23/2017 14:45
Sample #2 – 5/31/2017 09:50
Sample #3 – 6/8/2017 13:45
Sample #4 – 6/14/2017 16:25

Kirby Inland Marine, LP
18350 Market Street
Channelview, Texas 77530

800-324-3621
713-435-1600

Fax: 713-435-1951

September 24, 2019

TCEQ
Wastewater Permitting Section
Water Quality Division
PO Box 13087
Austin, TX 78711

RE: Analytical for Permit Renewal WQ0004992000
Facility: RN102204211 Kirby Gate 5 Barge Cleaning Facility
Issued to: Owner, CN600611206, Kirby Inland Marine, LP

Dear Wastewater Permitting,

Kirby Inland Marine, LP is requesting to use analytical data from 5/23/2017 to 6/22/2017 for the renewal of Permit WQ0004992000 which was issued 1/5/2018 and is set to expire 5/01/2020. In talking with the TCEQ it sounds like we got the short permit length due to an initiative the state put forth to align permit renewal expirations. The short permit length poses a financial burden on the facility, and using our prior analytical will greatly help offset the cost. Our last renewal was over $11,500 which spread across 5 years is a much more manageable expense. There are no proposed changes to the permit and we feel this data is still accurate. Please feel free to contact me to discuss at 713-435-1825 or steven.caruselle@kirbycorp.com .

Sincerely,

Steven Caruselle
General Manager
Kirby Inland Marine, LP.

Laboratory Analysis Report

Total Number of Pages: 34

Job ID : 17060449

10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name :
Wastewater Discharge Permit / Barge Cleaning Facility - Gate 5

Report To :	Client Name:	Kirby Inland Marine, LP	P.O.#.: 886730
	Attn:	Collin MacAllister	Sample Collected By: Larry Porter
	Client Address:	18350 Market St.	Date Collected: 06/08/17
	City, State, Zip:	Channelview, Texas, 77530	

A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID
WasteWater Discharge	Water	17060449.01

Released By: Alisha Hughes
Title: Project Manager
Date: 7/7/2017

This Laboratory is NELAP (T104704213-17-16) accredited. Effective: 4/1/2017; Expires: 3/31/2018
Scope: Non-Potable Water, Drinking Water, Air, Solid, Biological Tissue, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client. Soil samples are reported on a wet weight basis unless otherwise noted. Uncertainty estimates are available on request.

Date Received : 06/08/2017 15:00

LABORATORY TERM AND QUALIFIER DEFINITION REPORT

Job ID : 17060449

Date: 7/7/2017

General Term Definition

Back-Wt	Back Weight	Post-Wt	Post Weight
BRL	Below Reporting Limit	ppm	parts per million
cfu	colony-forming units	Pre-Wt	Previous Weight
Conc.	Concentration	Q	Qualifier
D.F.	Dilution Factor	RegLimit	Regulatory Limit
Front-Wt	Front Weight	RPD	Relative Percent Difference
LCS	Laboratory Check Standard	RptLimit	Reporting Limit
LCSD	Laboratory Check Standard Duplicate	SDL	Sample Detection Limit
MS	Matrix Spike	surr	Surrogate
MSD	Matrix Spike Duplicate	T	Time
MW	Molecular Weight	TNTC	Too numerous to count
J	Estimation. Below calibration range but above MDL		

Qualifier Definition

L1	Associated LCS and/or LCSD recovery is above acceptance limits for flagged analyte. Bias may be high.
L2	Associated LCS and/or LCSD recovery is below acceptance limits for flagged analyte. Bias may be low.
M2	Matrix Spike and/or Matrix Spike Duplicate recovery is below laboratory control limits due to matrix interference."The sample randomly selected as QC for this batch was not part of your project. Therefore, this sample matrix is not applicable to your project samples."
M6	Not calculated. Sample concentration high, more than 4X spike concentration. Control limits do not apply."The sample randomly selcted as QC for this batch was not part of your project. Therefore, this sample matrix is not applicable to your project samples."
M8	Matrix Spike and/or Matrix Spike Duplicate recovery is above laboratory control limits.
S1	Surrogate recovery is above control limit. Results may be biased high.
S2	Surrogate recovery is below control limit. Results may be biased low.
V1	CCV recovery is above acceptance limits. This target analyte was not detected in the sample.
V7	CCV recovery is below the control limit for this analyte, however the average %difference for all the analytes meets method criteria.

LABORATORY TEST RESULTS

Job ID : 17060449

Date 7/7/2017

Client Name: Kirby Inland Marine, LP Attn: Collin MacAllister

Project Name: Wastewater Discharge Permit / Barge Cleaning Facility - Gate 5

Client Sample ID: WasteWater Discharge
Date Collected: 06/08/17
Time Collected: 13:45
Other Information:

Job Sample ID: 17060449.01
Sample Matrix Water
% Moisture

Test Method	Parameter/Test Description	Result	Units	DF	MDL	MQL	Q	Date Time	Analyst
EPA 1664B	Oil & Grease, Hexane Extractables								
	Oil & Grease	<1.15	mg/L	1.15	1.15	2.3		06/15/17 06:30	SG
SM 2320B	Alkalinity								
	Alkalinity	305	mg CaCO3/L	1	20	20		06/15/17 16:30	AL
SM 2540C	Total Dissolved Solids								
	TDS	1506	mg/L	1	3.4	10		06/09/17 12:25	PM
SM 2540D									
	TSS	2.9	mg/L	0.400	1.5	1		06/08/17 16:20	PM
SM 2550B									
	Temperature	29.7	°C	1				06/08/17 13:45	LP
EPA 300.0	Anions								
	Fluoride	0.487	mg/L	1	0.01	0.1		06/09/17 02:37	RT
	Chloride	158	mg/L	50	1	5		06/09/17 18:15	RT
	Nitrate-N	0.232	mg/L	1	0.01	0.1		06/09/17 02:37	RT
	Sulfate	268	mg/L	50	0.5	5		06/09/17 18:15	RT
EPA 330.5	Chlorine, as Total Residual								
	Chlorine, Total	0.05	mg/L	1	0.02	0.05		06/08/17 13:45	LP
SM 4500CN-CG	Cyanide Amenable to Chlorination								
	Cyanide, Amenable	<0.006	mg/L	1	0.006	0.01		06/13/17 17:00	SRG
	Cyanide, Chlorinated Portion	<0.006	mg/L	1	0.006	0.01		06/13/17 17:00	SRG
SM 3500Cr B	Hexavalent Chromium								
	Chromium, Hexavalent	<0.002	mg/L	1	0.002	0.01		06/08/17 15:40	AJ
SM 3500Cr B	Trivalent Chromium								
	Chromium, Trivalent	<0.01	mg/L	1	0.01			06/15/17 11:00	AJ
SM 4500H B	Corrosivity, pH								
	pH	7.2	s.u.	1				06/08/17 13:45	LP
SM 4500NH3D	Ammonia as Nitrogen								
	Ammonia as N	0.878	mg/L	1	0.04	0.1		06/15/17 08:26	SG
SM 4500NH3D	Total Kjeldahl Nitrogen								
	TKN	7.26	mg/L	1	0.2	0.5		06/09/17 13:00	SG
SM 4500NH3D	Total Organic Nitrogen								
	Total Organic Nitrogen	6.4	mg/L	1				06/15/17 13:37	SG
SM 4500O-G	Dissolved Oxygen								
	Dissolved Oxygen	4.2	mg/L	1	0.1			06/08/17 13:45	LP
SM 4500P-E									
	Phosphorus	0.96	mg/L	5	0.1	0.25		06/13/17 10:30	AJ

LABORATORY TEST RESULTS

Job ID : 17060449

Date 7/7/2017

Client Name: Kirby Inland Marine, LP Attn: Collin MacAllister

Project Name: Wastewater Discharge Permit / Barge Cleaning Facility - Gate 5

Client Sample ID: WasteWater Discharge
Date Collected: 06/08/17
Time Collected: 13:45
Other Information:

Job Sample ID: 17060449.01
Sample Matrix Water
% Moisture

Test Method	Parameter/Test Description	Result	Units	DF	MDL	MQL	Q	Date Time	Analyst
SM 5210B	Biochemical Oxygen Demand								
	BOD	5.77	mg/L	1	2	2		06/09/17 15:30	CO
SM 5210B	Carbonaceous Biochemical Oxygen Demand								
	CBOD	<2	mg/L	1	2			06/09/17 15:00	CO
SM 5220D	Chemical Oxygen Demand								
	COD	224	mg/L	1	2.4	10		06/12/17 11:30	AJ
SM 5310B	Total Organic Carbon								
	TOC	69.3	mg/L	2	0.96	2		06/12/17 09:00	AJ
EPA 200.8	Metals by ICP/MS								
	Aluminum	0.025	mg/L	1	0.001	0.001		06/12/17 17:18	GG
	Antimony	0.0044	mg/L	1	0.0002	0.00025		06/12/17 17:18	GG
	Arsenic	0.014	mg/L	1	0.0001	0.00025		06/12/17 17:18	GG
	Barium	0.052	mg/L	1	0.0004	0.00025		06/12/17 17:18	GG
	Beryllium	<0.0001	mg/L	1	0.0001	0.00025		06/12/17 17:18	GG
	Cadmium	<0.0001	mg/L	1	0.0001	0.00025		06/12/17 17:18	GG
	Chromium	0.0014	mg/L	1	0.0001	0.00025		06/12/17 17:18	GG
	Copper	0.0016	mg/L	1	0.0001	0.00025		06/12/17 17:18	GG
	Iron	0.871	mg/L	1	0.015	0.025		06/12/17 17:18	GG
	Lead	0.000351	mg/L	1	0.0001	0.00025	J	06/12/17 17:18	GG
	Nickel	0.023	mg/L	1	0.0001	0.00025		06/12/17 17:18	GG
	Selenium	<0.0007	mg/L	1	0.0007	0.00025		06/12/17 17:18	GG
	Silver	<0.0001	mg/L	1	0.0001	0.00025		06/12/17 17:18	GG
	Thallium	<0.0001	mg/L	1	0.0001	0.00025		06/12/17 17:18	GG
	Zinc	0.02	mg/L	1	0.0012	0.002		06/12/17 17:18	GG
EPA 608	Polychlorinated Biphenyls								
	Aroclor 1016	<0.25	ug/L	1	0.25	0.1		06/13/17 13:36	PNS
	Aroclor 1221	<0.17	ug/L	1	0.17	0.1		06/13/17 13:36	PNS
	Aroclor 1232	<0.17	ug/L	1	0.17	0.1		06/13/17 13:36	PNS
	Aroclor 1242	<0.17	ug/L	1	0.17	0.1		06/13/17 13:36	PNS
	Aroclor 1248	<0.17	ug/L	1	0.17	0.1		06/13/17 13:36	PNS
	Aroclor 1254	<0.17	ug/L	1	0.17	0.1		06/13/17 13:36	PNS
	Aroclor 1260	<0.35	ug/L	1	0.35	0.1		06/13/17 13:36	PNS
	Total PCBs	<0.35	ug/L	1	0.35	0.1		06/13/17 13:36	PNS
	Decachlorobiphenyl(surr)	39	%	1		40-140	S2	06/13/17 13:36	PNS
	Tetrachloro-m-xylene(surr)	150	%	1		40-140	S1	06/13/17 13:36	PNS
EPA 624	Volatile Organic Compounds								
	1,1,1-Trichloroethane	<0.001	mg/L	1	0.001	0.005		06/13/17 04:31	JKD
	1,1,2,2-Tetrachloroethane	<0.001	mg/L	1	0.001	0.005		06/13/17 04:31	JKD

LABORATORY TEST RESULTS

Job ID : 17060449

Date 7/7/2017

Client Name: Kirby Inland Marine, LP Attn: Collin MacAllister

Project Name: Wastewater Discharge Permit / Barge Cleaning Facility - Gate 5

Client Sample ID: WasteWater Discharge
Date Collected: 06/08/17
Time Collected: 13:45
Other Information:

Job Sample ID: 17060449.01
Sample Matrix Water
% Moisture

Test Method	Parameter/Test Description	Result	Units	DF	MDL	MQL	Q	Date Time	Analyst
EPA 624	Volatile Organic Compounds								
	1,1,2-Trichloroethane	<0.001	mg/L	1	0.001	0.005		06/13/17 04:31	JKD
	1,1-Dichloroethylene	<0.001	mg/L	1	0.001	0.005		06/13/17 04:31	JKD
	1,2-Dibromoethane	<0.001	mg/L	1	0.001	0.005		06/13/17 04:31	JKD
	1,2-Dichlorobenzene	<0.001	mg/L	1	0.001	0.005		06/13/17 04:31	JKD
	1,2-Dichloroethane	<0.001	mg/L	1	0.001	0.005	V1	06/13/17 04:31	JKD
	1,2-Dichloropropane	<0.001	mg/L	1	0.001	0.005		06/13/17 04:31	JKD
	1,3-Dichlorobenzene	<0.001	mg/L	1	0.001	0.005		06/13/17 04:31	JKD
	1,4-Dichlorobenzene	<0.001	mg/L	1	0.001	0.005		06/13/17 04:31	JKD
	Acrylonitrile	<0.003	mg/L	1	0.003	0.005		06/13/17 04:31	JKD
	Amyl Acetate	<0.002	mg/L	1	0.002	0.005		06/15/17 12:35	JKD
	Benzene	<0.001	mg/L	1	0.001	0.005		06/13/17 04:31	JKD
	Bromodichloromethane	<0.001	mg/L	1	0.001	0.005	V1	06/13/17 04:31	JKD
	Bromoform	<0.001	mg/L	1	0.001	0.005		06/13/17 04:31	JKD
	Butyl acetate	<0.002	mg/L	1	0.002	0.005		06/13/17 04:31	JKD
	Carbon tetrachloride	<0.001	mg/L	1	0.001	0.005	V1	06/13/17 04:31	JKD
	Chlorobenzene	<0.001	mg/L	1	0.001	0.005		06/13/17 04:31	JKD
	Chloroform	<0.001	mg/L	1	0.001	0.005		06/13/17 04:31	JKD
	cis-1,3-Dichloropropene	<0.001	mg/L	1	0.001	0.005	V1	06/13/17 04:31	JKD
	Cyclohexane	<0.001	mg/L	1	0.001	0.005		06/13/17 04:31	JKD
	Dibromochloromethane	<0.001	mg/L	1	0.001	0.005		06/13/17 04:31	JKD
	Ethylbenzene	<0.001	mg/L	1	0.001	0.005		06/13/17 04:31	JKD
	m- & p-Xylenes	<0.002	mg/L	1	0.002	0.01		06/13/17 04:31	JKD
	MEK	<0.001	mg/L	1	0.001	0.005		06/13/17 04:31	JKD
	Methyl Methacrylate	<0.002	mg/L	1	0.002	0.005		06/13/17 04:31	JKD
	Methylene chloride	<0.001	mg/L	1	0.001	0.005		06/13/17 04:31	JKD
	Naphthalene	<0.002	mg/L	1	0.002	0.005		06/13/17 04:31	JKD
	o-Xylene	<0.001	mg/L	1	0.001	0.005		06/13/17 04:31	JKD
	Styrene	<0.001	mg/L	1	0.001	0.005		06/13/17 04:31	JKD
	Tetrachloroethylene	<0.001	mg/L	1	0.001	0.005		06/13/17 04:31	JKD
	Toluene	<0.001	mg/L	1	0.001	0.005		06/13/17 04:31	JKD
	trans-1,3-Dichloropropene	<0.001	mg/L	1	0.001	0.005		06/13/17 04:31	JKD
	Trichloroethylene	<0.001	mg/L	1	0.001	0.005		06/13/17 04:31	JKD
	TTHMs	<0.002	mg/L	1	0.002	0.005		06/13/17 04:31	JKD
	Vinyl Acetate	<0.001	mg/L	1	0.001	0.005		06/13/17 04:31	JKD
	Vinyl Chloride	<0.001	mg/L	1	0.001	0.005		06/13/17 04:31	JKD
	Xylenes	<0.002	mg/L	1	0.002	0.005		06/13/17 04:31	JKD
	1,2-Dichloroethane-d4(surr)	113	%	1		70-130		06/13/17 04:31	JKD
	Dibromofluoromethane(surr)	113	%	1		70-130		06/13/17 04:31	JKD

LABORATORY TEST RESULTS

Job ID : 17060449

Date 7/7/2017

Client Name: Kirby Inland Marine, LP Attn: Collin MacAllister

Project Name: Wastewater Discharge Permit / Barge Cleaning Facility - Gate 5

Client Sample ID: WasteWater Discharge
Date Collected: 06/08/17
Time Collected: 13:45
Other Information:

Job Sample ID: 17060449.01
Sample Matrix Water
% Moisture

Test Method	Parameter/Test Description	Result	Units	DF	MDL	MQL	Q	Date Time	Analyst
EPA 624	Volatile Organic Compounds								
	p-Bromofluorobenzene(surr)	102	%	1		70-130		06/13/17 04:31	JKD
	Toluene-d8(surr)	94.8	%	1		70-130		06/13/17 04:31	JKD
EPA 625	Semivolatile Organic Compounds								
	1,2,4,5-Tetrachlorobenzene	<0.003	mg/L	1	0.003	0.01		06/12/17 15:25	PNS
	2,4,5-Trichlorophenol	<0.003	mg/L	1	0.003	0.01		06/12/17 15:25	PNS
	2,4-Dimethylphenol	<0.004	mg/L	1	0.004	0.01		06/12/17 15:25	PNS
	2-Methylphenol	<0.006	mg/L	1	0.006	0.01		06/12/17 15:25	PNS
	3- & 4-Methylphenols	<0.004	mg/L	1	0.004	0.02		06/12/17 15:25	PNS
	3,3-Dichlorobenzidine	<0.005	mg/L	1	0.005	0.01		06/12/17 15:25	PNS
	Anthracene	<0.002	mg/L	1	0.002	0.01		06/12/17 15:25	PNS
	Benzidine	<0.013	mg/L	1	0.013	0.01		06/12/17 15:25	PNS
	Benzo(a)anthracene	<0.002	mg/L	1	0.002	0.01		06/12/17 15:25	PNS
	Benzo(a)pyrene	<0.002	mg/L	1	0.002	0.01		06/12/17 15:25	PNS
	Bis(2-chloroethyl) ether	<0.001	mg/L	1	0.001	0.01		06/12/17 15:25	PNS
	Bis(2-ethylhexyl)phthalate	<0.002	mg/L	1	0.002	0.01	V7	06/12/17 15:25	PNS
	Chrysene	<0.002	mg/L	1	0.002	0.01		06/12/17 15:25	PNS
	Di-n-butyl phthalate	<0.002	mg/L	1	0.002	0.01		06/12/17 15:25	PNS
	Hexachlorobenzene	<0.002	mg/L	1	0.002	0.01		06/12/17 15:25	PNS
	Hexachlorobutadiene	<0.003	mg/L	1	0.003	0.01		06/12/17 15:25	PNS
	Hexachlorocyclopentadiene	<0.002	mg/L	1	0.002	0.01	V7	06/12/17 15:25	PNS
	Hexachloroethane	<0.002	mg/L	1	0.002	0.01		06/12/17 15:25	PNS
	Naphthalene	<0.003	mg/L	1	0.003	0.01		06/12/17 15:25	PNS
	Nitrobenzene	<0.002	mg/L	1	0.002	0.01	V7	06/12/17 15:25	PNS
	Nitroso-N-diethylamine	<0.003	mg/L	1	0.003	0.01		06/12/17 15:25	PNS
	N-Nitrosodibutylamine	<0.02	mg/L	1	0.02	0.01	V7	06/12/17 15:25	PNS
	Pentachlorobenzene	<0.003	mg/L	1	0.003	0.01		06/12/17 15:25	PNS
	Pentachlorophenol	<0.002	mg/L	1	0.002	0.01		06/12/17 15:25	PNS
	Phenanthrene	<0.002	mg/L	1	0.002	0.01		06/12/17 15:25	PNS
	Pyridine	<0.01	mg/L	1	0.01	0.01		06/12/17 15:25	PNS
	2,4,6-Tribromophenol(surr)	47.5	%	1		19-122		06/12/17 15:25	PNS
	2-Fluorobiphenyl(surr)	52.2	%	1		30-115		06/12/17 15:25	PNS
	2-Fluorophenol(surr)	20.1	%	1		15-115		06/12/17 15:25	PNS
	Nitrobenzene-d5(surr)	49.2	%	1		23-120		06/12/17 15:25	PNS
	Phenol-d6(surr)	8.13	%	1		10-130	S2	06/12/17 15:25	PNS
	p-Terphenyl-d14(surr)	56.7	%	1		18-137		06/12/17 15:25	PNS
ASTM D7065-11	Semivolatile Organic Compounds								
	Nonyl Phenol	<5	ug/L	1	5	5	V7	06/12/17 15:25	PNS
	Terphenyl-d14(surr)	56.7	%	1		40-140		06/12/17 15:25	PNS

LABORATORY TEST RESULTS

Job ID : 17060449

Date 7/7/2017

Client Name:	Kirby Inland Marine, LP	Attn: Collin MacAllister
Project Name:	Wastewater Discharge Permit / Barge Cleaning Facility - Gate 5	

Client Sample ID:	WasteWater Discharge	Job Sample ID:	17060449.01
Date Collected:	06/08/17	Sample Matrix	Water
Time Collected:	13:45	% Moisture	
Other Information:			

Test Method	Parameter/Test Description	Result	Units	DF	MDL	MQL	Q	Date Time	Analyst
SW-846 8015D	Non Purgeable Organic Compounds								
	Allyl alcohol	<5	mg/L	1	5	1.71		06/12/17 17:37	VMN

QUALITY CONTROL CERTIFICATE

Job ID : 17060449 **Date :** 7/7/2017

Analysis : Total Kjeldahl Nitrogen **Method : SM 4500NH3D** **Reporting Units : mg/L**

QC Batch ID : Qb17060906 **Created Date :** 06/09/17 **Created By :** Sgarcia

Samples in This QC Batch : 17060449.01

Sample Preparation : PB17060909 **Prep Method :** SM 4500NorgB **Prep Date :** 06/09/17 07:01 **Prep By :** Sgarcia

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual
TKN		< MDL	mg/L	1	0.5	0.2		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
TKN	5.00	4.92	98.4	5.00	5.02	100	2	20	80-120	

QC Type: MS and MSD
QC Sample ID: 17060423.08

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
TKN	BRL	5.00	4.71	94.2	5.00	4.97	99.4	5.4	20	80-120	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 17060449 **Date :** 7/7/2017

Analysis : **Method :** **SM 2540D** **Reporting Units : mg/L**

QC Batch ID : Qb17060913 **Created Date :** 06/08/17 **Created By :** PMehta

Samples in This QC Batch : 17060449.01

Sample Preparation : PB17060913 **Prep Method :** SM 2540D **Prep Date :** 06/08/17 16:15 **Prep By :** PMehta

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual
TSS		< MDL	mg/L	1	2.5	1.5		

QC Type: Duplicate

QC Sample ID: 17060433.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
TSS	4.4	4.4	mg/L	0	20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
TSS	500	370.1	74						72-108	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 17060449 **Date :** 7/7/2017

Analysis : Total Dissolved Solids **Method : SM 2540C** **Reporting Units : mg/L**

QC Batch ID : Qb17060931 **Created Date :** 06/09/17 **Created By :** PMehta

Samples in This QC Batch : 17060449.01

Sample Preparation : PB17060918 **Prep Method :** SM 2540C **Prep Date :** 06/09/17 11:30 **Prep By :** PMehta

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual
TDS		< MDL	mg/L	1	10	3.4		

QC Type: Duplicate

QC Sample ID: 17060431.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
TDS	990.0	992.0	mg/L	0.2	5		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
TDS	500	534.0	107						80-120	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 17060449 **Date :** 7/7/2017

Analysis : Anions **Method : EPA 300.0** **Reporting Units : mg/L**

QC Batch ID : Qb17060976 **Created Date :** 06/09/17 **Created By :** Rajeev

Samples in This QC Batch : 17060449.01

Sample Preparation : PB17060952 **Prep Method :** EPA 300.0 **Prep Date :** 06/08/17 15:00 **Prep By :** Rajeev

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual
Fluoride		< MDL	mg/L	1	0.1	0.01		
Chloride	16887-00-6	< MDL	mg/L	1	0.1	0.02		
Nitrate-N		< MDL	mg/L	1	0.1	0.01		
Sulfate		< MDL	mg/L	1	0.1	0.01		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Fluoride	1	0.922	92.2	1	0.924	92.4	0.2	20	90-110	
Chloride	1	1.01	101	1	1	100	1	20	90-110	
Nitrate-N	1	0.944	94.4	1	0.939	93.9	0.5	20	90-110	
Sulfate	1	1.07	107	1	1.04	104	2.8	20	90-110	

QC Type: MS and MSD
QC Sample ID: 17060431.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Fluoride	1.87	1	2.85	98						80-120	
Chloride	122	1	N/A	N/A						80-120	M6
Nitrite-N	1.177	1	2.16	98.3						80-120	
Nitrate-N	2.520	1	3.47	95						80-120	
Sulfate	206	1	N/A	N/A						80-120	M6

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 17060449 **Date :** 7/7/2017

Analysis : Chemical Oxygen Demand **Method : SM 5220D** **Reporting Units : mg/L**

QC Batch ID : Qb17061246 **Created Date :** 06/12/17 **Created By :** Ajohn

Samples in This QC Batch : 17060449.01

Sample Preparation : PB17061234 **Prep Method :** SM 5220D **Prep Date :** 06/12/17 11:00 **Prep By :** Ajohn

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual
COD		< MDL	mg/L	1	10	2.4		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
COD	300	299.0	99.7	300	306.0	102	2.3	20	80-120	

QC Type: MS and MSD
QC Sample ID: 17060394.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
COD	69.0	400	458.0	97.3	400	464.0	98.8	1.5	20	80-120	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 17060449 **Date :** 7/7/2017

Analysis : Total Organic Carbon **Method : SM 5310B** **Reporting Units : mg/L**

QC Batch ID : Qb17061264 **Created Date :** 06/12/17 **Created By :** Ajohn

Samples in This QC Batch : 17060449.01

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual
TOC		< MDL	mg/L	1	1	0.48		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
TOC	10	9.5	95						89.4-113	

QC Type: MS and MSD
QC Sample ID: 17060482.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
TOC	5.5	5	10.0	90	5	9.9	88	2.2	10	80-120	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 17060449 **Date :** 7/7/2017

Analysis : Metals by ICP/MS **Method :** EPA 200.8 **Reporting Units :** mg/L

QC Batch ID : Qb17061287 **Created Date :** 06/12/17 **Created By :** Ggorane

Samples in This QC Batch : 17060449.01

Digestion : PB17061253 **Prep Method :** EPA 200.8 **Prep Date :** 06/12/17 12:20 **Prep By :** JYou

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	MQL	MDL	Qual
Aluminum	7429-90-5	< MDL	mg/L	1	0.001	0.001	
Antimony	7440-36-0	< MDL	mg/L	1	0.00025	0.0002	
Arsenic	7440-38-2	< MDL	mg/L	1	0.00025	0.0001	
Barium	7440-39-3	< MDL	mg/L	1	0.00025	0.0004	
Beryllium	7440-41-7	< MDL	mg/L	1	0.00025	0.0001	
Cadmium	7440-43-9	< MDL	mg/L	1	0.00025	0.0001	
Chromium	7440-47-3	< MDL	mg/L	1	0.00025	0.0001	
Copper	7440-50-8	< MDL	mg/L	1	0.00025	0.0001	
Iron	7439-89-6	< MDL	mg/L	1	0.025	0.015	
Lead	7439-92-1	< MDL	mg/L	1	0.00025	0.0001	
Nickel	7440-02-0	< MDL	mg/L	1	0.00025	0.0001	
Selenium	7782-49-2	< MDL	mg/L	1	0.00025	0.0007	
Silver	7440-22-4	< MDL	mg/L	1	0.00025	0.0001	
Thallium	7440-28-0	< MDL	mg/L	1	0.00025	0.0001	
Zinc	7440-66-6	< MDL	mg/L	1	0.002	0.0012	

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Aluminum	0.05	0.0507	101	0.05	0.0498	99.6	1.8	20	85-115	
Antimony	0.05	0.0574	115	0.05	0.0566	113	1.3	20	85-115	
Arsenic	0.05	0.0550	110	0.05	0.0533	107	3.2	20	85-115	
Barium	0.05	0.0522	104	0.05	0.0514	103	1.5	20	85-115	
Beryllium	0.05	0.0506	101	0.05	0.0500	99.9	1.3	20	85-115	
Cadmium	0.05	0.0514	103	0.05	0.0511	102	0.6	20	85-115	
Chromium	0.05	0.0509	102	0.05	0.0492	98.4	3.4	20	85-115	
Copper	0.05	0.0516	103	0.05	0.0501	100	3	20	85-115	
Iron	5	5.1543	103	5	4.9902	99.8	3.2	20	85-115	
Lead	0.05	0.0518	104	0.05	0.0508	102	2	20	85-115	
Nickel	0.05	0.0515	103	0.05	0.0499	99.8	3.2	20	85-115	
Selenium	0.05	0.0521	104	0.05	0.0512	102	1.8	20	85-115	
Silver	0.05	0.0510	102	0.05	0.0496	99.2	2.8	20	85-115	
Thallium	0.05	0.0517	103	0.05	0.0503	101	2.8	20	85-115	
Zinc	0.05	0.0533	107	0.05	0.0520	104	2.6	20	85-115	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 17060449 **Date :** 7/7/2017

Analysis : Metals by ICP/MS **Method : EPA 200.8** **Reporting Units : mg/L**

QC Batch ID : Qb17061287 **Created Date :** 06/12/17 **Created By :** Ggorane

Samples in This QC Batch : 17060449.01

QC Type: MS and MSD
QC Sample ID: 17060487.31

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Aluminum	6.7320	0.1	6.7715	39.5						70-130	M2
Antimony	0.0168	0.1	0.1277	111						70-130	
Arsenic	0.0017	0.1	0.1096	108						70-130	
Barium	0.0493	0.1	0.1435	94.2						70-130	
Beryllium	BRL	0.1	0.0974	97.4						70-130	
Cadmium	BRL	0.1	0.1018	102						70-130	
Chromium	0.0046	0.1	0.1020	97.4						70-130	
Copper	0.0094	0.1	0.1047	95.2						70-130	
Iron	1.0610	10	10.8506	97.9						70-130	
Lead	0.0032	0.1	0.1037	100						70-130	
Nickel	0.0071	0.1	0.1049	97.8						70-130	
Selenium	0.0005	0.1	0.0986	98.1						70-130	
Silver	BRL	0.1	0.1006	101						70-130	
Thallium	BRL	0.1	0.1003	100						70-130	
Zinc	0.2712	0.1	0.3739	103						70-130	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 17060449 **Date :** 7/7/2017

Analysis : Semivolatile Organic Compounds **Method :** EPA 625 **Reporting Units :** mg/L

QC Batch ID : Qb17061305 **Created Date :** 06/13/17 **Created By :** Psaraiya

Samples in This QC Batch : 17060449.01

Extraction : PB17061232 **Prep Method :** EPA 625 **Prep Date :** 06/12/17 11:00 **Prep By :** Msoria

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	MQL	MDL	Qual
1,2,4,5-Tetrachlorobenzene	95-94-3	< MDL	mg/L	1	0.01	0.003	
2,4,5-Trichlorophenol	95-95-4	< MDL	mg/L	1	0.01	0.003	
2,4-Dimethylphenol	105-67-9	< MDL	mg/L	1	0.01	0.004	
2-Methylphenol	95-48-7	< MDL	mg/L	1	0.01	0.006	
3- & 4-Methylphenols	108-39-4 & 106-44-5	< MDL	mg/L	1	0.02	0.004	
3,3-Dichlorobenzidine	91-94-1	< MDL	mg/L	1	0.01	0.005	
Anthracene	120-12-7	< MDL	mg/L	1	0.01	0.002	
Benzidine	92-87-5	< MDL	mg/L	1	0.01	0.013	
Benzo(a)anthracene	56-55-3	< MDL	mg/L	1	0.01	0.002	
Benzo(a)pyrene	50-32-8	< MDL	mg/L	1	0.01	0.002	
Bis(2-chloroethyl) ether	111-44-4	< MDL	mg/L	1	0.01	0.001	
Bis(2-ethylhexyl)phthalate	117-81-7	< MDL	mg/L	1	0.01	0.002	
Chrysene	218-01-9	< MDL	mg/L	1	0.01	0.002	
Di-n-butyl phthalate	84-74-2	< MDL	mg/L	1	0.01	0.002	
Hexachlorobenzene	118-74-1	< MDL	mg/L	1	0.01	0.002	
Hexachlorobutadiene	87-68-3	< MDL	mg/L	1	0.01	0.003	
Hexachlorocyclopentadiene	77-47-4	< MDL	mg/L	1	0.01	0.002	
Hexachloroethane	67-72-1	< MDL	mg/L	1	0.01	0.002	
Naphthalene	91-20-3	< MDL	mg/L	1	0.01	0.003	
Nitrobenzene	98-95-3	< MDL	mg/L	1	0.01	0.002	
Nitroso-N-diethylamine	55-18-5	< MDL	mg/L	1	0.01	0.003	
N-Nitrosodibutylamine	924-16-3	< MDL	mg/L	1	0.01	0.02	
Pentachlorobenzene	608-93-5	< MDL	mg/L	1	0.01	0.003	
Pentachlorophenol	87-86-5	< MDL	mg/L	1	0.01	0.002	
Phenanthrene	85-01-8	< MDL	mg/L	1	0.01	0.002	
Pyridine	110-86-1	< MDL	mg/L	1	0.01	0.01	
2-Fluorophenol(surr)	367-12-4	38	%	1			
Phenol-d6(surr)	13127-88-3	28.9	%	1			
Nitrobenzene-d5(surr)	4165-60-0	49.7	%	1			
2-Fluorobiphenyl(surr)	132-60-8	50.4	%	1			
2,4,6-Tribromophenol(surr)	118-79-6	37.9	%	1			
p-Terphenyl-d14(surr)	1718-51-0	58.8	%	1			

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
1,2,4,5-Tetrachlorobenzene	0.05	0.087	174	0.05	0.086	172	1.2	35	40-140	L1

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 17060449 **Date :** 7/7/2017

Analysis : Semivolatile Organic Compounds **Method : EPA 625** **Reporting Units : mg/L**

QC Batch ID : Qb17061305 **Created Date :** 06/13/17 **Created By :** Psaraiya

Samples in This QC Batch : 17060449.01

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
2,4,5-Trichlorophenol	0.05	0.027	54	0.05	0.028	56	3.6	25	16-124	
2,4-Dimethylphenol	0.05	0.086	172	0.05	0.087	174	1.2	35	D-121	
2-Methylphenol	0.05	0.019	38	0.05	0.02	40	5.1	35	26-114	
3- & 4-Methylphenols	0.1	0.058	58	0.1	0.058	58	0.0	25	8-104	
3,3-Dichlorobenzidine	0.05	0.024	48	0.05	0.025	50	4.1	35	40-140	
Anthracene	0.05	0.031	62	0.05	0.031	62	0.0	35	32-118	
Benzidine	0.05	0.02	40	0.05	0.021	42	4.9	35	40-140	
Benzo(a)anthracene	0.05	0.031	62	0.05	0.031	62	0.0	25	36-115	
Benzo(a)pyrene	0.05	0.028	56	0.05	0.029	58	3.5	25	28-116	
Bis(2-chloroethyl) ether	0.05	0.026	52	0.05	0.027	54	3.8	35	23-95	
Bis(2-ethylhexyl)phthalate	0.05	0.021	42	0.05	0.023	46	9.1	35	9-133	
Chrysene	0.05	0.032	64	0.05	0.033	66	3.1	25	36-117	
Di-n-butyl phthalate	0.05	0.025	50	0.05	0.026	52	3.9	35	25-128	
Hexachlorobenzene	0.05	0.029	58	0.05	0.03	60	3.4	25	30-130	
Hexachlorobutadiene	0.05	0.024	48	0.05	0.025	50	4.1	25	5-115	
Hexachlorocyclopentadiene	0.05	0.019	38	0.05	0.021	42	10	35	D-95	
Hexachloroethane	0.05	0.025	50	0.05	0.025	50	0.0	25	14-102	
Naphthalene	0.05	0.028	56	0.05	0.028	56	0.0	25	19-112	
Nitrobenzene	0.05	0.023	46	0.05	0.023	46	0.0	25	20-109	
Nitroso-N-diethylamine	0.05	0.079	158	0.05	0.081	162	2.5	35	40-140	L1
N-Nitrosodibutylamine	0.05	0.041	82	0.05	0.044	88	7.1	35	40-140	
Pentachlorobenzene	0.05	0.145	290	0.05	0.152	304	4.7	35	40-140	L1
Pentachlorophenol	0.05	0.025	50	0.05	0.025	50	0.0	35	D-128	
Phenanthrene	0.05	0.031	62	0.05	0.032	64	3.2	25	31-119	
Pyridine	0.05	0.017	34	0.05	0.016	32	6.1	35	D-129	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 17060449 **Date :** 7/7/2017

Analysis : Volatile Organic Compounds **Method :** EPA 624 **Reporting Units :** mg/L

QC Batch ID : Qb17061317 **Created Date :** 06/12/17 **Created By :** Jdongre

Samples in This QC Batch : 17060449.01

Sample Preparation : PB17061312 **Prep Method :** EPA 624 **Prep Date :** 06/12/17 12:00 **Prep By :** Jdongre

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	MQL	MDL	Qual
1,1,1-Trichloroethane	71-55-6	< MDL	mg/L	1	0.005	0.001	
1,1,2,2-Tetrachloroethane	79-34-5	< MDL	mg/L	1	0.005	0.001	
1,1,2-Trichloroethane	79-00-5	< MDL	mg/L	1	0.005	0.001	
1,1-Dichloroethylene	75-35-4	< MDL	mg/L	1	0.005	0.001	
1,2-Dibromoethane	106-93-4	< MDL	mg/L	1	0.005	0.001	
1,2-Dichlorobenzene	95-50-1	< MDL	mg/L	1	0.005	0.001	
1,2-Dichloroethane	107-06-2	< MDL	mg/L	1	0.005	0.001	
1,2-Dichloropropane	78-87-5	< MDL	mg/L	1	0.005	0.001	
1,3-Dichlorobenzene	541-73-1	< MDL	mg/L	1	0.005	0.001	
1,4-Dichlorobenzene	106-46-7	< MDL	mg/L	1	0.005	0.001	
Acrylonitrile	107-13-1	< MDL	mg/L	1	0.005	0.003	
Amyl Acetate	628-63-7	< MDL	mg/L	1	0.005	0.002	
Benzene	71-43-2	< MDL	mg/L	1	0.005	0.001	
Bromodichloromethane	75-27-4	< MDL	mg/L	1	0.005	0.001	
Bromoform	75-25-2	< MDL	mg/L	1	0.005	0.001	
Butyl acetate	123-86-4	< MDL	mg/L	1	0.005	0.002	
Carbon tetrachloride	56-23-5	< MDL	mg/L	1	0.005	0.001	
Chlorobenzene	108-90-7	< MDL	mg/L	1	0.005	0.001	
Chloroform	67-66-3	< MDL	mg/L	1	0.005	0.001	
cis-1,3-Dichloropropene	10061-01-5	< MDL	mg/L	1	0.005	0.001	
Cyclohexane	110-82-7	< MDL	mg/L	1	0.005	0.001	
Dibromochloromethane	124-48-1	< MDL	mg/L	1	0.005	0.001	
Ethylbenzene	100-41-4	< MDL	mg/L	1	0.005	0.001	
m- & p-Xylenes	108-38-3&106-42-3	< MDL	mg/L	1	0.01	0.002	
MEK	78-93-3	< MDL	mg/L	1	0.005	0.001	
Methyl Methacrylate	80-62-6	< MDL	mg/L	1	0.005	0.002	
Methylene chloride	75-09-2	< MDL	mg/L	1	0.005	0.001	
Naphthalene	91-20-3	< MDL	mg/L	1	0.005	0.002	
o-Xylene	95-47-6	< MDL	mg/L	1	0.005	0.001	
Styrene	100-42-5	< MDL	mg/L	1	0.005	0.001	
Tetrachloroethylene	127-18-4	< MDL	mg/L	1	0.005	0.001	
Toluene	108-88-3	< MDL	mg/L	1	0.005	0.001	
trans-1,3-Dichloropropene	10061-02-6	< MDL	mg/L	1	0.005	0.001	
Trichloroethylene	79-01-6	< MDL	mg/L	1	0.005	0.001	
TTHMs		< MDL	mg/L	1	0.005	0.002	
Vinyl Acetate	108-05-4	< MDL	mg/L	1	0.005	0.001	
Vinyl Chloride	75-01-4	< MDL	mg/L	1	0.005	0.001	
Xylenes	1330-20-7	< MDL	mg/L	1	0.005	0.002	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 17060449 **Date :** 7/7/2017

Analysis : Volatile Organic Compounds **Method : EPA 624** **Reporting Units : mg/L**

QC Batch ID : Qb17061317 **Created Date :** 06/12/17 **Created By :** Jdongre

Samples in This QC Batch : 17060449.01

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual
Dibromofluoromethane(surr	1868-53-7	96.7	%	1				
1,2-Dichloroethane-d4(surr	17060-07-0	105	%	1				
Toluene-d8(surr)	2037-26-5	98	%	1				
p-Bromofluorobenzene(surr	460-00-4	98.9	%	1				

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
1,1-Dichloroethylene	0.02	0.015	75	0.02	0.015	75	0	30	75.5-124	L2
Amyl Acetate	0.02	0.024	120	0.02	0.028	140	15.4	30	70-130	L1
Benzene	0.02	0.02	100	0.02	0.021	105	4.9	30	80-120	
Chlorobenzene	0.02	0.019	95	0.02	0.02	100	5.1	30	80-120	
Methyl Methacrylate	0.02	0.024	120	0.02	0.025	125	4.1	30	70-130	
Toluene	0.02	0.019	95	0.02	0.02	100	5.1	30	77.1-121	
Trichloroethylene	0.02	0.019	95	0.02	0.02	100	5.1	30	80-120	
1,1,1-Trichloroethane	0.02	0.021	105	0.02	0.022	110	4.6	30	80-120	
1,1,2,2-Tetrachloroethane	0.02	0.022	110	0.02	0.023	115	4.4	30	80-120	
1,1,2-Trichloroethane	0.02	0.021	105	0.02	0.021	105	0	30	80-120	
1,2-Dibromoethane	0.02	0.021	105	0.02	0.021	105	0	30	80-120	
1,2-Dichlorobenzene	0.02	0.019	95	0.02	0.02	100	5.1	30	83.2-121	
1,2-Dichloroethane	0.02	0.025	125	0.02	0.025	125	0	30	74.5-129	
1,2-Dichloropropane	0.02	0.021	105	0.02	0.022	110	4.6	30	80-120	
1,3-Dichlorobenzene	0.02	0.019	95	0.02	0.019	95	0	30	80-120	
1,4-Dichlorobenzene	0.02	0.019	95	0.02	0.02	100	5.1	30	80-120	
MEK	0.02	0.023	115	0.02	0.024	120	4.3	30	47.5-159	
Acrylonitrile	0.02	0.021	105	0.02	0.022	110	4.6	30	54.5-148	
Bromodichloromethane	0.02	0.023	115	0.02	0.023	115	0	30	80-119	
Bromoform	0.02	0.023	115	0.02	0.023	115	0	30	78.8-127	
Butyl acetate	0.02	0.022	110	0.02	0.022	110	0	30	60-120	
Carbon tetrachloride	0.02	0.02	100	0.02	0.021	105	4.9	30	70-136	
Chloroform	0.02	0.021	105	0.02	0.022	110	4.6	30	79-123	
cis-1,3-Dichloropropene	0.02	0.023	115	0.02	0.023	115	0	30	80-120	
Cyclohexane	0.02	0.018	90	0.02	0.019	95	5.4	30	52.4-144	
Dibromochloromethane	0.02	0.021	105	0.02	0.022	110	4.6	30	82.8-117	
Ethylbenzene	0.02	0.019	95	0.02	0.02	100	5.1	30	80-120	
m- & p-Xylenes	0.04	0.039	97.5	0.04	0.04	100	2.5	30	80-120	
Methylene chloride	0.02	0.021	105	0.02	0.022	110	4.6	30	69.4-131	
Naphthalene	0.02	0.02	100	0.02	0.022	110	9.5	30	70.8-128	
o-Xylene	0.02	0.02	100	0.02	0.02	100	0	30	80-120	
Styrene	0.02	0.02	100	0.02	0.021	105	4.9	30	80-120	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 17060449 **Date :** 7/7/2017

Analysis : Volatile Organic Compounds **Method : EPA 624** **Reporting Units : mg/L**

QC Batch ID : Qb17061317 **Created Date :** 06/12/17 **Created By :** Jdongre

Samples in This QC Batch : 17060449.01

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Tetrachloroethylene	0.02	0.018	90	0.02	0.018	90	0	30	40-168	
trans-1,3-Dichloropropene	0.02	0.023	115	0.02	0.023	115	0	30	81.5-113	L1
Vinyl Acetate	0.02	0.02	100	0.02	0.022	110	9.5	30	41-145	
Vinyl Chloride	0.02	0.014	70	0.02	0.017	85	19.4	30	71.1-127	L2

QC Type: MS and MSD
QC Sample ID: 17060581.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
1,1-Dichloroethylene	BRL	0.02	0.017	85						81-130	
Benzene	BRL	0.02	0.024	120						84-132	
Chlorobenzene	BRL	0.02	0.022	110						72-132	
Toluene	BRL	0.02	0.022	110						72-136	
Trichloroethylene	BRL	0.02	0.023	115						75-136	
1,1,1-Trichloroethane	BRL	0.02	0.024	120						78-131	
1,1,2,2-Tetrachloroethane	BRL	0.02	0.024	120						66-145	
1,1,2-Trichloroethane	BRL	0.02	0.023	115						69-138	
1,2-Dibromoethane	BRL	0.02	0.023	115						68-139	
1,2-Dichlorobenzene	BRL	0.02	0.022	110						73-138	
1,2-Dichloroethane	BRL	0.02	0.026	130						65-154	
1,2-Dichloropropane	BRL	0.02	0.025	125						83-134	
1,3-Dichlorobenzene	BRL	0.02	0.021	105						74-136	
1,4-Dichlorobenzene	BRL	0.02	0.021	105						71-136	
MEK	0.012	0.02	0.033	105						43-160	
Acrylonitrile	BRL	0.02	0.025	125						54.5-148	
Bromodichloromethane	0.022	0.02	0.048	130						83-134	
Bromoform	0.004	0.02	0.029	125						68-135	
Butyl acetate	BRL	0.02	0.02	100						70-130	
Carbon tetrachloride	BRL	0.02	0.023	115						70-136	
Chloroform	0.024	0.02	0.043	95						68-130	
cis-1,3-Dichloropropene	BRL	0.02	0.025	125						81-126	
Cyclohexane	BRL	0.02	0.022	110						70-130	
Dibromochloromethane	0.016	0.02	0.04	120						68-139	
Ethylbenzene	BRL	0.02	0.022	110						75-133	
m- & p-Xylenes	BRL	0.04	0.04	100						78-132	
Methylene chloride	BRL	0.02	0.029	145						74-126	M8
Naphthalene	BRL	0.02	0.021	105						62-130	
o-Xylene	BRL	0.02	0.022	110						78-132	
Styrene	BRL	0.02	BRL							77-129	M2
Tetrachloroethylene	BRL	0.02	0.02	100						65-138	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 17060449 **Date :** 7/7/2017

Analysis : Volatile Organic Compounds **Method :** EPA 624 **Reporting Units :** mg/L

QC Batch ID : Qb17061317 **Created Date :** 06/12/17 **Created By :** Jdongre

Samples in This QC Batch : 17060449.01

QC Type: MS and MSD
QC Sample ID: 17060581.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
trans-1,3-Dichloropropene	BRL	0.02	0.024	120						73-129	
Vinyl Acetate	BRL	0.02	0.003	15						70-125	M2
Vinyl Chloride	BRL	0.02	0.023	115						58-135	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 17060449 **Date :** 7/7/2017

Analysis : Non Purgeable Organic Compounds **Method :** SW-846 8015D **Reporting Units :** mg/L

QC Batch ID : Qb17061320 **Created Date :** 06/12/17 **Created By :** VNair

Samples in This QC Batch : 17060449.01

Sample Preparation : PB17061317 **Prep Method :** SW-846 8015D **Prep Date :** 06/12/17 11:00 **Prep By :** VNair

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual
Allyl alcohol	107-18-6	< MDL	mg/L	1	1.71			

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Allyl alcohol	8.54	9.593	112	8.54	9.955	117	3.7	25	80-120	

QC Type: MS and MSD
QC Sample ID: 17060486.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Allyl alcohol	BRL	8.54	9.977	117						80-120	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 17060449 **Date :** 7/7/2017

Analysis : Semivolatile Organic Compounds **Method : ASTM D7065-11** **Reporting Units : ug/L**

QC Batch ID : Qb17061331 **Created Date :** 06/13/17 **Created By :** Psaraiya

Samples in This QC Batch : 17060449.01

Extraction : PB17061241 **Prep Method :** ASTM D7065-11 **Prep Date :** 06/12/17 11:00 **Prep By :** Msoria

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual
Nonyl Phenol	25154-52-3	< MDL	ug/L	1	5			
Terphenyl-d14(surr)		58.8	%	1				

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Nonyl Phenol	0.1	0.075	75	0.1	0.081	81	7.7		40-140	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 17060449 **Date :** 7/7/2017

Analysis : **Method :** **SM 4500P-E** **Reporting Units : mg/L**

QC Batch ID : Qb17061342 **Created Date :** 06/13/17 **Created By :** Ajohn

Samples in This QC Batch : 17060449.01

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual
Phosphorus	7723-14-0	< MDL	mg/L	1	0.05	0.02		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Phosphorus	0.200	0.19	93.9	0.200	0.18	90.4	3.6	20	80-120	

QC Type: MS and MSD
QC Sample ID: 17060538.05

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Phosphorus	BRL	0.200	0.20	97.5	0.200	0.19	95.5	1.8	20	80-120	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 17060449 **Date :** 7/7/2017

Analysis : Hexavalent Chromium **Method : SM 3500Cr B** **Reporting Units : mg/L**

QC Batch ID : Qb17061362 **Created Date :** 06/13/17 **Created By :** Ajohn

Samples in This QC Batch : 17060449.01

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual
Chromium, Hexavalent		< MDL	mg/L	1	0.01	0.002		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Chromium, Hexavalent	0.1	0.103	103	0.1	0.103	103	0	20	90.7-111	

QC Type: MS and MSD
QC Sample ID: 17060449.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Chromium, Hexavalent	BRL	0.1	0.099	99						80-120	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 17060449 **Date :** 7/7/2017

Analysis : Biochemical Oxygen Demand **Method : SM 5210B** **Reporting Units : mg/L**

QC Batch ID : Qb17061435 **Created Date :** 06/09/17 **Created By :** CObuekwe

Samples in This QC Batch : 17060449.01

Sample Preparation : PB17061423 **Prep Method :** SM 5210B **Prep Date :** 06/09/17 15:30 **Prep By :** CObuekwe

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual
BOD		< MDL	mg/L	1	2	2		

QC Type: Duplicate

QC Sample ID: 17060448.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
BOD	8.01	7.71	mg/L	3.8	20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
BOD	200	184.00	92	200	178.00	89	3.3	20	83.8-114.2	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 17060449 **Date :** 7/7/2017

Analysis : Carbonaceous Biochemical Oxygen Demand **Method :** SM 5210B **Reporting Units :** mg/L

QC Batch ID : Qb17061436 **Created Date :** 06/09/17 **Created By :** CObuekwe

Samples in This QC Batch : 17060449.01

Sample Preparation : PB17061424 **Prep Method :** SM 5210B **Prep Date :** 06/09/17 15:00 **Prep By :** CObuekwe

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual
CBOD		< MDL	mg/L	1	----	2		

QC Type: Duplicate

QC Sample ID: 17060462.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
CBOD	2.58	2.43	mg/L	6	20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
CBOD	200	193.00	96.5	200	186.00	93	3.7	20	83.8-114.3	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 17060449 **Date :** 7/7/2017

Analysis : Oil & Grease, Hexane Extractables **Method : EPA 1664B** **Reporting Units : mg/L**

QC Batch ID : Qb17061465 **Created Date :** 06/14/17 **Created By :** Sgarcia

Samples in This QC Batch : 17060449.01

Sample Preparation : PB17061445 **Prep Method :** EPA 1664B **Prep Date :** 06/14/17 16:00 **Prep By :** Sgarcia

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual
Oil & Grease		< MDL	mg/L	1	2	1		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Oil & Grease	40	35.6	89	40	36.0	90	1.1	11	78-114	

QC Type: MS and MSD
QC Sample ID: 17060448.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Oil & Grease	BRL	40	42.5	106						78-114	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 17060449 **Date :** 7/7/2017

Analysis : Ammonia as Nitrogen **Method : SM 4500NH3D** **Reporting Units : mg/L**

QC Batch ID : Qb17061501 **Created Date :** 06/15/17 **Created By :** Sgarcia

Samples in This QC Batch : 17060449.01

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual
Ammonia as N		< MDL	mg/L	1	0.1	0.04		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Ammonia as N	5.00	5.0	101	5.00	4.9	98	2.8	17.9	87.1-115	

QC Type: MS and MSD
QC Sample ID: 17060411.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Ammonia as N	0.7	5.00	5.5	96.4	5.00	5.4	94.6	2	17.9	85.2-121	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 17060449 **Date :** 7/7/2017

Analysis : Polychlorinated Biphenyls **Method :** EPA 608 **Reporting Units :** ug/L

QC Batch ID : Qb17061525 **Created Date :** 06/15/17 **Created By :** Psaraiya

Samples in This QC Batch : 17060449.01

Extraction : PB17061254 **Prep Method :** EPA 608 **Prep Date :** 06/12/17 13:00 **Prep By :** Msoria

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual
Aroclor 1016	12674-11-2	< MDL	ug/L	1	0.1	0.25		
Aroclor 1221	11104-28-2	< MDL	ug/L	1	0.1	0.17		
Aroclor 1232	11141-16-5	< MDL	ug/L	1	0.1	0.17		
Aroclor 1242	53469-21-9	< MDL	ug/L	1	0.1	0.17		
Aroclor 1248	12672-29-6	< MDL	ug/L	1	0.1	0.17		
Aroclor 1254	11097-69-1	< MDL	ug/L	1	0.1	0.17		
Aroclor 1260	11096-82-5	< MDL	ug/L	1	0.1	0.35		
Total PCBs		< MDL	ug/L	1	0.1	0.35		
Decachlorobiphenyl(surr)	2051-24-3	60	%	1				
Tetrachloro-m-xylene(surr)	877-09-8	55.5	%	1				

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Aroclor 1016	2	2.090	105	2	2.152	108	2.9	18.7	27.6-121	
Aroclor 1260	2	1.914	95.7	2	1.969	98.5	2.8	18	36.7-136	
Total PCBs	4	4.004	100	4	4.121	103	2.9	18.7	27.6-136	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 17060449 **Date :** 7/7/2017

Analysis : Cyanide Amenable to Chlorination **Method : SM 4500CN-CG** **Reporting Units : mg/L**

QC Batch ID : Qb17061534 **Created Date :** 06/14/17 **Created By :** SRGade

Samples in This QC Batch : 17060449.01

Sample Preparation : PB17061523 **Prep Method :** SM 4500CN-CG **Prep Date :** 06/13/17 17:00 **Prep By :** SRGade

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual
Cyanide, Amenable	57-12-5	< MDL	mg/L	1	0.01	0.006		
Cyanide, Chlorinated Portio	57-12-5	< MDL	mg/L	1	0.01	0.006		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Cyanide, Amenable	0.1	0.091	91	0.1	0.090	90	1.1	20	80-120	

QC Type: MS and MSD
QC Sample ID: 17060449.01

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Cyanide, Amenable	BRL	0.1	0.101	101	0.1	0.094	94	7.2	20	80-120	

Refer to the Definition page for terms.

QUALITY CONTROL CERTIFICATE

Job ID : 17060449 **Date :** 7/7/2017

Analysis : Alkalinity **Method : SM 2320B** **Reporting Units : mg/L**

QC Batch ID : Qb17061588 **Created Date :** 06/15/17 **Created By :** Alomeda

Samples in This QC Batch : 17060449.01

QC Type: Method Blank

Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual
Alkalinity		< MDL	mg/L	1	20	20		

QC Type: Duplicate

QC Sample ID: 17060449.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit		Qual
Alkalinity	306	305	mg/L	0.3	20		

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Alkalinity	1170	1151	98.4						80-120	

Refer to the Definition page for terms.

The Chain of Custody is a Legal Document

A&B LABS
10100 East Freeway (I-10)
Houston, TX 77029
713-453-6060
1-877-478-6060 Toll Free
713-453-6091 Fax
info@ablabs.com
www.ablabs.com

Wastewater Discharge Permit 1706044

1. REPORT TO:	2. INVOICE TO:	3. PO # 886730
Company: Kirby Inland Marine, LP	SAME	4. Turnaround Time (Business Days)
18350 Market St	Address:	☐ 1 Day * ☐ Other
Channelview, TX 77530		☐ 2 Days *
Contact: Collin MacAllister	Contact:	☐ 3 Days *
Phone: 713-201-0513	Phone:	☐ 5 Days Standard
collin.macallister@kirbyinland.com	Fax:	☑ 7 Days
	Email:	* Surcharge
CC:	Email CC:	

5. Project #

6. Project Name / Location: Barge cleaning Facility - Gate 5

7. Reporting Requirement: ☐ TRRP Limits Only ☐ TRRP Package ☑ Standard Level II

8. Sampler's Name & Company: A&B Labs/ Larry Porter

Sampler's Signature & Date: 6/8/17

9. Sample ID & Description	Lab Use Only	10. Sampling Date	10. Sampling Time	11. Comp	11. Grab	12. Matrix Waste Water	12. Matrix Water	12. Matrix Other	13. Total No. of Containers	8-P C BOD, CBOD, TSS, *Anions, Cr6, Cr3, Alk, TDS, Surfactant(SUB)	1-P N *Metals-200.8	6-VOA H LL Hg(SUB)	1-P S NH3N,COD,TOC,TKN,P,TON	3-Voa H,C VOC - 624	5-AG C SVOC-625, Nonylphenols, PCBs-608, Tributyltin (SUB)	1-P OH,T Cyanide,Amenable	1-G S O&G	3-VOA C 8015: Ally Alcohol	** Field tests: pH, Temp.,DO,TRC	18. Comments
Wastewater Discharge	DIA-AA	6/8/2017	13:45		X		X		27	X	X	X	X	X	X	X	X	X	*	Field Temp: 29.7°C
																				Field: Ph: 7.20
																				Field: DO: 4.2
																				Field Chlorine: 0.05
																				*Anions: Cl,Fl,NO3,SO4
																				*Metals: Al, Sb, As, Ba,
																				Be, Cd, Cr, Cu, Fe, Pb,
																				Ni, Se, Ag, Tl, Zn

19. RELINQUISHED BY	DATE	TIME	20. RECEIVED BY	DATE	TIME
1)	6/8/17	1500		6/8/17	1500
2)					
3)					

KNOWN HAZARDS / COMMENTS:

QT17051801

4.3 - 0.5 = 3.8

* Containers: V- 40 ml vials; 4 oz/8 oz- glass wide mouth; A/G- Amber/Glass 1 Liter; P/O- Plastic/other _____

**Preservatives: C-Cool H- HCl N- HNO3 S-H2SO4 OH- NaOH T-Na2S2O3 X- Other ZnAcetate

Temperature: 1405396 31

Intact? ☑ Y ☐ N

Initials

A&B CANNOT ACCEPT VERBAL CHANGES. PLEASE FAX WRITTEN CHANGES TO 713-453-6091 OR EMAIL THE NEW COC TO YOUR PROJECT MANAGER.

Samples will be disposed of after 30 days. A&B reserves the right to return samples.

Sample Condition Checklist

A&B JobID : **17060449**	Date Received : **06/08/2017**	Time Received : **3:00PM**
Client Name : **Kirby Inland Marine, LP**		
Temperature : **4.3-0.5cf=3.8°C**	Sample pH : **<2 Metals, NH3; >12 CN**	
Thermometer ID : **140539631**	pH Paper ID : **70578**	

	Check Points	Yes	No	N/A
1.	**Cooler seal present and signed.**		X	
2.	**Sample(s) in a cooler.**	X		
3.	**If yes, ice in cooler.**	X		
4.	**Sample(s) received with chain-of-custody.**	X		
5.	**C-O-C signed and dated.**	X		
6.	**Sample(s) received with signed sample custody seal.**		X	
7.	**Sample containers arrived intact. (If no comment).**	X		
8.	**Matrix :** **Water** ☑ **Soil** ☐ **Liquid** ☐ **Sludge** ☐ **Solid** ☐ **Cassette** ☐ **Tube** ☐ **Bulk** ☐ **Badge** ☐ **Food** ☐ **Other** ☐			
9.	**Sample(s) were received in appropriate container(s).**	X		
10.	**Sample(s) were received with proper preservative**	X		
11.	**All samples were logged or labeled.**	X		
12.	**Sample ID labels match C-O-C ID's**	X		
13.	**Bottle count on C-O-C matches bottles found.**	X		
14.	**Sample volume is sufficient for analyses requested.**	X		
15.	**Samples were received within the hold time.**	X		
16.	**VOA vials completely filled.**	X		
17.	**Sample accepted.**	X		
18	**Has client been contacted about sub-out**	X		

Comments : Include actions taken to resolve discrepancies/problem:

Cyanide: NaOH+Thio.

Received by : AHall

Check in by/date : AHall / 06/08/2017

Laboratory Analysis Report

Total Number of Pages: 47

Job ID : 17060449

10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name :
Wastewater Discharge Permit / Barge Cleaning Facility - Gate 5

Report To :	Client Name:	Kirby Inland Marine, LP	P.O.#.:	886730
	Attn:	Collin MacAllister	Sample Collected By:	Larry Porter
	Client Address:	18350 Market St.	Date Collected:	06/08/17
	City, State, Zip:	Channelview, Texas, 77530		

Client Sample ID	Matrix	A&B Sample ID
WasteWater Discharge	Water	17060449.01

This analysis was subcontracted to :
Summit Environmental Technologies, INC., 3310 Win Street
Cuyahoga Falls, Ohio, 44223

Released By: Alisha Hughes
Title: Project Manager
Date: 07/07/2017

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client.

Date Received : 06/08/2017 15:00

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

June 29, 2017

Alisha Rodriguez
A&B Laboratories
10100 East Freeway
Suite 100
Houston, TX 77029
TEL: (713) 453-6060
FAX: (713) 453-6091

RE: 17060449

Dear Alisha Rodriguez:

Order No.: 17061096

Summit Environmental Technologies, Inc. received 2 sample(s) on 6/20/2017 for the analyses presented in the following report.

There were no problems with the analytical events associated with this report unless noted in the Case Narrative.

Quality control data is within laboratory defined or method specified acceptance limits except where noted.

If you have any questions regarding these tests results, please feel free to call the laboratory.

Sincerely,

Soha Gouilos
Project Manager
3310 Win St.
Cuyahoga Falls, Ohio 44223

CC:
Alisha Hughes
customer services
Shantall Carpenter

Arkansas 88-0735, California 07256CA, Colorado, Connecticut PH-0108, Delaware, Florida NELAC E87688, Georgia E87688, Idaho OH00923, Illinois 200061, Indiana C-OH-13, Kansas E-10347, Kentucky (Underground Storage Tank) 3, Kentucky 90146, Louisiana 04061, Maryland 339, Minnesota 409711, New Hampshire 2996, New Jersey OH006, New York 11777, North Carolina 39705 and 631, North Dakota R-201, Oklahoma 9940, Oregon OH200001, Rhode Island LA000317, South Carolina 92016001, Texas T104704466-11-5, Utah OH009232011-1, Virginia 00440 and 1581, Washington C891

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Case Narrative

WO#: **17061096**
Date: **6/29/2017**

CLIENT: A&B Laboratories
Project: 17060449

WorkOrder Narrative:
17061096: This report in its entirety consists of the following documents: Cover Letter, Case Narrative, Analytical Results, QC Summary Report, Applicable Accreditation Information, Chain-of-Custody, Cooler Receipt Form, and other applicable forms as necessary. All documents contain the Summit Environmental Technologies, Inc., Work Order Number assigned to this report.

Summit Environmental Technologies, Inc., holds the accreditations/certifications listed at the bottom of the cover letter that may or may not pertain to this report. State Certificates and Scopes of Accreditation are attached as applicable. Results provided in this report for any parameter not listed on the Scope of Accreditation should be considered “not certified.”

The information contained in this analytical report is the sole property of Summit Environmental Technologies, Inc. and that of the customer. It cannot be reproduced in any form without the consent of Summit Environmental Technologies, Inc. or the customer for which this report was issued. The results contained in this report are only representative of the samples received. Conditions can vary at different times and at different sampling conditions. Summit Environmental Technologies, Inc. is not responsible for use or interpretation of the data included herein.

All results for Solid Samples are reported on an "as received" or "wet weight" basis unless indicated as "dry weight" using the "-dry" designation on the reporting units.

This report is believed to meet all of the requirements of the accrediting agency, where applicable. Any comments or problems with the analytical events associated with this report are noted below.

Second sample added for Trip Blank. SG 6/21/17

Included in this report is a copy of our most recent certification for your review, results provided in this report for any parameter not listed should be considered not certified.

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Workorder Sample Summary

WO#: **17061096**

29-Jun-17

CLIENT: A&B Laboratories
Project: 17060449

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
17061096-001	Wastewater		6/8/2017 1:45:00 PM	6/20/2017 10:25:00 AM	Wastewater
17061096-002	Trip Blank			6/20/2017 10:25:00 AM	Wastewater

Summit Environmental Technologies, Inc.
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Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

DATES REPORT

WO#: **17061096**

29-Jun-17

Client: A&B Laboratories

Project: 17060449

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
17061096-001A	Wastewater	6/8/2017 1:45:00 PM	Wastewater	Low-Level Mercury (EPA 1631)			6/26/2017 11:51:43 AM
17061096-002A	Trip Blank			Low-Level Mercury (EPA 1631)			6/26/2017 11:55:52 AM

Original

Summit Environmental Technologies, In
3310 Win S
Cuyahoga Falls, Ohio 4422
TEL: (330) 253-8211 FAX: (330) 253-448
Website: http://www.settek.co

Qualifiers and Acronyms

WO#: **17061096**
Date: **6/29/2017**

These commonly used Qualifiers and Acronyms may or may not be present in this report.

Qualifiers

U	The compound was analyzed for but was not detected.
J	The reported value is greater than the Method Detection Limit but less than the Reporting Limit.
H	The hold time for sample preparation and/or analysis was exceeded.
D	The result is reported from a dilution.
E	The result exceeded the linear range of the calibration or is estimated due to interference.
MC	The result is below the Minimum Compound Limit.
*****	The result exceeds the Regulatory Limit or Maximum Contamination Limit.
m	Manual integration was used to determine the area response.
d	Manual integration in which peak was deleted
N	The result is presumptive based on a Mass Spectral library search assuming a 1:1 response.
P	The second column confirmation exceeded 25% difference.
C	The result has been confirmed by GC/MS.
X	The result was not confirmed when GC/MS Analysis was performed.
B/MB+	The analyte was detected in the associated blank.
G	The ICB or CCB contained reportable amounts of analyte.
QC-/+	The CCV recovery failed low (-) or high (+).
R/QDR	The RPD was outside of accepted recovery limits.
QL-/+	The LCS or LCSD recovery failed low (-) or high (+).
QLR	The LCS/LCSD RPD was outside of accepted recovery limits.
QM-/+	The MS or MSD recovery failed low (-) or high (+).
QMR	The MS/MSD RPD was outside of accepted recovery limits.
QV-/+	The ICV recovery failed low (-) or high (+).
S	The spike result was outside of accepted recovery limits.
Z	Deviation; A deviation from the method was performed; Please refer to the Case Narrative for additional information

Acronyms

ND	Not Detected	**RL**	Reporting Limit
QC	Quality Control	**MDL**	Method Detection Limit
MB	Method Blank	**LOD**	Level of Detection
LCS	Laboratory Control Sample	**LOQ**	Level of Quantitation
LCSD	Laboratory Control Sample Duplicate	**PQL**	Practical Quantitation Limit
QCS	Quality Control Sample	**CRQL**	Contract Required Quantitation Limit
DUP	Duplicate	**PL**	Permit Limit
MS	Matrix Spike	**RegLvl**	Regulatory Limit
MSD	Matrix Spike Duplicate	**MCL**	Maximum Contamination Limit
RPD	Relative Percent Different	**MinCL**	Minimum Compound Limit
ICV	Initial Calibration Verification	**RA**	Reanalysis
ICB	Initial Calibration Blank	**RE**	Reextraction
CCV	Continuing Calibration Verification	**TIC**	Tentatively Identified Compound
CCB	Continuing Calibration Blank	**RT**	Retention Time
RLC	Reporting Limit Check	**CF**	Calibration Factor
DF	Dilution Factor	**RF**	Response Factor

This list of Qualifiers and Acronyms reflects the most commonly utilized Qualifiers and Acronyms for reporting. Please refer to the Analytical Notes in the Case Narrative for any Qualifiers or Acronyms that do not appear in this list or for additional information regarding the use of these Qualifiers on reported data.

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

WO#: **17061096**
Date Reported: **6/29/2017**
Company: A&B Laboratories
Address: 10100 East Freeway
Houston TX 77029
Received: 6/20/2017
Project#: 17060449

Client ID#	Lab#	Collected	Analyte	Result	Units	Qual	Matrix	Method	DF	LOD	LOQ	Run	Analyst
Wastewater	001	6/8/2017	Mercury	1.41	ng/L		Wastewater	EPA 1631 E	1	0.382	0.500	6/26/2017	AJT
Trip Blank	002		Mercury	0.723	ng/L		Wastewater	EPA 1631 E	1	0.382	0.500	6/26/2017	AJT

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC
Analytical Laboratories

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **17061096**

29-Jun-17

Client: A&B Laboratories
Project: 17060449 **BatchID:** **R71254**

Sample ID **lcs**	SampType: **LCS**	TestCode: **HG-LL_NPW(**	Units: **ng/L**	Prep Date:	RunNo: **71254**
Client ID: **LCSW**	Batch ID: **R71254**	TestNo: **E1631**		Analysis Date: **6/26/2017**	SeqNo: **1179157**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	44.7	0.500	50.00	0	89.4	71	123				

Sample ID **mblank 1**	SampType: **MBLK**	TestCode: **HG-LL_NPW(**	Units: **ng/L**	Prep Date:	RunNo: **71254**
Client ID: **PBW**	Batch ID: **R71254**	TestNo: **E1631**		Analysis Date: **6/26/2017**	SeqNo: **1179158**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.241	0.500									J

Sample ID **17061175-002AMS**	SampType: **MS**	TestCode: **HG-LL_NPW(**	Units: **ng/L**	Prep Date:	RunNo: **71254**
Client ID: **BatchQC**	Batch ID: **R71254**	TestNo: **E1631**		Analysis Date: **6/26/2017**	SeqNo: **1179169**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	58.7	0.500	50.00	1.514	114	71	123				QMR

Sample ID **17061175-002AMSD**	SampType: **MSD**	TestCode: **HG-LL_NPW(**	Units: **ng/L**	Prep Date:	RunNo: **71254**
Client ID: **BatchQC**	Batch ID: **R71254**	TestNo: **E1631**		Analysis Date: **6/26/2017**	SeqNo: **1179170**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	42.5	0.500	50.00	1.514	81.9	71	123	58.66	32.0	24	R

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine
MC	Value is below Minimum Compound Limit.	ND	Not Detected	O	RSD is greater than RSDlimit
P	Second column confirmation exceeds	PL	Permit Limit	R	RPD outside accepted recovery limits

Original

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **17061096**

29-Jun-17

Client: A&B Laboratories
Project: 17060449 **BatchID:** **R71254**

Sample ID	**17061175-002AMSD**	SampType:	**MSD**	TestCode:	**HG-LL_NPW(**	Units:	**ng/L**	Prep Date:		RunNo:	**71254**
Client ID:	**BatchQC**	Batch ID:	**R71254**	TestNo:	**E1631**			Analysis Date:	**6/26/2017**	SeqNo:	**1179170**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID	**17061342-002AMS**	SampType:	**MS**	TestCode:	**HG-LL_NPW(**	Units:	**ng/L**	Prep Date:		RunNo:	**71254**
Client ID:	**BatchQC**	Batch ID:	**R71254**	TestNo:	**E1631**			Analysis Date:	**6/26/2017**	SeqNo:	**1179181**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	48.0	0.500	50.00	0	96.0	71	123				

Sample ID	**17061342-002AMSD**	SampType:	**MSD**	TestCode:	**HG-LL_NPW(**	Units:	**ng/L**	Prep Date:		RunNo:	**71254**
Client ID:	**BatchQC**	Batch ID:	**R71254**	TestNo:	**E1631**			Analysis Date:	**6/26/2017**	SeqNo:	**1179182**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	48.6	0.500	50.00	0	97.1	71	123	47.99	1.20	24	

Sample ID	**mblank 2**	SampType:	**MBLK**	TestCode:	**HG-LL_NPW(**	Units:	**ng/L**	Prep Date:		RunNo:	**71254**
Client ID:	**PBW**	Batch ID:	**R71254**	TestNo:	**E1631**			Analysis Date:	**6/26/2017**	SeqNo:	**1179183**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.237	0.500									J

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine
MC	Value is below Minimum Compound Limit.	ND	Not Detected	O	RSD is greater than RSDlimit
P	Second column confirmation exceeds	PL	Permit Limit	R	RPD outside accepted recovery limits

Original

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **17061096**

29-Jun-17

Client: A&B Laboratories

Project: 17060449 **BatchID:** **R71254**

Sample ID	**MBLANK 3**	SampType: **MBLK**	TestCode: **HG-LL_NPW(**	Units: **ng/L**	Prep Date:	RunNo: **71254**
Client ID:	**PBW**	Batch ID: **R71254**	TestNo: **E1631**		Analysis Date: **6/26/2017**	SeqNo: **1181949**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.500									U

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	M	Manual Integration used to determine
MC	Value is below Minimum Compound Limit.	ND	Not Detected	O	RSD is greater than RSDlimit
P	Second column confirmation exceeds	PL	Permit Limit	R	RPD outside accepted recovery limits

Original

Subcontract Laboratory Chain-of-Custody

A & B Labs	Send To:	Invoice To:	Turnaround Time:
10100 East Freeway	Company: Summit Environmental Tech., INC.	Company: A&B Labs	Standard TAT: X
Suite 100	Address: 3310 Win Street	Address: 10100 East Frwy Suite 100	
Houston, TX 77029	City, State,Zip: Cuyahoga Falls, OH 44223	Houston, TX 77029	Need by:
713-453-6060	Contact: Sample receiving/Dara Gilger	Contact: Shantall Carpenter/Alisha Hughes	PO# 17060449
713-453-6091 fax	Phone: 330-253-8211	Phone: 713-453-6060 xt 127	Quote:
info@ablabs.com	Fax: 330-253-4489	Report To Email: scarpenter@ablabs.com / alishar@ablabs.com	Voa
	Email: dgilger@settek.com	Invoice To Email: accountspayable@ablabs.com	H

PLEASE EMAIL INVOICE TO: ACCOUNTSPAYABLE@ABLABS.COM

Special Instructions or Comments Send report with QC !!

Use only "Sample ID/Name" on final report. Lab #s given are for bottle identification purposes only.

Lab #	Item	Sample ID / Name	Collection Date	Collection Time	Comp	Grab	Matrix	# of Containers	Container Types	1631 - Low level Hg					Preservatives / Remarks:
17060449.01	1	WasteWater	6/8/2017	13:45		X	W	G	3	X					Rpt limit is
	2	Trip Blank					W			X					0.0005 ug/L
	3														
	4														
	5	SEND TRIP BLANK													
	6														
	7														
	8														

17061096-001 002 CK

Matrix: **WW**-Wastewater **W**-Water **DW**-Drinking Water **S**-Soil **SD**-Solid **L**-Liquid **SL**-Sludge **O**-Oil **A**-Air Bag **Can**-Air Canister **B**-OVM Badge **T**-Tube
Preservatives: **C**-Cool/Ice **H**-HCl **N**-Nitric Acid **S**-Sulfuric Acid **OH**-NaOH **T**-Sodium Thiosulfate **O**- Other (specify)_____
Containers: **VOA**-40 ml vial **A**-amber 1 liter **G**-glass 1 liter **4oz** or **8oz** - 4/8 ounce glass **P**-Plastic

Relinquished By:	Date	Time		Received By:	Date	Time
	6.19.17	1800		FedEx		
					6.20.17	1020

ab-s004-0309

DC-7
Rev. 16

Effective Date: 07/14/16

Summit Environmental Technologies, Inc.
Cooler Receipt Form

Client: A+B

Initials of person inspecting cooler and samples: CSL

Order Number: 1706196

Date Received: 6-20 Time Received: 1015 Date cooler(s) opened and samples inspected: 6-20

Number of Coolers/Boxes: _____ N/A

Shipper: (FEDEX) UPS DHL Airborne US Postal Walk-in Pickup Other: _____

Packaging: Peanuts (Bubble Wrap) Paper Foam None Other: _____

Tape on cooler/box:	(Y)	N	N/A
Custody Seals intact	Y	N	(N/A)
C-O-C in plastic	(Y)	N	N/A
Ice ✓ Blue ice _____	(present) / absent / melted		N/A
Sample Temperature IR Gun #16020459 CF 0.0 °C	2.1 °C		N/A
Radiological Testing Instrument serial #35127 (see page 2 for scan results)	Y	N	(N/A)

****Use 1 sheet per sample for Radiological Testing. If sample is HOT, the Radiological Safety Officer must be notified immediately.**

C-O-C filled out properly	(Y)	N	N/A
Samples in separate bags	(Y)	N	N/A
Sample containers intact*	(Y)	N	N/A

*If no, list broken sample(s): _____

Sample label(s) complete (ID, date, etc.)	(Y)	N	N/A
Label(s) agree with C-O-C	(Y)	N	N/A
Correct containers used	(Y)	N	N/A
Sufficient sample received	(Y)	N	N/A
Samples received within holding time	(Y)	N	
Bubbles absent from 40 mL vials**	Y	N	(N/A)

** Samples with bubbles <6mm are acceptable. Indicate bubble size if >6mm. _____

Was client contacted about samples	Y	N
Will client send new samples	Y	N

Client contact: _____

Date/Time: _____

Logged in by: _____

Comments: _____

Page 1 of 2

Texas Commission on Environmental Quality

NELAP-Recognized Laboratory Accreditation is hereby awarded to

Summit Environmental Technologies, Inc.

3310 Win Street
Cuyahoga Falls, OH 44223-3790

in accordance with Texas Water Code Chapter 5, Subchapter R, Title 30 Texas Administrative Code Chapter 25, and the National Environmental Laboratory Accreditation Program.

The laboratory's scope of accreditation includes the fields of accreditation that accompany this certificate. Continued accreditation depends upon successful ongoing participation in the program. The Texas Commission on Environmental Quality urges customers to verify the laboratory's current location(s) and accreditation status for particular methods and analyses (www.tceq.texas.gov/goto/lab). Accreditation does not imply that a product, process, system or person is approved by the Texas Commission on Environmental Quality.

Certificate Number: T104704466-16-11
Effective Date: 8/1/2016
Expiration Date: 7/31/2017

Executive Director Texas Commission on Environmental Quality

Texas Commission on Environmental Quality

NELAP - Recognized Laboratory Fields of Accreditation

Certificate: T104704466-16-11
Expiration Date: 7/31/2017
Issue Date: 8/1/2016

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Matrix: ***Drinking Water***

Method EPA 1613

Analyte	AB	Analyte ID	Method ID
2,3,7,8-Tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD)	FL	9618	10120204

Method EPA 200.7

Analyte	AB	Analyte ID	Method ID
Aluminum	FL	1000	10013806
Antimony	FL	1005	10013806
Arsenic	FL	1010	10013806
Barium	FL	1015	10013806
Beryllium	FL	1020	10013806
Boron	FL	1025	10013806
Cadmium	FL	1030	10013806
Chromium	FL	1040	10013806
Copper	FL	1055	10013806
Iron	FL	1070	10013806
Lead	FL	1075	10013806
Magnesium	FL	1085	10013806
Manganese	FL	1090	10013806
Molybdenum	FL	1100	10013806
Nickel	FL	1105	10013806
Potassium	FL	1125	10013806
Selenium	FL	1140	10013806
Silica as SiO2	FL	1990	10013806
Silver	FL	1150	10013806
Sodium	FL	1155	10013806
Thallium	FL	1165	10013806
Vanadium	FL	1185	10013806
Zinc	FL	1190	10013806

Method EPA 200.8

Analyte	AB	Analyte ID	Method ID
Aluminum	FL	1000	10014605

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Matrix: *Drinking Water*

Antimony	FL	1005	10014605
Arsenic	FL	1010	10014605
Barium	FL	1015	10014605
Beryllium	FL	1020	10014605
Cadmium	FL	1030	10014605
Chromium	FL	1040	10014605
Copper	FL	1055	10014605
Lead	FL	1075	10014605
Manganese	FL	1090	10014605
Nickel	FL	1105	10014605
Selenium	FL	1140	10014605
Silver	FL	1150	10014605
Thallium	FL	1165	10014605
Uranium	FL	3035	10014605
Zinc	FL	1190	10014605

Method EPA 245.1

Analyte	AB	Analyte ID	Method ID
Mercury	FL	1095	10036609

Method EPA 300.0

Analyte	AB	Analyte ID	Method ID
Bromide	FL	1540	10053006
Chloride	FL	1575	10053006
Fluoride	FL	1730	10053006
Nitrate as N	FL	1810	10053006
Nitrite as N	FL	1840	10053006
Sulfate	FL	2000	10053006

Method EPA 300.0 B

Analyte	AB	Analyte ID	Method ID
Bromide	FL	1540	10275408

Method EPA 300.1

Analyte	AB	Analyte ID	Method ID

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Matrix: ***Drinking Water***

Bromate	FL	1535	10053608
Bromide	FL	1540	10053608
Chlorate	FL	1570	10053608
Chlorite	FL	1595	10053608

Method EPA 314.0

Analyte	**AB**	**Analyte ID**	**Method ID**
Perchlorate	FL	1895	10055400

Method EPA 900.0

Analyte	**AB**	**Analyte ID**	**Method ID**
Gross-alpha	FL	2830	10112400
Gross-beta	FL	2840	10112400

Method EPA 903.0

Analyte	**AB**	**Analyte ID**	**Method ID**
Radium-226	FL	2965	10113209

Method EPA 904.0

Analyte	**AB**	**Analyte ID**	**Method ID**
Radium-228	FL	2970	10113607

Method EPA 908.0

Analyte	**AB**	**Analyte ID**	**Method ID**
Uranium	FL	3035	10114202

Method SM 2510 B

Analyte	**AB**	**Analyte ID**	**Method ID**
Conductivity	FL	1610	20048004

Method SM 2540 C

Analyte	**AB**	**Analyte ID**	**Method ID**
Residue-filterable (TDS)	FL	1955	20049803

Method SM 4500-CN^- C,E

Analyte	**AB**	**Analyte ID**	**Method ID**
Total Cyanide	FL	1635	20092404

Method SM 4500-CN^- G

Analyte	**AB**	**Analyte ID**	**Method ID**

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Matrix: ***Drinking Water***

Amenable cyanide	FL	1510	20093203

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Matrix: *Non-Potable Water*

Method EPA 1010

Analyte	AB	Analyte ID	Method ID
Ignitability	FL	1780	10116606

Method EPA 160.4

Analyte	AB	Analyte ID	Method ID
Residue-volatile	FL	1970	10010409

Method EPA 1613

Analyte	AB	Analyte ID	Method ID
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	FL	9516	10120204
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	FL	9519	10120204
1,2,3,4,6,7,8-Heptachlorodibenzofuran (1,2,3,4,6,7,8-HpCDF)	FL	9420	10120204
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD)	FL	9426	10120204
1,2,3,4,7,8,9-Heptachlorodibenzofuran (1,2,3,4,7,8,9-HpCDF)	FL	9423	10120204
1,2,3,4,7,8-Hexachlorodibenzofuran (1,2,3,4,7,8-HxCDF)	FL	9471	10120204
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (1,2,3,4,7,8-HxCDD)	FL	9453	10120204
1,2,3,6,7,8-Hexachlorodibenzofuran (1,2,3,6,7,8-HxCDF)	FL	9474	10120204
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin(1,2,3,6,7,8-HxCDD)	FL	9456	10120204
1,2,3,7,8,9-Hexachlorodibenzofuran (1,2,3,7,8,9-HxCDF)	FL	9477	10120204
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (1,2,3,7,8,9-HxCDD)	FL	9459	10120204
1,2,3,7,8-Pentachlorodibenzofuran (1,2,3,7,8-PeCDF)	FL	9543	10120204
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (1,2,3,7,8-PeCDD)	FL	9540	10120204
2,3,4,6,7,8-Hexachlorodibenzofuran (2,3,4,6,7,8-HxCDF)	FL	9480	10120204
2,3,4,7,8-Pentachlorodibenzofuran (2,3,4,7,8-PeCDF	FL	9549	10120204
2,3,7,8-Tetrachlorodibenzofuran (2,3,7,8-TCDF)	FL	9612	10120204
2,3,7,8-Tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD)	FL	9618	10120204
Total Heptachlorodibenzofuran (Total HpCDF)	FL	9444	10120204
Total Heptachlorodibenzo-p-dioxin (Total HpCDD)	FL	9438	10120204
Total Hexachlorodibenzofuran (Total HxCDF)	FL	9483	10120204
Total Hexachlorodibenzo-p-dioxin (Total HxCDD)	FL	9468	10120204
Total Pentachlorodibenzofuran (Total PeCDF)	FL	9552	10120204
Total Pentachlorodibenzo-p-dioxin (Total PeCDD)	FL	9555	10120204

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Matrix: *Non-Potable Water*

Total Tetrachlorodibenzofuran (Total TCDF)	FL	9615	10120204
Total Tetrachlorodibenzo-p-dioxin (Total TCDD)	FL	9609	10120204

Method EPA 1631E

Analyte	**AB**	**Analyte ID**	**Method ID**
Mercury	FL	1095	10237204

Method EPA 1664

Analyte	**AB**	**Analyte ID**	**Method ID**
n-Hexane Extractable Material (HEM) (O&G)	FL	1803	10127807
Silica Gel Treated n-Hexane Extractable Material (SGT-HEM)	FL	10220	10127807

Method EPA 200.7

Analyte	**AB**	**Analyte ID**	**Method ID**
Aluminum	FL	1000	10013806
Antimony	FL	1005	10013806
Arsenic	FL	1010	10013806
Barium	FL	1015	10013806
Beryllium	FL	1020	10013806
Boron	FL	1025	10013806
Cadmium	FL	1030	10013806
Calcium	FL	1035	10013806
Chromium	FL	1040	10013806
Cobalt	FL	1050	10013806
Copper	FL	1055	10013806
Iron	FL	1070	10013806
Lead	FL	1075	10013806
Magnesium	FL	1085	10013806
Manganese	FL	1090	10013806
Molybdenum	FL	1100	10013806
Nickel	FL	1105	10013806
Phosphorus	FL	1910	10013806
Potassium	FL	1125	10013806
Selenium	FL	1140	10013806

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Matrix: *Non-Potable Water*

Silver	FL	1150	10013806
Sodium	FL	1155	10013806
Thallium	FL	1165	10013806
Tin	FL	1175	10013806
Titanium	FL	1180	10013806
Vanadium	FL	1185	10013806
Zinc	FL	1190	10013806

Method EPA 200.8

Analyte	AB	Analyte ID	Method ID
Aluminum	FL	1000	10014605
Antimony	FL	1005	10014605
Arsenic	FL	1010	10014605
Barium	FL	1015	10014605
Beryllium	FL	1020	10014605
Cadmium	FL	1030	10014605
Chromium	FL	1040	10014605
Cobalt	FL	1050	10014605
Copper	FL	1055	10014605
Lead	FL	1075	10014605
Manganese	FL	1090	10014605
Molybdenum	FL	1100	10014605
Nickel	FL	1105	10014605
Selenium	FL	1140	10014605
Silver	FL	1150	10014605
Strontium	FL	1160	10014605
Thallium	FL	1165	10014605
Thorium	FL	1170	10014605
Uranium	FL	3035	10014605
Vanadium	FL	1185	10014605
Zinc	FL	1190	10014605

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Matrix: *Non-Potable Water*

Method EPA 245.1

Analyte	AB	Analyte ID	Method ID
Mercury	FL	1095	10036609

Method EPA 300.0

Analyte	AB	Analyte ID	Method ID
Bromide	FL	1540	10053006
Chloride	FL	1575	10053006
Fluoride	FL	1730	10053006
Nitrate as N	FL	1810	10053006
Nitrate-nitrite	FL	1820	10053006
Nitrite as N	FL	1840	10053006
Orthophosphate as P	FL	1870	10053006
Sulfate	FL	2000	10053006

Method EPA 420.1

Analyte	AB	Analyte ID	Method ID
Total phenolics	FL	1905	10079400

Method EPA 6010

Analyte	AB	Analyte ID	Method ID
Aluminum	FL	1000	10155803
Antimony	FL	1005	10155803
Arsenic	FL	1010	10155803
Barium	FL	1015	10155803
Beryllium	FL	1020	10155803
Boron	FL	1025	10155803
Cadmium	FL	1030	10155803
Calcium	FL	1035	10155803
Chromium	FL	1040	10155803
Cobalt	FL	1050	10155803
Copper	FL	1055	10155803
Iron	FL	1070	10155803
Lead	FL	1075	10155803

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Matrix: *Non-Potable Water*

Magnesium	FL	1085	10155803
Manganese	FL	1090	10155803
Molybdenum	FL	1100	10155803
Nickel	FL	1105	10155803
Phosphorus	FL	1910	10155803
Potassium	FL	1125	10155803
Selenium	FL	1140	10155803
Silver	FL	1150	10155803
Sodium	FL	1155	10155803
Thallium	FL	1165	10155803
Vanadium	FL	1185	10155803
Zinc	FL	1190	10155803

Method EPA 608

Analyte	AB	Analyte ID	Method ID
4,4'-DDD	FL	7355	10103603
4,4'-DDE	FL	7360	10103603
4,4'-DDT	FL	7365	10103603
Aldrin	FL	7025	10103603
alpha-BHC (alpha-Hexachlorocyclohexane)	FL	7110	10103603
Aroclor-1016 (PCB-1016)	FL	8880	10103603
Aroclor-1221 (PCB-1221)	FL	8885	10103603
Aroclor-1232 (PCB-1232)	FL	8890	10103603
Aroclor-1242 (PCB-1242)	FL	8895	10103603
Aroclor-1248 (PCB-1248)	FL	8900	10103603
Aroclor-1254 (PCB-1254)	FL	8905	10103603
Aroclor-1260 (PCB-1260)	FL	8910	10103603
beta-BHC (beta-Hexachlorocyclohexane)	FL	7115	10103603
Chlordane (tech.)	FL	7250	10103603
delta-BHC (delta-Hexachlorocyclohexane)	FL	7105	10103603
Dieldrin	FL	7470	10103603

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Matrix: ***Non-Potable Water***

Endosulfan I	FL	7510	10103603
Endosulfan II	FL	7515	10103603
Endosulfan sulfate	FL	7520	10103603
Endrin	FL	7540	10103603
gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	FL	7120	10103603
Heptachlor	FL	7685	10103603
Heptachlor epoxide	FL	7690	10103603
Toxaphene (Chlorinated camphene)	FL	8250	10103603

Method EPA 615

Analyte	AB	Analyte ID	Method ID
2,4,5-T	FL	8655	10105609
2,4-D	FL	8545	10105609
2,4-DB	FL	8560	10105609
Dalapon	FL	8555	10105609
Dicamba	FL	8595	10105609
Dichloroprop (Dichlorprop, Weedone)	FL	8605	10105609
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	FL	8620	10105609
MCPA	FL	7775	10105609
MCPP	FL	7780	10105609
Silvex (2,4,5-TP)	FL	8650	10105609

Method EPA 624

Analyte	AB	Analyte ID	Method ID
1,1,1-Trichloroethane	FL	5160	10107207
1,1,2,2-Tetrachloroethane	FL	5110	10107207
1,1,2-Trichloroethane	FL	5165	10107207
1,1-Dichloroethane	FL	4630	10107207
1,1-Dichloroethylene	FL	4640	10107207
1,2-Dichlorobenzene	FL	4610	10107207
1,2-Dichloroethane (Ethylene dichloride)	FL	4635	10107207
1,2-Dichloropropane	FL	4655	10107207
1,3-Dichlorobenzene	FL	4615	10107207

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Matrix: ***Non-Potable Water***

1,4-Dichlorobenzene	FL	4620	10107207
2-Chloroethyl vinyl ether	FL	4500	10107207
Acrolein (Propenal)	FL	4325	10107207
Acrylonitrile	FL	4340	10107207
Benzene	FL	4375	10107207
Bromodichloromethane	FL	4395	10107207
Bromoform	FL	4400	10107207
Carbon tetrachloride	FL	4455	10107207
Chlorobenzene	FL	4475	10107207
Chlorodibromomethane	FL	4575	10107207
Chloroethane (Ethyl chloride)	FL	4485	10107207
Chloroform	FL	4505	10107207
cis-1,3-Dichloropropene	FL	4680	10107207
Ethylbenzene	FL	4765	10107207
Methyl bromide (Bromomethane)	FL	4950	10107207
Methyl chloride (Chloromethane)	FL	4960	10107207
Methylene chloride (Dichloromethane)	FL	4975	10107207
Tetrachloroethylene (Perchloroethylene)	FL	5115	10107207
Toluene	FL	5140	10107207
trans-1,2-Dichloroethylene	FL	4700	10107207
trans-1,3-Dichloropropylene	FL	4685	10107207
Trichloroethene (Trichloroethylene)	FL	5170	10107207
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	FL	5175	10107207
Vinyl chloride	FL	5235	10107207
Xylene (total)	FL	5260	10107207

Method EPA 625

Analyte	AB	Analyte ID	Method ID
2,2'-Oxybis(1-chloropropane) (bis(2-Chloro-1-methylethyl)ether)	FL	4659	10107401
1,2,4-Trichlorobenzene	FL	5155	10107401
1,2-Dichlorobenzene	FL	4610	10107401

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Matrix: *Non-Potable Water*

1,3-Dichlorobenzene	FL	4615	10107401
1,4-Dichlorobenzene	FL	4620	10107401
2,4,6-Trichlorophenol	FL	6840	10107401
2,4-Dichlorophenol	FL	6000	10107401
2,4-Dimethylphenol	FL	6130	10107401
2,4-Dinitrophenol	FL	6175	10107401
2,4-Dinitrotoluene (2,4-DNT)	FL	6185	10107401
2,6-Dinitrotoluene (2,6-DNT)	FL	6190	10107401
2-Chloronaphthalene	FL	5795	10107401
2-Chlorophenol	FL	5800	10107401
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	FL	6360	10107401
2-Nitrophenol	FL	6490	10107401
3,3'-Dichlorobenzidine	FL	5945	10107401
4-Bromophenyl phenyl ether (BDE-3)	FL	5660	10107401
4-Chloro-3-methylphenol	FL	5700	10107401
4-Chlorophenyl phenylether	FL	5825	10107401
4-Nitrophenol	FL	6500	10107401
Acenaphthene	FL	5500	10107401
Acenaphthylene	FL	5505	10107401
Anthracene	FL	5555	10107401
Benzidine	FL	5595	10107401
Benzo(a)anthracene	FL	5575	10107401
Benzo(a)pyrene	FL	5580	10107401
Benzo(b)fluoranthene	FL	5585	10107401
Benzo(g,h,i)perylene	FL	5590	10107401
Benzo(k)fluoranthene	FL	5600	10107401
bis(2-Chloroethoxy)methane	FL	5760	10107401
bis(2-Chloroethyl) ether	FL	5765	10107401
bis(2-Ethylhexyl) phthalate (Di(2-Ethylhexyl) phthalate, DEHP)	FL	6065	10107401
Butyl benzyl phthalate	FL	5670	10107401

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Matrix: ***Non-Potable Water***

Chrysene	FL	5855	10107401
Dibenz(a,h) anthracene	FL	5895	10107401
Diethyl phthalate	FL	6070	10107401
Dimethyl phthalate	FL	6135	10107401
Di-n-butyl phthalate	FL	5925	10107401
Di-n-octyl phthalate	FL	6200	10107401
Fluoranthene	FL	6265	10107401
Fluorene	FL	6270	10107401
Hexachlorobenzene	FL	6275	10107401
Hexachlorobutadiene	FL	4835	10107401
Hexachlorocyclopentadiene	FL	6285	10107401
Hexachloroethane	FL	4840	10107401
Indeno(1,2,3-cd) pyrene	FL	6315	10107401
Isophorone	FL	6320	10107401
Naphthalene	FL	5005	10107401
Nitrobenzene	FL	5015	10107401
n-Nitrosodimethylamine	FL	6530	10107401
n-Nitrosodi-n-propylamine	FL	6545	10107401
n-Nitrosodiphenylamine	FL	6535	10107401
Pentachlorophenol	FL	6605	10107401
Phenanthrene	FL	6615	10107401
Phenol	FL	6625	10107401
Pyrene	FL	6665	10107401

Method EPA 7196

Analyte	**AB**	**Analyte ID**	**Method ID**
Chromium (VI)	FL	1045	10162400

Method EPA 7470

Analyte	**AB**	**Analyte ID**	**Method ID**
Mercury	FL	1095	10165603

Method EPA 8015

Analyte	**AB**	**Analyte ID**	**Method ID**

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Matrix: *Non-Potable Water*

Diesel range organics (DRO)	FL	9369	10305609
Ethylene glycol	FL	4785	10305609
Gasoline range organics (GRO)	FL	9408	10305609
Methanol	FL	4930	10305609

Method EPA 8081

Analyte	AB	Analyte ID	Method ID
4,4'-DDD	FL	7355	10178800
4,4'-DDE	FL	7360	10178800
4,4'-DDT	FL	7365	10178800
Aldrin	FL	7025	10178800
alpha-BHC (alpha-Hexachlorocyclohexane)	FL	7110	10178800
alpha-Chlordane	FL	7240	10178800
beta-BHC (beta-Hexachlorocyclohexane)	FL	7115	10178800
Chlordane (tech.)	FL	7250	10178800
delta-BHC (delta-Hexachlorocyclohexane)	FL	7105	10178800
Dieldrin	FL	7470	10178800
Endosulfan I	FL	7510	10178800
Endosulfan II	FL	7515	10178800
Endosulfan sulfate	FL	7520	10178800
Endrin	FL	7540	10178800
Endrin ketone	FL	7535	10178800
gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	FL	7120	10178800
gamma-Chlordane	FL	7245	10178800
Heptachlor	FL	7685	10178800
Heptachlor epoxide	FL	7690	10178800
Methoxychlor	FL	7810	10178800
Toxaphene (Chlorinated camphene)	FL	8250	10178800

Method EPA 8082

Analyte	AB	Analyte ID	Method ID
Aroclor-1016 (PCB-1016)	FL	8880	10179201
Aroclor-1221 (PCB-1221)	FL	8885	10179201

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Matrix: *Non-Potable Water*

Aroclor-1232 (PCB-1232)	FL	8890	10179201
Aroclor-1242 (PCB-1242)	FL	8895	10179201
Aroclor-1248 (PCB-1248)	FL	8900	10179201
Aroclor-1254 (PCB-1254)	FL	8905	10179201
Aroclor-1260 (PCB-1260)	FL	8910	10179201
PCBs (total)	FL	8870	10179201

Method EPA 8151

Analyte	AB	Analyte ID	Method ID
2,4,5-T	FL	8655	10183207
2,4-D	FL	8545	10183207
2,4-DB	FL	8560	10183207
Dalapon	FL	8555	10183207
Dicamba	FL	8595	10183207
Dichloroprop (Dichlorprop, Weedone)	FL	8605	10183207
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	FL	8620	10183207
MCPA	FL	7775	10183207
MCPP	FL	7780	10183207
Silvex (2,4,5-TP)	FL	8650	10183207

Method EPA 8260

Analyte	AB	Analyte ID	Method ID
1,1,1,2-Tetrachloroethane	FL	5105	10184802
1,1,1-Trichloroethane	FL	5160	10184802
1,1,2,2-Tetrachloroethane	FL	5110	10184802
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	FL	5195	10184802
1,1,2-Trichloroethane	FL	5165	10184802
1,1-Dichloroethane	FL	4630	10184802
1,1-Dichloroethylene	FL	4640	10184802
1,1-Dichloropropene	FL	4670	10184802
1,2,3-Trichlorobenzene	FL	5150	10184802
1,2,3-Trichloropropane	FL	5180	10184802
1,2,4-Trichlorobenzene	FL	5155	10184802

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Matrix: *Non-Potable Water*

1,2,4-Trimethylbenzene	FL	5210	10184802
1,2-Dibromo-3-chloropropane (DBCP)	FL	4570	10184802
1,2-Dibromoethane (EDB, Ethylene dibromide)	FL	4585	10184802
1,2-Dichlorobenzene	FL	4610	10184802
1,2-Dichloroethane (Ethylene dichloride)	FL	4635	10184802
1,2-Dichloropropane	FL	4655	10184802
1,3,5-Trimethylbenzene	FL	5215	10184802
1,3-Dichlorobenzene	FL	4615	10184802
1,3-Dichloropropane	FL	4660	10184802
1,4-Dichlorobenzene	FL	4620	10184802
2,2-Dichloropropane	FL	4665	10184802
2-Butanone (Methyl ethyl ketone, MEK)	FL	4410	10184802
2-Chloroethyl vinyl ether	FL	4500	10184802
2-Chlorotoluene	FL	4535	10184802
2-Hexanone (MBK)	FL	4860	10184802
2-Nitropropane	FL	5020	10184802
4-Chlorotoluene	FL	4540	10184802
4-Isopropyltoluene (p-Cymene)	FL	4915	10184802
4-Methyl-2-pentanone (MIBK)	FL	4995	10184802
Acetone (2-Propanone)	FL	4315	10184802
Acrolein (Propenal)	FL	4325	10184802
Acrylonitrile	FL	4340	10184802
Benzene	FL	4375	10184802
Bromobenzene	FL	4385	10184802
Bromochloromethane	FL	4390	10184802
Bromodichloromethane	FL	4395	10184802
Bromoform	FL	4400	10184802
Carbon disulfide	FL	4450	10184802
Carbon tetrachloride	FL	4455	10184802
Chlorobenzene	FL	4475	10184802

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Matrix: *Non-Potable Water*

Chlorodibromomethane	FL	4575	10184802
Chloroethane (Ethyl chloride)	FL	4485	10184802
Chloroform	FL	4505	10184802
cis-1,2-Dichloroethylene	FL	4645	10184802
cis-1,3-Dichloropropene	FL	4680	10184802
Dibromomethane (Methylene bromide)	FL	4595	10184802
Dichlorodifluoromethane (Freon-12)	FL	4625	10184802
Diethyl ether	FL	4725	10184802
Ethyl acetate	FL	4755	10184802
Ethyl methacrylate	FL	4810	10184802
Ethylbenzene	FL	4765	10184802
Hexachlorobutadiene	FL	4835	10184802
Hexachloroethane	FL	4840	10184802
Iodomethane (Methyl iodide)	FL	4870	10184802
Isopropylbenzene (Cumene)	FL	4900	10184802
m+p-xylene	FL	5240	10184802
Methyl acetate	FL	4940	10184802
Methyl bromide (Bromomethane)	FL	4950	10184802
Methyl chloride (Chloromethane)	FL	4960	10184802
Methyl methacrylate	FL	4990	10184802
Methyl tert-butyl ether (MTBE)	FL	5000	10184802
Methylene chloride (Dichloromethane)	FL	4975	10184802
Naphthalene	FL	5005	10184802
n-Butyl alcohol (1-Butanol, n-Butanol)	FL	4425	10184802
n-Butylbenzene	FL	4435	10184802
n-Propylbenzene	FL	5090	10184802
o-Xylene	FL	5250	10184802
sec-Butylbenzene	FL	4440	10184802
Styrene	FL	5100	10184802
tert-Butyl alcohol	FL	4420	10184802

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Matrix: *Non-Potable Water*

tert-Butylbenzene	FL	4445	10184802
Tetrachloroethylene (Perchloroethylene)	FL	5115	10184802
Toluene	FL	5140	10184802
trans-1,2-Dichloroethylene	FL	4700	10184802
trans-1,3-Dichloropropylene	FL	4685	10184802
trans-1,4-Dichloro-2-butene	FL	4605	10184802
Trichloroethene (Trichloroethylene)	FL	5170	10184802
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	FL	5175	10184802
Vinyl acetate	FL	5225	10184802
Vinyl chloride	FL	5235	10184802
Xylene (total)	FL	5260	10184802

Method EPA 8270

Analyte	**AB**	**Analyte ID**	**Method ID**
2,2'-Oxybis(1-chloropropane) (bis(2-Chloro-1-methylethyl)ether)	FL	4659	10186002
1,2,4-Trichlorobenzene	FL	5155	10186002
1,2-Dichlorobenzene	FL	4610	10186002
1,3-Dichlorobenzene	FL	4615	10186002
1,4-Dichlorobenzene	FL	4620	10186002
2,4,5-Trichlorophenol	FL	6835	10186002
2,4,6-Trichlorophenol	FL	6840	10186002
2,4-Dichlorophenol	FL	6000	10186002
2,4-Dimethylphenol	FL	6130	10186002
2,4-Dinitrophenol	FL	6175	10186002
2,4-Dinitrotoluene (2,4-DNT)	FL	6185	10186002
2,6-Dinitrotoluene (2,6-DNT)	FL	6190	10186002
2-Chloronaphthalene	FL	5795	10186002
2-Chlorophenol	FL	5800	10186002
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	FL	6360	10186002
2-Methylphenol (o-Cresol)	FL	6400	10186002
2-Nitrophenol	FL	6490	10186002

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Matrix: *Non-Potable Water*

3,3'-Dichlorobenzidine	FL	5945	10186002
4-Bromophenyl phenyl ether (BDE-3)	FL	5660	10186002
4-Chloro-3-methylphenol	FL	5700	10186002
4-Chlorophenyl phenylether	FL	5825	10186002
4-Methylphenol (p-Cresol)	FL	6410	10186002
4-Nitrophenol	FL	6500	10186002
Acenaphthene	FL	5500	10186002
Acenaphthylene	FL	5505	10186002
Anthracene	FL	5555	10186002
Benzidine	FL	5595	10186002
Benzo(a)anthracene	FL	5575	10186002
Benzo(a)pyrene	FL	5580	10186002
Benzo(b)fluoranthene	FL	5585	10186002
Benzo(g,h,i)perylene	FL	5590	10186002
Benzo(k)fluoranthene	FL	5600	10186002
bis(2-Chloroethoxy)methane	FL	5760	10186002
bis(2-Chloroethyl) ether	FL	5765	10186002
bis(2-Ethylhexyl) phthalate (DI(2-Ethylhexyl) phthalate, DEHP)	FL	6065	10186002
Butyl benzyl phthalate	FL	5670	10186002
Chrysene	FL	5855	10186002
Dibenz(a,h) anthracene	FL	5895	10186002
Diethyl phthalate	FL	6070	10186002
Dimethyl phthalate	FL	6135	10186002
Di-n-butyl phthalate	FL	5925	10186002
Di-n-octyl phthalate	FL	6200	10186002
Fluoranthene	FL	6265	10186002
Fluorene	FL	6270	10186002
Hexachlorobenzene	FL	6275	10186002
Hexachlorobutadiene	FL	4835	10186002
Hexachlorocyclopentadiene	FL	6285	10186002

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Matrix: ***Non-Potable Water***

Hexachloroethane	FL	4840	10186002
Indeno(1,2,3-cd) pyrene	FL	6315	10186002
Isophorone	FL	6320	10186002
Naphthalene	FL	5005	10186002
Nitrobenzene	FL	5015	10186002
n-Nitrosodimethylamine	FL	6530	10186002
n-Nitrosodi-n-propylamine	FL	6545	10186002
n-Nitrosodiphenylamine	FL	6535	10186002
Pentachlorophenol	FL	6605	10186002
Phenanthrene	FL	6615	10186002
Phenol	FL	6625	10186002
Pyrene	FL	6665	10186002
Pyridine	FL	5095	10186002

Method EPA 8290

Analyte	AB	Analyte ID	Method ID
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	FL	9516	10187403
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	FL	9519	10187403
1,2,3,4,6,7,8-Heptachlorodibenzofuran (1,2,3,4,6,7,8-HpCDF)	FL	9420	10187403
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD)	FL	9426	10187403
1,2,3,4,7,8,9-Heptachlorodibenzofuran (1,2,3,4,7,8,9-HpCDF)	FL	9423	10187403
1,2,3,4,7,8-Hexachlorodibenzofuran (1,2,3,4,7,8-HxCDF)	FL	9471	10187403
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (1,2,3,4,7,8-HxCDD)	FL	9453	10187403
1,2,3,6,7,8-Hexachlorodibenzofuran (1,2,3,6,7,8-HxCDF)	FL	9474	10187403
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin(1,2,3,6,7,8-HxCDD)	FL	9456	10187403
1,2,3,7,8,9-Hexachlorodibenzofuran (1,2,3,7,8,9-HxCDF)	FL	9477	10187403
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (1,2,3,7,8,9-HxCDD)	FL	9459	10187403
1,2,3,7,8-Pentachlorodibenzofuran (1,2,3,7,8-PeCDF)	FL	9543	10187403
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (1,2,3,7,8-PeCDD)	FL	9540	10187403
2,3,4,6,7,8-Hexachlorodibenzofuran (2,3,4,6,7,8-HxCDF)	FL	9480	10187403
2,3,4,7,8-Pentachlorodibenzofuran (2,3,4,7,8-PeCDF	FL	9549	10187403

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Matrix: *Non-Potable Water*

2,3,7,8-Tetrachlorodibenzofuran (2,3,7,8-TCDF)	FL	9612	10187403
2,3,7,8-Tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD)	FL	9618	10187403
Total Heptachlorodibenzofuran (Total HpCDF)	FL	9444	10187403
Total Heptachlorodibenzo-p-dioxin (Total HpCDD)	FL	9438	10187403
Total Hexachlorodibenzofuran (Total HxCDF)	FL	9483	10187403
Total Hexachlorodibenzo-p-dioxin (Total HxCDD)	FL	9468	10187403
Total Pentachlorodibenzofuran (Total PeCDF)	FL	9552	10187403
Total Pentachlorodibenzo-p-dioxin (Total PeCDD)	FL	9555	10187403
Total Tetrachlorodibenzofuran (Total TCDF)	FL	9615	10187403
Total Tetrachlorodibenzo-p-dioxin (Total TCDD)	FL	9609	10187403

Method EPA 8315

Analyte	AB	Analyte ID	Method ID
Formaldehyde	FL	4815	10188008

Method EPA 8321

Analyte	AB	Analyte ID	Method ID
2,4-D	FL	8545	10189001
Silvex (2,4,5-TP)	FL	8650	10189001

Method EPA 9014

Analyte	AB	Analyte ID	Method ID
Amenable cyanide	FL	1510	10193803
Total Cyanide	FL	1635	10193803

Method EPA 9020

Analyte	AB	Analyte ID	Method ID
Total organic halides (TOX)	FL	2045	10194000

Method EPA 9034

Analyte	AB	Analyte ID	Method ID
Sulfide	FL	2005	10196006

Method EPA 9040

Analyte	AB	Analyte ID	Method ID
pH	FL	1900	10197203

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Matrix: ***Non-Potable Water***

Method EPA 9050

Analyte	AB	Analyte ID	Method ID
Conductivity	FL	1610	10198808

Method EPA 9056

Analyte	AB	Analyte ID	Method ID
Bromide	FL	1540	10199607
Chloride	FL	1575	10199607
Fluoride	FL	1730	10199607
Nitrate as N	FL	1810	10199607
Nitrate-nitrite	FL	1820	10199607
Nitrite as N	FL	1840	10199607
Orthophosphate as P	FL	1870	10199607
Sulfate	FL	2000	10199607

Method EPA 9060

Analyte	AB	Analyte ID	Method ID
Total Organic Carbon (TOC)	FL	2040	10200201

Method EPA 9065

Analyte	AB	Analyte ID	Method ID
Total phenolics	FL	1905	10200405

Method EPA 9070

Analyte	AB	Analyte ID	Method ID
n-Hexane Extractable Material (HEM) (O&G)	FL	1803	10201000
Silica Gel Treated n-Hexane Extractable Material (SGT-HEM)	FL	10220	10201000

Method EPA RSK 175

Analyte	AB	Analyte ID	Method ID
Ethane	FL	4747	10212905
Ethene	FL	4752	10212905
Methane	FL	4926	10212905
n-Butane	FL	5007	10212905
n-Propane	FL	5029	10212905

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Matrix: ***Non-Potable Water***

Method	Analyte	AB	Analyte ID	Method ID
SM 2510 B	Conductivity	FL	1610	20048004
SM 2540 B	Residue-total (total solids)	FL	1950	20004608
SM 2540 C	Residue-filterable (TDS)	FL	1955	20049803
SM 2540 D	Residue-nonfilterable (TSS)	FL	1960	20004802
SM 4500-CN^- E	Total Cyanide	FL	1635	20021209
SM 4500-CN^- G	Amenable cyanide	FL	1510	20021607
SM 4500-H+ B	pH	FL	1900	20104603
SM 4500-NH3 D	Ammonia as N	FL	1515	20108809
SM 4500-P E	Phosphorus	FL	1910	20025803
SM 5210 B	Biochemical oxygen demand (BOD)	FL	1530	20027401
	Carbonaceous BOD, CBOD	FL	1555	20027401

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Matrix: *Non-Potable Water*

Method	Analyte	AB	Analyte ID	Method ID
SM 5220 D	Chemical oxygen demand (COD)	FL	1565	20027809
SM 5310 B	Total Organic Carbon (TOC)	FL	2040	20137206
SM 5540 C	Surfactants - MBAS	FL	2025	20144405

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Matrix: ***Solid & Chemical Materials***

Method	Analyte	AB	Analyte ID	Method ID
EPA 1010	Ignitability	FL	1780	10116606
EPA 1030	Ignitability	FL	1780	10117201
EPA 1311	TCLP	FL	849	10118806
EPA 6010	Aluminum	FL	1000	10155803
	Antimony	FL	1005	10155803
	Arsenic	FL	1010	10155803
	Barium	FL	1015	10155803
	Beryllium	FL	1020	10155803
	Cadmium	FL	1030	10155803
	Calcium	FL	1035	10155803
	Chromium	FL	1040	10155803
	Cobalt	FL	1050	10155803
	Copper	FL	1055	10155803
	Iron	FL	1070	10155803
	Lead	FL	1075	10155803
	Magnesium	FL	1085	10155803
	Manganese	FL	1090	10155803
	Molybdenum	FL	1100	10155803
	Nickel	FL	1105	10155803
	Potassium	FL	1125	10155803
	Selenium	FL	1140	10155803
	Silver	FL	1150	10155803
	Sodium	FL	1155	10155803

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Matrix: *Solid & Chemical Materials*

Thallium	FL	1165	10155803
Tin	FL	1175	10155803
Titanium	FL	1180	10155803
Vanadium	FL	1185	10155803
Zinc	FL	1190	10155803

Method EPA 6020

Analyte	AB	Analyte ID	Method ID
Antimony	FL	1005	10156408
Arsenic	FL	1010	10156408
Barium	FL	1015	10156408
Beryllium	FL	1020	10156408
Cadmium	FL	1030	10156408
Chromium	FL	1040	10156408
Cobalt	FL	1050	10156408
Copper	FL	1055	10156408
Lead	FL	1075	10156408
Manganese	FL	1090	10156408
Molybdenum	FL	1100	10156408
Nickel	FL	1105	10156408
Selenium	FL	1140	10156408
Silver	FL	1150	10156408
Strontium	FL	1160	10156408
Thallium	FL	1165	10156408
Vanadium	FL	1185	10156408
Zinc	FL	1190	10156408

Method EPA 7196

Analyte	AB	Analyte ID	Method ID
Chromium (VI)	FL	1045	10162400

Method EPA 7470

Analyte	AB	Analyte ID	Method ID
Mercury	FL	1095	10165807

Texas Commission on Environmental Quality

NELAP - Recognized Laboratory Fields of Accreditation

Certificate: T104704466-16-11
Expiration Date: 7/31/2017
Issue Date: 8/1/2016

Summit Environmental Technologies, Inc.

3310 Win Street
Cuyahoga Falls, OH 44223-3790

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Matrix: ***Solid & Chemical Materials***

Method EPA 7471

Analyte	AB	Analyte ID	Method ID
Mercury	FL	1095	10166004

Method EPA 8015

Analyte	AB	Analyte ID	Method ID
Diesel range organics (DRO)	FL	9369	10305609
Ethylene glycol	FL	4785	10305609
Gasoline range organics (GRO)	FL	9408	10305609

Method EPA 8081

Analyte	AB	Analyte ID	Method ID
4,4'-DDD	FL	7355	10178800
4,4'-DDE	FL	7360	10178800
4,4'-DDT	FL	7365	10178800
Aldrin	FL	7025	10178800
alpha-BHC (alpha-Hexachlorocyclohexane)	FL	7110	10178800
alpha-Chlordane	FL	7240	10178800
beta-BHC (beta-Hexachlorocyclohexane)	FL	7115	10178800
Chlordane (tech.)	FL	7250	10178800
delta-BHC (delta-Hexachlorocyclohexane)	FL	7105	10178800
Dieldrin	FL	7470	10178800
Endosulfan I	FL	7510	10178800
Endosulfan II	FL	7515	10178800
Endosulfan sulfate	FL	7520	10178800
Endrin	FL	7540	10178800
Endrin aldehyde	FL	7530	10178800
Endrin ketone	FL	7535	10178800
gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	FL	7120	10178800
gamma-Chlordane	FL	7245	10178800
Heptachlor	FL	7685	10178800
Heptachlor epoxide	FL	7690	10178800
Methoxychlor	FL	7810	10178800

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Matrix: *Solid & Chemical Materials*

Toxaphene (Chlorinated camphene)	FL	8250	10178800

Method EPA 8082

Analyte	AB	Analyte ID	Method ID
Aroclor-1016 (PCB-1016)	FL	8880	10179201
Aroclor-1221 (PCB-1221)	FL	8885	10179201
Aroclor-1232 (PCB-1232)	FL	8890	10179201
Aroclor-1242 (PCB-1242)	FL	8895	10179201
Aroclor-1248 (PCB-1248)	FL	8900	10179201
Aroclor-1254 (PCB-1254)	FL	8905	10179201
Aroclor-1260 (PCB-1260)	FL	8910	10179201
PCBs (total)	FL	8870	10179201

Method EPA 8151

Analyte	AB	Analyte ID	Method ID
2,4,5-T	FL	8655	10183207
2,4-D	FL	8545	10183207
2,4-DB	FL	8560	10183207
Dalapon	FL	8555	10183207
Dicamba	FL	8595	10183207
Dichloroprop (Dichlorprop, Weedone)	FL	8605	10183207
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	FL	8620	10183207
MCPA	FL	7775	10183207
MCPP	FL	7780	10183207
Silvex (2,4,5-TP)	FL	8650	10183207

Method EPA 8260

Analyte	AB	Analyte ID	Method ID
1,1,1,2-Tetrachloroethane	FL	5105	10184802
1,1,1-Trichloroethane	FL	5160	10184802
1,1,2,2-Tetrachloroethane	FL	5110	10184802
1,1,2-Trichloroethane	FL	5165	10184802
1,1-Dichloroethane	FL	4630	10184802
1,1-Dichloroethylene	FL	4640	10184802

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Summit Environmental Technologies, Inc.

3310 Win Street
Cuyahoga Falls, OH 44223-3790

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Matrix: *Solid & Chemical Materials*

1,1-Dichloropropene	FL	4670	10184802
1,2,3-Trichlorobenzene	FL	5150	10184802
1,2,3-Trichloropropane	FL	5180	10184802
1,2,4-Trichlorobenzene	FL	5155	10184802
1,2,4-Trimethylbenzene	FL	5210	10184802
1,2-Dibromo-3-chloropropane (DBCP)	FL	4570	10184802
1,2-Dibromoethane (EDB, Ethylene dibromide)	FL	4585	10184802
1,2-Dichlorobenzene	FL	4610	10184802
1,2-Dichloroethane (Ethylene dichloride)	FL	4635	10184802
1,2-Dichloropropane	FL	4655	10184802
1,3,5-Trimethylbenzene	FL	5215	10184802
1,3-Dichlorobenzene	FL	4615	10184802
1,3-Dichloropropane	FL	4660	10184802
1,4-Dichlorobenzene	FL	4620	10184802
2,2-Dichloropropane	FL	4665	10184802
2-Butanone (Methyl ethyl ketone, MEK)	FL	4410	10184802
2-Chloroethyl vinyl ether	FL	4500	10184802
2-Chlorotoluene	FL	4535	10184802
2-Hexanone (MBK)	FL	4860	10184802
2-Nitropropane	FL	5020	10184802
4-Chlorotoluene	FL	4540	10184802
4-Methyl-2-pentanone (MIBK)	FL	4995	10184802
Acetone (2-Propanone)	FL	4315	10184802
Acrolein (Propenal)	FL	4325	10184802
Acrylonitrile	FL	4340	10184802
Benzene	FL	4375	10184802
Bromobenzene	FL	4385	10184802
Bromochloromethane	FL	4390	10184802
Bromodichloromethane	FL	4395	10184802
Bromoform	FL	4400	10184802

Texas Commission on Environmental Quality

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3310 Win Street
Cuyahoga Falls, OH 44223-3790

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Matrix: *Solid & Chemical Materials*

Carbon disulfide	FL	4450	10184802
Carbon tetrachloride	FL	4455	10184802
Chlorobenzene	FL	4475	10184802
Chlorodibromomethane	FL	4575	10184802
Chloroethane (Ethyl chloride)	FL	4485	10184802
Chloroform	FL	4505	10184802
cis-1,2-Dichloroethylene	FL	4645	10184802
cis-1,3-Dichloropropene	FL	4680	10184802
Dibromomethane (Methylene bromide)	FL	4595	10184802
Dichlorodifluoromethane (Freon-12)	FL	4625	10184802
Diethyl ether	FL	4725	10184802
Ethyl acetate	FL	4755	10184802
Ethylbenzene	FL	4765	10184802
Methyl bromide (Bromomethane)	FL	4950	10184802
Methyl chloride (Chloromethane)	FL	4960	10184802
Methyl tert-butyl ether (MTBE)	FL	5000	10184802
Methylene chloride (Dichloromethane)	FL	4975	10184802
Naphthalene	FL	5005	10184802
n-Butyl alcohol (1-Butanol, n-Butanol)	FL	4425	10184802
n-Butylbenzene	FL	4435	10184802
n-Propylbenzene	FL	5090	10184802
sec-Butylbenzene	FL	4440	10184802
Styrene	FL	5100	10184802
tert-Butylbenzene	FL	4445	10184802
Tetrachloroethylene (Perchloroethylene)	FL	5115	10184802
Toluene	FL	5140	10184802
trans-1,2-Dichloroethylene	FL	4700	10184802
trans-1,3-Dichloropropylene	FL	4685	10184802
Trichloroethene (Trichloroethylene)	FL	5170	10184802
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	FL	5175	10184802

Texas Commission on Environmental Quality

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Matrix: ***Solid & Chemical Materials***

Vinyl acetate	FL	5225	10184802
Vinyl chloride	FL	5235	10184802
Xylene (total)	FL	5260	10184802

Method EPA 8270

Analyte	AB	Analyte ID	Method ID
2,2'-Oxybis(1-chloropropane) (bis(2-Chloro-1-methylethyl)ether)	FL	4659	10186002
1,2,4-Trichlorobenzene	FL	5155	10186002
1,2-Dichlorobenzene	FL	4610	10186002
1,3-Dichlorobenzene	FL	4615	10186002
1,4-Dichlorobenzene	FL	4620	10186002
2,4,5-Trichlorophenol	FL	6835	10186002
2,4,6-Trichlorophenol	FL	6840	10186002
2,4-Dichlorophenol	FL	6000	10186002
2,4-Dimethylphenol	FL	6130	10186002
2,4-Dinitrophenol	FL	6175	10186002
2,4-Dinitrotoluene (2,4-DNT)	FL	6185	10186002
2,6-Dinitrotoluene (2,6-DNT)	FL	6190	10186002
2-Chloronaphthalene	FL	5795	10186002
2-Chlorophenol	FL	5800	10186002
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	FL	6360	10186002
2-Methylphenol (o-Cresol)	FL	6400	10186002
2-Nitrophenol	FL	6490	10186002
3,3'-Dichlorobenzidine	FL	5945	10186002
3-Methylphenol (m-Cresol)	FL	6405	10186002
4-Bromophenyl phenyl ether (BDE-3)	FL	5660	10186002
4-Chloro-3-methylphenol	FL	5700	10186002
4-Chlorophenyl phenylether	FL	5825	10186002
4-Methylphenol (p-Cresol)	FL	6410	10186002
4-Nitrophenol	FL	6500	10186002
Acenaphthene	FL	5500	10186002

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Matrix: *Solid & Chemical Materials*

Acenaphthylene	FL	5505	10186002
Anthracene	FL	5555	10186002
Benzidine	FL	5595	10186002
Benzo(a)anthracene	FL	5575	10186002
Benzo(a)pyrene	FL	5580	10186002
Benzo(b)fluoranthene	FL	5585	10186002
Benzo(g,h,i)perylene	FL	5590	10186002
Benzo(k)fluoranthene	FL	5600	10186002
bis(2-Chloroethoxy)methane	FL	5760	10186002
bis(2-Chloroethyl) ether	FL	5765	10186002
bis(2-Ethylhexyl) phthalate (Di(2-Ethylhexyl) phthalate, DEHP)	FL	6065	10186002
Butyl benzyl phthalate	FL	5670	10186002
Chrysene	FL	5855	10186002
Dibenz(a,h) anthracene	FL	5895	10186002
Diethyl phthalate	FL	6070	10186002
Dimethyl phthalate	FL	6135	10186002
Di-n-butyl phthalate	FL	5925	10186002
Di-n-octyl phthalate	FL	6200	10186002
Fluoranthene	FL	6265	10186002
Fluorene	FL	6270	10186002
Hexachlorobenzene	FL	6275	10186002
Hexachlorobutadiene	FL	4835	10186002
Hexachlorocyclopentadiene	FL	6285	10186002
Hexachloroethane	FL	4840	10186002
Indeno(1,2,3-cd) pyrene	FL	6315	10186002
Isophorone	FL	6320	10186002
Naphthalene	FL	5005	10186002
Nitrobenzene	FL	5015	10186002
n-Nitrosodimethylamine	FL	6530	10186002
n-Nitrosodi-n-propylamine	FL	6545	10186002

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Matrix: ***Solid & Chemical Materials***

n-Nitrosodiphenylamine	FL	6535	10186002
Pentachlorophenol	FL	6605	10186002
Phenanthrene	FL	6615	10186002
Phenol	FL	6625	10186002
Pyrene	FL	6665	10186002
Pyridine	FL	5095	10186002

Method EPA 8290

Analyte	AB	Analyte ID	Method ID
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	FL	9516	10187403
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	FL	9519	10187403
1,2,3,4,6,7,8-Heptachlorodibenzofuran (1,2,3,4,6,7,8-HpCDF)	FL	9420	10187403
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD)	FL	9426	10187403
1,2,3,4,7,8,9-Heptachlorodibenzofuran (1,2,3,4,7,8,9-HpCDF)	FL	9423	10187403
1,2,3,4,7,8-Hexachlorodibenzofuran (1,2,3,4,7,8-HxCDF)	FL	9471	10187403
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (1,2,3,4,7,8-HxCDD)	FL	9453	10187403
1,2,3,6,7,8-Hexachlorodibenzofuran (1,2,3,6,7,8-HxCDF)	FL	9474	10187403
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin(1,2,3,6,7,8-HxCDD)	FL	9456	10187403
1,2,3,7,8,9-Hexachlorodibenzofuran (1,2,3,7,8,9-HxCDF)	FL	9477	10187403
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (1,2,3,7,8,9-HxCDD)	FL	9459	10187403
1,2,3,7,8-Pentachlorodibenzofuran (1,2,3,7,8-PeCDF)	FL	9543	10187403
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (1,2,3,7,8-PeCDD)	FL	9540	10187403
2,3,4,6,7,8-Hexachlorodibenzofuran (2,3,4,6,7,8-HxCDF)	FL	9480	10187403
2,3,4,7,8-Pentachlorodibenzofuran (2,3,4,7,8-PeCDF	FL	9549	10187403
2,3,7,8-Tetrachlorodibenzofuran (2,3,7,8-TCDF)	FL	9612	10187403
2,3,7,8-Tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD)	FL	9618	10187403
Total Heptachlorodibenzofuran (Total HpCDF)	FL	9444	10187403
Total Heptachlorodibenzo-p-dioxin (Total HpCDD)	FL	9438	10187403
Total Hexachlorodibenzofuran (Total HxCDF)	FL	9483	10187403
Total Hexachlorodibenzo-p-dioxin (Total HxCDD)	FL	9468	10187403
Total Pentachlorodibenzofuran (Total PeCDF)	FL	9552	10187403

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Matrix: *Solid & Chemical Materials*

Total Pentachlorodibenzo-p-dioxin (Total PeCDD)	FL	9555	10187403
Total Tetrachlorodibenzofuran (Total TCDF)	FL	9615	10187403
Total Tetrachlorodibenzo-p-dioxin (Total TCDD)	FL	9609	10187403

Method EPA 9014

Analyte	AB	Analyte ID	Method ID
Amenable cyanide	FL	1510	10193803
Total Cyanide	FL	1635	10193803

Method EPA 9023

Analyte	AB	Analyte ID	Method ID
Extractable organics halides (EOX)	FL	1720	10195003

Method EPA 9040

Analyte	AB	Analyte ID	Method ID
Corrosivity	FL	1615	10197203
pH	FL	1900	10197203

Method EPA 9045

Analyte	AB	Analyte ID	Method ID
Corrosivity	FL	1615	10244607
pH	FL	1900	10244607

Method EPA 9056

Analyte	AB	Analyte ID	Method ID
Bromide	FL	1540	10199607
Chloride	FL	1575	10199607
Fluoride	FL	1730	10199607
Nitrate as N	FL	1810	10199607
Nitrate-nitrite	FL	1820	10199607
Nitrite as N	FL	1840	10199607
Orthophosphate as P	FL	1870	10199607
Sulfate	FL	2000	10199607

Method EPA 9071

Analyte	AB	Analyte ID	Method ID
n-Hexane Extractable Material (HEM) (O&G)	FL	1803	10201806

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Matrix: *Solid & Chemical Materials*

Silica Gel Treated n-Hexane Extractable Material (SGT-HEM)	FL	10220	10201806
Method EPA 9095			
Analyte	**AB**	**Analyte ID**	**Method ID**
Paint Filter Liquids Test	FL	10312	10204203
Method EPA 9310			
Analyte	**AB**	**Analyte ID**	**Method ID**
Gross-alpha	FL	2830	10208205
Gross-beta	FL	2840	10208205

Laboratory Analysis Report

Total Number of Pages: 6

Job ID : 17060449

10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name :
Wastewater Discharge Permit / Barge Cleaning Facility - Gate 5

Report To :	Client Name:	Kirby Inland Marine, LP	P.O.#.:	886730
	Attn:	Collin MacAllister	Sample Collected By:	Larry Porter
	Client Address:	18350 Market St.	Date Collected:	06/08/17
	City, State, Zip:	Channelview, Texas, 77530		

Client Sample ID	Matrix	A&B Sample ID
WasteWater Discharge	Water	17060449.01

This analysis was subcontracted to :
Envirodyne Laboratories, Inc, 11011 Brooklet Dr, Suite 230
Houston, Texas, 77099-3543

Released By: Alisha Hughes
Title: Project Manager
Date: 06/19/2017

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client.

Date Received : 06/08/2017 15:00

Envirodyne Laboratories, Inc
11011 Brooklet Dr., # 230
Houston, TX 77099
281.568.7880 Phone
www.envirodyne.com

19 June 2017

A & B Laboratories
Alisha Rodriguez
10100 East Frwy Ste 100
Houston, TX 77029

A & B Labs

Enclosed are the results of analyses for samples received by the laboratory on 09-Jun-17 10:12. The analytical data provided relates only to the samples as received in this laboratory report.

ELI certifies that all results are NELAP compliant and performed in accordance with the referenced method except as noted in the Case Narrative or as noted with a qualifier. Any reproductions of this laboratory report should be in full and only with the written authorization from the client.

The total number of pages in this report is 5

Thank you for selecting ELI for your analytical needs. If you have any questions regarding this report, please contact us.

Sincerely,

Monica Smith
Project Manager

Certificate No: TX104704265

Envirodyne Laboratories, Inc
11011 Brooklet Dr., # 230
Houston, TX 77099
281.568.7880 Phone
www.envirodyne.com

Client:	A & B Laboratories
Project:	A & B Labs
Work Order:	17F1164

Reported:
19-Jun-17 05:40

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
17060449.01 WW DISCHARGE	17F1164-01	Water	08-Jun-17 13:45	09-Jun-17 10:12

Envirodyne Laboratories, Inc.

Monica Smith

Monica Smith, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Envirodyne Laboratories, Inc
11011 Brooklet Dr., # 230
Houston, TX 77099
281.568.7880 Phone
www.envirodyne.com

Client:	A & B Laboratories
Project:	A & B Labs
Work Order:	17F1164

Reported:
19-Jun-17 05:40

17060449.01 WW DISCHARGE

17F1164-01 (Water) Sampled: 08-Jun-17 13:45

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
Envirodyne Laboratories, Inc.										
Wet Chemistry										
Surfactants	**0.27**	0.10	mg/L	1	B7F1237	09-Jun-17	09-Jun-17 12:10	SM5540 C	AT	

Envirodyne Laboratories, Inc.

Monica Smith

Monica Smith, Project Manager

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Envirodyne Laboratories, Inc
11011 Brooklet Dr., # 230
Houston, TX 77099
281.568.7880 Phone
www.envirodyne.com

Client: A & B Laboratories
Project: A & B Labs
Work Order: 17F1164

Reported:
19-Jun-17 05:40

Wet Chemistry - Quality Control

Envirodyne Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B7F1237 - Inorganics										
Blank (B7F1237-BLK1)				Prepared & Analyzed: 09-Jun-17						
Surfactants	<0.10	0.10	mg/L							
LCS (B7F1237-BS1)				Prepared & Analyzed: 09-Jun-17						
Surfactants	1.08		mg/L	1.00		108	80-120			
Duplicate (B7F1237-DUP1)		**Source: 17F1164-01**		Prepared & Analyzed: 09-Jun-17						
Surfactants	0.260	0.10	mg/L		0.270			3.77	20	

Envirodyne Laboratories, Inc.

Monica Smith

Monica Smith, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Envirodyne Laboratories, Inc
11011 Brooklet Dr., # 230
Houston, TX 77099
281.568.7880 Phone
www.envirodyne.com

Client:	A & B Laboratories
Project:	A & B Labs
Work Order:	17F1164

Reported:
19-Jun-17 05:40

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Envirodyne Laboratories, Inc.

Monica Smith

Monica Smith, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

17F1164

Subcontract Laboratory Chain-of-Custody

A & B Labs	Sub To:	Report To:	Turnaround Time:
10100 East Freeway	Company: Envirodyne	Company: A&B Labs	Standard 5 Day TAT XXX
Suite 100	Address: 11011 Brooklet Drive, Suite 230	Address: 10100 East Frwy Suite 100	Rush:
Houston, TX 77029	Houston, TX 77099	Houston, TX 77029	Need Results by:
713-453-6060	Contact: Sample Receiving	Contact: Shantall Carpenter/Alisha Hughes	PO#
713-453-6091 fax	Phone: (281) 568-7880	Phone: 713-453-6060 xt 127	Quote:
info@ablabs.com		Email: alishar@ablabs.com	Container Type: P
		CC: scarpenter@ablabs.com	Preservatives: C

PLEASE EMAIL INVOICE TO: ACCOUNTSPAYABLE@ABLABS.COM

Special Instructions or Comments:

Lab #	Item	Sample ID / Name	Collection Date	Collection Time	Comp	Grab	Matrix	# of Containers	Container Size	Surfactant					Remarks
17060449.01	1	WW Discharge	~~6/7/2017~~ 6·8·17	13:45		X	W	1	P	X					
	2														
	3														
	4														
	5														
	6														
	7														
	8														
	9														
	10														

Matrix: **WW**-Wastewater **W**-Water **DW**-Drinking Water **S**-Soil **SD**-Solid **L**-Liquid **SL**-Sludge **O**-Oil **A**-Air Bag **Can**-Air Canister **B**-OVM Badge **T**-Tube

Preservatives: **C**-Cool/Ice **H**-HCl **N**-Nitric Acid **S**-Sulfuric Acid **OH**-NaOH **T**-Sodium Thiosulfate **O**- Other (specify)________

Containers: **VOA**-40 ml vial **A**-amber 1 liter **G**-glass 1 liter **4oz** or **8oz** - 4/8 ounce glass **P**-Plastic

Relinquished By:	Date	Time		Received By:	Date	Time
[signature]	6-9-17	10:12		[signature]	6/9/17	10:12

ab-s004-0309

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: No Chemicals used in Boiler for blowdown. Boiler runs on municipal water source

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	N/A		
Boilers	1	360	360

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

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

NOTICE OF APPLICATION AND PRELIMINARY DECISION FOR TPDES PERMIT FOR INDUSTRIAL WASTEWATER RENEWAL

Permit No. WQ0004992000

APPLICATION AND PRELIMINARY DECISION. Kirby Inland Marine, LP, 18350 Market Street, Channelview, Texas 77530, which operates Kirby Gate 5 Barge Cleaning Facility, has applied to the Texas Commission on Environmental Quality (TCEQ) for a renewal of Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0004992000, which authorizes the discharge of treated tank barge wash water and boiler blowdown on an intermittent and flow-variable basis via Outfall 013. The TCEQ received this application on October 10, 2019.

The facility is located at 16538 De Zavalla Road, in Channelview, near the City of Houston, Harris County, Texas 77530. This link to an electronic map of the site or facility's general location is provided as a public courtesy and is not part of the application or notice. For the exact location, refer to the application.
https://tceq.maps.arcgis.com/apps/webappviewer/index.html?id=db5bac44afbc468bbddd360f8168250f&marker=-95.096944%2C29.758333&level=12

The effluent is discharged directly to the Houston Ship Channel Tidal in Segment No. 1006 of the San Jacinto River Basin. The designated uses for Segment No. 1006 are navigation and industrial water supply uses.

The TCEQ executive director has completed the technical review of the application and prepared a draft permit. The draft permit, if approved, would establish the conditions under which the facility must operate. The executive director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The permit application, executive director's preliminary decision, and draft permit are available for viewing and copying at North Channel Branch Library, 15741 Wallisville Road, Houston, Texas.

PUBLIC COMMENT / PUBLIC MEETING. You may submit public comments or request a public meeting about this application. The purpose of a public meeting is to provide the opportunity to submit written or oral comment or to ask questions about the application. Generally, the TCEQ will hold a public meeting if the executive director determines that there is a significant degree of public interest in the application or if requested by a local legislator. A public meeting is not a contested case hearing.

OPPORTUNITY FOR A CONTESTED CASE HEARING. After the deadline for public comments, the executive director will consider the comments and prepare a response to all relevant and material, or significant public comments. **The response to comments, along with the executive director's decision on the application, will be mailed to everyone who submitted public comments or who requested to be on a mailing list for this application. If comments are received, the mailing will also provide instructions for requesting a contested case hearing or reconsideration of the executive director's**

decision. A contested case hearing is a legal proceeding similar to a civil trial in a state district court.

TO REQUEST A CONTESTED CASE HEARING, YOU MUST INCLUDE THE FOLLOWING ITEMS IN YOUR REQUEST: your name, address, phone number; applicant's name and proposed permit number; the location and distance of your property/activities relative to the proposed facility; a specific description of how you would be adversely affected by the facility in a way not common to the general public; a list of all disputed issues of fact that you submit during the comment period; and the statement "[I/we] request a contested case hearing." If the request for contested case hearing is filed on behalf of a group or association, the request must designate the group's representative for receiving future correspondence; identify by name and physical address an individual member of the group who would be adversely affected by the proposed facility or activity; provide the information discussed above regarding the affected member's location and distance from the facility or activity; explain how and why the member would be affected; and explain how the interests the group seeks to protect are relevant to the group's purpose.

Following the close of all applicable comment and request periods, the executive director will forward the application and any requests for reconsideration or for a contested case hearing to the TCEQ Commissioners for their consideration at a scheduled Commission meeting.

The Commission may only grant a request for a contested case hearing on issues the requestor submitted in their timely comments that were not subsequently withdrawn. **If a hearing is granted, the subject of a hearing will be limited to disputed issues of fact or mixed questions of fact and law relating to relevant and material water quality concerns submitted during the comment period. TCEQ may act on an application to renew a permit for discharge of wastewater without providing an opportunity for a contested case hearing if certain criteria are met.**

EXECUTIVE DIRECTOR ACTION. The executive director may issue final approval of the application unless a timely contested case hearing request or a timely request for reconsideration is filed. If a timely hearing request or request for reconsideration is filed, the executive director will not issue final approval of the permit and will forward the application and requests to the TCEQ Commissioners for their consideration at a scheduled Commission meeting.

MAILING LIST. If you submit public comments, a request for a contested case hearing or a reconsideration of the executive director's decision, you will be added to the mailing list for this specific application to receive future public notices mailed by the Office of the Chief Clerk. In addition, you may request to be added to: (1) the permanent list for a specific applicant name and permit number; and (2) the mailing list for a specific county. If you wish to be placed on the permanent and the county mailing list, clearly specify which list(s) and send your request to TCEQ Office of the Chief Clerk at the address below.

All written public comments and public meeting requests must be submitted to the Office of the Chief Clerk, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 or electronically at https://www14.tceq.texas.gov/epic/eComment/ within 30 days from the date of newspaper publication of this notice.

INFORMATION AVAILABLE ONLINE. For details about the status of the application, visit the Commissioners' Integrated Database at https://www14.tceq.texas.gov/epic/eCID/. Search

the database using the permit number for this application, which is provided at the top of this notice.

AGENCY CONTACTS AND INFORMATION. Public comments and requests must be submitted either electronically at https://www14.tceq.texas.gov/epic/eComment/, or in writing to the Texas Commission on Environmental Quality, Office of the Chief Clerk, MC-105, P.O. Box 13087, Austin, Texas 78711-3087. Please be aware that any contact information you provide, including your name, phone number, email address, and physical address will become part of the agency's public record. For more information about this permit application or the permitting process, please call the TCEQ Public Education Program, toll free, at 1-800-687-4040 or visit their website at https://www.tceq.texas.gov/agency/decisions/participation/permitting-participation. Si desea información en Español, puede llamar al 1-800-687-4040.

Further information may also be obtained from Kirby Inland Marine, LP at the address stated above or by calling Mr. Steven Caruselle, General Manager, Facilities, at 713-435-1825.

Issued:

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

DESCRIPTION OF APPLICATION

Applicant:	Kirby Inland Marine, LP; Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0004992000 (EPA I.D. No. TX0133604)
Regulated activity:	Industrial wastewater permit
Type of application:	Renewal
Request:	Renewal without changes
Authority:	Federal Clean Water Act (CWA) §402; Texas Water Code (TWC) §26.027; 30 Texas Administrative Code (TAC) Chapter 305, Subchapters C-F, and Chapters 307 and 319; commission policies; and Environmental Protection Agency (EPA) guidelines

EXECUTIVE DIRECTOR RECOMMENDATION

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

REASON FOR PROJECT PROPOSED

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

PROJECT DESCRIPTION AND LOCATION

The applicant currently operates the Kirby Gate 5 Barge Cleaning Facility, a conventional tank barge cleaning facility.

Residual liquid cargo is removed from barges via stripping pumps prior to washing. Impingement cleaning devices (Butterworth) are then lowered into the tanks for hot or cold water washing. Tank barge wash water is pumped to a solid settling drum and then to an oil/water separator. Boiler blowdown is also routed to the oil/water separator. Wash water and boiler blowdown from the oil/water separator is routed to one of three batch tanks where it is held for evaluation prior to entering the equalization tank, which provides a three-day retention time, allowing for thorough mixing and pH adjustment. The effluent is then routed to the dissolved air flotation unit, where finer solids are removed via chemical and mechanical manipulation. Next, the effluent is routed to one of two membrane biological reactors (MBR), where microorganisms consume the organics. The effluent is then routed through a diffused air flotation filter where the suspended solids are removed. The treated effluent is routed to the permeate tank, while filter reject is routed back to the MBR. From the permeate tank, the treated effluent is either transferred across the wastewater treatment unit (WWTU) to be used in the barge washing process again or to a proposed holding tank for batch discharge. Domestic wastewater is discharged into the sanitary sewer system for Harris County Freshwater Supply District No. 6.

The facility is located at 16538 De Zavalla Road, in Channelview, near the City of Houston, Harris County, Texas 77530.

Discharge Route and Designated Uses
The effluent is discharged directly to the Houston Ship Channel Tidal in Segment No. 1006 of the San Jacinto River Basin. The designated uses for Segment No. 1006 are navigation and industrial water supply uses. The effluent limits in the draft permit will maintain and protect the existing instream uses. All determinations are preliminary and subject to additional review and revisions.

Endangered Species Review
The discharge from this permit is not expected to have an effect on any federal endangered or threatened aquatic or aquatic-dependent species or proposed species or their critical habitat. This determination is based on the United States Fish and Wildlife Service's (USFWS's) biological opinion on the State of Texas authorization of the TPDES (September 14, 1998; October 21, 1998 update). To make this determination for TPDES permits, TCEQ and the EPA only considered aquatic or aquatic-dependent species occurring in watersheds of critical concern or high priority as listed in Appendix A of the USFWS's biological opinion. The determination is subject to reevaluation due to subsequent updates or amendments to the biological opinion. The permit does not require EPA review with respect to the presence of endangered or threatened species.

Impaired Water Bodies
Segment No. 1006 is currently listed on the state's inventory of impaired and threatened waters, the 2016 CWA §303(d) list. The listings are specifically for elevated bacteria levels, dioxin and polychlorinated biphenyls (PCBS) in edible tissue, mercury, and toxicity in sediment.

- Bacteria levels (general use) in Goodyear Creek from the confluence with Greens Bayou Tidal to Granada Street in Harris County (AU1006_05). The draft permit does not authorize the discharge of domestic wastewater. Domestic wastewater is treated off-site therefore the discharge is not expected to contribute to the bacteria impairment.

- Dioxin in edible tissue in the Houston Ship Channel (HSC) Tidal from the Greens Bayou confluence to the HSC/San Jacinto River Tidal (Segment No. 1005) confluence (AUs 1006_01 and 1006_02); Greens Bayou Tidal from the HSC confluence to a point 0.7 kilometer (0.4 mile) upstream of the Halls Bayou confluence (AU 1006_03); Patrick Bayou Tidal from the confluence with the HSC to 100 meters (328 feet) upstream of the railroad bridge (AU1006_04); Goodyear Creek from the confluence with Greens Bayou Tidal to Granada Street in Harris County (AU 1006_05); Tucker Bayou from the HSC confluence to a point 2.7 kilometers (1.7 miles) upstream (AU 1006_06); and Carpenters Bayou from the HSC confluence to the lower boundary of 1006B (Carpenters Bayou (above tidal)) (2.3 kilometers (1.4 miles) upstream from the HSC confluence) (AU 1006_07). The facility does not manufacture or use dioxin. In addition, Other Requirement No. 4 is continued from the existing permit and prohibits the discharge of wastewater from the cleaning of barges or other vessels or containers carrying dioxins.

- PCBs in edible tissue in the Houston Ship Channel (HSC) Tidal from the Greens Bayou confluence to the HSC/San Jacinto River Tidal (Segment No. 1005) confluence (AUs 1006_01 and 1006_02); Greens Bayou Tidal from the HSC confluence to a point 0.7 kilometer (0.4 mile) upstream of the Halls Bayou confluence (AU 1006_03); Patrick Bayou Tidal from the confluence with the HSC to 100 meters (328 feet) upstream of the railroad bridge (AU1006_04); Goodyear Creek from the confluence with Greens Bayou Tidal to Granada Street in Harris County (AU 1006_05); Tucker Bayou from the HSC confluence to a point 2.7 kilometers (1.7 miles) upstream (AU 1006_06); and Carpenters Bayou from the HSC confluence to the lower boundary of 1006B (Carpenters Bayou (above tidal)) (2.3 kilometers (1.4 miles) upstream from the HSC confluence) (AU 1006_07). Other Requirement No. 4 is

continued from the existing permit and prohibits the discharge of wastewater from the cleaning of barges or other vessels or containers carrying PCBs. In addition, a re-test requirement has been included in the draft permit. Once analytical data is submitted, it will be screened against calculated water quality-based effluent limitations (see Appendix B), and if necessary the permit will be re-open to include effluent limitations and/or monitoring requirements.

- Mercury in water in Patrick Bayou Tidal from the confluence with the HSC to 100 meters (328 feet) upstream of the railroad bridge (AU 1006_04). Effluent limitations for total mercury are continued in the draft permit from the existing permit and are more protective than the newly calculated water quality-based effluent limitations. In addition, the monthly effluent report data for the period June 2016 through February 2020, did not have any exceedances for mercury.

- Toxicity in sediment in water in Patrick Bayou Tidal from the confluence with the HSC to 100 meters (328 feet) upstream of the railroad bridge (AU 1006_04). The draft permit is a renewal of an existing authorization with no changes. This facility is not expected to contribute to the toxicity in sediment.

Completed Total Maximum Daily Loads (TMDLs)
Segment No. 1006 is included in the agency's document *Fourteen Total Maximum Daily Loads for Nickel in the Houston Ship Channel System* (TMDL Project No. 1). The discharge was screened using the methods outlined in the documents *Procedures to Implement the Texas Surface Water Quality Standards* (IPs), TCEQ, June 2010. The discharge authorized in this permit was evaluated consistent with established procedures to ensure that nickel criteria are maintained. The TMDL indicates that the water quality criteria for dissolved nickel are generally being met in the Houston Ship Channel. The daily maximum limit of 0.311 mg/L nickel in the existing permit is consistent with the TMDL and the TMDL Implementation Plan.

Dissolved Oxygen
An analysis of the discharge via Outfall 013 was conducted using a calibrated QUAL-TX model. The QUAL-TX model used for evaluating the discharge is described and documented in the *Waste Load Evaluation WLE-1R for the Houston Ship Channel System* (September 2006). Based on model results, the existing effluent limit of 22 mg/L BOD_5 is predicted to be adequate to ensure that dissolved oxygen levels will be maintained above the criterion established by the Standard Implementation Team for the Houston Ship Channel Tidal (2.0 mg/L).

SUMMARY OF EFFLUENT DATA

The following is a quantitative description of the discharge described in the monthly effluent report data for the period June 2016 through February 2020. The "Avg of Daily Avg" values presented in the following table are the average of all daily average values for the reporting period for each pollutant. The "Max of Daily Max" values presented in the following table are the individual maximum values for the reporting period for each pollutant. Flows are expressed in million gallons per day (MGD). All pH values are expressed in standard units (SU).

Flow

Outfall	Frequency	Avg of Daily Avg, MGD	Max of Daily Max, MGD
013	Intermittent	0.0068	0.0939

Effluent Characteristics

Outfall	Pollutant	Avg of Daily Avg	Max of Daily Max
		mg/L	mg/L
013	Biochemical Oxygen Demand, 5-day (BOD_5)	5.20	14.1
	Total Suspended Solids (TSS)	5.11	13.6
	Oil and Grease	1.59	23.8
	Cadmium, Total	N/A	0.002
	Chromium, Total	N/A	0.0041
	Copper, Total	N/A	0.0729
	Lead, Total	N/A	0.0052
	Mercury, Total	N/A	0.0009
	Nickel, Total	N/A	0.083
	Zinc, Total	N/A	0.076
	Cyanide, Total	N/A	0.02
	pH	6.95 SU (min)	8.15 SU

No effluent limit violations were documented in the monthly effluent reports.

DRAFT PERMIT CONDITIONS

The draft permit authorizes the discharge of treated tank barge wash water and boiler blowdown on an intermittent and flow-variable basis via Outfall 013. See Appendix D for a comparison of calculated technology-based effluent limitations, water quality-based effluent limitations, existing effluent limitations, and the proposed final effluent limitations established in the draft permit.

OUTFALL LOCATIONS

Outfall	Latitude	Longitude
013	29.759267 N	95.095893 W

Technology-Based Effluent Limitations

Regulations in Title 40 of the Code of Federal Regulations (40 CFR) require that technology-based limitations be placed in wastewater discharge permits based on effluent limitations guidelines, where applicable, or on best professional judgment (BPJ) in the absence of guidelines. The discharge of transportation equipment cleaning wastewater via Outfall 013 is subject to federal effluent limitation guidelines (ELGs) at 40 CFR Part 442 – Transportation Equipment Cleaning Point Source Category, Subpart C – Tank Barges and Ocean/Sea Tankers Transporting Chemical and Petroleum Cargos. Development of technology-based effluent limitations is presented in Appendix A.

Water Quality-Based Effluent Limitations

Calculations of water quality-based effluent limitations for the protection of aquatic life and human health are presented in Appendix B. Aquatic life criteria established in Table 1 and human health criteria established in Table 2 of 30 TAC Chapter 307 are incorporated into the calculations, as are recommendations in the Water Quality Assessment Team's memorandum dated November 8, 2019. TCEQ practice for determining significant potential is to compare the reported analytical data from the facility against percentages of the calculated daily average water quality-based effluent limitation. Permit limitations are required when analytical data reported in the application exceeds 85 percent of the calculated daily average water quality-based effluent limitation. Monitoring and reporting is required when analytical data reported in the application exceeds 70 percent of the calculated daily average water quality-based effluent limitation.

A site-specific water-effect-ratio of 1.8 was used in the calculated water quality-based effluent limits (see Appendix B) for total copper based on 30 TAC Chapter 307, Appendix E.

The analytical data submitted with the application was from May 2017 to June 2017. The applicant requested that the analytical data submitted with the renewal application be acceptable because the current permit was issued with a shorter term, and therefore the short permit length pose a financial burden on the facility. TCEQ allows the submittal of analytical data if the analytical is one-year or less from the date the permit application is submitted. Therefore, Other Requirement No. 1 has been added to the draft permit for the applicant to submit analytical data. Once the analytical data is received it will be screened against the calculated water quality-based effluent limitations (see Appendix B) and if needed the permit will be re-open to include effluent limitations and/or monitoring requirements.

The effluent limits in the existing permit were compared to the calculated water quality-based effluent limits to determine whether the existing limits are still protective. The effluent limits in the existing permit are as protective as the newly calculated water quality-based effluent limitations and are continued in the draft permit. The daily maximum monitoring and reporting requirement for total cyanide is continued in the draft permit in accordance with antibacksliding regulations in 40 CFR § 122.44(l)(2)(B)(1).

Total Dissolved Solids (TDS), Chloride, and Sulfate Screening
Segment No. 1006, which receives the discharge from this facility, does not have criteria established for TDS, chloride, or sulfate in 30 TAC Chapter 307; therefore, no screening was performed for TDS, chloride, or sulfate in the effluent.

pH Screening
The existing permit includes pH limits of 6.0 – 9.0 SU at Outfall 013, which discharges directly into Houston Ship Channel Tidal, Segment No. 1006. Screening was performed to ensure that these existing pH limits would not cause a violation of the 6.5 – 9.0 SU pH criteria for Houston Ship Channel Tidal (see Appendix C). The existing effluent limits of 6.0 – 9.0 SU are adequate to ensure that the discharge will not violate the pH criteria in Houston Ship Channel Tidal. These limits have been carried forward in the draft permit.

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

SUMMARY OF CHANGES FROM APPLICATION

The following changes have been made from the application, which make the draft permit more stringent.

1. Analytical data was submitted with the renewal permit application; however, the analytical data provided was from the period May 2017 to June 2017. Therefore, a re-test requirement has been included in the Other Requirement Section of the draft permit.

SUMMARY OF CHANGES FROM EXISTING PERMIT

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

1. The cover page of the draft permit now includes the EPA ID number. The permittee's mailing address has been updated.
2. Pages 3-13 were updated (January 2016 version).
3. The Other Requirements section (beginning on page 14) was rearranged to assist with compliance monitoring.
4. Footnote No. 1 in the effluent page of the draft permit was added to all the parameters for clarification.
5. New Other Requirement No. 1 was added in the draft permit which requires a re-test and submittal of analytical data.

BASIS FOR DRAFT PERMIT

The following items were considered in developing the draft permit:

1. Application received on October 10, 2019, and additional information received via electronic mail dated October 24, 2019, October 28, 2019, and April 13, 2020.
2. Existing permits: TPDES Permit No. WQ0004992000 issued on December 21, 2017.
3. Waste Load Evaluation *WLE-1R for the Houston Ship Channel System* for Segment No. 1006.
4. TCEQ Rules.
5. *Texas Surface Water Quality Standards* – 30 TAC §§307.1-307.10, effective March 1, 2018, as approved by EPA Region 6.
6. *Texas Surface Water Quality Standards* – 30 TAC §§307.1-307.10, 0
7. *Texas Surface Water Quality Standards* – 30 TAC §§307.1-307.10, effective July 22, 2010, as approved by EPA Region 6, for portions of the 2014 standards not approved by EPA Region 6.
8. *Texas Surface Water Quality Standards* – 30 TAC §§307.1-307.10, effective August 17, 2000, and Appendix E, effective February 27, 2002, for portions of the 2010 standards not approved by EPA Region 6.
9. *Procedures to Implement the Texas Surface Water Quality Standards* (IPs), Texas Commission on Environmental Quality, June 2010, as approved by EPA Region 6.
10. *Procedures to Implement the Texas Surface Water Quality Standards*, Texas Commission on Environmental Quality, January 2003, for portions of the 2010 IPs not approved by EPA Region 6.
11. Memos from the Standards Implementation Team and Water Quality Assessment Team of the Water Quality Assessment Section of the TCEQ.
12. *Guidance Document for Establishing Monitoring Frequencies for Domestic and Industrial Wastewater Discharge Permits*, TCEQ Document No. 98-001.000-OWR-WQ, May 1998.

13. EPA Effluent Guidelines: 40 CFR Part 442 Subpart C (NSPS). A new source determination was performed and the discharge of treated barge wash water is a new source as defined at 40 CFR §122.2.
14. Consistency with the Coastal Management Plan: The Executive Director has reviewed this action for consistency with the goals and policies of the Texas Coastal Management Program (CMP) in accordance with the regulations of the General Land Office and has determined that the action is consistent with the applicable CMP goals and policies.
15. Letter dated May 28, 2014, from L'Oreal W. Stepney, P.E., Deputy Director, Office of Water, TCEQ, to Bill Honker, Director, Water Quality Protection Division, EPA (TCEQ proposed development strategy for pH evaluation procedures).
16. Letter dated June 2, 2014, from William K. Honker, P.E., Director, Water Quality Protection Division, EPA, to L'Oreal W. Stepney, P.E., Deputy Director, Office of Water, TCEQ (Approval of TCEQ proposed development strategy for pH evaluation procedures).
17. *Fourteen Total Maximum Daily Loads for Nickel in the Houston Ship Channel System (TMDL Project No. 1)*, Texas Commission on Environmental Quality, June 2010.
18. *Implementation Plan for Dissolved Nickel in the Houston Ship Channel*, Texas Commission on Environmental Quality, July 2001.

PROCEDURES FOR FINAL DECISION

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

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

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

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

The executive director will issue the permit unless a written hearing request or request for reconsideration is filed within 30 days after the executive director's response to comments and final decision is mailed. If a hearing request or request for reconsideration is filed, the executive director will not issue the permit and will forward the application and request to the TCEQ commissioners for their

consideration at a scheduled commission meeting. If a contested case hearing is held, it will be a legal proceeding similar to a civil trial in state district court.

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

For additional information about this application, contact Monica Baez at (512) 239-5784.

Mónica Vallin-Báez

Mónica Vallin-Báez

April 14, 2020 (Revised May 11, 2020)

Date

Appendix A
Calculated Technology-Based Effluent Limits

The barge cleaning operation was initiated in 2011, and 40 CFR Part 442 was promulgated August 14, 2000. Therefore, the facility is a new source and new source performance standards (NSPS) effluent limitations apply in 40 CFR § 442.34. These are the same as the best practicable control technology (BPT) effluent limitations in 40 CFR § 442.31.

The discharge of transportation equipment cleaning wastewater via Outfall 013 is subject to federal effluent limitation guidelines (ELGs) at 40 CFR Part 442 – Transportation Equipment Cleaning Point Source Category, Subpart C – Tank Barges and Ocean/Sea Tankers Transporting Chemical and Petroleum Cargos. According to 40 CFR §442.2(a), transportation equipment cleaning (TEC) process wastewater means "all wastewaters associated with cleaning the interiors of tanks including: tank trucks; rail tank cars; intermodal tank containers; tank barges; and ocean/sea tankers used to transport commodities or cargos that come into direct contact with the interior of the tank or container. At those facilities that clean tank interiors, TEC process wastewater also includes wastewater generated from washing vehicle exteriors, equipment and floor washings, TEC-contaminated stormwater, wastewater pre-rinse cleaning solutions, chemical cleaning solutions, and final rinse solutions. TEC process wastewater is defined to include only wastewater generated from a regulated TEC subcategory." In addition, "[w]astewater generated from cleaning tank interiors for purposes of shipping products (i.e., cleaned for purposes other than maintenance and repair) is considered TEC process wastewater. Wastewater generated from cleaning tank interiors for the purposes of maintenance and repair on the tank is not considered TEC process wastewater. Facilities that clean tank interiors solely for the purposes of repair and maintenance are not regulated under this part." Based on the information provided in the permit application, the treated tank barge wash water from this facility is considered to be transportation equipment cleaning wastewater subject to the requirements of 40 CFR Part 442, Subpart C.

The permitted daily maximum flow (barge cleaning wastewater plus boiler blowdown) is 0.1 MGD, to be discharged in batches. Boiler blowdown contributes 360 gallons per day to this total (0.36%). Based on this very small contribution to the overall discharge, all effluent limitations were based on the requirements for barge cleaning wastewater.

Due to the intermittent nature of the discharge, all effluent limitations in the draft permit are expressed as concentrations rather than as mass loadings.

Table 1

Pollutant	Allocation, mg/L	
	Daily Avg.	Daily
BOD_5	22	61
TSS	26	58
Oil & Grease	16	36
Cadmium, Total	—	0.020
Chromium, Total	—	0.42
Copper, Total	—	0.10
Lead, Total	—	0.14
Mercury, Total	—	0.0013
Nickel, Total	—	0.58
Zinc, Total	—	8.3
pH (standard units)	(6.0 min)	(9.0 max)

Appendix B
Calculated Water Quality-Based Effluent Limits

TEXTOX MENU #5 - BAY OR WIDE TIDAL RIVER	
The water quality-based effluent limitations developed below are calculated using:	
Table 1, 2014 Texas Surface Water Quality Standards (30 TAC 307) for Saltwater Aquatic Life	
Table 2, 2018 Texas Surface Water Quality Standards for Human Health	
"Procedures to Implement the Texas Surface Water Quality Standards," TCEQ, June 2010	
PERMIT INFORMATION	
Permittee Name:	Kirby Inland Marine, LP
TPDES Permit No:	WQ0004992000
Outfall No:	013
Prepared by:	Mónica Báez
Date:	April 8, 2020
DISCHARGE INFORMATION	
Receiving Waterbody:	Houston Ship Channel Tidal
Segment No:	1006
TSS (mg/L):	10
Effluent Flow for Aquatic Life (MGD)	<10
% Effluent for Chronic Aquatic Life (Mixing Zone):	8
% Effluent for Acute Aquatic Life (ZID):	30
Oyster Waters?	**no**
Effluent Flow for Human Health (MGD):	<10
% Effluent for Human Health:	4

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

Estuarine Metal	*Intercept (b)*	*Slope (m)*	*Partition Coefficient (Kp)*	*Dissolved Fraction (Cd/Ct)*	*Source*	*Water Effect Ratio (WER)*	*Source*
Aluminum	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Arsenic	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Cadmium	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Chromium (total)	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Chromium (trivalent)	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Chromium (hexavalent)	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Copper	4.85	-0.72	13489.63	0.881		1.80	*
Lead	6.06	-0.85	162181.01	0.381		1.00	Assumed
Mercury	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Nickel	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Selenium	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Silver	5.86	-0.74	131825.67	0.431		1.00	Assumed
Zinc	5.36	-0.52	69183.10	0.591		1.00	Assumed

*Results based on a water-effect ratio study. See 30 TAC Chapter 307.

Appendix B
Calculated Water Quality-Based Effluent Limits

AQUATIC LIFE								
CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:								
Parameter	***SW Acute Criterion (µg/L)***	***SW Chronic Criterion (µg/L)***	***WLAa (µg/L)***	***WLAc (µg/L)***	***LTAa (µg/L)***	***LTAc (µg/L)***	***Daily Avg. (µg/L)***	***Daily Max. (µg/L)***
Acrolein	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Aldrin	1.3	N/A	4.33	N/A	1.39	N/A	2.03	4.31
Aluminum	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Arsenic	149	78	497	975	159	595	233	494
Cadmium	40.0	8.75	133	109	42.7	66.7	62.7	132
Carbaryl	613	N/A	2043	N/A	654	N/A	961	2033
Chlordane	0.09	0.004	0.300	0.0500	0.0960	0.0305	0.0448	0.0948
Chlorpyrifos	0.011	0.006	0.0367	0.0750	0.0117	0.0458	0.0172	0.0364
Chromium (trivalent)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chromium (hexavalent)	1090	49.6	3633	620	1163	378	555	1176
Copper	24.3	6.48	91.9	91.9	29.4	56.1	43.2	91.4
Copper (oyster waters)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cyanide (free)	5.6	5.6	18.7	70.0	5.97	42.7	8.78	18.5
4,4'-DDT	0.13	0.001	0.433	0.0125	0.139	0.00763	0.0112	0.0237
Demeton	N/A	0.1	N/A	1.25	N/A	0.763	1.12	2.37
Diazinon	0.819	0.819	2.73	10.2	0.874	6.24	1.28	2.71
Dicofol [Kelthane]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dieldrin	0.71	0.002	2.37	0.0250	0.757	0.0153	0.0224	0.0474
Diuron	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Endosulfan I (*alpha*)	0.034	0.009	0.113	0.113	0.0363	0.0686	0.0533	0.112
Endosulfan II (*beta*)	0.034	0.009	0.113	0.113	0.0363	0.0686	0.0533	0.112
Endosulfan sulfate	0.034	0.009	0.113	0.113	0.0363	0.0686	0.0533	0.112
Endrin	0.037	0.002	0.123	0.0250	0.0395	0.0153	0.0224	0.0474
Guthion [Azinphos Methyl]	N/A	0.01	N/A	0.125	N/A	0.0763	0.112	0.237
Heptachlor	0.053	0.004	0.177	0.0500	0.0565	0.0305	0.0448	0.0948
Hexachlorocyclohexane (*gamma*) [Lindane]	0.16	N/A	0.533	N/A	0.171	N/A	0.250	0.530
Lead	133	5.3	1162	174	372	106	155	329
Malathion	N/A	0.01	N/A	0.125	N/A	0.0763	0.112	0.237
Mercury	2.1	1.1	7.00	13.8	2.24	8.39	3.29	6.96
Methoxychlor	N/A	0.03	N/A	0.375	N/A	0.229	0.336	0.711
Mirex	N/A	0.001	N/A	0.0125	N/A	0.00763	0.0112	0.0237
Nickel	118	13.1	393	164	126	99.9	146	310
Nonylphenol	7	1.7	23.3	21.3	7.47	13.0	10.9	23.2
Parathion (ethyl)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pentachlorophenol	15.1	9.6	50.3	120	16.1	73.2	23.6	50.0
Phenanthrene	7.7	4.6	25.7	57.5	8.21	35.1	12.0	25.5
Polychlorinated Biphenyls [PCBs]	10	0.03	33.3	0.375	10.7	0.229	0.336	0.711
Selenium	564	136	1880	1700	602	1037	884	1870
Silver	2	N/A	15.5	N/A	4.95	N/A	7.27	15.3
Toxaphene	0.21	0.0002	0.700	0.00250	0.224	0.00153	0.00224	0.00474
Tributyltin [TBT]	0.24	0.0074	0.800	0.0925	0.256	0.0564	0.0829	0.175
2,4,5 Trichlorophenol	259	12	863	150	276	91.5	134	284
Zinc	92.7	84.2	523	1781	167	1086	245	520

Appendix B
Calculated Water Quality-Based Effluent Limits

HUMAN HEALTH

CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:

Parameter	*Fish Only Criterion (µg/L)*	*WLAh (µg/L)*	*LTAh (µg/L)*	*Daily Avg. (µg/L)*	*Daily Max. (µg/L)*
Acrylonitrile	115	2875	2674	3930	8315
Aldrin	1.147E-05	0.000287	0.000267	0.000392	0.000829
Anthracene	1317	32925	30620	45011	95228
Antimony	1071	26775	24901	36604	77441
Arsenic	N/A	N/A	N/A	N/A	N/A
Barium	N/A	N/A	N/A	N/A	N/A
Benzene	581	14525	13508	19857	42010
Benzidine	0.107	2.68	2.49	3.65	7.73
Benzo(*a*)anthracene	0.025	0.625	0.581	0.854	1.80
Benzo(*a*)pyrene	0.0025	0.0625	0.0581	0.0854	0.180
Bis(chloromethyl)ether	0.2745	6.86	6.38	9.38	19.8
Bis(2-chloroethyl)ether	42.83	1071	996	1463	3096
Bis(2-ethylhexyl) phthalate [Di(2-ethylhexyl) phthalate]	7.55	189	176	258	545
Bromodichloromethane [Dichlorobromomethane]	275	6875	6394	9398	19884
Bromoform [Tribromomethane]	1060	26500	24645	36228	76645
Cadmium	N/A	N/A	N/A	N/A	N/A
Carbon Tetrachloride	46	1150	1070	1572	3326
Chlordane	0.0025	0.0625	0.0581	0.0854	0.180
Chlorobenzene	2737	68425	63635	93543	197905
Chlorodibromomethane [Dibromochloromethane]	183	4575	4255	6254	13232
Chloroform [Trichloromethane]	7697	192425	178955	263064	556550
Chromium (hexavalent)	502	12550	11672	17157	36298
Chrysene	2.52	63.0	58.6	86.1	182
Cresols [Methylphenols]	9301	232525	216248	317884	672532
Cyanide (free)	N/A	N/A	N/A	N/A	N/A
4,4'-DDD	0.002	0.0500	0.0465	0.0683	0.144
4,4'-DDE	0.00013	0.00325	0.00302	0.00444	0.00939
4,4'-DDT	0.0004	0.0100	0.00930	0.0136	0.0289
2,4'-D	N/A	N/A	N/A	N/A	N/A
Danitol [Fenpropathrin]	473	11825	10997	16165	34201
1,2-Dibromoethane [Ethylene Dibromide]	4.24	106	98.6	144	306
m-Dichlorobenzene [1,3-Dichlorobenzene]	595	14875	13834	20335	43022
o-Dichlorobenzene [1,2-Dichlorobenzene]	3299	82475	76702	112751	238542
p-Dichlorobenzene [1,4-Dichlorobenzene]	N/A	N/A	N/A	N/A	N/A
3,3'-Dichlorobenzidine	2.24	56.0	52.1	76.5	161
1,2-Dichloroethane	364	9100	8463	12440	26319
1,1-Dichloroethylene [1,1-Dichloroethene]	55114	1377850	1281401	1883658	3985155
Dichloromethane [Methylene Chloride]	13333	333325	309992	455688	964075
1,2-Dichloropropane	259	6475	6022	8851	18727
1,3-Dichloropropene [1,3-Dichloropropylene]	119	2975	2767	4067	8604
Dicofol [Kelthane]	0.30	7.50	6.98	10.2	21.6
Dieldrin	2.0E-05	0.000500	0.000465	0.000683	0.00144
2,4-Dimethylphenol	8436	210900	196137	288321	609986
Di-*n*-Butyl Phthalate	92.4	2310	2148	3158	6681
Dioxins/Furans [TCDD Equivalents]	7.97E-08	0.0000020	0.0000019	0.0000027	0.0000058
Endrin	0.02	0.500	0.465	0.683	1.44
Epichlorohydrin	2013	50325	46802	68799	145554
Ethylbenzene	1867	46675	43408	63809	134998

Appendix B
Calculated Water Quality-Based Effluent Limits

HUMAN HEALTH

CALCULATE DAILY AVERAGE AND DAILY MAXIMUM EFFLUENT LIMITATIONS:

Parameter	*Fish Only Criterion (µg/L)*	*WLAh (µg/L)*	*LTAh (µg/L)*	*Daily Avg. (µg/L)*	*Daily Max. (µg/L)*
Ethylene Glycol	1.68E+07	420000000	390600000	574182000	1214766000
Fluoride	N/A	N/A	N/A	N/A	N/A
Heptachlor	0.0001	0.00250	0.00233	0.00341	0.00723
Heptachlor Epoxide	0.00029	0.00725	0.00674	0.00991	0.0209
Hexachlorobenzene	0.00068	0.0170	0.0158	0.0232	0.0491
Hexachlorobutadiene	0.22	5.50	5.12	7.51	15.9
Hexachlorocyclohexane (*alpha*)	0.0084	0.210	0.195	0.287	0.607
Hexachlorocyclohexane (*beta*)	0.26	6.50	6.05	8.88	18.7
Hexachlorocyclohexane (*gamma*) [Lindane]	0.341	8.53	7.93	11.6	24.6
Hexachlorocyclopentadiene	11.6	290	270	396	838
Hexachloroethane	2.33	58.3	54.2	79.6	168
Hexachlorophene	2.90	72.5	67.4	99.1	209
4,4'-Isopropylidenediphenol [Bisphenol A]	15982	399550	371582	546224	1155618
Lead	3.83	251	233	343	726
Mercury	0.0250	0.625	0.581	0.854	1.80
Methoxychlor	3.0	75.0	69.8	102	216
Methyl Ethyl Ketone	9.92E+05	24800000	23064000	33904080	71729040
Methyl *tert*-butyl ether [MTBE]	10482	262050	243707	358248	757927
Nickel	1140	28500	26505	38962	82430
Nitrate-Nitrogen (as Total Nitrogen)	N/A	N/A	N/A	N/A	N/A
Nitrobenzene	1873	46825	43547	64014	135431
N-Nitrosodiethylamine	2.1	52.5	48.8	71.7	151
N-Nitroso-di-*n*-Butylamine	4.2	105	97.7	143	303
Pentachlorobenzene	0.355	8.88	8.25	12.1	25.6
Pentachlorophenol	0.29	7.25	6.74	9.91	20.9
Polychlorinated Biphenyls [PCBs]	6.4E-04	0.0160	0.0149	0.0218	0.0462
Pyridine	947	23675	22018	32366	68475
Selenium	N/A	N/A	N/A	N/A	N/A
1,2,4,5-Tetrachlorobenzene	0.24	6.00	5.58	8.20	17.3
1,1,2,2-Tetrachloroethane	26.35	659	613	900	1905
Tetrachloroethylene [Tetrachloroethylene]	280	7000	6510	9569	20246
Thallium	0.23	5.75	5.35	7.86	16.6
Toluene	N/A	N/A	N/A	N/A	N/A
Toxaphene	0.011	0.275	0.256	0.375	0.795
2,4,5-TP [Silvex]	369	9225	8579	12611	26681
1,1,1-Trichloroethane	784354	19608850	18236231	26807258	56714676
1,1,2-Trichloroethane	166	4150	3860	5673	12003
Trichloroethylene [Trichloroethene]	71.9	1798	1672	2457	5198
2,4,5-Trichlorophenol	1867	46675	43408	63809	134998
TTHM [Sum of Total Trihalomethanes]	N/A	N/A	N/A	N/A	N/A
Vinyl Chloride	16.5	413	384	563	1193

Appendix B
Calculated Water Quality-Based Effluent Limits

CALCULATE 70% AND 85% OF DAILY AVERAGE EFFLUENT LIMITATIONS:		
Aquatic Life	***70% of Daily Avg.***	***85% of Daily Avg.***
Parameter	***(µg/L)***	***(µg/L)***
Acrolein	N/A	N/A
Aldrin	1.42	1.73
Aluminum	N/A	N/A
Arsenic	163	198
Cadmium	43.9	53.3
Carbaryl	672	817
Chlordane	0.0313	0.0381
Chlorpyrifos	0.0120	0.0146
Chromium (trivalent)	N/A	N/A
Chromium (hexavalent)	389	472
Copper	30.2	36.7
Copper (oyster waters)	N/A	N/A
Cyanide (free)	6.14	7.46
4,4'-DDT	0.00784	0.00952
Demeton	0.784	0.952
Diazinon	0.898	1.09
Dicofol [Kelthane]	N/A	N/A
Dieldrin	0.0156	0.0190
Diuron	N/A	N/A
Endosulfan I (*alpha*)	0.0373	0.0453
Endosulfan II (*beta*)	0.0373	0.0453
Endosulfan sulfate	0.0373	0.0453
Endrin	0.0156	0.0190
Guthion [Azinphos Methyl]	0.0784	0.0952
Heptachlor	0.0313	0.0381
Hexachlorocyclohexane (*gamma*) [Lindane]	0.175	0.213
Lead	109	132
Malathion	0.0784	0.0952
Mercury	2.30	2.79
Methoxychlor	0.235	0.285
Mirex	0.00784	0.00952
Nickel	102	124
Nonylphenol	7.68	9.32
Parathion (ethyl)	N/A	N/A
Pentachlorophenol	16.5	20.1
Phenanthrene	8.45	10.2
Polychlorinated Biphenyls [PCBs]	0.235	0.285
Selenium	619	751
Silver	5.08	6.17
Toxaphene	0.00156	0.00190
Tributyltin [TBT]	0.0580	0.0705
2,4,5 Trichlorophenol	94.1	114
Zinc	172	209

Appendix B
Calculated Water Quality-Based Effluent Limits

Human Health	***70% of Daily Avg.***	***85% of Daily Avg.***
Parameter	***(µg/L)***	***(µg/L)***
Acrylonitrile	2751	3340
Aldrin	0.000274	0.000333
Anthracene	31508	38260
Antimony	25622	31113
Arsenic	N/A	N/A
Barium	N/A	N/A
Benzene	13899	16878
Benzidine	2.55	3.10
Benzo(*a*)anthracene	0.598	0.726
Benzo(*a*)pyrene	0.0598	0.0726
Bis(chloromethyl)ether	6.56	7.97
Bis(2-chloroethyl)ether	1024	1244
Bis(2-ethylhexyl) phthalate [Di(2-ethylhexyl) phthalate]	180	219
Bromodichloromethane [Dichlorobromomethane]	6579	7988
Bromoform [Tribromomethane]	25359	30793
Cadmium	N/A	N/A
Carbon Tetrachloride	1100	1336
Chlordane	0.0598	0.0726
Chlorobenzene	65480	79512
Chlorodibromomethane [Dibromochloromethane]	4378	5316
Chloroform [Trichloromethane]	184144	223604
Chromium (hexavalent)	12009	14583
Chrysene	60.2	73.2
Cresols [Methylphenols]	222519	270202
Cyanide (free)	N/A	N/A
4,4'-DDD	0.0478	0.0581
4,4'-DDE	0.00311	0.00377
4,4'-DDT	0.00956	0.0116
2,4'-D	N/A	N/A
Danitol [Fenpropathrin]	11316	13741
1,2-Dibromoethane [Ethylene Dibromide]	101	123
m-Dichlorobenzene [1,3-Dichlorobenzene]	14234	17285
o-Dichlorobenzene [1,2-Dichlorobenzene]	78926	95838
p-Dichlorobenzene [1,4-Dichlorobenzene]	N/A	N/A
3,3'-Dichlorobenzidine	53.5	65.0
1,2-Dichloroethane	8708	10574
1,1-Dichloroethylene [1,1-Dichloroethene]	1318561	1601109
Dichloromethane [Methylene Chloride]	318982	387335
1,2-Dichloropropane	6196	7524
1,3-Dichloropropene [1,3-Dichloropropylene]	2846	3457
Dicofol [Kelthane]	7.17	8.71
Dieldrin	0.000478	0.000581
2,4-Dimethylphenol	201824	245073
Di-*n*-Butyl Phthalate	2210	2684
Dioxins/Furans [TCDD Equivalents]	0.0000019	0.0000023
Endrin	0.478	0.581
Epichlorohydrin	48159	58479
Ethylbenzene	44666	54237

Appendix B
Calculated Water Quality-Based Effluent Limits

Human Health *Parameter*	*70% of Daily Avg.* *(µg/L)*	*85% of Daily Avg.* *(µg/L)*
Ethylene Glycol	401927400	488054700
Fluoride	N/A	N/A
Heptachlor	0.00239	0.00290
Heptachlor Epoxide	0.00693	0.00842
Hexachlorobenzene	0.0162	0.0197
Hexachlorobutadiene	5.26	6.39
Hexachlorocyclohexane (*alpha*)	0.200	0.244
Hexachlorocyclohexane (*beta*)	6.22	7.55
Hexachlorocyclohexane (*gamma*) [Lindane]	8.15	9.90
Hexachlorocyclopentadiene	277	336
Hexachloroethane	55.7	67.6
Hexachlorophene	69.3	84.2
4,4'-Isopropylidenediphenol [Bisphenol A]	382357	464291
Lead	240	291
Mercury	0.598	0.726
Methoxychlor	71.7	87.1
Methyl Ethyl Ketone	23732856	28818468
Methyl *tert*-butyl ether [MTBE]	250773	304511
Nickel	27273	33117
Nitrate-Nitrogen (as Total Nitrogen)	N/A	N/A
Nitrobenzene	44810	54412
N-Nitrosodiethylamine	50.2	61.0
N-Nitroso-di-*n*-Butylamine	100	122
Pentachlorobenzene	8.49	10.3
Pentachlorophenol	6.93	8.42
Polychlorinated Biphenyls [PCBs]	0.0153	0.0185
Pyridine	22656	27511
Selenium	N/A	N/A
1,2,4,5-Tetrachlorobenzene	5.74	6.97
1,1,2,2-Tetrachloroethane	630	765
Tetrachloroethylene [Tetrachloroethylene]	6698	8134
Thallium	5.50	6.68
Toluene	N/A	N/A
Toxaphene	0.263	0.319
2,4,5-TP [Silvex]	8828	10719
1,1,1-Trichloroethane	18765081	22786170
1,1,2-Trichloroethane	3971	4822
Trichloroethylene [Trichloroethene]	1720	2088
2,4,5-Trichlorophenol	44666	54237
TTHM [Sum of Total Trihalomethanes]	N/A	N/A
Vinyl Chloride	394	479

Appendix C, pH Screening

Calculation of pH of a mixture in seawater.			
Based on the CO2SYS program (Lewis and Wallace, 1998)			**04992-000 - pH Screening Summary**
http://cdiac.esd.ornl.gov/oceans/co2rprt.html			**The following screening applies to Outfall 013**
INPUT			**Notes on Data Sources**
1. MIXING ZONE BOUNDARY CHARACTERISTICS			
Dilution factor at mixing zone boundary	12.50	12.50	Calculated from chronic effluent % at edge of mixing zone given in October 28, 2016, critical conditions memo. Inverse of effluent fraction (1/0.08 = 12.5).
Depth at plume trapping level (m)	3.00	3.00	Default value. Range of depths tested.
2. BACKGROUND RECEIVING WATER CHARACTERISTICS			
Temperature (deg C):	20.00	20.00	Range of temperatures tested (5 to 35 degrees C)
pH:	7.20	7.20	Ambient pH for Segment 1006 from 2010 IPs.
Salinity (psu):	15.00	15.00	Range of salinities tested (5 to 35 ppt)
Total alkalinity (meq/L)	147.15	147.15	Range of alkalinities tested (50 to 500 mg/L CaCO3)
3. EFFLUENT CHARACTERISTICS			
Temperature (deg C):	31.30	31.30	Range of temperatures tested (5 to 35 degrees C)
pH:	6.00	9.00	Proposed permit limit.
Salinity (psu)	2.00	2.00	Minimum salinity assumed because discharge is freshwater. However, values up to 5 ppt tested.
Total alkalinity (meq/L):	0.40	70.00	For high pH scenario, tested a range of values. For low pH scenarios, used default of 20 mg/L CaCO3 = 0.40 meq/L
4. CLICK THE 'calculate" BUTTON TO UPDATE OUTPUT RESULTS >>>			
OUTPUT			
CONDITIONS AT THE MIXING ZONE BOUNDARY			
Temperature (deg C):	20.90	20.90	
Salinity (psu)	13.96	13.96	
Density (kg/m^3)	1008.59	1008.59	
Alkalinity (mmol/kg-SW):	134.26	139.78	
Total Inorganic Carbon (mmol/kg-SW):	141.67	145.79	
pH at Mixing Zone Boundary:	7.20	7.28	
Notes:			
To convert from units of mgCaCO3/L to meq/L divide by 50.044 mg/meq			
PSU refers to the Practical Salinity Scale (PSS) and is approximately equivalent to parts per thousand (ppt)			

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

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

Outfall	*Pollutant*	*Technology-Based*		*Water Quality-Based*		*Existing Permit*	
		Daily Avg	*Daily Max*	*Daily Avg*	*Daily Max*	*Daily Avg*	*Daily Max*
		mg/L	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*
013	Flow	---	---	---	---	**Report, MGD**	**0.1 MGD**
	BOD_5	22	61	N/A	N/A	**22**	**61**
	TSS	26	58	N/A	N/A	**26**	**58**
	Oil and Grease	16	36	N/A	N/A	**16**	**36**
	Cadmium, Total	N/A	0.020	N/A	0.132	N/A	**0.020**
	Chromium, Total	N/A	0.42	N/A	N/A	N/A	**0.42**
	Copper, Total	N/A	0.10	N/A	0.091	N/A	**0.091**
	Lead, Total	N/A	0.14	N/A	0.329	N/A	**0.14**
	Mercury, Total	N/A	0.0013	N/A	0.0018	N/A	**0.0013**
	Nickel, Total	N/A	0.58	N/A	0.311	N/A	**0.311**
	Zinc, Total	N/A	8.3	N/A	0.520	N/A	**0.520**
	Cyanide, Total[1]	N/A	N/A	N/A	N/A	N/A	**Report**
	pH	6.0 SU (minimum)	9.0 SU (maximum)	6.5 SU (minimum)	9.0 SU (maximum)	**6.0 SU (minimum)**	**9.0 SU (maximum)**

[1] Any analytical method for free cyanide or available cyanide that is approved in 40 CFR Part 136 may be used.

TPDES PERMIT NO.
WQ0004992000
[For TCEQ office use only -
EPA I.D. No. TX0133604]

This renewal replaces TPDES Permit No. WQ0004992000, issued on December 21, 2017.

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

PERMIT TO DISCHARGE WASTES
under provisions of
Section 402 of the Clean Water Act
and Chapter 26 of the Texas Water Code
and 40 CFR Part 40 CFR § 442 Subpart C

Kirby Inland Marine, LP

whose mailing address is
18350 Market Street
Channelview, Texas 77530

is authorized to treat and discharge wastes from Kirby Gate 5 Barge Cleaning Facility, a conventional tank barge cleaning facility (SIC 4491)

located at 16538 De Zavalla Road, in Channelview, near the City of Houston, Harris County, Texas 77530

directly to the Houston Ship Channel Tidal in Segment No. 1006 of the San Jacinto River Basin

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

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

ISSUED DATE:

_____
For the Commission

1. During the period beginning upon the date of permit issuance and lasting through the date of permit expiration, the permittee is authorized to discharge treated tank barge wash water and boiler blowdown subject to the following effluent limitations:

   Volume: Intermittent and flow-variable. The daily maximum flow shall not exceed 0.1 million gallons per day (MGD).

Effluent Characteristics	Discharge Limitations			Minimum Self-Monitoring Requirements	
	Daily Average mg/L	Daily Maximum mg/L	Single Grab mg/L	Report Daily Average and Daily Maximum Measurement Frequency	Sample Type
Flow	Report, MGD	0.1 MGD	N/A	1/day[1]	Estimate
Biochemical oxygen demand (5-day)	22	61	61	2/week[1]	Grab
Total Suspended Solids	26	58	58	2/week[1]	Grab
Oil and grease	16	36	36	1/week[1]	Grab
Cadmium, Total	N/A	0.020	0.020	1/week[1]	Grab
Chromium, Total	N/A	0.42	0.42	1/week[1]	Grab
Copper, Total	N/A	0.091	0.091	1/week[1]	Grab
Lead, Total	N/A	0.14	0.14	1/week[1]	Grab
Mercury, Total	N/A	0.0013	0.0013	1/week[1]	Grab
Nickel, Total	N/A	0.311	0.311	1/week[1]	Grab
Zinc, Total	N/A	0.520	0.520	1/week[1]	Grab
Cyanide, Total[2]	N/A	Report	N/A	1/week[1]	Grab

2. The pH must not be less than 6.0 standard units nor greater than 9.0 standard units and must be monitored 1/day[1] by grab sample.

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

4. Effluent monitoring samples must be taken at the following location: At Outfall 013 where the effluent is discharged from the holding tank prior to mingling with water in the Houston Ship Channel Tidal.

[1] When discharging.
[2] The approved analytical methods for cyanide include any procedure for total cyanide, weak acid dissociable cyanide, or cyanide amenable to chlorination from the latest edition of Standard Methods or 40 CFR Part 136.

DEFINITIONS AND STANDARD PERMIT CONDITIONS

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

1. Flow Measurements

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

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

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

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

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

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

2. Concentration Measurements

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

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

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

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

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

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

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

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

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

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

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

3. Sample Type

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

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

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

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

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

MONITORING AND REPORTING REQUIREMENTS

1. Self-Reporting

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

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

2. Test Procedures

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

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

3. Records of Results

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

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

   c. Records of monitoring activities shall include the following:

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

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

4. Additional Monitoring by Permittee

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

5. Calibration of Instruments

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

6. Compliance Schedule Reports

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

7. Noncompliance Notification

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

   b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:

      i. unauthorized discharges as defined in Permit Condition 2(g).
      ii. any unanticipated bypass that exceeds any effluent limitation in the permit.
      iii. violation of a permitted maximum daily discharge limitation for pollutants listed specifically in the Other Requirements section of an Industrial TPDES permit.

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

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

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

9. Changes in Discharges of Toxic Substances

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

   a. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) that is not limited in the permit, if that discharge will exceed the highest of the following “notification levels”:

      i. one hundred micrograms per liter (100 µg/L);
      ii. two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
      iii. five (5) times the maximum concentration value reported for that pollutant in the permit application; or
      iv. the level established by the TCEQ.

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

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

10. Signatories to Reports

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

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

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

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

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

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

PERMIT CONDITIONS

1. General

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

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

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

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

2. Compliance

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

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

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

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

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

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

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

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

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

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

3. Inspections and Entry

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

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

4. Permit Amendment or Renewal

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

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

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

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

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

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

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

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

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

5. Permit Transfer

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

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

6. Relationship to Hazardous Waste Activities

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

7. Relationship to Water Rights

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

8. Property Rights

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

9. Permit Enforceability

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

10. Relationship to Permit Application

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

11. Notice of Bankruptcy.

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

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

    b. This notification must indicate:

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

OPERATIONAL REQUIREMENTS

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

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

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

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

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

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

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

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

7. Documentation

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

TCEQ Revision 01/2016

OTHER REQUIREMENTS

1. Wastewater discharged via Outfall 013 must be sampled and analyzed as directed below for those parameters listed in Tables 1, 2, and 3 of Attachment A of this permit. Analytical testing for Outfall 013 must be completed within 60 days from date of permit issuance. Results of the analytical testing must be submitted within 90 days from the last sample taken to the TCEQ Industrial Permits Team (MC 148) and Region 12 Office. Based on a technical review of the submitted analytical results, an amendment may be initiated by TCEQ staff to include additional effluent limitations, monitoring requirements, or both.

   Table 1: Analysis is required for all pollutants in Table 1. Wastewater must be sampled and analyzed for those parameters listed in Table 1 for a minimum of four sampling events that are each at least one week apart.

   Table 2: Analysis is required for those pollutants in Table 2 that are used at the facility that could in any way contribute to contamination in the Outfall 013 discharge. Sampling and analysis must be conducted for a minimum of four sampling events that are each at least one week apart.

   Table 3: For all pollutants listed in Table 3, the permittee shall indicate whether each pollutant is believed to be present or absent in the discharge. Sampling and analysis must be conducted for each pollutant believed present for a minimum of one sampling event.

   The permittee shall report the flow at Outfall 013 in MGD in the attachment. The permittee shall indicate on each table whether the samples are composite (C) or grab (G) by checking the appropriate box.

2. Violations of daily maximum limitations for the following pollutants shall be reported orally or by facsimile to TCEQ Region 12 within 24 hours from the time the permittee becomes aware of the violation, followed by a written report within five working days to TCEQ Region 12 and Compliance Monitoring Team (MC 224):

Pollutant	**MAL[1] (mg/L)**
Cadmium (Total)	0.001
Chromium (Total)	0.003
Copper (Total)	0.002
Cyanide (Available)	0.010
Cyanide (Total)	0.010
Lead (Total)	0.0005
Mercury (Total)	0.000005
Nickel (Total)	0.002
Zinc (Total)	0.005
Oil and Grease	1.15-5.0[2]

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

[1] Minimum analytical level.

[2] EPA Methods 1664 HEM, MQL of 5.0 mg/L and MDL of 1.15 mg/L

Pollutant	MAL[1] (mg/L)
Cyanide (Available)	0.010
Cyanide (Total)	0.010

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

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

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

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

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

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

5. There shall be no discharge of wastewater from the cleaning of barges or other vessels and containers carrying hazardous waste as defined in 40 CFR Part 426, pesticides, herbicides, polychlorinated biphenyls (PCBs), dioxins, furans, explosives, or radioactive materials.

6. This permit does not authorize the discharge of domestic wastewater. All domestic wastewater must be disposed of in an approved manner, such as routing to an approved on-site septic tank and drainfield system or to an authorized third party for treatment and disposal.

7. This permit does not provide authorization for the permittee to accept wastewaters from third party sources, nor does it prohibit acceptance of such wastewaters. This permit only provides the authorization to discharge these wastes. Should authorization to accept third party waste be required, it is the obligation of the permittee to obtain such authorization from the appropriate regulatory authority.

8. For wastewater processed by the biological wastewater treatment system, the residual cargo shall be removed and not processed via the biological wastewater treatment system. Wash water and boiler blowdown may be processed by the biological treatment system.

[1] Minimum analytical level.

9. The facility shall maintain a daily log at the site that records the following information:

    a. barge identification number for each barge cleaned,
    b. a description of material cleaned from the barge,
    c. method of cleaning, including a list of any presolve wash or chemical cleaning solutions,
    d. the volume of wastewater routed to the wastewater treatment system, and
    e. a list of wastewater treatment units operated.

ATTACHMENT A

Table 1

Outfall No.: ☐C ☐G	**Effluent Concentration (mg/L)**					
Pollutant	**Samp.**	**Samp.**	**Samp.**	**Samp.**	**Average**	
Flow (MGD)						
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; min/max)						

ATTACHMENT A

Table 2

Pollutant	Effluent Concentration (µg/L)[1]					MAL[2] (µg/L)
	Samp.	Samp.	Samp.	Samp.	Average	
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, Free						10
Lead, Total						0.5
Mercury, Total						0.005
Nickel, Total						2
Selenium, Total						5
Silver, Total						0.5
Thallium, Total						0.5
Zinc, Total						5.0

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

ATTACHMENT A

Table 3

Outfall No.:	☐C ☐G	**Samp. 1 (µg/L)[1]**	**Samp. 2 (µg/L)[1]**	**Samp. 3 (µg/L)[1]**	**Samp. 4 (µg/L)[1]**	**Avg. (µg/L)[1]**	**MAL (µg/L)**
Pollutant							
Acrolein							0.7
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							10
Bromoform							10
Carbon Tetrachloride							2
Chlorobenzene							10
Chlorodibromomethane							10
Chloroform							10
Chrysene							5
Cresols							10
1,2-Dibromoethane							10
m-Dichlorobenzene							10
o-Dichlorobenzene							10
p-Dichlorobenzene							10
3,3'-Dichlorobenzidine							5
1,2-Dichloroethane							10
1,1-Dichloroethylene							10
Dichloromethane							20
1,2-Dichloropropane							10
1,3-Dichloropropylene							10
2,4-Dimethylphenol							10
Di-*n*-Butyl Phthalate							10
Epichlorohydrin							1,000
Ethylbenzene							10
Ethylene Glycol							—
Fluoride							500
Hexachlorobenzene							5
Hexachlorobutadiene							10
Hexachlorocyclopentadiene							10

[1] Indicate units if different than µg/L.

Outfall No.:	☐C ☐G	**Samp. 1 (µg/L)[1]**	**Samp. 2 (µg/L)[1]**	**Samp. 3 (µg/L)[1]**	**Samp. 4 (µg/L)[1]**	**Avg. (µg/L)[1]**	**MAL (µg/L)**
Pollutant							
Hexachloroethane							20
4,4′-Isopropylidenediphenol [bisphenol A]							—
Methyl Ethyl Ketone							50
Methyl *tert*-butyl ether [MTBE]							—
Nitrobenzene							10
N-Nitrosodiethylamine							20
N-Nitroso-di-*n*-Butylamine							20
Nonylphenol							333
Pentachlorobenzene							20
Pentachlorophenol							5
Phenanthrene							10
Polychlorinated Biphenyls (PCBs) [1]							0.2
Pyridine							20
1,2,4,5-Tetrachlorobenzene							20
1,1,2,2-Tetrachloroethane							10
Tetrachloroethylene							10
Toluene							10
1,1,1-Trichloroethane							10
1,1,2-Trichloroethane							10
Trichloroethylene							10
2,4,5-Trichlorophenol							50
TTHM (Total Trihalomethanes)							10
Vinyl Chloride							10

[1] Total of detects for PCB-1242, PCB-1254, PCB-1221, PCB-1232, PCB-1248, PCB-1260, PCB-1016. If all values are non-detects, enter the highest non-detect preceded by a "<" symbol.

From: Morgan Johnson
To: Sophia Houston; Monica Baez
Subject: RE: WQ0004992000 KIRBY INLAND MARINE, LP
Date: Monday, May 04, 2020 2:43:48 PM
Attachments: WQ0004992000-Notice Fact Sheet and Draft permit.docx

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Ms. Baez,

Our facility manager had a question about an item we identified in our review of the draft permit. In the project description and location section of the statement of basis (page 4), the summary refers to a tubular membrane filter. The facility is using a diffused air flotation filter. This correction does not affect the facility's ability to meet the conditions of the permit, nor does it change the characteristics of the discharge.

Is there anything that Kirby Inland Marine needs to submit to update the project description section, or will this email suffice?

Thank you,

Morgan Johnson, PE
Director - Environmental Compliance
Kirby Corporation
713-435-1311 office
832-472-1153 mobile

From: Sophia Houston <Sophia.Houston@tceq.texas.gov>
Date: April 30, 2020 at 12:42:31 PM CDT
To: Steven Caruselle <Steven.Caruselle@kirbycorp.com>
Cc: Monica Baez <monica.baez@tceq.texas.gov>
Subject: [External] WQ0004992000 KIRBY INLAND MARINE, LP

To whom it may concern,
The draft acceptance request letter, draft permit, NAPD, and statement of basis/technical summary are attached for your review.
Please email your comments to the attention of the **Permit Coordinator** or fax them to (512) 239-4430. Your comments and/or approval is due no later than **5/7/2020.** For your convenience, the Permit Coordinator has been copied on this email.
Please note: *The draft permit will be filled with the Office of the Chief Clerk for issuance of public notice no later than one (1) week from the deadline indicated above.*
Thank you,
Sophia Houston
Customer Information & Assistance Team

From:	Caitlyn Mitts
To:	Monica Baez
Cc:	Steven Caruselle; Morgan Johnson
Subject:	RE: [External] RE: Public Notice
Date:	Friday, May 15, 2020 1:53:32 PM
Attachments:	image001.png WQ0004992000-Notice, Fact Sheet and Draft permit.pdf

Monica,

Please notice this as our acceptance of the attached draft permit as written. Please let me know if you have any questions.

Thanks!

From: Monica Baez [mailto:monica.baez@tceq.texas.gov]
Sent: Friday, May 15, 2020 1:23 PM
To: Caitlyn Mitts <Caitlyn.Mitts@kirbycorp.com>
Cc: Steven Caruselle <Steven.Caruselle@kirbycorp.com>
Subject: RE: [External] RE: Public Notice

Yes, that will work.

Thank you,
Mónica

Mónica Vallin-Báez
Industrial Wastewater Permits Team
Water Quality Division
TCEQ
Tel.: 512-239-5784
Email: monica.baez@tceq.texas.gov

How is our customer service? Fill out our online customer satisfaction survey at www.tceq.texas.gov/customersurvey.

From: Caitlyn Mitts <Caitlyn.Mitts@kirbycorp.com>
Sent: Friday, May 15, 2020 12:16 PM
To: Monica Baez <monica.baez@tceq.texas.gov>
Cc: Steven Caruselle <Steven.Caruselle@kirbycorp.com>
Subject: RE: [External] RE: Public Notice

Monica,

Can the written statement be sent to you via email?

From: Monica Baez [mailto:monica.baez@tceq.texas.gov]
Sent: Friday, May 15, 2020 11:55 AM
To: Caitlyn Mitts <Caitlyn.Mitts@kirbycorp.com>
Cc: Steven Caruselle <Steven.Caruselle@kirbycorp.com>; Monica Baez <monica.baez@tceq.texas.gov>
Subject: [External] RE: Public Notice

Good morning Caitlyn,

Thank you so much for the prompt response. Your application and all correspondence you submitted with the application will need to be available online. Yes, once you receive a package from the Office of the Chief Clerk with the instructions, the Notice will need to be published in the newspaper. In addition, the Notice, Statement of Basis/Technical Summary, and draft permit will need to be available online.

Please provide the link information so I can make revisions to the Notice. Also, if the draft permit is accepted as written, please provide a written statement accepting the draft permit. I cannot move forward until the Notice is revised and I receive your acceptance. Let me know if you have any other questions.

Thank you,
Mónica

Mónica Vallin-Báez
Industrial Wastewater Permits Team
Water Quality Division
TCEQ
Tel.: 512-239-5784
Email: monica.baez@tceq.texas.gov

How is our customer service? Fill out our online customer satisfaction survey at www.tceq.texas.gov/customersurvey.

From: Caitlyn Mitts <Caitlyn.Mitts@kirbycorp.com>
Sent: Thursday, May 14, 2020 9:40 AM
To: Monica Baez <monica.baez@tceq.texas.gov>
Cc: Steven Caruselle <Steven.Caruselle@kirbycorp.com>

Subject: Public Notice

Good Morning Monica,

We are in the process of posting our discharge application on our Kirby website and wanted to verify what needs to be included when we post it. Also, will we still be required to post a notice in the newspaper, if so, what needs to be included so that we can make sure it's correlated with our website post. Please feel free to give me a call on my cell to discuss.

Thanks!

Caitlyn Mitts
Environmental Supervisor
Office: (713) 435-1629
Cell: (281) 685-0389
Caitlyn.Mitts@kirbycorp.com

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From: Steven Caruselle
To: Monica Baez
Subject: RE: [External] Kirby Inland Marine, LP, WQ0004992000
Date: Tuesday, April 14, 2020 9:46:33 AM

The blowdown comingles.

From: Monica Baez [mailto:monica.baez@tceq.texas.gov]
Sent: Tuesday, April 14, 2020 9:45 AM
To: Steven Caruselle <Steven.Caruselle@kirbycorp.com>
Subject: RE: [External] Kirby Inland Marine, LP, WQ0004992000

When in use, does boiler blowdown commingles with your other wastewater prior to discharge via Outfall 013 or is it routed to the city? Make a note that the facility does not use any chemicals.

Thank you,
Mónica

From: Steven Caruselle <Steven.Caruselle@kirbycorp.com>
Sent: Tuesday, April 14, 2020 9:38 AM
To: Monica Baez <monica.baez@tceq.texas.gov>
Subject: RE: [External] Kirby Inland Marine, LP, WQ0004992000

We had some confusion on this one. We do have a boiler that is used on a rare occasion (numbers represented would be if we ran the boiler every day). It is tied into city water and we do not use any chemicals for blow down. Question D says if yes to 5. B include data sheets, but since we don't use any chemicals what would we do for that part?

Thanks,

Steven

From: Monica Baez [mailto:monica.baez@tceq.texas.gov]
Sent: Tuesday, April 14, 2020 9:25 AM
To: Steven Caruselle <Steven.Caruselle@kirbycorp.com>
Subject: FW: [External] Kirby Inland Marine, LP, WQ0004992000

Steven,

Can you please revise page 9 of 38 of the Technical Report? It is regarding boiler blowdown.

Thank you,
Mónica

Mónica Vallin-Báez

Industrial Wastewater Permits Team
Water Quality Division
TCEQ
Tel.: 512-239-5784
Email: monica.baez@tceq.texas.gov

How is our customer service? Fill out our online customer satisfaction survey at www.tceq.texas.gov/customersurvey.

From: Monica Baez
Sent: Tuesday, April 14, 2020 9:13 AM
To: Steven Caruselle <Steven.Caruselle@kirbycorp.com>
Subject: RE: [External] Kirby Inland Marine, LP, WQ0004992000

Thank you. One more question, I am looking into the description of the produced wastewater, but I don't see anything regarding boiler blowdown. When does boiler blowdown is generated and does it commingle with wash water and treated with it?

Thanks, Mónica

Mónica Vallin-Báez
Industrial Wastewater Permits Team
Water Quality Division
TCEQ
Tel.: 512-239-5784
Email: monica.baez@tceq.texas.gov

How is our customer service? Fill out our online customer satisfaction survey at www.tceq.texas.gov/customersurvey.

From: Steven Caruselle <Steven.Caruselle@kirbycorp.com>
Sent: Monday, April 13, 2020 5:07 PM
To: Monica Baez <monica.baez@tceq.texas.gov>
Subject: Re: [External] Kirby Inland Marine, LP, WQ0004992000

I will get that to you first thing in the morning.

Thanks!

Steven

Sent from my iPhone

> On Apr 13, 2020, at 4:46 PM, Monica Baez <monica.baez@tceq.texas.gov> wrote:
>
> Steven,
>
> Thank you. I received all the lab reports. I hate to do this, but I am going to need a revised Worksheet 2.0 with the correct units (ug/L).
>
> Thank you,
> Mónica
>
> *Mónica Vallin-Báez*
> Industrial Wastewater Permits Team
> Water Quality Division
> TCEQ
> Tel.: 512-239-5784
> Email: monica.baez@tceq.texas.gov
>
> How is our customer service? Fill out our online customer satisfaction survey at www.tceq.texas.gov/customersurvey.
>
> ---
>
> **From:** Steven Caruselle <Steven.Caruselle@kirbycorp.com>
> **Sent:** Monday, April 13, 2020 3:40 PM
> **To:** Monica Baez <monica.baez@tceq.texas.gov>
> **Subject:** RE: [External] Kirby Inland Marine, LP, WQ0004992000
>
> Last one!
>
> ---
>
> **From:** Monica Baez [mailto:monica.baez@tceq.texas.gov]
> **Sent:** Monday, April 13, 2020 3:33 PM
> **To:** Steven Caruselle <Steven.Caruselle@kirbycorp.com>
> **Subject:** RE: [External] Kirby Inland Marine, LP, WQ0004992000
>
> Steven,
>
> I didn't. Can you resend it?

Thank you,
Mónica

From: Steven Caruselle <Steven.Caruselle@kirbycorp.com>
Sent: Monday, April 13, 2020 3:29 PM
To: Monica Baez <monica.baez@tceq.texas.gov>
Subject: RE: [External] Kirby Inland Marine, LP, WQ0004992000

Hi Monica,

I just wanted to confirm you received the files I sent earlier with the analytical?

Thanks,

Steven

From: Monica Baez [mailto:monica.baez@tceq.texas.gov]
Sent: Monday, April 13, 2020 11:50 AM
To: Steven Caruselle <Steven.Caruselle@kirbycorp.com>
Cc: Monica Baez <monica.baez@tceq.texas.gov>
Subject: [External] Kirby Inland Marine, LP, WQ0004992000

Good morning Mr. Caruselle,

My name is Mónica Vallin-Báez. I am the permit writer assigned to review and prepare a draft permit for this facility. I am reviewing the analytical data provided in the renewal in Worksheet 2.0. Can you please verify the units in Tables 2 and 3, and provide the lab results.

Please note that the Agency is currently performing work from home, so any correspondence is preferable via e-mail.

Thank you,
Mónica

Mónica Vallin-Báez
Industrial Wastewater Permits Team
Water Quality Division
TCEQ
Tel.: 512-239-5784
Email: monica.baez@tceq.texas.gov

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