



Administrative Package Cover Page

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1. Summary of application (in plain language)
 - English
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 2. First Notice (NORI-Notice of Receipt of Application and Intent to Obtain a Permit)
 - English
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-



Portada de Paquete Administrativo

Este archivo contiene los siguientes documentos:

1. Resumen en lenguaje sencillo (PLS, por sus siglas en inglés) de la actividad propuesta
 - Inglés
 - Idioma alternativo (español)
2. Primer aviso (NORI, por sus siglas en inglés)
 - Inglés
 - Idioma alternativo (español)
3. Solicitud original



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUMMARY OF APPLICATION IN PLAIN LANGUAGE FOR TPDES OR TLAP PERMIT APPLICATIONS

Summary of Application (in plain language) Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

Applicants should use this template to develop a plain language summary of your facility and application as required by Title 30, Texas Administrative Code (30 TAC), Chapter 39, Subchapter H. You may modify the template as necessary to accurately describe your facility as long as the summary includes the following information: (1) the function of the proposed plant or facility; (2) the expected output of the proposed plant or facility; (3) the expected pollutants that may be emitted or discharged by the proposed plant or facility; and (4) how you will control those pollutants, so that the proposed plant will not have an adverse impact on human health or the environment.

Fill in the highlighted areas below to describe your facility and application in plain language. Instructions and examples are provided below. Make any other edits necessary to improve readability or grammar and to comply with the rule requirements. After filling in the information for your facility delete these instructions.

If you are subject to the alternative language notice requirements in 30 TAC Section 39.426, **you must provide a translated copy of the completed plain language summary in the appropriate alternative language as part of your application package.** For your convenience, a Spanish template has been provided below.

ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS Enter 'INDUSTRIAL' or 'DOMESTIC' here WASTEWATER/STORMWATER

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 TAC Chapter 39. The information provided in this summary may change during the technical review of the application and is not a federal enforceable representation of the permit application.

Seadrift Coke, LP ([CN604943100](#)) operates Seadrift Coke ([RN102147055](#)), a coking facility which produces calcined petroleum needle coke from decant oil (No. 6 oil) feedstock. The facility is located at 8618 State Highway 185 North, in Port Lavaca, Calhoun County, Texas 77979.

Seadrift Coke, LP ("Seadrift") is renewing its wastewater permit with a major amendment to allow for intermittent discharges of process wastewater into outfall 002.

Discharges from the facility are expected to contain Organic Carbon., Suspended Solids, Oil and Grease, Sulfates, Copper, Phenols, Benzene, Toluene, Naphthalene, Phenanthrene, 1,1,1-Trichloroethane, Chromium, and Enterococci. Wastewater is generated from equipment/process area washdown, cooling tower blowdown, process areas and storm runoff from the process areas, and sanitary wastewater from the onsite facilities. The wastewater is treated by solids gravity separation basins; Corrugated Plate Interceptor (CPI); Chemical Treatment (Coagulant and Coagulant Aid as needed); Dissolved Air Flotation Unit (DAF); Surge

Capacity Tank; and Activated Carbon Filters. Wastewater from the unit is pumped via the oily water header or the oily water collection sump to the CPI. Treated wastewater from the CPI flows by gravity to mix tanks in which a coagulant (and coagulant aid as needed) is added prior to treatment in the DAF. Treated process water from the DAF may be discharged to Outfall 002. During periods of low rainfall or low basin levels, wastewater from CPI can be routed back to the Rain (East) Basin for storage and later use in the process instead of flowing through the DAF to Outfall 001. Additional coagulant aid is added to the DAF unit as needed to aid the separation process. Storm runoff from the concrete areas within the process unit and coke-cutting water tanks flow by gravity to the Rain Basin (East Basin) or Storm Basin (West Basin), which would eventually be pumped to the CPI, then the DAF unit. Treated wastewater from the DAF unit is recycled to the process for coke cutting and other purposes. Water in excess for process needs is routed to activated carbon filters for final polishing. Treated water from the carbon filters flows to Outfall 001 and is then pumped to the Victoria Barge Canal for disposal. Domestic wastewater generated at the facility is routed to a package treatment plant which discharges via internal Outfall 101 at the final basin. All wastewaters in the final basin are pumped and discharged to the Victoria Barge Canal at Outfall 001. Seadrift Coke is requesting approval to divert wash water from the Waste Heat Boiler and the North Cooling Tower to Outfall 002. These discharges would occur episodically, during plant outages when maintenance and cleaning activities take place. During such events, stormwater at Outfall 002 would potentially mix with wash water. Seadrift Coke is also requesting the removal of Outfall 101 flow reporting requirements. As an internal outfall that discharges directly to Outfall 001, its flow is already accounted for within Outfall 001 reporting. Furthermore, Seadrift Coke is requesting the removal of specific waste stream contributions from Outfall 001. These include boiler blowdown and cooling tower blowdown, which will no longer be directed to this outfall. Additionally, the neutralized demineralized regenerant has been replaced with RO (reverse osmosis) water, reflecting an operational change in water treatment processes.

PLANTILLA EN ESPAÑOL PARA SOLICITUDES NUEVAS/RENOVACIONES/ENMIENDAS DE TPDES o TLAP

AGUAS RESIDUALES Introduzca 'INDUSTRIALES' o 'DOMÉSTICAS' aquí /AGUAS PLUVIALES

El siguiente resumen se proporciona para esta solicitud de permiso de calidad del agua pendiente que está siendo revisada por la Comisión de Calidad Ambiental de Texas según lo requerido por el Capítulo 39 del Código Administrativo de Texas 30. La información proporcionada en este resumen puede cambiar durante la revisión técnica de la solicitud y no es una representación ejecutiva fedérale de la solicitud de permiso.

Seadrift Coke, LP (CN604943100) opera Seadrift Coke RN102147055, un coking facility which produces calcined petroleum needle coke from decant oil (No. 6 oil) feedstock. La instalación está ubicada en 8618 State Highway 185 North, en Port Lavavaca, Condado de Calhoun, Texas 77979. Seadrift Coke, LP ("Seadrift") está renovando su permiso de aguas residuales con una enmienda importante para permitir descargas intermitentes de aguas residuales de proceso en el desagüe 002. <<Para las solicitudes de TLAP incluya la siguiente oración, de lo contrario, elimine:>> Este permiso no autorizará una descarga de contaminantes en el agua en el estado.

Se espera que las descargas de la instalación contengan Carbono orgánico, sólidos en suspensión, aceites y grasas, sulfatos, cobre, fenoles, benceno, tolueno, naftaleno, fenantreno, 1,1,1-tricloroetano, cromo y enterococos. Las aguas residuales se generan a partir del lavado de equipos/áreas de proceso, la purga de la torre de enfriamiento, las áreas de proceso y la escorrentía pluvial de las áreas de proceso, y las aguas residuales sanitarias de las instalaciones en el sitio. Las aguas residuales. está tratado por balsas de separación de sólidos por gravedad; Interceptor de placa corrugada (CPI); Tratamiento químico (coagulante y coadyuvante según sea necesario); Unidad de Flotación por Aire Disuelto (DAF); tanque de capacidad de oleaje; y Filtros de Carbón Activado. Las aguas residuales de la unidad se bombean a través del cabezal de agua aceitosa o el sumidero de recolección de agua aceitosa al CPI. Las aguas residuales tratadas del CPI fluyen por gravedad a los tanques de mezcla en los que se agrega un coagulante (y un auxiliar coagulante según sea necesario) antes del tratamiento en el DAF. El agua de proceso tratada del DAF puede descargarse en el emisario 002. Durante los períodos de baja pluviometría o bajos niveles de la cuenca, las aguas residuales del CPI pueden dirigirse de vuelta a la cuenca de lluvia (este) para su almacenamiento y posterior uso en el proceso en lugar de fluir a través del DAF hasta el emisario 001. Se añade un auxiliar coagulante adicional a la unidad DAF según sea necesario para ayudar en el proceso de separación. La escorrentía pluvial de las áreas de concreto dentro de la unidad de proceso y los tanques de agua de corte de coque fluyen por gravedad a la cuenca de lluvia (cuenca este) o a la cuenca Strom (cuenca oeste), que eventualmente se bombearía al CPI y luego a la unidad DAF. Las aguas residuales tratadas de la unidad DAF se reciclan en el proceso para el corte de coque y otros fines. El agua en exceso para las necesidades del proceso se dirige a los filtros de carbón activado para el pulido final. El agua tratada de los filtros de carbón fluye al desagüe 001 y luego se bombea al canal de barcazas Victoria para su eliminación. Las aguas residuales domésticas generadas en la instalación se dirigen a una planta de tratamiento de paquetes que se descargan a través del emisario interno 101 en la cuenca final. Todas las aguas residuales de la cuenca final se bombean y descargan al canal de barcazas Victoria en el desagüe 001. Seadrift Coke está solicitando aprobación para desviar el agua de lavado de la caldera de calor residual y la torre de enfriamiento norte al emisario 002. Estas descargas ocurrirían episódicamente, durante las paradas de la planta cuando se llevan a cabo actividades de mantenimiento y limpieza. Durante tales eventos, las aguas pluviales en el emisario 002 potencialmente se mezclarían con el agua de lavado. Seadrift Coke también está solicitando la eliminación de los requisitos

de informes de flujo del desagüe 101. Como emisario interno que descarga directamente al emisario 001, su caudal ya se tiene en cuenta en los informes del emisario 001. Además, Seadrift Coke está solicitando la eliminación de contribuciones específicas del flujo de desechos del desagüe 001. Estos incluyen la purga de la caldera y la purga de la torre de enfriamiento, que ya no se dirigirán a este emisario. Además, el regenerante desmineralizado neutralizado se ha reemplazado con agua de ósmosis inversa (RO), lo que refleja un cambio operativo en los procesos de tratamiento de agua.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



NOTICE OF RECEIPT OF APPLICATION AND INTENT TO OBTAIN WATER QUALITY PERMIT

AMENDMENT PERMIT NO. WQ0002586000

APPLICATION. Seadrift Coke L.P., 8618 State Highway 185 North, Port Lavaca, Texas 77979, which owns a petroleum needle coke production and calcining facility, has applied to the Texas Commission on Environmental Quality (TCEQ) to amend Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0002586000 (EPA I.D. No. TX0090948) to authorize removing the monitoring of flow from internal Outfall 101, change wash water wastestream from Outfall 001 to Outfall 002, and remove waste streams of boiler blowdown and cooling tower blowdown from Outfall 001. The facility is located at 8618 State Highway 185 North, southwest of the City of Port Lavaca, in Calhoun County, Texas 77979. The discharge route is from the plant site via pipe directly to Victoria Barge Canal. TCEQ received this application on March 14, 2025. The permit application will be available for viewing and copying at Calhoun County Public Library, Public Notice Board, 200 West Mahan Street, Port Lavaca, Texas, prior to the date this notice is published in the newspaper. The application, including any updates, and associated notices are available electronically at the following webpage:

<https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications>. This link to an electronic map of the site or facility's general location is provided as a public courtesy and not part of the application or notice. For the exact location, refer to the application.

<https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.794722,28.511944&level=18>

The application is subject to the goals and policies of the Texas Coastal Management Program and must be consistent with the applicable Coastal Management Program goals and policies.

ALTERNATIVE LANGUAGE NOTICE. Alternative language notice in Spanish is available at:

<https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications>.

El aviso de idioma alternativo en español está disponible en

<https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications>.

ADDITIONAL NOTICE. TCEQ's Executive Director has determined the application is administratively complete and will conduct a technical review of the application. After technical review of the application is complete, the Executive Director may prepare a draft permit and will issue a preliminary decision on the application. **Notice of the Application and Preliminary Decision will be published and mailed to those who are on the county-wide mailing list and to those who are on the mailing list for this application. That notice will contain the deadline for submitting public comments.**

PUBLIC COMMENT / PUBLIC MEETING. You may submit public comments or request a public meeting on this application. The purpose of a public meeting is to provide the opportunity to submit comments or to ask questions about the application. 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 submitting public comments, the Executive Director will consider all timely comments and prepare a response to all relevant and material, or significant public comments. **Unless the application is directly referred for a contested case hearing, the response to comments, and the Executive Director's decision on the application, will be mailed to everyone who submitted public comments and to those persons who are on the mailing list for this application.** If comments are received, the mailing will also provide instructions for requesting reconsideration of the Executive Director's decision and for requesting a contested case hearing. A contested case hearing is a legal proceeding similar to a civil trial in 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.**

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 placed on: (1) the permanent mailing list for a specific applicant name and permit number; and/or (2) the mailing list for a specific county. If you wish to be placed on the permanent and/or the county mailing list, clearly specify which list(s) and send your request to TCEQ Office of the Chief Clerk at the address below.

INFORMATION AVAILABLE ONLINE. For details about the status of the application, visit the Commissioners' Integrated Database at www.tceq.texas.gov/goto/cid. Search the database using the permit number for this application, which is provided at the top of this notice.

AGENCY CONTACTS AND INFORMATION. All 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 www.tceq.texas.gov/goto/pep. Si desea información en Español, puede llamar al 1-800-687-4040.

Further information may also be obtained from Seadrift Coke L.P. at the address stated above or by calling Mr. Jonathan Martensen, Senior Environmental Associate, CAMS eSPARC, at 713-457-5232.

Issuance Date: April 18, 2025

Comisión de Calidad Ambiental del Estado de Texas



AVISO DE RECIBO DE LA SOLICITUD E INTENCION DE OBTENER PERMISO PARA LA CALIDAD DEL AGUA MODIFICACION

PERMISO NO. WQ0002586000

SOLICITUD. Seadrift Coke L.P, 8618 State Highway 185 North, Port Lavaca, Texas 77979 ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) para modificar el Permiso No.WQ0002586000 (EPA I.D. No. TX0090948) del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) para autorizar la eliminación del monitoreo del flujo del emisario interno 101, cambiar el flujo de aguas residuales de lavado del desagüe 001 al desagüe 002 y eliminar los flujos de desechos de la purga de la caldera y la purga de la torre de enfriamiento del desagüe 001. La planta está ubicada 8618 Carretera Estatal 185 Norte, al suroeste de la Ciudad de Port Lavaca en el Condado de Calhoun, Texas 77979. La ruta de descarga es desde el sitio de la planta a través de una tubería directamente al canal de barcazas Victoria. La TCEQ recibió esta solicitud el día 14 de marzo de 2025. La solicitud para el permiso está disponible para leer y copiar en Biblioteca Pública del Condado de Calhoun, Tablón de Anuncios Público, 200 West Mahan Street, Port Lavaca, Texas, antes de la fecha de publicación de este aviso en el periódico. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en la siguiente página web:

<https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications>. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud.

<https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.794722,28.511944&level=18>

El Director Ejecutivo de la TCEQ ha revisado esta medida para ver si está de acuerdo con los objetivos y las regulaciones del Programa de Administración Costero de Texas (CMP) de acuerdo con las regulaciones del Consejo Coordinador de la Costa (CCC) y ha determinado que la acción es conforme con las metas y regulaciones pertinentes del CMP.

AVISO ADICIONAL. El Director Ejecutivo de la TCEQ ha determinado que la solicitud es administrativamente completa y conducirá una revisión técnica de la solicitud. Después de completar la revisión técnica, el Director Ejecutivo puede preparar un borrador del permiso y emitirá una Decisión Preliminar sobre la solicitud. **El aviso de la solicitud y la decisión preliminar serán publicados y enviado a los que**

están en la lista de correo de las personas a lo largo del condado que desean recibir los avisos y los que están en la lista de correo que desean recibir avisos de esta solicitud. El aviso dará la fecha límite para someter comentarios públicos.

COMENTARIO PUBLICO / REUNION PUBLICA. Usted puede presentar **comentarios públicos o pedir una reunión pública sobre esta solicitud.** El propósito de una reunión pública es dar la oportunidad de presentar comentarios o hacer preguntas acerca de la solicitud. La TCEQ realiza una reunión pública si el Director Ejecutivo determina que hay un grado de interés público suficiente en la solicitud o si un legislador local lo pide. Una reunión pública no es una audiencia administrativa de lo contencioso.

OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO CONTENCIOSO. Después del plazo para presentar comentarios públicos, el Director Ejecutivo considerará todos los comentarios apropiados y preparará una respuesta a todo los comentarios públicos esenciales, pertinentes, o significativos. **A menos que la solicitud haya sido referida directamente a una audiencia administrativa de lo contencioso, la respuesta a los comentarios y la decisión del Director Ejecutivo sobre la solicitud serán enviados por correo a todos los que presentaron un comentario público y a las personas que están en la lista para recibir avisos sobre esta solicitud.** Si se reciben comentarios, el aviso también proveerá instrucciones para pedir una reconsideración de la decisión del Director Ejecutivo y para pedir una audiencia administrativa de lo contencioso. Una audiencia administrativa de lo contencioso es un procedimiento legal similar a un procedimiento legal civil en un tribunal de distrito del estado.

PARA SOLICITAR UNA AUDIENCIA DE CASO IMPUGNADO, USTED DEBE INCLUIR EN SU SOLICITUD LOS SIGUIENTES DATOS: su nombre, dirección, y número de teléfono; el nombre del solicitante y número del permiso; la ubicación y distancia de su propiedad/actividad con respecto a la instalación; una descripción específica de la forma cómo usted sería afectado adversamente por el sitio de una manera no común al público en general; una lista de todas las cuestiones de hecho en disputa que usted presente durante el período de comentarios; y la declaración "[Yo/nosotros] solicito/solicitamos una audiencia de caso impugnado". Si presenta la petición para una audiencia de caso impugnado de parte de un grupo o asociación, debe identificar una persona que representa al grupo para recibir correspondencia en el futuro; identificar el nombre y la dirección de un miembro del grupo que sería afectado adversamente por la planta o la actividad propuesta; proveer la información indicada anteriormente con respecto a la ubicación del miembro afectado y su distancia de la planta o actividad propuesta; explicar cómo y porqué el miembro sería afectado; y explicar cómo los intereses que el grupo desea proteger son pertinentes al propósito del grupo.

Después del cierre de todos los períodos de comentarios y de petición que aplican, el Director Ejecutivo enviará la solicitud y cualquier petición para reconsideración o para una audiencia de caso impugnado a los Comisionados de la TCEQ para su consideración durante una reunión programada de la Comisión. La Comisión sólo puede conceder una solicitud de una audiencia de caso impugnado sobre los temas que el solicitante haya presentado en sus comentarios oportunos que no fueron retirados posteriormente. Si se concede una audiencia, el tema de la audiencia estará limitado a cuestiones de hecho en disputa o cuestiones mixtas de hecho y de derecho relacionadas a intereses pertinentes y materiales de calidad del agua que se hayan presentado durante el período de comentarios.

LISTA DE CORREO. Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo, la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. Además, puede pedir que la TCEQ ponga su nombre en una o más de las listas correos siguientes (1) la lista de correo permanente para recibir los avisos de el solicitante indicado por nombre y número del permiso específico y/o (2) la lista de correo de todas las solicitudes en un condado específico. Si desea que se agregue su nombre en una de las listas designe cual lista(s) y envía por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

CONTACTOS E INFORMACIÓN DE LA TCEQ. Todos los comentarios escritos del público y los para pedidos una reunión deben ser presentados a la Oficina del Secretario Principal, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 o por el internet at www.tceq.texas.gov/about/comments.html. Tenga en cuenta que cualquier información personal que usted proporcione, incluyendo su nombre, número de teléfono, dirección de correo electrónico y dirección física pasarán a formar parte del registro público de la Agencia. Si necesita más información en Español sobre esta solicitud para un permiso o el proceso del permiso, por favor llame a El Programa de Educación Pública de la TCEQ, sin cobro, al 1-800-687-4040. La información general sobre la TCEQ puede ser encontrada en nuestro sitio de la red: www.tceq.texas.gov.

También se puede obtener información adicional del Seadrift Coke L.P. a la dirección indicada arriba o llamando a Mr. Jonathan Martensen, Asociado Ambiental Senior, CAMS eSPARC al 713-457-5232.

Fecha de emisión 18 de abril de 2025

Abesha Michael

From: Jonathan Martensen <jmartensen@camsops.com>
Sent: Thursday, April 3, 2025 3:39 PM
To: Abesha Michael
Cc: Seadrift; patricia.daigle@seadriftcoke.com
Subject: RE: [EXTERNAL] Application to Amend Permit No. WQ0002586000 - Notice of Deficiency Letter
Attachments: Seadrift WQ0002586000 Ind-tpdes-amend-nori.docx; Seadrift - Affected Landowners Map 1 of 2.pdf; Seadrift - Affected Landowners Map 2 of 2.pdf; wq0002586000-NOD1.pdf
Follow Up Flag: Follow up
Flag Status: Flagged

Dear Ms. Michael,

On behalf of Seadrift Coke L.P., we would like to thank you for the opportunity to address the three items noted in the NOD1 issued March 24, 2025 for permit WQ0002586000 (see attached: *wq0002586000-NOD1.pdf*). The responses to the three items are as follows:

1. The Affected Landowners Map has been re-issued with a second page that includes a closer view of the smaller properties which could not be labeled accurately with a single map. Please see the attached *Seadrift - Affected Landowners Map 1 of 2.pdf* and *Seadrift - Affected Landowners Map 2 of 2.pdf* for the updated Affected Landowners maps.
2. We would like to note one revision to the NORI included as item 2 in the NOD1: Change "Seadrift Coke L.P., 982 Keynote Circle, Brooklyn Heights, Ohio 44131" to "Seadrift Coke L.P, 8618 State Highway 185 North, Port Lavaca, Texas 77979".
3. Please see the attached file *Seadrift WQ0002586000 Ind-tpdes-amend-nori.docx* for the updated Spanish language NORI template.

We hope these responses adequately address the items identified in the NOD1. If you require additional information or clarification, please do not hesitate to reach out.

Thank you,



Jonathan Martensen

Senior Environmental Associate I
Consolidated Asset Management Services
Office: 713-457-5232 | Cell: 936-524-0819
jmartensen@camstex.com
910 Louisiana St, Ste 2400, Houston, Texas 77002

From: SD Daigle, Patricia <patricia.daigle@seadriftcoke.com>
Sent: Monday, March 24, 2025 7:41 PM
To: Seadrift <Seadrift@camstex.com>
Subject: Fw: [EXTERNAL] Application to Amend Permit No. WQ0002586000 - Notice of Deficiency Letter



TCEQ Core Data Form

For detailed instructions on completing 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 604943100		RN 102147055

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:	
Seadrift Coke, LP					
7. TX SOS/CPA Filing Number		8. TX State Tax ID (11 digits)		9. Federal Tax ID	
0800484990		12026927504		(9 digits)	
10. DUNS Number (if applicable)					
11. Type of Customer:		☒ Corporation		☐ Individual	
Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other		☐ Sole Proprietorship		Partnership: ☐ General ☒ Limited	
12. Number of Employees				13. Independently Owned and Operated?	
☐ 0-20 ☒ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher				☐ 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 ☐ Other:					
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant					
15. Mailing Address:		8618 State Highway 185 N			
City		Port Lavaca		State TX	
ZIP		77979		ZIP + 4	
16. Country Mailing Information (if outside USA)			17. E-Mail Address (if applicable)		

18. Telephone Number (361) 552-8887	19. Extension or Code	20. Fax Number (if applicable) () -
--	-----------------------	---

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If "New Regulated Entity" is selected, a new permit application is also required.) ☐ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information								
<i>The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).</i>								
22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.) Seadrift Coke, LP								
23. Street Address of the Regulated Entity: (No PO Boxes)	8618 State Highway 185 N							
	City	Port Lavaca	State	TX	ZIP	77979	ZIP + 4	
24. County	Calhoun							

If no Street Address is provided, fields 25-28 are required.

25. Description to Physical Location:								
26. Nearest City	State				Nearest ZIP Code			
<i>Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).</i>								
27. Latitude (N) In Decimal:					28. Longitude (W) In Decimal:			
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds			
29. Primary SIC Code (4 digits)	30. Secondary SIC Code (4 digits)		31. Primary NAICS Code (5 or 6 digits)		32. Secondary NAICS Code (5 or 6 digits)			
2999			324199					
33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.) Petroleum-based needle coke production								
34. Mailing Address:	8618 State Highway 185 N							
	City	Port Lavaca	State	TX	ZIP	77979	ZIP + 4	
35. E-Mail Address:								
36. Telephone Number			37. Extension or Code			38. Fax Number (if applicable)		
(361) 552-8887						() -		

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.

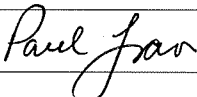
☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☒ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:
	WQ0002586000			

SECTION IV: Preparer Information

40. Name:	Jonathan Martensen		41. Title:	Senior Environmental Associate
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address	
(713) 457-5232		() -	jmartensen@camstex.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:	Seadrift Coke, LP		Job Title:	President
Name (In Print):	Paul Fraser		Phone:	(361) 552- 8310
Signature:			Date:	4/15/25

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe. If you believe you've received this email in error, or believe this is a phishing attempt contact Bluewire Help Desk

Just received this.

Sent via the Samsung Galaxy Note10, an AT&T 5G Evolution capable smartphone

Get [Outlook for Android](#)

Patricia Daigle
HSEP Manager
Seadrift Coke L.P.
8618 State Highway 185 North
Port Lavaca, TX United States 77979
Phone: 361-551-4593
patricia.daigle@seadriftcoke.com



From: Abesha Michael <Abesha.Michael@tceq.texas.gov>
Sent: Monday, March 24, 2025 3:13:40 PM
To: SD Daigle, Patricia <patricia.daigle@seadriftcoke.com>
Subject: [EXTERNAL] Application to Amend Permit No. WQ0002586000 - Notice of Deficiency Letter

This is the first time you received an email from this sender (Abesha.Michael@tceq.texas.gov). Exercise caution when clicking links, opening attachments or taking further action, before validating its authenticity.

CAUTION: This email is from an external source. Be careful when clicking on links or attachments.

Dear Ms. Daigle:

The attached Notice of Deficiency letter sent on March 24, 2025, requests additional information needed to declare the application administratively complete. Please send the complete response to my attention by April 7, 2025.

Thank you,



Abesha H. Michael
Applications Review & Processing Team
Water Quality Division Support Section
Water Quality Division, MC 148
PO Box 13087
Austin, Texas 78711
Phone: o: 512-239-4912
Email: abesha.michael@tceq.texas.gov

How is our customer service? Fill out our online customer satisfaction survey at
www.tceq.texas.gov/customersurvey

Comisión de Calidad Ambiental del Estado de Texas



AVISO DE RECIBO DE LA SOLICITUD E INTENCION DE OBTENER PERMISO PARA LA CALIDAD DEL AGUA MODIFICACION

PERMISO NO. WQ0002586000

SOLICITUD. Seadrift Coke L.P, 8618 State Highway 185 North, Port Lavaca, Texas 77979 ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) para modificar el Permiso No.WQ0002586000 del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) para autorizar la descarga de aguas residuales tratadas en un volumen que no sobrepasa un flujo promedio diario de _____ *[daily average flow in gallons per day]* galones por día. La planta está ubicada 8618 Carretera Estatal 185 Norte, al suroeste de la Ciudad de Port Lavaca en el Condado de *Calhoun*, Texas. La TCEQ recibió esta solicitud el día 14 de marzo de 2025. La solicitud para el permiso está disponible para leer y copiar en *Biblioteca Pública del Condado de Calhoun, Tablón de Anuncios Público, 200 West Mahan Street, Port Lavaca, Texas*. La solicitud (cualquier actualización y aviso inclusive) está disponible electrónicamente en la siguiente página web: <https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications>. Este enlace a un mapa electrónico de la ubicación general del sitio o de la instalación es proporcionado como una cortesía y no es parte de la solicitud o del aviso. Para la ubicación exacta, consulte la solicitud. <https://gisweb.tceq.texas.gov/LocationMapper/?marker=-96.794722,28.511944&level=18>

El Director Ejecutivo de la TCEQ ha revisado esta medida para ver si está de acuerdo con los objetivos y las regulaciones del Programa de Administración Costero de Texas (CMP) de acuerdo con las regulaciones del Consejo Coordinador de la Costa (CCC) y ha determinado que la acción es conforme con las metas y regulaciones pertinentes del CMP.

AVISO ADICIONAL. El Director Ejecutivo de la TCEQ ha determinado que la solicitud es administrativamente completa y conducirá una revisión técnica de la solicitud. Después de completar la revisión técnica, el Director Ejecutivo puede preparar un borrador del permiso y emitirá una Decisión Preliminar sobre la solicitud. **El aviso de la solicitud y la decisión preliminar serán publicados y enviado a los que están en la lista de correo de las personas a lo largo del condado que desean recibir los avisos y los que están en la lista de correo que desean recibir avisos de esta solicitud. El aviso dará la fecha límite para someter**

comentarios públicos.

COMENTARIO PUBLICO / REUNION PUBLICA. Usted puede presentar **comentarios públicos o pedir una reunión pública sobre esta solicitud.** El propósito de una reunión pública es dar la oportunidad de presentar comentarios o hacer preguntas acerca de la solicitud. La TCEQ realiza una reunión pública si el Director Ejecutivo determina que hay un grado de interés público suficiente en la solicitud o si un legislador local lo pide. Una reunión pública no es una audiencia administrativa de lo contencioso.

OPORTUNIDAD DE UNA AUDIENCIA ADMINISTRATIVA DE LO CONTENCIOSO. Después del plazo para presentar comentarios públicos, el Director Ejecutivo considerará todos los comentarios apropiados y preparará una respuesta a todo los comentarios públicos esenciales, pertinentes, o significativos. **A menos que la solicitud haya sido referida directamente a una audiencia administrativa de lo contencioso, la respuesta a los comentarios y la decisión del Director Ejecutivo sobre la solicitud serán enviados por correo a todos los que presentaron un comentario público y a las personas que están en la lista para recibir avisos sobre esta solicitud.** Si se reciben comentarios, el aviso también proveerá instrucciones para pedir una reconsideración de la decisión del Director Ejecutivo y para pedir una audiencia administrativa de lo contencioso. Una audiencia administrativa de lo contencioso es un procedimiento legal similar a un procedimiento legal civil en un tribunal de distrito del estado.

PARA SOLICITAR UNA AUDIENCIA DE CASO IMPUGNADO, USTED DEBE INCLUIR EN SU SOLICITUD LOS SIGUIENTES DATOS: su nombre, dirección, y número de teléfono; el nombre del solicitante y número del permiso; la ubicación y distancia de su propiedad/actividad con respecto a la instalación; una descripción específica de la forma cómo usted sería afectado adversamente por el sitio de una manera no común al público en general; una lista de todas las cuestiones de hecho en disputa que usted presente durante el período de comentarios; y la declaración "[Yo/nosotros] solicito/solicitamos una audiencia de caso impugnado". Si presenta la petición para una audiencia de caso impugnado de parte de un grupo o asociación, debe identificar una persona que representa al grupo para recibir correspondencia en el futuro; identificar el nombre y la dirección de un miembro del grupo que sería afectado adversamente por la planta o la actividad propuesta; proveer la información indicada anteriormente con respecto a la ubicación del miembro afectado y su distancia de la planta o actividad propuesta; explicar cómo y porqué el miembro sería afectado; y explicar cómo los intereses que el grupo desea proteger son pertinentes al propósito del grupo.

Después del cierre de todos los períodos de comentarios y de petición que aplican, el Director Ejecutivo enviará la solicitud y cualquier petición para reconsideración o para una audiencia de caso impugnado a los

Comisionados de la TCEQ para su consideración durante una reunión programada de la Comisión. La Comisión sólo puede conceder una solicitud de una audiencia de caso impugnado sobre los temas que el solicitante haya presentado en sus comentarios oportunos que no fueron retirados posteriormente. Si se concede una audiencia, el tema de la audiencia estará limitado a cuestiones de hecho en disputa o cuestiones mixtas de hecho y de derecho relacionadas a intereses pertinentes y materiales de calidad del agua que se hayan presentado durante el período de comentarios.

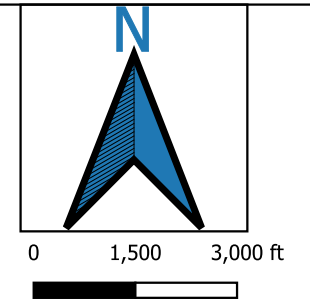
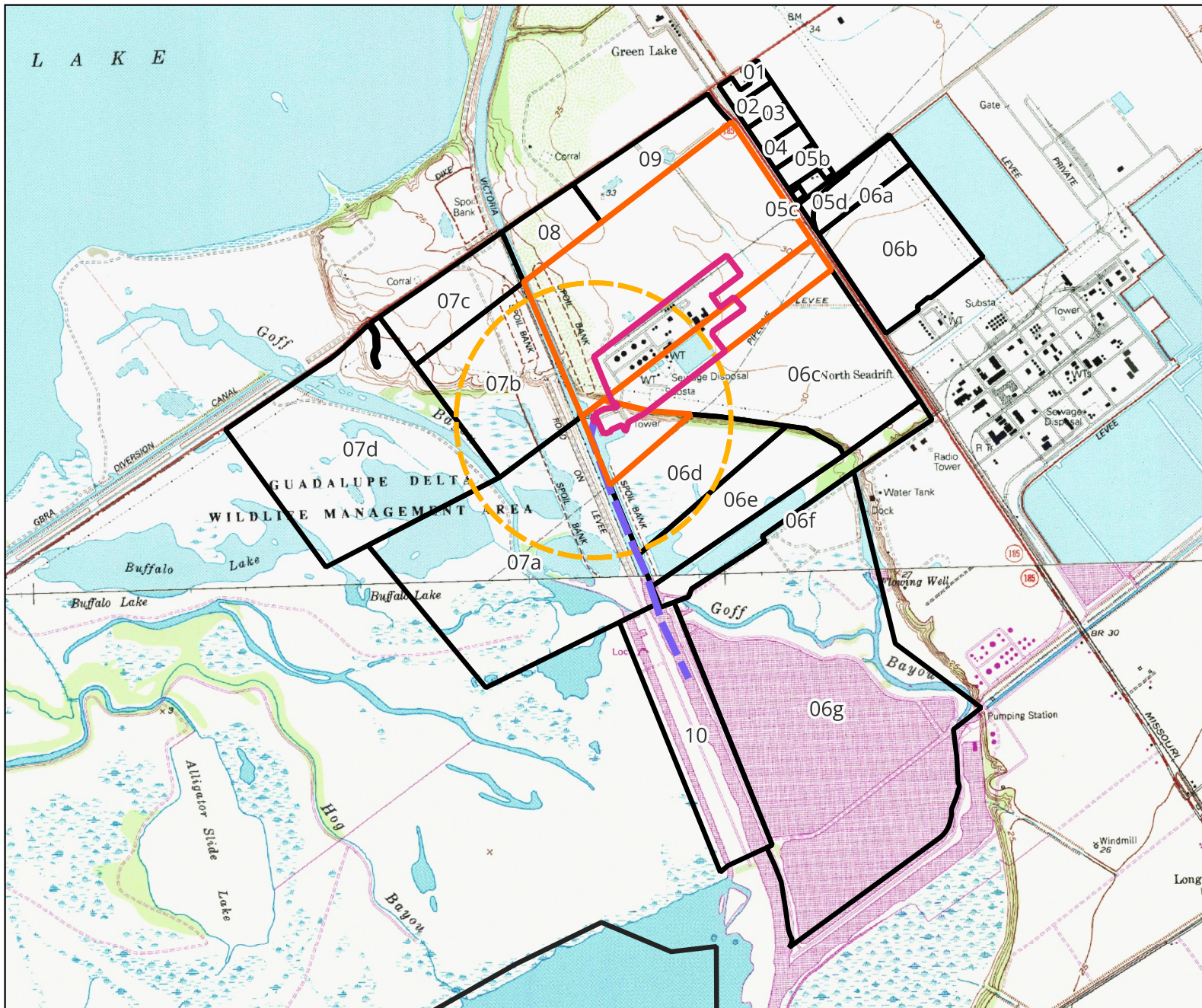
LISTA DE CORREO. Si somete comentarios públicos, un pedido para una audiencia administrativa de lo contencioso o una reconsideración de la decisión del Director Ejecutivo, la Oficina del Secretario Principal enviará por correo los avisos públicos en relación con la solicitud. Además, puede pedir que la TCEQ ponga su nombre en una o más de las listas de correos siguientes (1) la lista de correo permanente para recibir los avisos de el solicitante indicado por nombre y número del permiso específico y/o (2) la lista de correo de todas las solicitudes en un condado específico. Si desea que se agregue su nombre en una de las listas designe cual lista(s) y envía por correo su pedido a la Oficina del Secretario Principal de la TCEQ.

CONTACTOS E INFORMACIÓN DE LA TCEQ. Todos los comentarios escritos del público y los para pedidos una reunión deben ser presentados a la Oficina del Secretario Principal, MC 105, TCEQ, P.O. Box 13087, Austin, TX 78711-3087 o por el internet at www.tceq.texas.gov/about/comments.html.

Tenga en cuenta que cualquier información personal que usted proporcione, incluyendo su nombre, número de teléfono, dirección de correo electrónico y dirección física pasarán a formar parte del registro público de la Agencia. Si necesita más información en Español sobre esta solicitud para un permiso o el proceso del permiso, por favor llame a El Programa de Educación Pública de la TCEQ, sin cobro, al 1-800-687-4040. La información general sobre la TCEQ puede ser encontrada en nuestro sitio de la red: www.tceq.texas.gov.

También se puede obtener información adicional del Seadrift Coke L.P. a la dirección indicada arriba o llamando a Mr. Jonathan Martensen, Asociado Ambiental Senior, CAMS eSPARC al 713-457-5232.

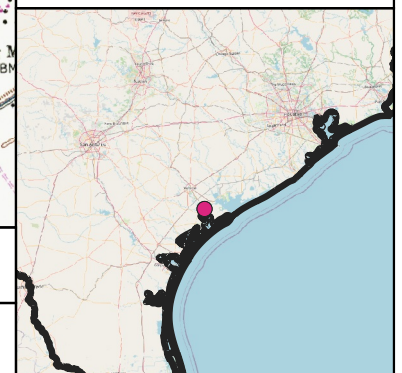
Fecha de emisión _____ *[Date notice issued]*

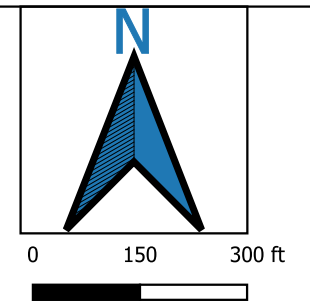


Legend:

- Discharge Route
1-Mile Downstream
- Facility Boundaries
- Seadrift Property Boundaries
- Discharge 001
1/2 Mile Radius
- Affected Landowners

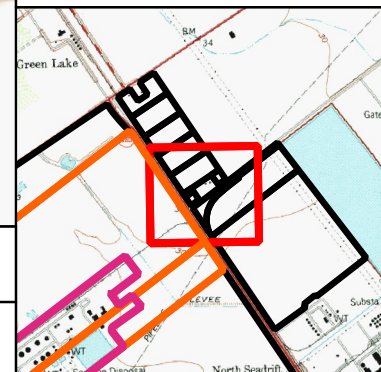
Project Location





- Legend:**
- Facility Boundaries
 - Seadrift Property Boundaries
 - Affected Landowners
 - Zoomed Location

Zoomed Location



Texas Commission on Environmental Quality
Update Domestic or Industrial Individual Permit
WQ0002586000

Site Information (Regulated Entity)

What is the name of the site to be authorized?	SEADRIFT COKE PLANT
Does the site have a physical address?	Yes

Physical Address

Number and Street	8618 SH 185 N
City	PORT LAVACA
State	TX
ZIP	77979
County	CALHOUN
Latitude (N) (##.#####)	28.511944
Longitude (W) (-###.#####)	-96.794722
Primary SIC Code	2999
Secondary SIC Code	
Primary NAICS Code	324199
Secondary NAICS Code	

Regulated Entity Site Information

What is the Regulated Entity's Number (RN)?	RN102147055
What is the name of the Regulated Entity (RE)?	SEADRIFT COKE
Does the RE site have a physical address?	Yes

Physical Address

Number and Street	8618 HIGHWAY 185 N
City	PORT LAVACA
State	TX
ZIP	77979
County	CALHOUN
Latitude (N) (##.#####)	28.5125
Longitude (W) (-###.#####)	-96.793
Facility NAICS Code	
What is the primary business of this entity?	NEEDLE COKE & COKE FOR GRAPHITE MFG.

Seadrif-Customer (Applicant) Information (Owner)

How is this applicant associated with this site?	Owner
What is the applicant's Customer Number (CN)?	CN604943100

Type of Customer	Corporation
Full legal name of the applicant:	
Legal Name	Seadrift Coke L.P.
Texas SOS Filing Number	800484990
Federal Tax ID	
State Franchise Tax ID	12026927504
State Sales Tax ID	
Local Tax ID	
DUNS Number	8237497
Number of Employees	101-250
Independently Owned and Operated?	Yes
I certify that the full legal name of the entity applying for this permit has been provided and is legally authorized to do business in Texas.	Yes
Responsible Authority Contact	
Organization Name	Seadrift Coke L.P.
Prefix	MR
First	Paul
Middle	
Last	Fraser
Suffix	
Credentials	
Title	President and General Manager
Responsible Authority Mailing Address	
Enter new address or copy one from list:	Site Physical Address
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	8618 SH 185 N
Routing (such as Mail Code, Dept., or Attn:)	
City	PORT LAVACA
State	TX
ZIP	77979
Phone (###-###-####)	3615528310
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	paul.fraser@seadriftcoke.com

Billing Contact

Responsible contact for receiving billing statements:

Select the permittee that is responsible for payment of the annual fee. CN604943100, Seadrift Coke L.P.

Organization Name	Seadrift Coke L.P.
Prefix	MS
First	Patricia
Middle	
Last	Daigle
Suffix	
Credentials	
Title	HSEP Manager
Enter new address or copy one from list:	Site Physical Address
Mailing Address	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	8618 SH 185 N
Routing (such as Mail Code, Dept., or Attn:)	
City	PORT LAVACA
State	TX
ZIP	77979
Phone (###-###-####)	3615514593
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	patricia.daigle@seadriftcoke.com

Application Contact

Person TCEQ should contact for questions about this application:

Same as another contact?	Billing Contact
Organization Name	Seadrift Coke L.P.
Prefix	MS
First	Patricia
Middle	
Last	Daigle
Suffix	
Credentials	
Title	HSEP Manager
Enter new address or copy one from list:	
Mailing Address	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	8618 SH 185 N
Routing (such as Mail Code, Dept., or Attn:)	
City	PORT LAVACA

State	TX
ZIP	77979
Phone (###-###-####)	3615514593
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	patricia.daigle@seadriftcoke.com

Technical Contact

Person TCEQ should contact for questions about this application:

Same as another contact?	Billing Contact
Organization Name	Seadrift Coke L.P.
Prefix	MS
First	Patricia
Middle	
Last	Daigle
Suffix	
Credentials	
Title	HSEP Manager

Enter new address or copy one from list:

Mailing Address

Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	8618 SH 185 N
Routing (such as Mail Code, Dept., or Attn:)	
City	PORT LAVACA
State	TX
ZIP	77979
Phone (###-###-####)	3615514593
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	patricia.daigle@seadriftcoke.com

DMR Contact

Person responsible for submitting Discharge Monitoring Report

Forms:

Same as another contact?	Billing Contact
Organization Name	Seadrift Coke L.P.
Prefix	MS

First	Patricia
Middle	
Last	Daigle
Suffix	
Credentials	
Title	HSEP Manager
Enter new address or copy one from list:	
Mailing Address:	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	8618 SH 185 N
Routing (such as Mail Code, Dept., or Attn:)	
City	PORT LAVACA
State	TX
ZIP	77979
Phone (###-###-####)	3615514593
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	patricia.daigle@seadriftcoke.com

Section 1# Permit Contact

Permit Contact#: 1

Person TCEQ should contact throughout the permit term.

1) Same as another contact?	Billing Contact
2) Organization Name	Seadrift Coke L.P.
3) Prefix	MS
4) First	Patricia
5) Middle	
6) Last	Daigle
7) Suffix	
8) Credentials	
9) Title	HSEP Manager
Mailing Address	
10) Enter new address or copy one from list	
11) Address Type	Domestic
11.1) Mailing Address (include Suite or Bldg. here, if applicable)	8618 SH 185 N
11.2) Routing (such as Mail Code, Dept., or Attn:)	
11.3) City	PORT LAVACA
11.4) State	TX

11.5) ZIP	77979
12) Phone (###-###-####)	3615514593
13) Extension	
14) Alternate Phone (###-###-####)	
15) Fax (###-###-####)	
16) E-mail	patricia.daigle@seadriftcoke.com

Section 2# Permit Contact

Permit Contact#: 2

Person TCEQ should contact throughout the permit term.

1) Same as another contact?	
2) Organization Name	Seadrift Coke LP
3) Prefix	MS
4) First	Mary
5) Middle	
6) Last	Bowden
7) Suffix	
8) Credentials	
9) Title	Production Supervisor

Mailing Address

10) Enter new address or copy one from list	Site Physical Address
11) Address Type	Domestic
11.1) Mailing Address (include Suite or Bldg. here, if applicable)	8618 SH 185 N
11.2) Routing (such as Mail Code, Dept., or Attn:)	
11.3) City	PORT LAVACA
11.4) State	TX
11.5) ZIP	77979
12) Phone (###-###-####)	3615514579
13) Extension	
14) Alternate Phone (###-###-####)	
15) Fax (###-###-####)	
16) E-mail	Mary.Bowden@seadriftcoke.com

Owner Information

Owner of Treatment Facility

1) Prefix	
2) First and Last Name	
3) Organization Name	Seadrift Coke LP

4) Mailing Address	8618 State Highway 185 North
5) City	Port Lavaca TX
6) State	TX
7) Zip Code	77979
8) Phone (###-###-####)	3615528887
9) Extension	
10) Email	SeadriftHR@seadriftcoke.com
11) What is ownership of the treatment facility?	Private
Owner of Land (where treatment facility is or will be)	
12) Prefix	
13) First and Last Name	
14) Organization Name	Seadrift Coke LP
15) Mailing Address	8618 State Highway 185 North
16) City	Port Lavaca
17) State	TX
18) Zip Code	77979
19) Phone (###-###-####)	3615528887
20) Extension	
21) Email	SeadriftHR@seadriftcoke.com
22) Is the landowner the same person as the facility owner or co-applicant?	Yes

General Information Renewal-Amendment

1) Current authorization expiration date:	09/11/2025
2) Current Facility operational status:	Active
3) Is the facility located on or does the treated effluent cross American Indian Land?	No
4) What is the application type that you are seeking?	Major Amendment with Renewal
4.1) Describe the proposed changes:	Seadrift Coke requests authorization to divert wash water from the Waste Heat Boiler and North Cooling Tower to Outfall 002 during episodic maintenance outages 1 to 2 days, which typically occur every 2 to 3 years. During these events, stormwater at Outfall 002 may mix with drained wash water. Additionally, when the South Cooling Tower is offline about every two years, air-compressor cooling wastewater will be treated settling basins, CPI unit, chemical coagulants, DAF before discharge through Outfall 002. Seadrift Coke also

seeks to discontinue separate flow reporting for Outfall 101, as it is an internal outfall discharging directly to Outfall 001. Outfall 101 volumes would no longer be reported separately. Further, the company proposes removing boiler and cooling tower blowdown streams from Outfall 001, and notes that neutralized demineralized regenerant has been replaced by reverse osmosis water.

Industrial Wastewater

Minor

No

Major Amendment - \$350

TPDES

TX0090948

Yes

Yes

Port Lavaca

CALHOUN

No

No

No

5) Current Authorization type:

5.1) What is your EPA facility classification?

5.1.1) Are the discharges at your facility subjected to federal effluent limitation guidelines (ELG) 40 CFR Part 400-471?

5.1.1.1) Select the applicable fee for the Minor facility that is not subjected to 40 CFR 400-471:

6) What is the classification for your authorization?

6.1) What is the EPA Identification Number?

6.2) Is the wastewater treatment facility location in the existing permit accurate?

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

6.4) City nearest the outfall(s):

6.5) County where the outfalls are located:

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

6.7) Is the daily average discharge at your facility of 5 MGD or more?

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

Public Notice Information

Individual Publishing the Notices

1) Prefix

MR

2) First and Last Name

Jonathan Martensen

3) Credential

4) Title

Senior Environmental Associate

5) Organization Name

CAMS eSPARC

6) Mailing Address

910 LOUISIANA ST

7) Address Line 2

Ste 2400

8) City

HOUSTON

9) State

TX

10) Zip Code

77002

11) Phone (###-###-####)	7134575232
12) Extension	
13) Fax (###-###-####)	
14) Email	jmartensen@camstex.com
Contact person to be listed in the Notices	
15) Prefix	MR
16) First and Last Name	Jonathan Martensen
17) Credential	
18) Title	Senior Environmental Associate
19) Organization Name	CAMS eSPARC
20) Phone (###-###-####)	7134575232
21) Fax (###-###-####)	
22) Email	jmartensen@camstex.com
Bilingual Notice Requirements	
23) Is a bilingual education program required by the Texas Education Code at the elementary or middle school nearest to the facility or proposed facility?	Yes
23.1) Are the students who attend either the elementary school or the middle school enrolled in a bilingual education program at that school?	No
23.2) Do the students at these schools attend a bilingual education program at another location?	Yes
23.3) 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)?	No
23.4) Which language is required by the bilingual program?	Spanish

Section 1# Public Viewing Information

County#: 1

1) County	CALHOUN
2) Public building name	Calhoun County Public Library
3) Location within the building	Public Notice Board
4) Physical Address of Building	200 W Mahan Street
5) City	Port Lavaca
6) Contact Name	
7) Phone (###-###-####)	3615527323
8) Extension	
9) Is the location open to the public?	Yes

Plain Language

1) Plain Language

[File Properties]

File Name	LANG_AR3.0 PLS.pdf
Hash	8BE79A2DC1D8690DD25F87EA68DE1E99DF39F65D26F89CB457DFD926AFF4F21B
MIME-Type	application/pdf

Supplemental Permit Information Form

1) Supplemental Permit Information Form (SPIF)

[File Properties]

File Name	SPIF_2025-02-27 - SPIF.pdf
Hash	F3BA02BAC4292B795C8835E10956D5F316C7D1AED179F68AD0304A57E8C82AD0
MIME-Type	application/pdf

[File Properties]

File Name	SPIF_Seadrift - Attachment SPIF A - USGS Map.pdf
Hash	5AA9CE4EF82623EF70DF3DE502BEB2489C92E9ED9BBF288750B831CD8AB657E2
MIME-Type	application/pdf

[File Properties]

File Name	SPIF_SPIF-1 USGS Map.pdf
Hash	ECC9E55ED9CB4B07098CB57240503C7ED61FE38C54AAD63342C45A9757617FE9
MIME-Type	application/pdf

Industrial Attachments

1) Attach an 8.5"x11", reproduced portion of the most current and original USGS Topographic Quadrangle Map(s) that meets the 1:24,000 scale.

[File Properties]

File Name	MAP_Seadrift - Attachment AR5.0 - USGS Map.pdf
Hash	DDD83A85AAB3D664096811927D6D0EABA33442C1DC8441BEE05162367B622B7E
MIME-Type	application/pdf

2) Public Involvement Plan (TCEQ Form 20960)

[File Properties]

File Name	PIP_AR4.0 PIP.pdf
Hash	2863129FC978435C317538258CEC4F0580194E32B37AB639858A54D1A9FA4F38
MIME-Type	application/pdf

3) Administrative Report 1.1

[File Properties]

File Name	ARPT_Admin 1.1.pdf
Hash	2FF9348BB72F4BFAC8F4B368870FE2F4DA3C66DEE559F7B678398BD52F739A27
MIME-Type	application/pdf

[File Properties]

File Name	ARPT_2025-02-27 Core Data Form.pdf
Hash	DA198BB59C42B8C60A1623D1D3E79189488BA96E9A88980968540E4EA33C355C
MIME-Type	application/pdf

4) I confirm that all required sections of Technical Report 1.0 are complete and will be included in the Technical Attachment.	Yes
--	-----

4.1) I confirm that Worksheet 2.0 (Pollutant Analyses Requirements) is complete and included in the Technical Attachment.	Yes
---	-----

4.2) I confirm that Worksheet 4.0 (Receiving Waters) is complete and included in the Technical Attachment.	Yes
--	-----

4.3) Are you planning to include Worksheet 4.1 (Waterbody Physical Characteristics) in the Technical Attachment?	No
--	----

4.4) Are you planning to include Worksheet 6.0 (Industrial Waste Contribution) in the Technical Attachment?	No
---	----

4.5) Are you planning to include Worksheet 7.0 (Stormwater Discharges Associated with Industrial Activities) to the Technical Attachment?	Yes
---	-----

4.6) Are you planning to include Worksheet 8.0 (Aquaculture) in the Technical Attachment?	No
---	----

4.7) Are you planning to include Worksheet 9.0 (Class V Injection Well Inventory/Authorization) in the Technical Attachment?	No
--	----

4.8) Are you planning to include Worksheet 10.0 (Quarries in the John Graves Scenic Riverway) in the Technical Attachment?	No
--	----

4.9) Are you planning to include Worksheet 11.0 (Cooling Water System Information) in the Technical Attachment?	No
---	----

4.10) Are you planning to include Worksheet 11.1 (Impingement Mortality) in the Technical Attachment?	No
---	----

4.11) Are you planning to include Worksheet 11.2 (Source Water Biological Data) in the Technical Attachment?	Yes
--	-----

4.12) Are you planning to include Worksheet 11.3 (Entrainment) in the Technical Attachment?	No
---	----

4.13) Technical Attachment

[File Properties]

File Name	TECH_2025-03-12_10055-Technical - jwm-hn - tn.pdf
Hash	1040807F908BA5D7077FBD5B9DCD337D992747C97BECCC4C8A3AE9EACEF65454
MIME-Type	application/pdf

[File Properties]

File Name	TECH_Additional Outfall Wastestream Contribution.pdf
Hash	23364124A7F54200EF772C63273ED5F3C8142FBA97DDA39D413F49391912F9D2
MIME-Type	application/pdf

5) Affected Landowners Map

[File Properties]

File Name	LANDMP_Seadrift - Attachment AR6.0 - Affected Landowners.pdf
Hash	B166D6BBDA87160B1A6549AE08A30EAD616FCE3EF5AAF8F4037212D58A284075
MIME-Type	application/pdf

6) Landowners Cross Reference List

[File Properties]

File Name	LANDCRL_Attachment AR6.0 Affected Landowners - Table.pdf
Hash	CEE4574E782BE8395F3A45ABAE3CF8D56A30A6119E7054A327130BA4B62D7405
MIME-Type	application/pdf

7) Landowner Avery Template

[File Properties]

File Name	LANDAT_Seadrift - Attachment AR6.1 - Avery Labels - Affected Landowners.pdf
Hash	8962CACDEC9B4C078010B7AF71EF34F75F158C0463CE32A0415BEDBA56DA57DB
MIME-Type	application/pdf

8) Flow Diagram

[File Properties]

File Name	FLDIA_2025-02-06 Updated Flow Map.pdf
Hash	9B5264FFB0B14AE3BEFC369715975B3800F4F0FD0714B5A01DD15AD1B1589B1D
MIME-Type	application/pdf

[File Properties]

File Name	FLDIA_2025-03-12 Maintenance-Related Flow Alternatives - tn.pdf
Hash	E3B2C902031902E4EADF0719A687E5C2A23717A999D7A4EE73AF6E5CA69D5FB7
MIME-Type	application/pdf

[File Properties]

File Name	FLDIA_Outfall Flows.pdf
Hash	55B59A9BB4F1DFA04A9E60BD7E768468E1CEDB2C27D1B5AEB035DF0E89B2C204
MIME-Type	application/pdf

9) Site Drawing

[File Properties]

File Name	SITEDR_Facility Map.pdf
Hash	2E3A68B096A1563CB84A64AD7A33F095C6E6B938E1C9F5DAE33229446F1AAA03
MIME-Type	application/pdf

[File Properties]

File Name	SITEDR_Facility Site Plan.pdf
Hash	E47644105F3A888B5AD4F028AFDF265EEF6B13796F25B32F1AB0289451BC14B2
MIME-Type	application/pdf

[File Properties]

File Name	SITEDR_E9317-00010A DISPOSE UNITS (1).pdf
Hash	3BD446C5A36B41C4951253BFD69C09DE70860B3DEE538A215DF887E98A136936
MIME-Type	application/pdf

[File Properties]

File Name	SITEDR_Waste Management Units.pdf
Hash	83E9E37C0736A046EE5529FB52931D0DC281A3D8C9EBA178BEA7F556D0474BE2
MIME-Type	application/pdf

10) Original Photographs

[File Properties]

File Name	ORIGPH_AR7.0 Photos.pdf
Hash	F71D7FF4E50899E12786168AB808708230F9C8722B4DB495A363A38B521990E4
MIME-Type	application/pdf

[File Properties]

File Name	ORIGPH_Photo map.pdf
Hash	A2DC31408A0BF9F9C1861468EAFBCDBF3780B120BD3B858DF2EF62917C01AE80
MIME-Type	application/pdf

[File Properties]

File Name	ORIGPH_Seadrift - Attachment AR7.0 - Photos.pdf
Hash	59157311F632982A953B1EC1A5F1B86BEE718024C0738D9357135C606122B1CA
MIME-Type	application/pdf

11) Design Calculations

[File Properties]

File Name	DES_CAL_2025-03-12_10055-Technical - jwm- hn - tn.pdf
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Hash 1040807F908BA5D7077FBD5B9DCD337D992747C97BECCC4C8A3AE9EACEF65454

MIME-Type application/pdf

12) Solids Management Plan

13) Water Balance

[File Properties]

File Name WB_Outfall Flows.pdf

Hash 55B59A9BB4F1DFA04A9E60BD7E768468E1CEDB2C27D1B5AEB035DF0E89B2C204

MIME-Type application/pdf

[File Properties]

File Name WB_2025-03-12 Maintenance-Related Flow
Alternatives - tn.pdf

Hash E3B2C902031902E4EADF0719A687E5C2A23717A999D7A4EE73AF6E5CA69D5FB7

MIME-Type application/pdf

[File Properties]

File Name WB_2025-02-06 Updated Flow Map.pdf

Hash 9B5264FFB0B14AE3BEFC369715975B3800F4F0FD0714B5A01DD15AD1B1589B1D

MIME-Type application/pdf

14) Other Attachments

[File Properties]

File Name OTHER_Payment Receipt and Vouchers -
final.pdf

Hash C7A21F281B80BE5BED9A4B87C31D898A391D52A92905FA0F4968A70598B9E855

MIME-Type application/pdf

[File Properties]

File Name OTHER_Seadrift - Attachment TR1.0-1.f - FEMA
NFHL Map.pdf

Hash 9973484DD4771599A9F85F9D496D43795A453553FFF901861948199B33462824

MIME-Type application/pdf

[File Properties]

File Name OTHER_2012 Retention Basin Inspection.pdf

Hash A359DF04F6C59776C38798074B50795325074E4B1730795912EF83DDCAFC1CB0

MIME-Type application/pdf

[File Properties]

File Name OTHER_All Chemicals.pdf

Hash DC7C983659A7F187287D947BFD58C833707222EB8B044AA2739A4328BFD95441

MIME-Type application/pdf

[File Properties]

File Name	OTHER_Storm Water Management.pdf
Hash	199ADBB079A4FB58BD5256E51DFA6482648B121D288F4F5888192A97567DF32D
MIME-Type	application/pdf

[File Properties]

File Name	OTHER_Toxicity Testing Information.pdf
Hash	F8508C9844B3BCDA559D3BB04C12C409FA00A9280D44B971732BB61B3E11A8CE
MIME-Type	application/pdf

[File Properties]

File Name	OTHER_Pages from 2019 Seadrift TPDES Application-3.pdf
Hash	5041D4A666E07D5A7851C95DB18525F60AD09E3B5C9E114A17F4E7E5AFDC687C
MIME-Type	application/pdf

[File Properties]

File Name	OTHER_Inventory exposed to stormwater.pdf
Hash	EC511357FB40F3C583D7C1DEA8F2234B60B019EB40D835EA8F64DFF58C940801
MIME-Type	application/pdf

[File Properties]

File Name	OTHER_Activities that may pollute precipitation.pdf
Hash	BAA9CE1B8415A0EB8B3533CD092B1AA27EF71BFD43357BF29D4605E3D2C27E4E
MIME-Type	application/pdf

[File Properties]

File Name	OTHER_Prevention of stormwater pollution.pdf
Hash	B1690E5420DB4765D003EA4EC8E5002209E1823F62012EEE28F66F1DF1E26F1C
MIME-Type	application/pdf

Certification

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

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.

1. I am Paul Fraser, the owner of the STEERS account ER073072.

2. I have the authority to sign this data on behalf of the applicant named above.
3. I have personally examined the foregoing and am familiar with its content and the content of any attachments, and based upon my personal knowledge and/or inquiry of any individual responsible for information contained herein, that this information is true, accurate, and complete.
4. I further certify that I have not violated any term in my TCEQ STEERS participation agreement and that I have no reason to believe that the confidentiality or use of my password has been compromised at any time.
5. I understand that use of my password constitutes an electronic signature legally equivalent to my written signature.
6. I also understand that the attestations of fact contained herein pertain to the implementation, oversight and enforcement of a state and/or federal environmental program and must be true and complete to the best of my knowledge.
7. I am aware that criminal penalties may be imposed for statements or omissions that I know or have reason to believe are untrue or misleading.
8. I am knowingly and intentionally signing Update Domestic or Industrial Individual Permit WQ0002586000.
9. My signature indicates that I am in agreement with the information on this form, and authorize its submittal to the TCEQ.

OWNER Signature: Paul Fraser OWNER

Customer Number:	CN604943100
Legal Name:	Seadrift Coke L.P.
Account Number:	ER073072
Signature IP Address:	165.225.216.174
Signature Date:	2025-03-13
Signature Hash:	88D714D225E18AD6319D4F4B4701FB27C61B52E7E2F1849D1119A7554B3A5E08
Form Hash Code at time of Signature:	CFC7DC739FEC691846085E3AC3904A5481081B17055930F4FC4B64AFA38EBA64

Fee Payment

Transaction by:	The application fee payment transaction was made by THOMAS NEWHOUSE
Paid by:	The application fee was paid by THOMAS NEWHOUSE
Fee Amount:	\$300.00
Paid Date:	The application fee was paid on 2025-03-05
Transaction/Voucher number:	The transaction number is 582EA000657885 and the voucher number is 755985

Submission

Reference Number:	The application reference number is 769368
Submitted by:	The application was submitted by ER073072/ Paul Fraser
Submitted Timestamp:	The application was submitted on 2025-03-14 at 05:31:39 CDT
Submitted From:	The application was submitted from IP address 165.225.216.174

Confirmation Number:

The confirmation number is 639012

Steers Version:

The STEERS version is 6.88

Permit Number:

The permit number is WQ0002586000

Additional Information

Application Creator: This account was created by Hannah Naivar

Brooke T. Paup, *Chairwoman*
Bobby Janecka, *Commissioner*
Catarina R. Gonzales, *Commissioner*
Kelly Keel, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 14, 2025

Dear Applicant:

Re: Confirmation of Submission of the New Industrial Wastewater Individual Permit Application

This is an acknowledgment that you have successfully completed the Industrial Wastewater Individual Permit Application.

ER Account Number: ER073072

Application Reference Number: 769368

Authorization Number: WQ0002586000

Site Name: SEADRIFT COKE PLANT

Regulated Entity: RN102147055

Customer(s): CN604943100

Please be aware that TCEQ staff may contact your designated contact for any additional information.

If you have any questions, you may contact the Applications Review and Processing Team by email at WQ-ARPTeam@tceq.texas.gov or by telephone at (512) 239-4671.

Sincerely,
Applications Review and Processing Team
Water Quality Division

INDUSTRIAL WASTEWATER PERMIT APPLICATION

ADMINISTRATIVE REPORT 1.1

The following information is required for new and amendment applications.

Item 1. Affected Landowner Information (Instructions, Page 35)

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

Attachment: AR6.0 - Affected Landowner Map

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

☒ Readable/Writeable CD ☐ Four sets of labels

Attachment: AR6.1 - Landowner Labels

- d. Provide the source of the landowners' names and mailing addresses:

<https://gis.bisclient.com/calhouncad/>

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

☐ Yes ☒ No

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

Item 2. Original Photographs (Instructions, Page 37)

Provide original ground level photographs. Check the box next to each of the following items to indicate it is included.

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

Attachment: AR7.0 - Original Photographs

AR2.0 - Core Data Form



TCEQ Core Data Form

For detailed instructions on completing 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 604943100		RN 102147055

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)					
<i>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).</i>					
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)				<i>If new Customer, enter previous Customer below:</i>	
Seadrift Coke, 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)
0800484990		12026927504			
11. Type of Customer:		☒ Corporation		☐ Individual	Partnership: ☐ General ☒ Limited
Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other		☐ Sole Proprietorship		☐ Other:	
12. Number of Employees				13. Independently Owned and Operated?	
☐ 0-20 ☒ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher				☐ 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 ☐ Other:					
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant					
15. Mailing Address:	982 KEYNOTE CIR				
	City	BROOKLYN HTS	State	OH	ZIP 44131 ZIP + 4
16. Country Mailing Information (if outside USA)			17. E-Mail Address (if applicable)		
18. Telephone Number		19. Extension or Code		20. Fax Number (if applicable)	

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If 'New Regulated Entity' is selected, a new permit application is also required.)								
☐ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information								
<i>The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).</i>								
22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)								
Seadrift Coke, LP								
23. Street Address of the Regulated Entity: (No PO Boxes)		8618 State Highway 185 N						
		City	Port Lavaca	State	TX	ZIP	77979	ZIP + 4
24. County		US						

If no Street Address is provided, fields 25-28 are required.

25. Description to Physical Location:								
26. Nearest City					State		Nearest ZIP Code	
<i>Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).</i>								
27. Latitude (N) In Decimal:						28. Longitude (W) In Decimal:		
Degrees	Minutes		Seconds		Degrees	Minutes		Seconds
29. Primary SIC Code (4 digits)		30. Secondary SIC Code (4 digits)		31. Primary NAICS Code (5 or 6 digits)		32. Secondary NAICS Code (5 or 6 digits)		
2999				324199				
33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)								
Petroleum-based needle coke production								
34. Mailing Address:		8618 State Highway 185 N						
		City	Port Lavaca	State	TX	ZIP	77979	ZIP + 4
35. E-Mail Address:								
36. Telephone Number			37. Extension or Code			38. Fax Number (if applicable)		
(361) 552-8887						() -		

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	☒ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:
	WQ0002586000			

SECTION IV: Preparer Information

40. Name:	Jonathan Martensen			41. Title:	Senior Environmental Associate
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address		
(713) 457-5232		() -	jmartensen@camstex.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:	Seadrift Coke, LP		Job Title:	President	
Name (In Print):	Paul Fraser			Phone:	(361) 552- 8310
Signature:				Date:	



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUMMARY OF APPLICATION IN PLAIN LANGUAGE FOR TPDES OR TLAP PERMIT APPLICATIONS

Summary of Application (in plain language) Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) and Texas Land Application (TLAP) Permit Applications

Applicants should use this template to develop a plain language summary of your facility and application as required by Title 30, Texas Administrative Code (30 TAC), Chapter 39, Subchapter H. You may modify the template as necessary to accurately describe your facility as long as the summary includes the following information: (1) the function of the proposed plant or facility; (2) the expected output of the proposed plant or facility; (3) the expected pollutants that may be emitted or discharged by the proposed plant or facility; and (4) how you will control those pollutants, so that the proposed plant will not have an adverse impact on human health or the environment.

Fill in the highlighted areas below to describe your facility and application in plain language. Instructions and examples are provided below. Make any other edits necessary to improve readability or grammar and to comply with the rule requirements. After filling in the information for your facility delete these instructions.

If you are subject to the alternative language notice requirements in 30 TAC Section 39.426, **you must provide a translated copy of the completed plain language summary in the appropriate alternative language as part of your application package.** For your convenience, a Spanish template has been provided below.

ENGLISH TEMPLATE FOR TPDES or TLAP NEW/RENEWAL/AMENDMENT APPLICATIONS Enter 'INDUSTRIAL' or 'DOMESTIC' here WASTEWATER/STORMWATER

The following summary is provided for this pending water quality permit application being reviewed by the Texas Commission on Environmental Quality as required by 30 TAC Chapter 39. The information provided in this summary may change during the technical review of the application and is not a federal enforceable representation of the permit application.

Seadrift Coke, LP ([CN604943100](#)) operates Seadrift Coke ([RN102147055](#)), a coking facility which produces calcined petroleum needle coke from decant oil (No. 6 oil) feedstock. The facility is located at 8618 State Highway 185 North, in Port Lavaca, Calhoun County, Texas 77979.

Seadrift Coke, LP ("Seadrift") is renewing its wastewater permit with a major amendment to allow for intermittent discharges of process wastewater into outfall 002.

Discharges from the facility are expected to contain Organic Carbon., Suspended Solids, Oil and Grease, Sulfates, Copper, Phenols, Benzene, Toluene, Naphthalene, Phenanthrene, 1,1,1-Trichloroethane, Chromium, and Enterococci. Wastewater is generated from equipment/process area washdown, cooling tower blowdown, process areas and storm runoff from the process areas, and sanitary wastewater from the onsite facilities. The wastewater is treated by solids gravity separation basins; Corrugated Plate Interceptor (CPI); Chemical Treatment (Coagulant and Coagulant Aid as needed); Dissolved Air Flotation Unit (DAF); Surge

Capacity Tank; and Activated Carbon Filters. Wastewater from the unit is pumped via the oily water header or the oily water collection sump to the CPI. Treated wastewater from the CPI flows by gravity to mix tanks in which a coagulant (and coagulant aid as needed) is added prior to treatment in the DAF. Treated process water from the DAF may be discharged to Outfall 002. During periods of low rainfall or low basin levels, wastewater from CPI can be routed back to the Rain (East) Basin for storage and later use in the process instead of flowing through the DAF to Outfall 001. Additional coagulant aid is added to the DAF unit as needed to aid the separation process. Storm runoff from the concrete areas within the process unit and coke-cutting water tanks flow by gravity to the Rain Basin (East Basin) or Storm Basin (West Basin), which would eventually be pumped to the CPI, then the DAF unit. Treated wastewater from the DAF unit is recycled to the process for coke cutting and other purposes. Water in excess for process needs is routed to activated carbon filters for final polishing. Treated water from the carbon filters flows to Outfall 001 and is then pumped to the Victoria Barge Canal for disposal. Domestic wastewater generated at the facility is routed to a package treatment plant which discharges via internal Outfall 101 at the final basin. All wastewaters in the final basin are pumped and discharged to the Victoria Barge Canal at Outfall 001. Seadrift Coke is requesting approval to divert wash water from the Waste Heat Boiler and the North Cooling Tower to Outfall 002. These discharges would occur episodically, during plant outages when maintenance and cleaning activities take place. During such events, stormwater at Outfall 002 would potentially mix with wash water. Seadrift Coke is also requesting the removal of Outfall 101 flow reporting requirements. As an internal outfall that discharges directly to Outfall 001, its flow is already accounted for within Outfall 001 reporting. Furthermore, Seadrift Coke is requesting the removal of specific waste stream contributions from Outfall 001. These include boiler blowdown and cooling tower blowdown, which will no longer be directed to this outfall. Additionally, the neutralized demineralized regenerant has been replaced with RO (reverse osmosis) water, reflecting an operational change in water treatment processes.

PLANTILLA EN ESPAÑOL PARA SOLICITUDES NUEVAS/RENOVACIONES/ENMIENDAS DE TPDES o TLAP

AGUAS RESIDUALES Introduzca 'INDUSTRIALES' o 'DOMÉSTICAS' aquí /AGUAS PLUVIALES

El siguiente resumen se proporciona para esta solicitud de permiso de calidad del agua pendiente que está siendo revisada por la Comisión de Calidad Ambiental de Texas según lo requerido por el Capítulo 39 del Código Administrativo de Texas 30. La información proporcionada en este resumen puede cambiar durante la revisión técnica de la solicitud y no es una representación ejecutiva fedérale de la solicitud de permiso.

Seadrift Coke, LP (CN604943100) opera Seadrift Coke RN102147055, un coking facility which produces calcined petroleum needle coke from decant oil (No. 6 oil) feedstock. La instalación está ubicada en 8618 State Highway 185 North, en Port Lavavaca, Condado de Calhoun, Texas 77979. Seadrift Coke, LP ("Seadrift") está renovando su permiso de aguas residuales con una enmienda importante para permitir descargas intermitentes de aguas residuales de proceso en el desagüe 002. <<Para las solicitudes de TLAP incluya la siguiente oración, de lo contrario, elimine:>> Este permiso no autorizará una descarga de contaminantes en el agua en el estado.

Se espera que las descargas de la instalación contengan Carbono orgánico, sólidos en suspensión, aceites y grasas, sulfatos, cobre, fenoles, benceno, tolueno, naftaleno, fenantreno, 1,1,1-tricloroetano, cromo y enterococos. Las aguas residuales se generan a partir del lavado de equipos/áreas de proceso, la purga de la torre de enfriamiento, las áreas de proceso y la escorrentía pluvial de las áreas de proceso, y las aguas residuales sanitarias de las instalaciones en el sitio. Las aguas residuales. está tratado por balsas de separación de sólidos por gravedad; Interceptor de placa corrugada (CPI); Tratamiento químico (coagulante y coadyuvante según sea necesario); Unidad de Flotación por Aire Disuelto (DAF); tanque de capacidad de oleaje; y Filtros de Carbón Activado. Las aguas residuales de la unidad se bombean a través del cabezal de agua aceitosa o el sumidero de recolección de agua aceitosa al CPI. Las aguas residuales tratadas del CPI fluyen por gravedad a los tanques de mezcla en los que se agrega un coagulante (y un auxiliar coagulante según sea necesario) antes del tratamiento en el DAF. El agua de proceso tratada del DAF puede descargarse en el emisario 002. Durante los períodos de baja pluviometría o bajos niveles de la cuenca, las aguas residuales del CPI pueden dirigirse de vuelta a la cuenca de lluvia (este) para su almacenamiento y posterior uso en el proceso en lugar de fluir a través del DAF hasta el emisario 001. Se añade un auxiliar coagulante adicional a la unidad DAF según sea necesario para ayudar en el proceso de separación. La escorrentía pluvial de las áreas de concreto dentro de la unidad de proceso y los tanques de agua de corte de coque fluyen por gravedad a la cuenca de lluvia (cuenca este) o a la cuenca Strom (cuenca oeste), que eventualmente se bombearía al CPI y luego a la unidad DAF. Las aguas residuales tratadas de la unidad DAF se reciclan en el proceso para el corte de coque y otros fines. El agua en exceso para las necesidades del proceso se dirige a los filtros de carbón activado para el pulido final. El agua tratada de los filtros de carbón fluye al desagüe 001 y luego se bombea al canal de barcasas Victoria para su eliminación. Las aguas residuales domésticas generadas en la instalación se dirigen a una planta de tratamiento de paquetes que se descargan a través del emisario interno 101 en la cuenca final. Todas las aguas residuales de la cuenca final se bombean y descargan al canal de barcasas Victoria en el desagüe 001. Seadrift Coke está solicitando aprobación para desviar el agua de lavado de la caldera de calor residual y la torre de enfriamiento norte al emisario 002. Estas descargas ocurrirían episódicamente, durante las paradas de la planta cuando se llevan a cabo actividades de mantenimiento y limpieza. Durante tales eventos, las aguas pluviales en el emisario 002 potencialmente se mezclarían con el agua de lavado. Seadrift Coke también está solicitando la eliminación de los requisitos

de informes de flujo del desagüe 101. Como emisario interno que descarga directamente al emisario 001, su caudal ya se tiene en cuenta en los informes del emisario 001. Además, Seadrift Coke está solicitando la eliminación de contribuciones específicas del flujo de desechos del desagüe 001. Estos incluyen la purga de la caldera y la purga de la torre de enfriamiento, que ya no se dirigirán a este emisario. Además, el regenerante desmineralizado neutralizado se ha reemplazado con agua de ósmosis inversa (RO), lo que refleja un cambio operativo en los procesos de tratamiento de agua.

AR4.0 - Public Involvement Plan



Texas Commission on Environmental Quality

Public Involvement Plan Form for Permit and Registration Applications

The Public Involvement Plan is intended to provide applicants and the agency with information about how public outreach will be accomplished for certain types of applications in certain geographical areas of the state. It is intended to apply to new activities; major changes at existing plants, facilities, and processes; and to activities which are likely to have significant interest from the public. This preliminary screening is designed to identify applications that will benefit from an initial assessment of the need for enhanced public outreach.

All applicable sections of this form should be completed and submitted with the permit or registration application. For instructions on how to complete this form, see TCEQ-20960-inst.

Section 1. Preliminary Screening

- ☐ New Permit or Registration Application
☒ New Activity - modification, registration, amendment, facility, etc. (see instructions)

If neither of the above boxes are checked, completion of the form is not required and does not need to be submitted.

Section 2. Secondary Screening

- ☒ Requires public notice,
☐ Considered to have significant public interest, **and**
☐ Located within any of the following geographical locations:

- Austin
- Dallas
- Fort Worth
- Houston
- San Antonio
- West Texas
- Texas Panhandle
- Along the Texas/Mexico Border
- Other geographical locations should be decided on a case-by-case basis

**If all the above boxes are not checked, a Public Involvement Plan is not necessary.
Stop after Section 2 and submit the form.**

- ☒ Public Involvement Plan not applicable to this application. Provide **brief** explanation.

Not in geographical location.

Section 3. Application Information

Type of Application (check all that apply):

Air ☐ Initial ☐ Federal ☐ Amendment ☐ Standard Permit ☐ Title V
Waste ☐ Municipal Solid Waste ☐ Industrial and Hazardous Waste ☐ Scrap Tire
 ☐ Radioactive Material Licensing ☐ Underground Injection Control

Water Quality

☐ Texas Pollutant Discharge Elimination System (TPDES)
 ☐ Texas Land Application Permit (TLAP)
 ☐ State Only Concentrated Animal Feeding Operation (CAFO)
 ☐ Water Treatment Plant Residuals Disposal Permit
☐ Class B Biosolids Land Application Permit
☐ Domestic Septage Land Application Registration

Water Rights New Permit

☐ New Appropriation of Water
☐ New or existing reservoir

Amendment to an Existing Water Right

☐ Add a New Appropriation of Water
☐ Add a New or Existing Reservoir
☐ Major Amendment that could affect other water rights or the environment

Section 4. Plain Language Summary

Provide a brief description of planned activities.

Section 5. Community and Demographic Information

Community information can be found using EPA's EJ Screen, U.S. Census Bureau information, or generally available demographic tools.

Information gathered in this section can assist with the determination of whether alternative language notice is necessary. Please provide the following information.

(City)

(County)

(Census Tract)

Please indicate which of these three is the level used for gathering the following information.

☐

City

☐

County

☐

Census Tract

(a) Percent of people over 25 years of age who at least graduated from high school

(b) Per capita income for population near the specified location

(c) Percent of minority population and percent of population by race within the specified location

(d) Percent of Linguistically Isolated Households by language within the specified location

(e) Languages commonly spoken in area by percentage

(f) Community and/or Stakeholder Groups

(g) Historic public interest or involvement

Section 6. Planned Public Outreach Activities

(a) Is this application subject to the public participation requirements of Title 30 Texas Administrative Code (30 TAC) Chapter 39?

☐ Yes ☐ No

(b) If yes, do you intend at this time to provide public outreach other than what is required by rule?

☐ Yes ☐ No

If Yes, please describe.

If you answered "yes" that this application is subject to 30 TAC Chapter 39, answering the remaining questions in Section 6 is not required.

(c) Will you provide notice of this application in alternative languages?

☐ Yes ☐ No

Please refer to Section 5. If more than 5% of the population potentially affected by your application is Limited English Proficient, then you are required to provide notice in the alternative language.

If yes, how will you provide notice in alternative languages?

- ☐ Publish in alternative language newspaper
- ☐ Posted on Commissioner's Integrated Database Website
- ☐ Mailed by TCEQ's Office of the Chief Clerk
- ☐ Other (specify)

(d) Is there an opportunity for some type of public meeting, including after notice?

☐ Yes ☐ No

(e) If a public meeting is held, will a translator be provided if requested?

☐ Yes ☐ No

(f) Hard copies of the application will be available at the following (check all that apply):

- ☐ TCEQ Regional Office ☐ TCEQ Central Office
- ☐ Public Place (specify)

Section 7. Voluntary Submittal

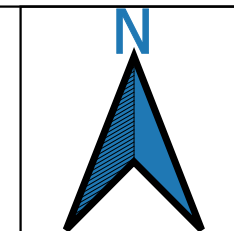
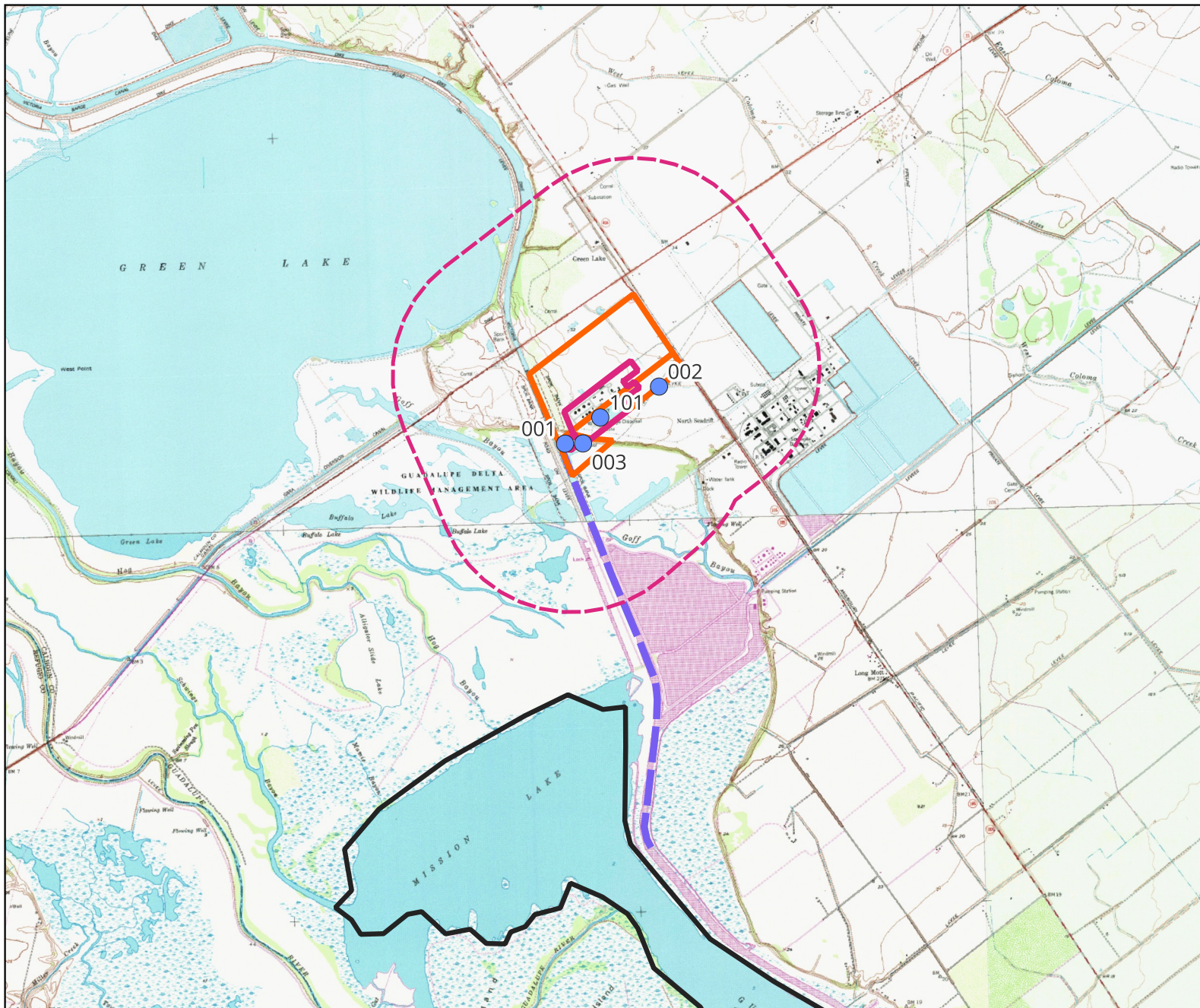
For applicants voluntarily providing this Public Involvement Plan, who are not subject to formal public participation requirements.

Will you provide notice of this application, including notice in alternative languages?

☐ Yes ☐ No

What types of notice will be provided?

- ☐ Publish in alternative language newspaper
- ☐ Posted on Commissioner's Integrated Database Website
- ☐ Mailed by TCEQ's Office of the Chief Clerk
- ☐ Other (specify)

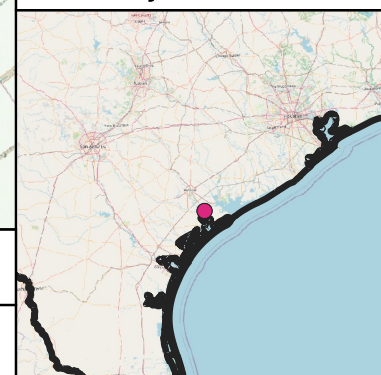


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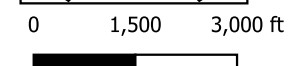
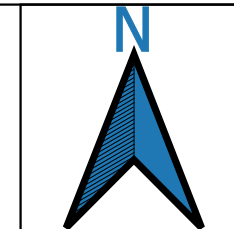
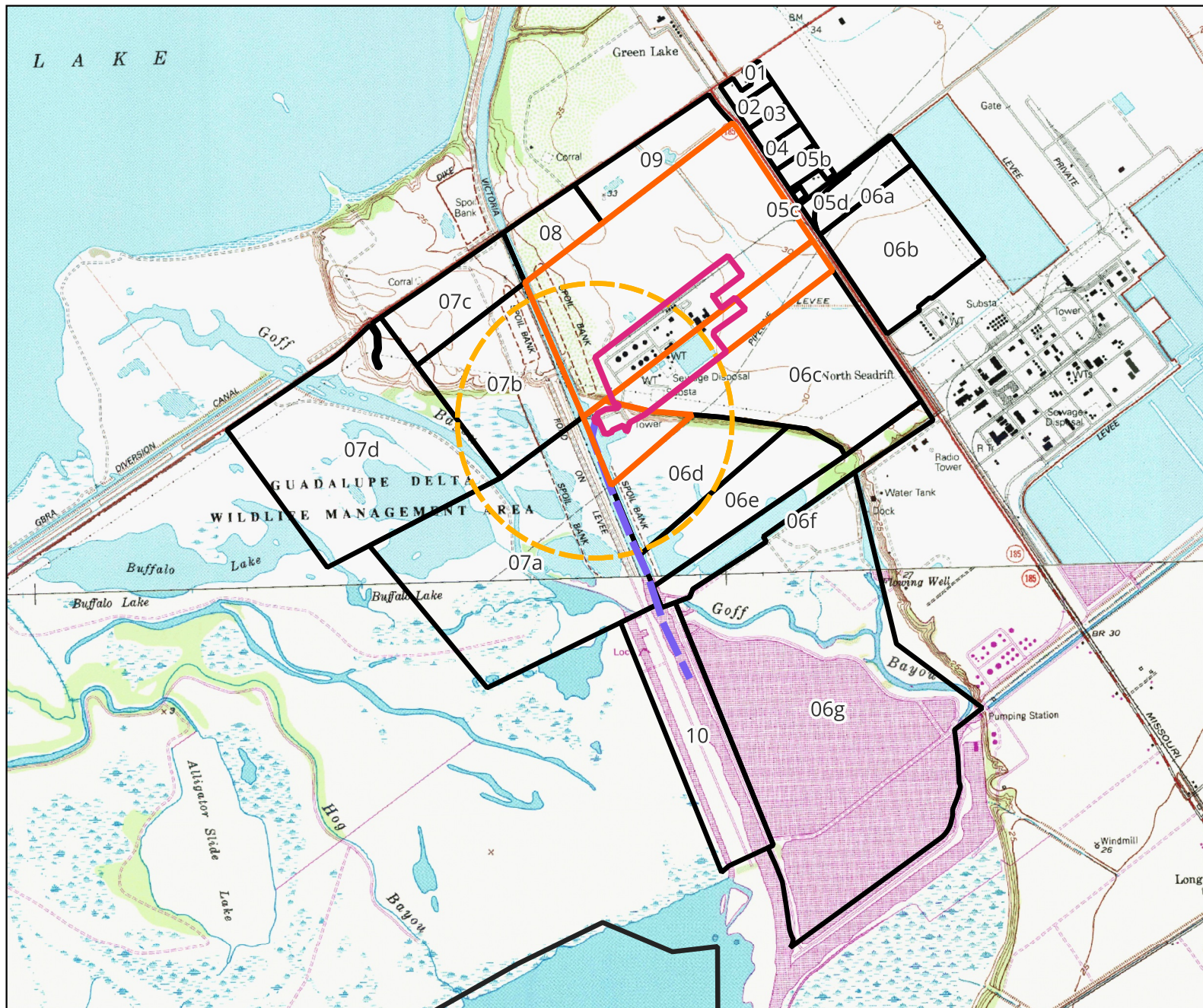
Legend:

- Facility Boundaries
- Seadrift Property Boundaries
- Discharge Route
3-Miles Downstream
- 1-Mile Radius
- Seadrift Outfalls

Project Location



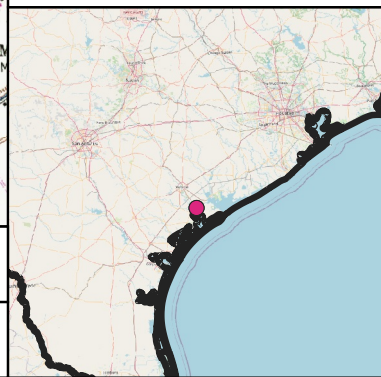
Affected Landowners Table					
Map ID	Owner Name	Street Address	City	State	Zipcode
1	RIGBY JERRY CARROLL	213 S GUADALUPE ST	PORT LAVACA	TX	77979
2	FREDERICK MARSHA L	170 CREEKVIEW RD	PORT LAVACA	TX	77979
3	RIGBY RALPH L	7615 SHEFFIELD CT	SUGAR LAND	TX	77479
4	RIGBY JERRY CARROLL	213 S GUADALUPE ST	PORT LAVACA	TX	77979
05a	UNION PACIFIC RAILROAD CO	PROPERTY TAX DEPT 1400 DOUGLAS STREET STOP 1640	OMAHA	NE	68179
05b	UNION PACIFIC RAILROAD CO	PROPERTY TAX DEPT 1400 DOUGLAS STREET STOP 1640	OMAHA	NE	68179
05c	UNION PACIFIC RAILROAD CO	PROPERTY TAX DEPT 1400 DOUGLAS STREET STOP 1640	OMAHA	NE	68179
05d	UNION PACIFIC RAILROAD CO	PROPERTY TAX DEPT 1400 DOUGLAS STREET STOP 1640	OMAHA	NE	68179
06a	DOW HYDROCARBONS & RESOURCES LLC	TAX DEPT, TXINN APB 332 SH 332 EAST	LAKE JACKSON	TX	77566
06b	DOW HYDROCARBONS & RESOURCES LLC	TAX DEPT, TXINN APB 332 SH 332 EAST	LAKE JACKSON	TX	77566
06c	DOW HYDROCARBONS & RESOURCES LLC	TAX DEPT, TXINN APB 332 SH 332 EAST	LAKE JACKSON	TX	77566
06d	DOW HYDROCARBONS & RESOURCES LLC	TAX DEPT, TXINN APB 332 SH 332 EAST	LAKE JACKSON	TX	77566
06e	DOW HYDROCARBONS & RESOURCES LLC	TAX DEPT, TXINN APB 332 SH 332 EAST	LAKE JACKSON	TX	77566
06f	DOW HYDROCARBONS & RESOURCES LLC	TAX DEPT, TXINN APB 332 SH 332 EAST	LAKE JACKSON	TX	77566
06g	DOW HYDROCARBONS & RESOURCES LLC	TAX DEPT, TXINN APB 332 SH 332 EAST	LAKE JACKSON	TX	77566
07a	TEXAS PARKS & WILDLIFE DEPT	4200 SMITH SCHOOL RD	AUSTIN	TX	78744
07b	TEXAS PARKS & WILDLIFE DEPT	4200 SMITH SCHOOL RD	AUSTIN	TX	78744
07c	TEXAS PARKS & WILDLIFE DEPT	4200 SMITH SCHOOL RD	AUSTIN	TX	78744
07d	TEXAS PARKS & WILDLIFE DEPT	4200 SMITH SCHOOL RD	AUSTIN	TX	78744
8	BOYD RANDY L DESCENDANTS TRUST	346 BAY MEADOWS DR	PORT LAVACA	TX	77979
9	REXCO INC	1104 MILDRED DR	PORT LAVACA	TX	77979
10	CALHOUN COUNTY NAV DISTRICT	PO BOX 397	POINT COMFORT	TX	77978



Legend:

- Discharge Route
1-Mile Downstream
- Facility Boundaries
- Seadrift Property Boundaries
- Discharge 001
1/2 Mile Radius
- Affected Landowners

Project Location



RIGBY JERRY CARROLL
213 S GUADALUPE ST
PORT LAVACA, TX 77979

RIGBY JERRY CARROLL
213 S GUADALUPE ST
PORT LAVACA, TX 77979

TEXAS PARKS & WILDLIFE DEPT
4200 SMITH SCHOOL RD
AUSTIN, TX 78744

CALHOUN COUNTY NAV DISTRICT
PO BOX 397
POINT COMFORT, TX 77978

FREDERICK MARSHA L
170 CREEKVIEW RD
PORT LAVACA, TX 77979

UNION PACIFIC RAILROAD CO
PROPERTY TAX DEPT 1400
DOUGLAS STREET STOP 1640
OMAHA. NE 68179
BOYD RANDY L DESCENDANTS
TRUST
346 BAY MEADOWS DR
PORT LAVACA. TX 77979

RIGBY RALPH L
7615 SHEFFIELD CT
SUGAR LAND, TX 77479

DOW HYDROCARBONS &
RESOURCES LLC
TXINN APB 332 SH 332 EAST
LAKE JACKSON. TX 77566
REXCO INC
1104 MILDRED DR
PORT LAVACA, TX 77979

AR7.0 - Original Photographs

- Two photographs of the existing/proposed point of discharge and as much area downstream (photo 1) and upstream (photo 2) as can be captured. If the discharge is to an open water body (e.g., lake, bay), the point of discharge should be in the right or left edge of each photograph showing the open water and with as much area on each respective side of the discharge as can be captured:



Fig 1. 001 Final discharge point facing southwest.



Fig 2. 001 Final discharge point facing northwest.



Fig 3. 001 Final discharge point.



Fig 4. 002 Final discharge point facing southeast.



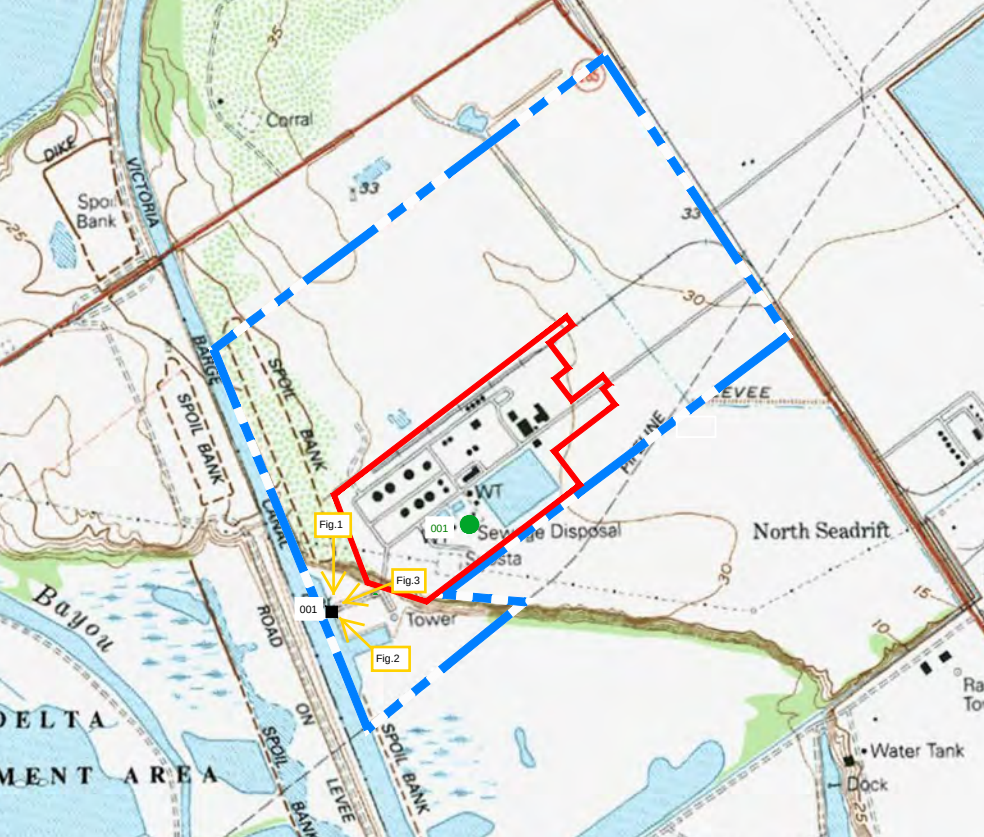
Fig 5. 002 Final discharge point facing northwest.



Fig 6. 003 Final discharge point facing southeast.



Fig 7. 003 final discharge point facing north.



AR8.0 - SPIF

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

FOR AGENCIES REVIEWING DOMESTIC OR 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 53)

Complete this form as a separate document. TCEQ will mail a copy to each agency as required by our agreement with EPA. If any of the items are not completely addressed or further information is needed, we will contact you to provide the information before issuing the permit. Address each item completely.

Do not refer to your response to any item in the permit application form. Provide each attachment for this form separately from the Administrative Report of the application. The application will not be declared administratively complete without this SPIF form being completed in its entirety including all attachments. Questions or comments concerning this form may be directed to the Water Quality Division's Application Review and Processing Team by email at WQ-ARPTeam@tceq.texas.gov or by phone at (512) 239-4671.

The following applies to all applications:

1. Permittee: Seadrift Coke, LP

Permit No. WQ00 002586000

EPA ID No. TX

Address of the project (or a location description that includes street/highway, city/vicinity, and county):

8618 State Highway 185 North Port Lavaca, TX, 77979

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

Prefix (Mr., Ms., Miss): Ms.

First and Last Name: Daigle Patricia

Credential (P.E, P.G., Ph.D., etc.):

Title: HSEP Manager

Mailing Address: 8618 State Highway 185 North

City, State, Zip Code: Port Lavaca, TX, 77979

Phone No.: 361-551-4593 Ext.: Fax No.:

E-mail Address: patricia.daigle@seadriftcoke.com

2. List the county in which the facility is located: Calhoun
3. If the property is publicly owned and the owner is different than the permittee/applicant, please list the owner of the property.

N/A

4. 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.

Effluent discharges via 4" pipe or 6" pipe, which eventually flows into an 8" pipe to the Victoria Barge Canal (Segment 1701)

5. 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).

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

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

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

N/A

2. Describe existing disturbances, vegetation, and land use:

Construction of Seadrift Coke L.P. industrial facility in 1983.

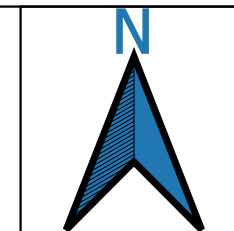
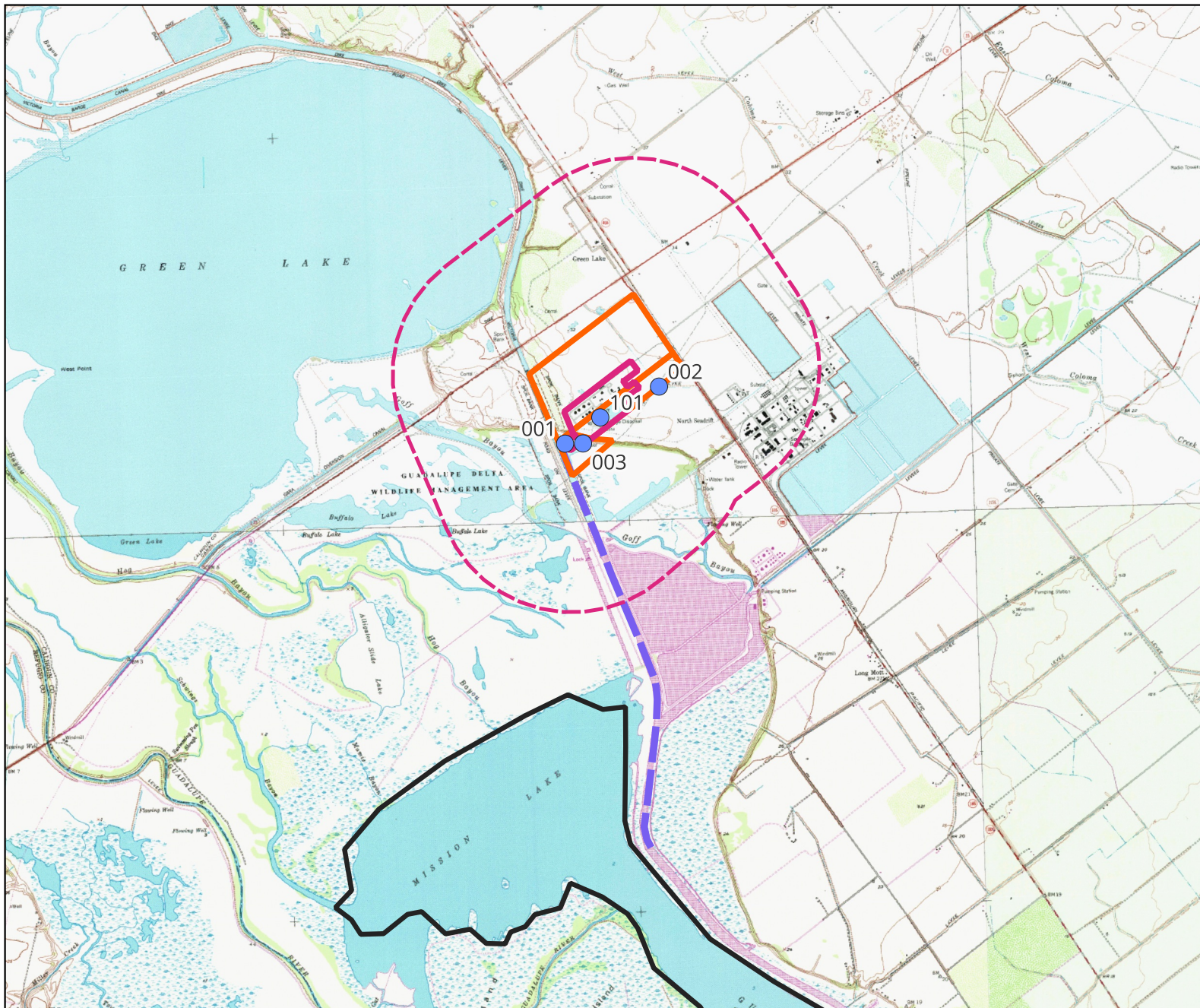
THE FOLLOWING ITEMS APPLY ONLY TO APPLICATIONS FOR NEW TPDES PERMITS AND MAJOR AMENDMENTS TO TPDES PERMITS

3. List construction dates of all buildings and structures on the property:

Seadrift Coke L.P. industrial facility was constructed in 1983.

4. Provide a brief history of the property, and name of the architect/builder, if known.

The site was designed and engineered by Lumas. It was built by Fluor Daniels. The site was commissioned in 1983. Graftech assumed ownership in 2010.

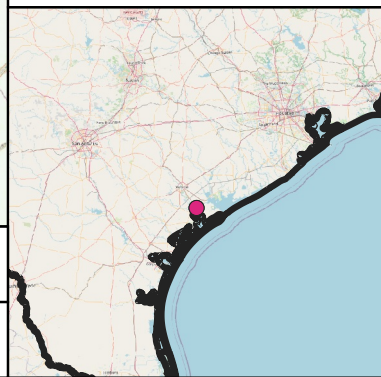


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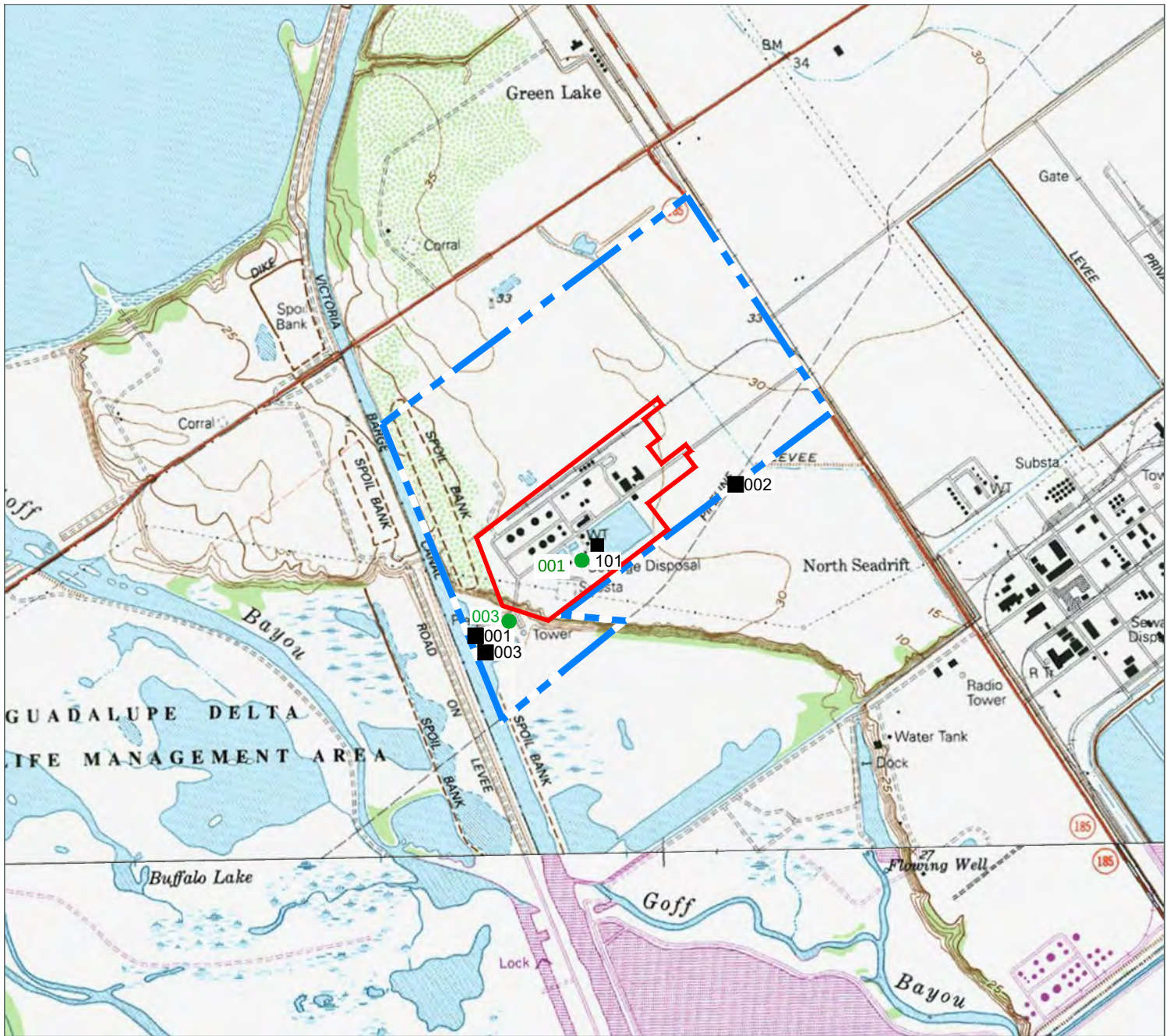
Legend:

- Facility Boundaries
- Seadrift Property Boundaries
- Discharge Route
3-Miles Downstream
- 1-Mile Radius
- Seadrift Outfalls

Project Location



SPIF-1 USGS Map



Source:
USGS 7.5 Minute Series
Topographic Quadrangle, 1995
Green Lake, Texas
Contour Interval = 5'

Legend:

- Facility Boundary
- - - Property Boundary
- Outfall Location
- Outfall Sample Location



Site Location Map

Seadrift Coke, L.P.
8618 State Highway 185 North
Port Lavaca, Calhoun County, Texas

Drawn
E.V.
Designed
M.W.
Approved
J.K.



Date
07/11/19
Figure
1

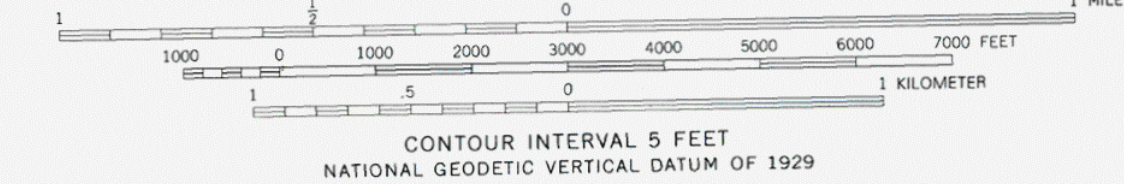
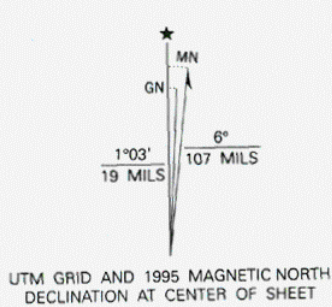
Scale In Feet



GES
Groundwater & Environmental Services, Inc.



Produced by the United States Geological Survey
Control by USGS and NOS/NOAA
Compiled from aerial photographs taken 1946-1947. Revised from aerial photographs taken 1990 and other sources. Field checked 1991
Map edited 1995
North American Datum of 1927 (NAD 27). Projection and 1000-foot ticks: Texas Coordinate System, south central zone (Lambert Conformal Conic)
Blue 1000-meter Universal Transverse Mercator ticks, zone 14
North American Datum of 1983 (NAD 83) is shown by dashed corner ticks. The values of the shift between NAD 27 and NAD 83 for 7.5-minute intersections are obtainable from National Geodetic Survey NADCON software
There may be private inholdings within the boundaries of the National or State reservations shown on this map
Fine red dashed lines indicate selected fence and field lines where generally visible on aerial photographs



THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST



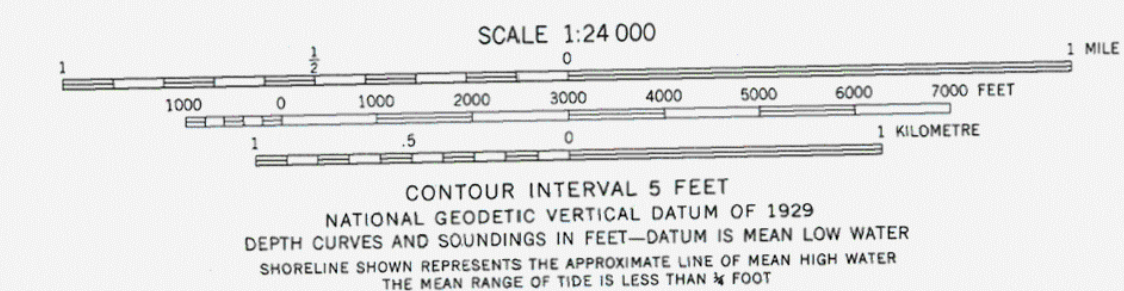
ROAD CLASSIFICATION

Primary highway, hard surface	Light-duty road, hard or improved surface
Secondary highway, hard surface	Unimproved road
Interstate Route	U. S. Route
	State Route

WQ IWD/ Maps
1st: 02586 2nd: 10/1/2014
CBC 100678937
IBC: 100741515

GREEN LAKE, TX
28096-E7-TF-024
1995
DMA 6641 III SE-SERIES V882

AUSTWELL QUADRANGLE
TEXAS
7.5 MINUTE SERIES (TOPOGRAPHIC)



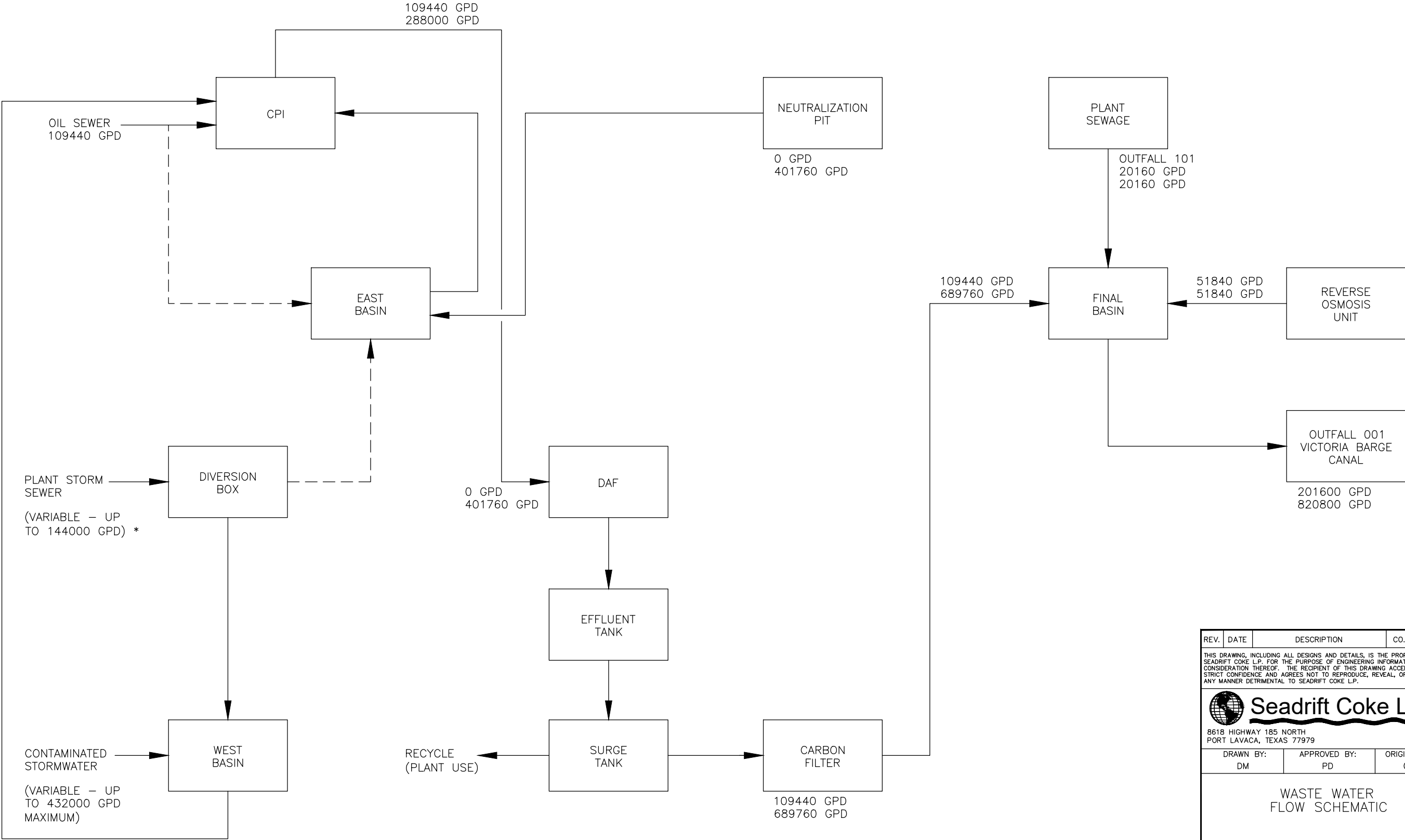
Revisions shown in purple compiled from aerial photographs taken 1973. This information not field checked

WQ IWD/ Maps
1st: 02586 2nd: 8/6/2014
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IBC: 100741512

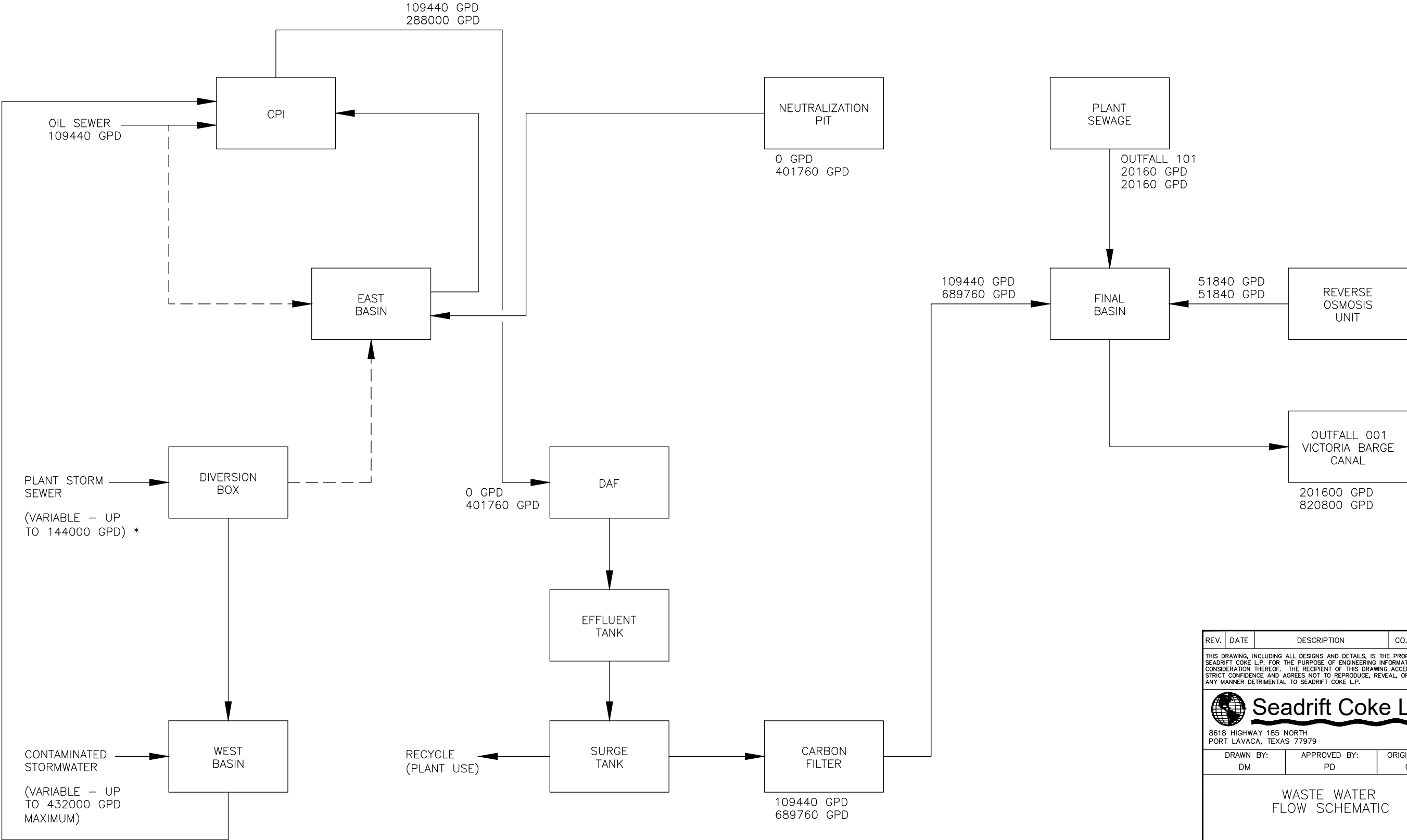
AUSTWELL, TEX.
N2822.5—W9645/7.5
1952
PHOTOREVISED 1973
AMS 6640 IV NE—SERIES V82

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

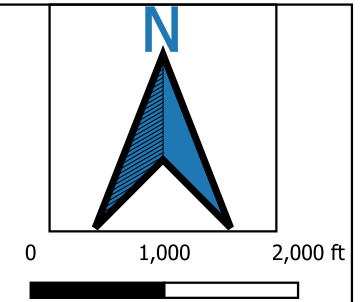
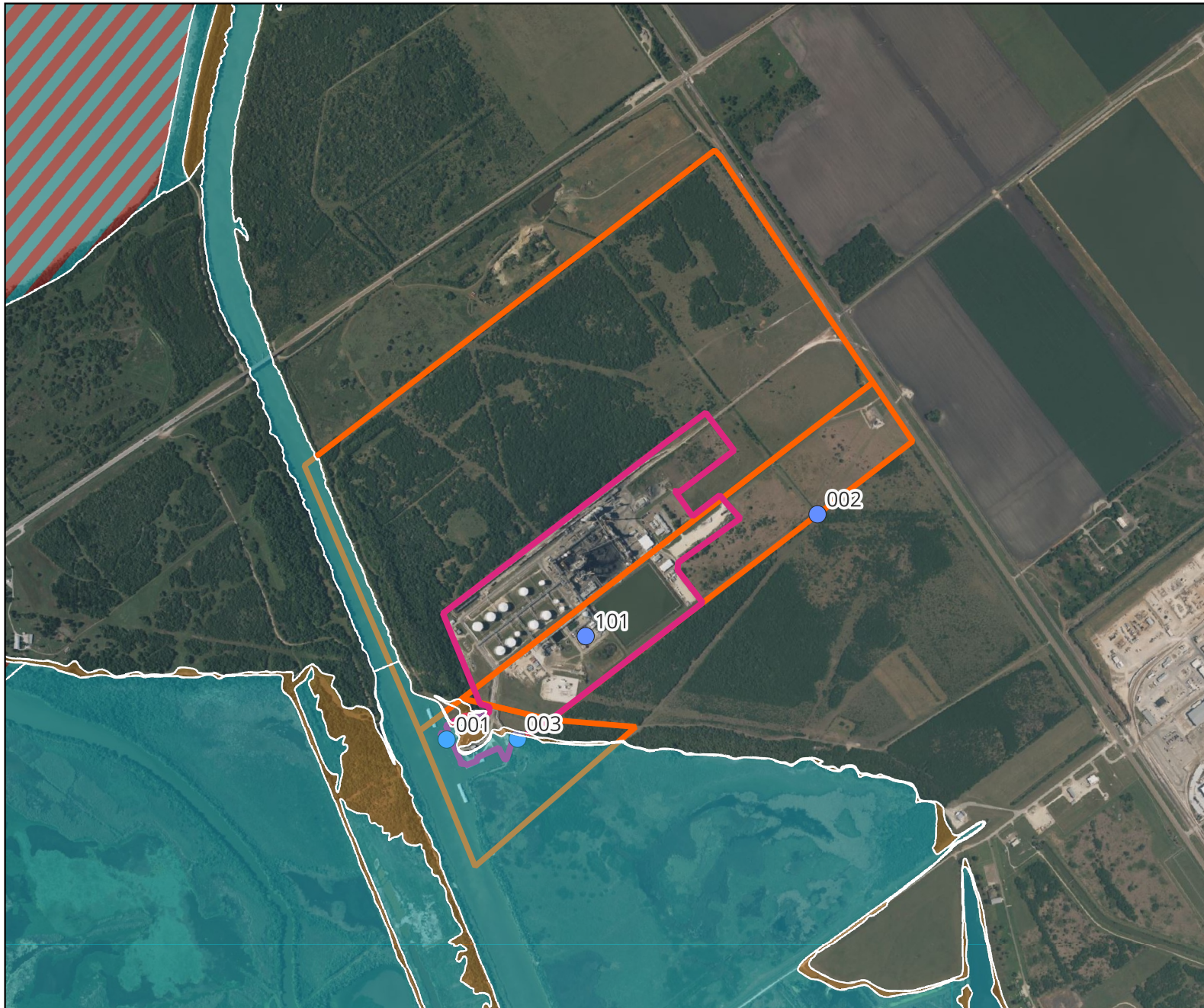
2896-234



REV.	DATE	DESCRIPTION	CO.	CHK. BY:	APR. BY:
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 Seadrift Coke L.P. 8618 HIGHWAY 185 NORTH PORT LAVACA, TEXAS 77979					
DRAWN BY: DM		APPROVED BY: PD		ORIGINAL DATE: 02/05/25	
WASTE WATER FLOW SCHEMATIC					
PROJ. NO.		PROJ. NAME		SCALE: NTS	
AREA:	DWG. TYPE	DWG. NO. SK-WWFS		REV. No 0	



REV.	DATE	DESCRIPTION	CO.	CHK. BY:	APR. BY:
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DRAWN BY: DM		APPROVED BY: PD		ORIGINAL DATE: 02/05/25	
WASTE WATER FLOW SCHEMATIC					
PROJ. NO.		PROJ. NAME		SCALE: NTS	
AREA:	DWG. TYPE	DWG. NO. SK-WWFS		REV. No 0	



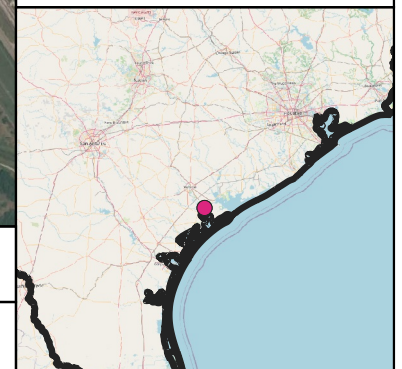
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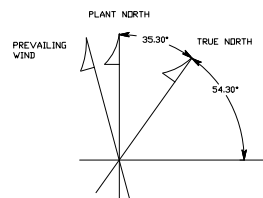
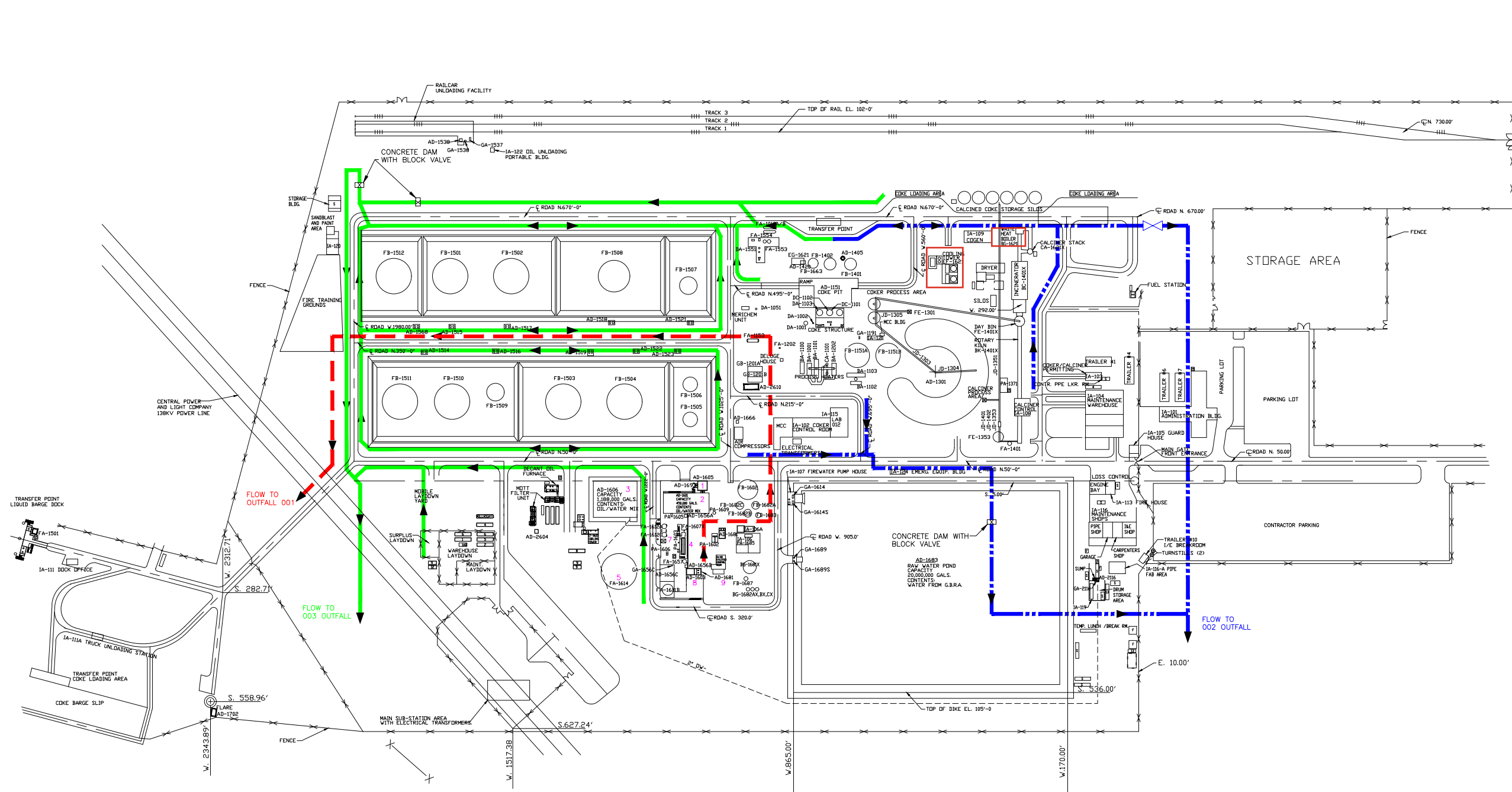
- Facility Boundaries
- Seadrift Property Boundaries
- Seadrift Outfalls

Flood Hazard Zones

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee
- Area with Risk Due to Levee

Project Location





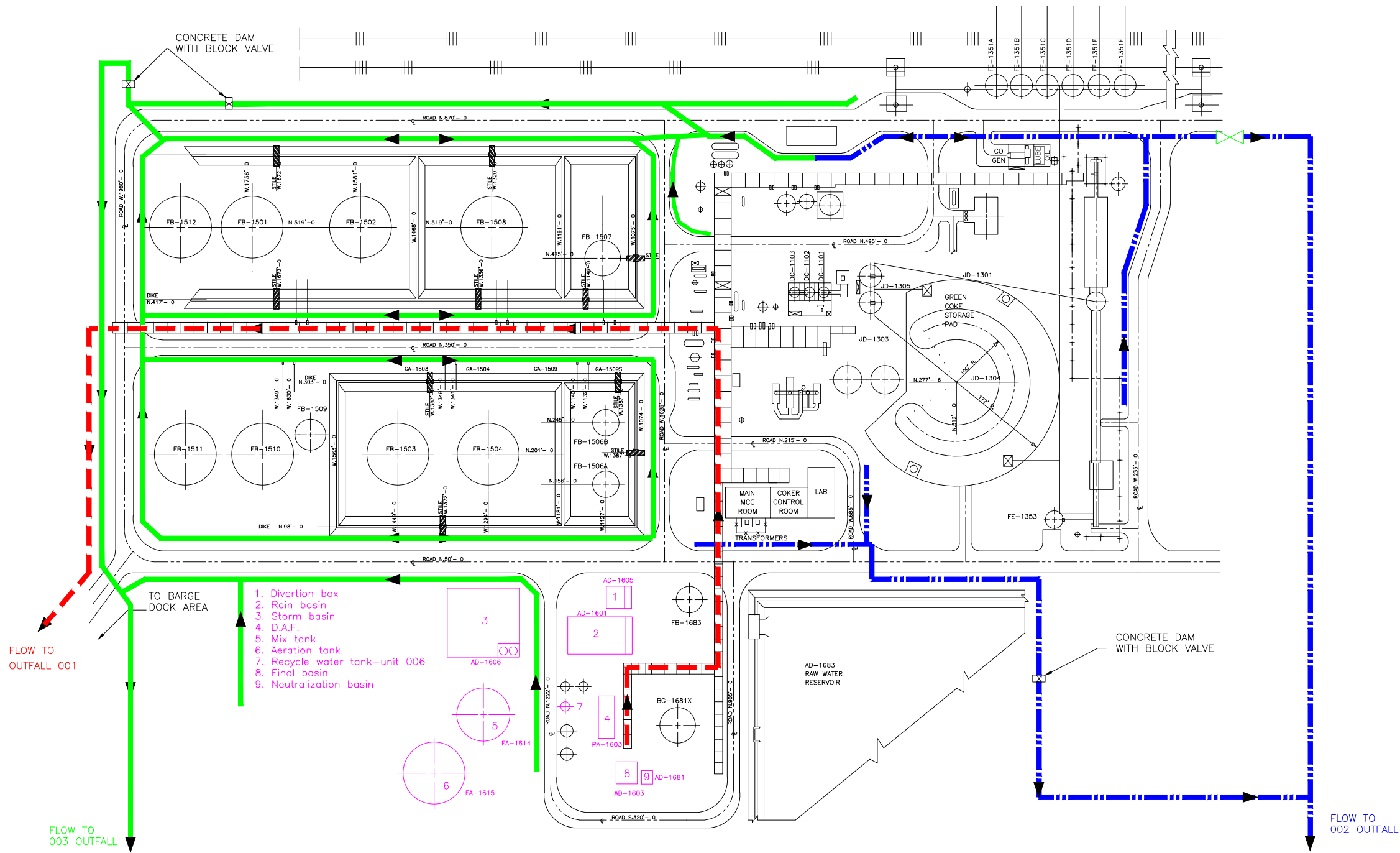
THE SINGLE DASHED LINE IS
THE FLOW TO 001 OUTFALL
WASTEWATER DISCHARGE.

THE DOUBLE DASHED LINE IS THE
FLOW TO THE 002 OUTFALL
STORMWATER DISCHARGE.

THE SOLID LINE IS THE
FLOW TO 003 OUTFALL
STORM WATER DISCHARGE.

1. DIVERSION BOX (AD-1605)
2. RAIN BASIN (AD-1601)
3. STORM BASIN (AD-1606)
4. D.A.F. (PA-1603)
5. MIX TANK (FA-1614) INACTIVE
6. AERATION TANK (FA-1615) DELETED
7. RECYCLE WATER TANK-UNIT 006
8. FINAL BASIN (AD-1603)
9. NEUTRALIZATION BASIN (AD-1681)

0	02/19/25	AS-BUILT	DM	PD	PD
REV.	DATE	DESCRIPTION	CO.	CHK. BY:	APR. BY:
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 Seadrift Coke L.P. 8618 HIGHWAY 185 NORTH PORT LAVACA, TEXAS 77979					
DRAWN BY: -		APPROVED BY: CCH/PD		ORIGINAL DATE: 02/19/25	
SITE PLAN FLOW DIAGRAM ENVIRONMENTAL WATER PERMITS OUTFALL FLOW					
PROJ. NO. -		PROJ. NAME			SCALE: NTS
AREA	PROCESS	DWG. TYPE	DWG. NO.		REV. NO.
OVERALL	2.01	E9317-00010A		0	



THE SINGLE DASHED LINE IS
THE FLOW TO 001 OUTFALL
WASTEWATER DISCHARGE.

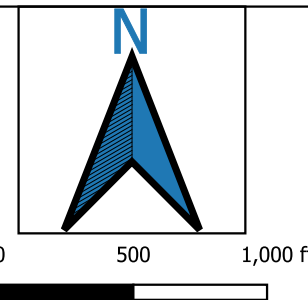
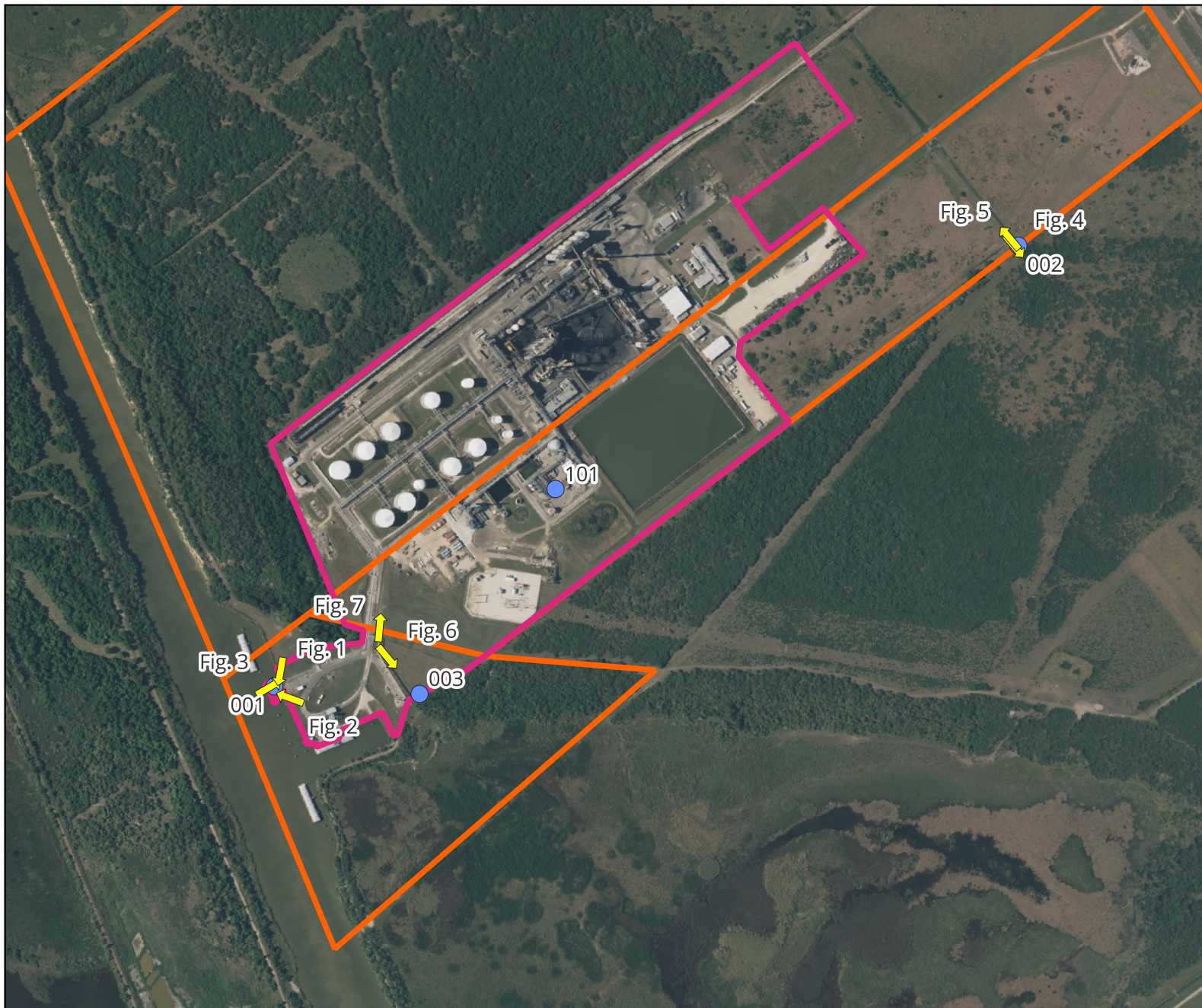
THE DOUBLE DASHED LINE IS THE
FLOW TO THE 002 OUTFALL
STORMWATER DISCHARGE.

THE SOLID LINE IS
THE FLOW TO 003 OUTFALL
STORM WATER DISCHARGE.

VOID
PER AS-BUILT

1	02/19/25	VOID		DM	PD	PD
REV.	DATE	DESCRIPTION	CO.	CHK. BY:	APR. BY:	
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			Seadrift Coke L.P.			
8618 HIGHWAY 185 NORTH PORT LAVACA, TEXAS 77979						
DRAWN BY: MSP		APPROVED BY:		ORIGINAL DATE: 4/06		
FLOW DIAGRAM ENVIRONMENTAL WATER PERMITS OUTFALL FLOW						
PROJ. NO.		PROJ. NAME			SCALE: NTS	
AREA	PROCESS	DWG. TYPE 1.08	DWG. NO. WW-0001		REV. No. 1	

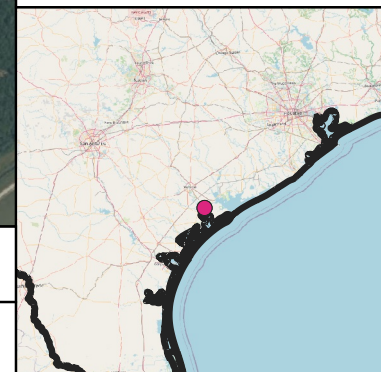
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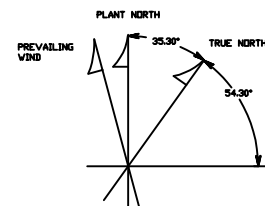
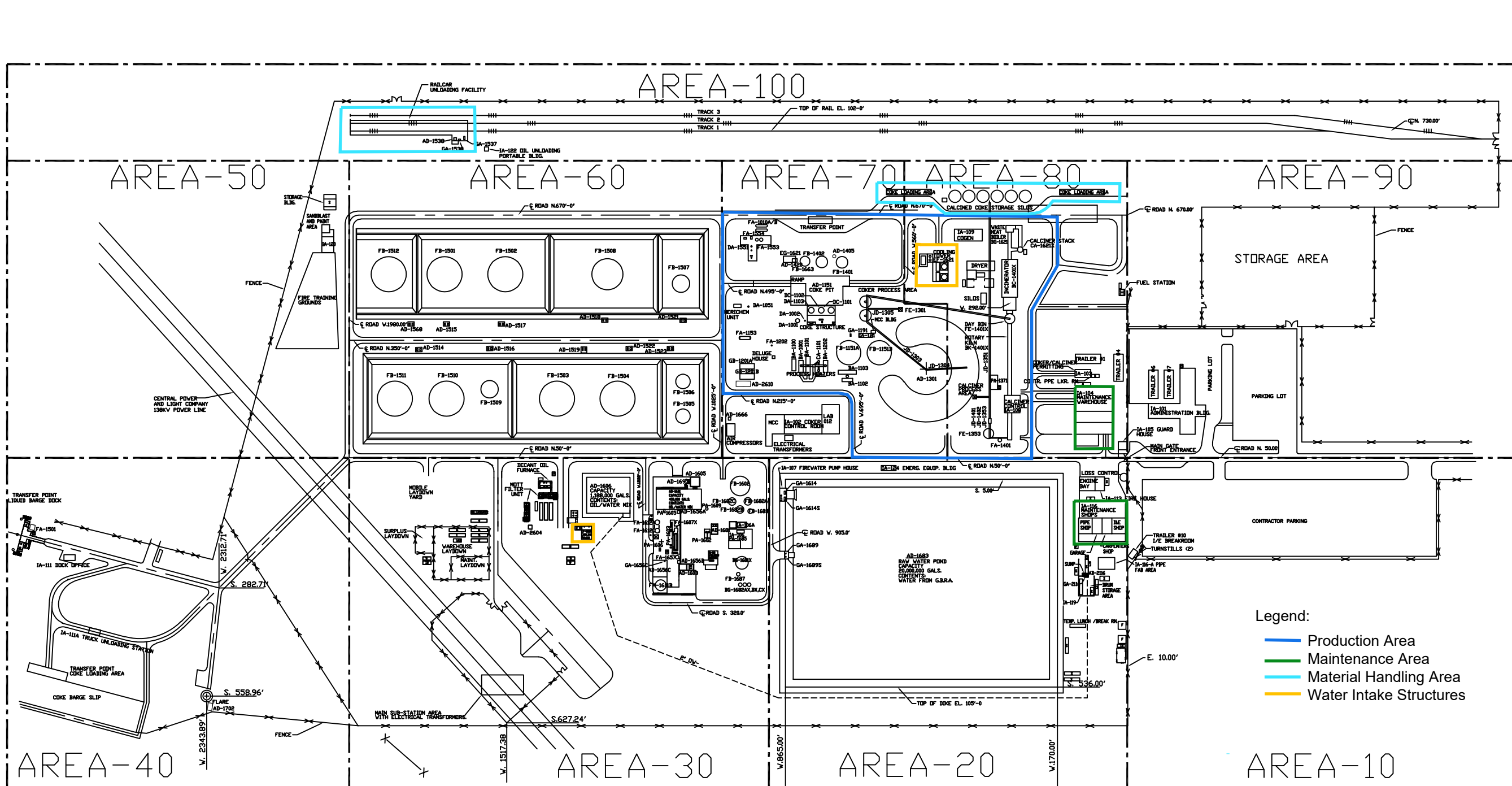


Legend:

- Facility Boundaries
- Seadrift Property Boundaries
- Seadrift Outfalls
- ↑ Photo Locations

Project Location





- Legend:
- Production Area
 - Maintenance Area
 - Material Handling Area
 - Water Intake Structures

33	8/2024	AS-BUILT	DM	CCH	PD
32	7/2024	M1009	DM	PD	PD
31	5/2024	M1049	DM	BC	BC
30	1/2024	DRAWING REFER. UPDATES ONE-LINES	SEA	CCH	DH
29	9/25/23	DRAWING REFERENCE UPDATES	SEA	CCH	RV
28	4/3/23	AS BUILT ADD AD-1301 TAG	SEA	CCH	JR
27	3/7/23	MOC-21-2129	BHP	CCH	RV
REV.	DATE	DESCRIPTION	CO.	CHK. BY:	APR. BY:

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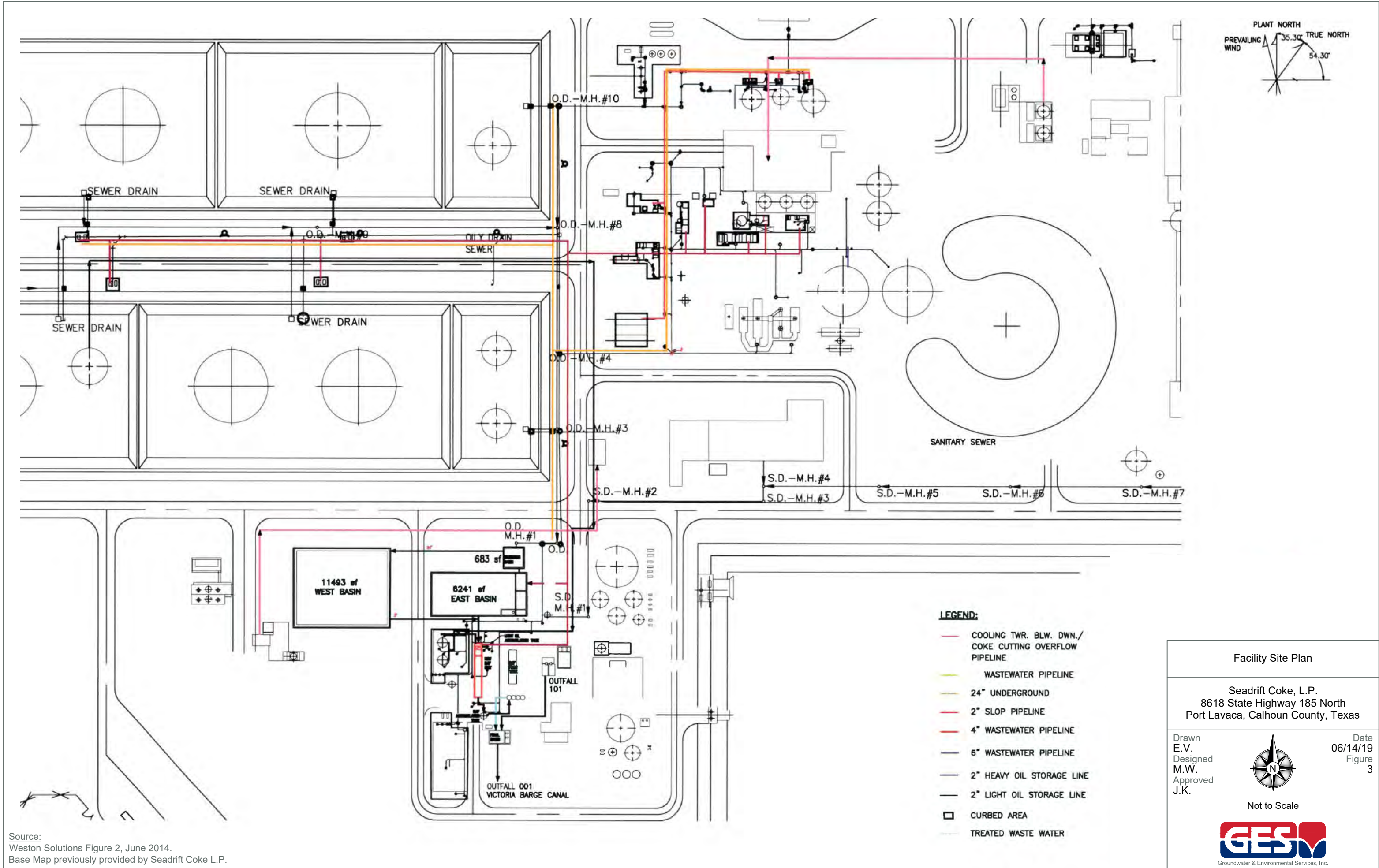
Seadrift Coke L.P.
8618 HIGHWAY 185 NORTH
PORT LAVACA, TEXAS 77979

DRAWN BY: LAC	APPROVED BY:	ORIGINAL DATE: 9/23/11
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FACILITY SITE PLAN
AREA LAYOUT
MAJOR EQUIPMENT
BUILDING & STORAGE LOCATIONS

PROJ. NO.	PROJ. NAME	SCALE: NTS
AREA	PROCESS	DWG. TYPE
OVERALL	2.01	E9317-00010A
REV. No.	33	

M:\Graphics\3600-Houston\Misc\Seadrift\Weston Solutions\Seadrift Coke LP Facility Site Plan.dwg, NTS, evaga



Source:
Weston Solutions Figure 2, June 2014.
Base Map previously provided by Seadrift Coke L.P.



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

INDUSTRIAL WASTEWATER PERMIT APPLICATION TECHNICAL REPORT 1.0

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, please refer to the [Instructions for Completing the Industrial Wastewater Permit Application](#)¹ available on the TCEQ website. Please contact the Industrial Permits Team at 512-239-4671 with any questions about this form.

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.

Item 1. Facility/Site Information (Instructions, Page 39)

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

SIC:2999 Production of calcined petroleum needle coke from decant oil (No. 6 oil) feedstock.

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

Wastewater is generated from the equipment/process area wash down, cooling tower blowdown, process areas and storm runoff from the process areas. Storm runoffs that are contaminated with process fluids are collected by both ground and underground drainage systems. Stormwater from non-process areas is isolated and discharged separately from stormwater from process areas.

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
Decant oil	"green" needle coke	Calcined needle coke
		Coker gas oil
		Coker naptha
		Coker Fines

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: See Attachment TR1.0-1.d

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

☐ Yes ☒ No

If **yes**, provide background discussion: [Click to enter text.](#)

- 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 Flood Map Service Center; See attachment TR1.0-1.f

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: [Click to enter text.](#)

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

Item 2. Treatment System (Instructions, Page 40)

- 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.

The following are used to provide treatment: Solids gravity separation basins; Corrugated Plate Interceptor (CPI); Chemical Treatment (Coagulant and Coagulant Aid as needed); Dissolved Air Flotation Unit (DAF); Surge Capacity Tank; and Activated Carbon Filters.

Wastewater from the unit is pumped via the oily water header or the oily water collection sump to the CPI. Treated wastewater from the CPI flows by gravity to mix tanks in which a coagulant (and coagulant aid as needed) is added prior to treatment in the DAF. Treated process water from the DAF may be discharged to Outfall 001. During periods of low rainfall or low basin levels, wastewater from CPI can be routed back to the Rain (East) Basin for storage and later use in the process instead of flowing through the DAF to Outfall 001. Additional coagulant aid is added to the DAF unit as needed to aid the separation process.

Storm runoff from the concrete areas within the process unit and coke cutting water tanks flows by gravity to the Rain Basin (East Basin) or Storm Basin (West Basin), which would eventually be pumped to the CPI, then the DAF unit.

Treated wastewater from the DAF unit is recycled to the process for coke cutting and other purposes. Water in excess for process needs is routed to activated carbon filters for final polishing. Treated water from the carbon filters flows to Outfall 001 and is discharged at the Victoria Barge Canal.

Domestic wastewater generated at the facility is routed to a package treatment plant which discharges via internal Outfall 101 at the final basin. All wastewaters in the final basin are pumped and discharged to the Victoria Barge Canal at Outfall 001.

- 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 TR1.0-2.b

Item 3. Impoundments (Instructions, Page 40)

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 40-42, 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. Attach additional copies of the Impoundment Information table, if needed.

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)	West Basin (c)	East Basin (c)		
Associated Outfall Number	001	001		
Liner Type (C) (I) (S) or (A)	Concrete Basin	Concrete Basin		
Alt. Liner Attachment Reference				
Leak Detection System, Y/N	N	N		
Groundwater Monitoring Wells, Y/N	N	N		
Groundwater Monitoring Data Attachment	N/A	N/A		
Pond Bottom Located Above The Seasonal High-Water Table, Y/N	Y	Y		
Length (ft)	110	100		
Width (ft)	90	50		
Max Depth From Water Surface (ft), Not Including Freeboard	14	12		
Freeboard (ft)	2	2		
Surface Area (acres)	.26	.14		
Storage Capacity (gallons)	890,000	370,000		

Parameter	Pond #	Pond #	Pond #	Pond #
40 CFR Part 257, Subpart D, Y/N	Y	Y		
Date of Construction	1983	1983		

Attachment: Attachment TR1.0-3.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**.

1. Liner data

☐ Yes ☐ No ☐ Not yet designed

2. Leak detection system or groundwater monitoring data

☐ Yes ☐ No ☐ Not yet designed

3. Groundwater impacts

☐ Yes ☐ No ☐ Not yet designed

NOTE: Item b.3 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

Item 4. Outfall/Disposal Method Information (Instructions, Page 42)

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

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

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

Outfall Longitude and Latitude

Outfall No.	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)
001	28.50861	96.79944
101	28.51139	96.79444
002	28.51444	96.7879
003	28.50833	96.79917

Outfall Location Description

Outfall No.	Location Description
001	Effluent of final basin is approximately 2000' to entering the Victoria Barge Canal
101	At the outlet weir of sanitary treatment plant prior to discharging into Outfall 001
002	Located approximately 1200' from State Highway 185 North immediately SE at the property boundary
003	SW of sample point 003 at Victoria Barge Canal

Description of Sampling Point(s) (if different from Outfall location)

Outfall No.	Description of sampling point
001	Effluent monitoring samples are taken from the discharge pumps, but before leaving company property.
101	Samples taken after final treatment and prior to commingling with any other waters
002	Approximately 150 yards South of Entrance Road
003	Approximately 500' east of Victoria Barge Canal

Outfall Flow Information - Permitted and Proposed

Outfall No.	Permitted Daily Avg Flow (MGD)	Permitted Daily Max Flow (MGD)	Proposed Daily Avg Flow (MGD)	Proposed Daily Max Flow (MGD)	Anticipated Discharge Date (mm/dd/yy)
001	0.202	0.821	0.202	0.821	-
101	0.015	0.030	0.015	0.030	-
002	-	-	-	-	Each significant rainfall event,

Outfall No.	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)
					equipment washing event, or process water diversion for compressor cooling event
003	-	-	-	-	Each significant rainfall event

Outfall Discharge - Method and Measurement

Outfall No.	Pumped Discharge? Y/N	Gravity Discharge? Y/N	Type of Flow Measurement Device Used
001	Y	N	Totalizer
101	Y	N	Weir
002	N	Y	Calculated Estimate
003	N	Y	Calculated Estimate

Outfall Discharge - Flow Characteristics

Outfall No.	Intermittent Discharge? Y/N	Continuous Discharge? Y/N	Seasonal Discharge? Y/N	Discharge Duration (hrs/day)	Discharge Duration (days/mo)	Discharge Duration (mo/yr)
001	Y	N	N	24	7	12
101	Y	N	N	24	7	12
002	Y	N	N	-	-	-
003	Y	N	N	-	-	-

Outfall Wastestream Contributions

Outfall No. 001

Contributing Wastestream	Volume (MGD)	Percent (%) of Total Flow
Process area wash down	0.108	20
Storm runoffs	0.360	63
RO reject	0.052	7
Outfall 101	0.020	4

Outfall No. 101

Contributing Wastestream	Volume (MGD)	Percent (%) of Total Flow
Sanitary Package	.0144	100

Outfall No. 002

Contributing Wastestream	Volume (MGD)	Percent (%) of Total Flow
Uncontaminated stormwater runoff		99.9
North Cooling Tower Wash Water	1.109*	<0.1
Boiler Wash Water	0.004*	<0.1
Process Water	0.058*	<0.1

Attachment: TR1.0-4 * Intermittent, representative of MGD during discharge event.

Item 5. Blowdown and Once-Through Cooling Water Discharges (Instructions, Page 43)

a. Indicate if the facility currently or proposes to:

- ☒ Yes ☐ No Use cooling towers that discharge blowdown or other wastestreams
☒ Yes ☐ No Use boilers that discharge blowdown or other wastestreams
☒ Yes ☐ No Discharge once-through cooling water

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

b. If **yes** to any of the above, attach an 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.

In addition to each SDS, attach a summary of the above information for each specific wastestream and the associated chemical additives. Specify which outfalls are affected.

Attachment: TR 1.0-5.c

c. Cooling Towers and Boilers

If the facility currently or proposes to use cooling towers or boilers that discharge blowdown or other wastestreams to the outfall(s), complete the following table.

Cooling Towers and Boilers

Type of Unit	Number of Units	Daily Avg Blowdown (gallons/day)	Daily Max Blowdown (gallons/day)
Cooling Towers	2	40320	57600
Boilers	2	28800	86400

Item 6. Stormwater Management (Instructions, Page 44)

Will any existing/proposed outfalls 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 a manner which may result in exposure of the activities or materials to stormwater: See Attachment TR 1.0-6

Item 7. Domestic Sewage, Sewage Sludge, and Septage Management and Disposal (Instructions, Page 44)

Domestic Sewage - Waste and wastewater from humans or household operations that is discharged to a wastewater collection system or otherwise enters a treatment works.

- 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 disposed of by an on-site septic tank and drainfield system. Complete Item 7.b.
 - ☐ Domestic and industrial treatment sludge ARE commingled prior to use or disposal.
 - ☐ Industrial wastewater and domestic sewage are treated separately, and the respective sludge IS NOT commingled prior to sludge use or disposal. Complete Worksheet 5.0.

- ☐ Facility is a POTW. Complete Worksheet 5.0.
- ☐ Domestic sewage is not generated on-site.
- ☐ Other (e.g., portable toilets), specify and Complete Item 7.b: [Click to enter text.](#)

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

Domestic Sewage Plant/Hauler Name

Plant/Hauler Name	Permit/Registration No.
Plant -Guadalupe Blanco River Authority	Permit WQ0011078001
Hauler - Stanford Vacuum Service	Registration - 20766

Item 8. Improvements or Compliance/Enforcement Requirements (Instructions, Page 45)

- 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: [Click to enter text.](#)

Item 9. Toxicity Testing (Instructions, Page 45)

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: [Attachment TR1.0-9](#)

Additionally, attach a copy of all tests performed which **have not** been submitted to the TCEQ or EPA. **Attachment:** [N/A](#)

Item 10. Off-Site/Third Party Wastes (Instructions, Page 45)

- 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 **yes**, provide responses to Items 10.b through 10.d below.

If **no**, proceed to Item 11.

- 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**.

Item 11. Radioactive Materials (Instructions, Page 46)

- 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 Name	Concentration (pCi/L)
N/A - Seadrift has instruments with radioactive parts but are sealed sources and inspected regularly.	

- 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 Name	Concentration (pCi/L)

Item 12. Cooling Water (Instructions, Page 46)

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

1. 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	Guadalupe— Blanco River Authority			
Operator	Guadalupe— Blanco River Authority			

2. 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: PWS No. 0290007

3. Cooling water is/will be obtained from a reclaimed water source?

☐ Yes ☐ No

If **no**, continue. If **yes**, provide the Reuse Authorization No. and stop here: [Click to enter text.](#)

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

☐ Yes ☐ No

If **no**, proceed to Item 12.d. If **yes**, provide the actual intake flow of the Independent Supplier's CWIS that is/will be used to provide water for cooling purposes and proceed: [Click to enter text.](#)

d. 316(b) General Criteria

1. The CWIS(s) used to provide water for cooling purposes to the facility has or will have a cumulative design intake flow of 2 MGD or greater.

☐ Yes ☐ No

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

☐ Yes ☐ No

3. The CWIS(s) withdraw(s)/propose(s) 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*: [Click to enter text.](#)

If **yes** to all three questions in Item 12.d, the facility **meets** the minimum criteria to be subject to the full requirements of Section 316(b) of the CWA. 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 Section 316(b) of the CWA; however, a determination is required based upon BPJ. Proceed to **Item 12.e**.

- e. The facility does not meet the minimum requirements to be subject to the fill requirements of Section 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.1-3 and 6, 2.b.1, and 3.a to allow for a determination based upon BPJ.

f. Oil and Gas Exploration and Production

1. The facility is subject to requirements at 40 CFR Part 435, Subparts A or D.

☐ Yes ☐ No

If **yes**, continue. If **no**, skip to Item 12.g.

2. The facility is an existing facility as defined at 40 CFR § 125.92(k) or a new unit at an existing facility as defined at 40 CFR § 125.92(u).

☐ Yes ☐ No

If **yes**, complete Worksheet 11.0, Items 1.a, 1.b.1-3 and 6, 2.b.1, and 3.a to allow for a determination based upon BPJ. If **no**, skip to Item 12.g.3.

g. Compliance Phase and Track Selection

1. Phase I – New facility subject to 40 CFR Part 125, Subpart I

☐ Yes ☐ No

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

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

Attachment: N/A

2. Phase II - Existing facility subject to 40 CFR Part 125, Subpart J

☐ Yes ☐ No

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

3. Phase III - New facility subject to 40 CFR Part 125, Subpart N

☐ Yes ☐ No

If **yes**, check the box next to the compliance track selection and provide the requested information.

- ☐ Track I - Fixed facility
 - Attach information required by 40 CFR § 125.136(b) and complete Worksheet 11.0, Items 2 and 3, and Worksheet 11.2.
- ☐ Track I - Not a fixed facility
 - Attach information required by 40 CFR § 125.136(b) and complete Worksheet 11.0, Item 2 (except CWIS latitude/longitude under Item 2.a).
- ☐ Track II - Fixed facility
 - Attach information required by 40 CFR § 125.136(c) and complete Worksheet 11.0, Items 2 and 3.

Attachment: N/A

Item 13. Permit Change Requests (Instructions, Page 48)

This item is only applicable to existing permitted facilities.

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.

Seadrift Coke is requesting approval to divert wash water from the Waste Heat Boiler and the North Cooling Tower to Outfall 002. These discharges would occur episodically, during plant outages when maintenance and cleaning activities take place. During such events, stormwater at Outfall 002 would potentially mix with wash water from the North Cooling Tower and the Waste Heat Boiler as these systems are drained. The de-inventorying process for these structures is expected to take one to two days and would occur approximately once every two to three years. Additionally, when the South Cooling Tower is offline, treated process wastewater from air compressor cooling will undergo necessary treatment before being redirected and combined with stormwater at Outfall 002. This redirection is expected to occur approximately once every two years, with the wastewater being treated as necessary to meet discharge requirements. Treatment includes solids gravity separation basins, a Corrugated Plate Interceptor (CPI), chemical treatment with coagulant and coagulant aid as needed, and a Dissolved Air Flotation (DAF) unit. The wastewater is pumped via the oily water header or the oily water collection sump to the CPI, where initial separation occurs. Treated wastewater then flows by gravity to mix tanks, where coagulant (and coagulant aid, if needed) is added before being processed in the DAF unit. Given these intermittent flow variations, future monitoring measures should be considered to ensure compliance with discharge regulations and environmental protection standards. Seadrift Coke is also requesting the removal of Outfall 101 flow reporting requirements. As an internal outfall that discharges directly to Outfall 001, its flow is already accounted for within Outfall 001 reporting, making separate reporting redundant. The same streams will continue to be discharged through Outfall 101, but their volumes will no longer be reported separately. Furthermore, Seadrift Coke is requesting the removal of specific waste stream contributions from Outfall 001. These include boiler blowdown and cooling tower blowdown, which will no longer be directed to this outfall. Additionally, the neutralized demineralized regenerant has been replaced with RO (reverse osmosis) water, reflecting an operational change in water treatment processes.

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

☐ Yes ☒ No

If **yes**, list and describe each change individually.

Click to enter text.

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

☐ Yes ☐ No

If **yes**, list and describe each change individually.

Click to enter text.

Item 14. Laboratory Accreditation (Instructions, Page 49)

All laboratory tests performed must meet the requirements of *30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification*, which includes the following general exemptions from National Environmental Laboratory Accreditation Program (NELAP) certification requirements:

- The laboratory is an in-house laboratory and is:
 - periodically inspected by the TCEQ; or
 - located in another state and is accredited or inspected by that state; or
 - performing work for another company with a unit located in the same site; or
 - performing pro bono work for a governmental agency or charitable organization.
- The laboratory is accredited under federal law.
- The data are needed for emergency-response activities, and a laboratory accredited under the Texas Laboratory Accreditation Program is not available.
- The laboratory supplies data for which the TCEQ does not offer accreditation.

The applicant should review *30 TAC Chapter 25* for specific requirements.

The following certification statement shall be signed and submitted with every application. See the *Signature Page* section in the Instructions, for a list of designated representatives who may sign the certification.

CERTIFICATION:

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

Printed Name: [Click to enter text.](#)

Title: [Click to enter text.](#)

Signature: _____

Date: _____

INDUSTRIAL WASTEWATER PERMIT APPLICATION

WORKSHEET 2.0: POLLUTANT ANALYSIS

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.

Item 1. General Testing Requirements (Instructions, Page 55)

- 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): [Click to enter text.](#)
- ☒ Check the box to confirm all samples were collected no more than 12 months prior to the date of application submittal.
- 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: [Click to enter text.](#)

Item 2. Specific Testing Requirements (Instructions, Page 56)

Attach correspondence from TCEQ approving submittal of less than the required number of samples, if applicable. **Attachment:** [Click to enter text.](#)

TABLE 1 and TABLE 2 (Instructions, Page 58)

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

Table 1 for Outfall No.: **001 & 002 WS 2.0-4**

☐ Composite

Samples are (check one):

☒ Grab

Pollutant	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)
BOD (5-day)				
CBOD (5-day)				
Chemical oxygen demand				
Total organic carbon				
Dissolved oxygen				
Ammonia nitrogen				
Total suspended solids				
Nitrate nitrogen				
Total organic nitrogen				
Total phosphorus				
Oil and grease				

Pollutant	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)
Total residual chlorine				
Total dissolved solids				
Sulfate				
Chloride				
Fluoride				
Total alkalinity (mg/L as CaCO3)				
Temperature (°F)				
pH (standard units)				

Table 2 for Outfall No.: 001 & 002 WS 2.0-4 Samples are (check one): ☐ Composite ☐ Grab

Pollutant	Sample 1 (µg/L)	Sample 2 (µg/L)	Sample 3 (µg/L)	Sample 4 (µg/L)	MAL (µg/L)
Aluminum, total					2.5
Antimony, total					5
Arsenic, total					0.5
Barium, total					3
Beryllium, total					0.5
Cadmium, total					1
Chromium, total					3
Chromium, hexavalent					3
Chromium, trivalent					N/A
Copper, total					2
Cyanide, available					2/10
Lead, total					0.5
Mercury, total					0.005/0.0005
Nickel, total					2
Selenium, total					5
Silver, total					0.5
Thallium, total					0.5
Zinc, total					5.0

TABLE 3 (Instructions, Page 58)

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

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

Table 3 for Outfall No.: **001 & 002 WS 2.0-4**

Samples are (check one):

☐ Composite

☐ Grab

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

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

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
[Trichloroethylene]					
2,4,5-Trichlorophenol					50
TTHM (Total trihalomethanes)					10
Vinyl chloride					10

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

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

TABLE 4 (Instructions, Pages 58-59)

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)

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

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)**

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

Domestic wastewater is/will be discharged.

☐ Yes ☐ No

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

Table 4 for Outfall No.: **001**

Samples are (check one): ☐ Composite ☐ Grab

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

TABLE 5 (Instructions, Page 59)

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 that may contain pesticides or herbicides, check N/A.

☒ N/A

Table 5 for Outfall No.: **N/A**

Samples are (check one): ☐ Composite ☐ Grab

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
Aldrin					0.01
Carbaryl					5
Chlordane					0.2
Chlorpyrifos					0.05
4,4'-DDD					0.1
4,4'-DDE					0.1
4,4'-DDT					0.02
2,4-D					0.7
Danitol [Fenpropathrin]					—
Demeton					0.20
Diazinon					0.5/0.1
Dicofol [Kelthane]					1
Dieldrin					0.02
Diuron					0.090

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
Endosulfan I (<i>alpha</i>)					0.01
Endosulfan II (<i>beta</i>)					0.02
Endosulfan sulfate					0.1
Endrin					0.02
Guthion [Azinphos methyl]					0.1
Heptachlor					0.01
Heptachlor epoxide					0.01
Hexachlorocyclohexane (<i>alpha</i>)					0.05
Hexachlorocyclohexane (<i>beta</i>)					0.05
Hexachlorocyclohexane (<i>gamma</i>) [Lindane]					0.05
Hexachlorophene					10
Malathion					0.1
Methoxychlor					2.0
Mirex					0.02
Parathion (ethyl)					0.1
Toxaphene					0.3
2,4,5-TP [Silvex]					0.3

* Indicate units if different from µg/L.

TABLE 6 (Instructions, Page 59)

Completion of Table 6 is required for all external outfalls.

Table 6 for Outfall No.: 001 & 002 WS 2.0-4 Samples are (check one): ☐ Composite ☒ Grab

Pollutants	Believed Present	Believed Absent	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)	MAL (µg/L)*
Bromide	☒	☐					400
Color (PCU)	☐	☒					—
Nitrate-Nitrite (as N)	☒	☐					—
Sulfide (as S)	☐	☒					—
Sulfite (as SO ₃)	☒	☐					—
Surfactants	☐	☒					—
Boron, total	☒	☐					20
Cobalt, total	☐	☒					0.3
Iron, total	☒	☐					7
Magnesium, total	☒	☐					20
Manganese, total	☒	☐					0.5
Molybdenum, total	☒	☐					1
Tin, total	☐	☒					5
Titanium, total	☐	☒					30

TABLE 7 (Instructions, Page 60)

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
☐ Oil and Gas Extraction - Subparts A, D, E, F, G, H	435	☐ Yes	☐ Yes	☐ Yes	No
☐ 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 60)

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

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

Table 8 for Outfall No.: N/A

Samples are (check one): ☐ Composite ☐ Grab

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

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
1,1,1-Trichloroethane					10
1,1,2-Trichloroethane					10
Trichloroethylene [Trichloroethene]					10
Vinyl chloride					10

* Indicate units if different from µg/L.

Table 9 for Outfall No.: N/A

Samples are (check one): ☐ Composite ☐ Grab

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

* Indicate units if different from µg/L.

Table 10 for Outfall No.: N/A

Samples are (check one): ☐ Composite ☒ Grab

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
Acenaphthene					10
Acenaphthylene					10
Anthracene					10
Ben-zidine					50
Benzo(a)anthracene					5
Benzo(a)pyrene					5
3,4-Benzofluoranthene [Benzo(b)fluoranthene]					10
Benzo(ghi)perylene					20
Benzo(k)fluoranthene					5
Bis(2-chloroethoxy)methane					10

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
Bis(2-chloroethyl)ether					10
Bis(2-chloroisopropyl)ether					10
Bis(2-ethylhexyl)phthalate					10
4-Bromophenyl phenyl ether					10
Butylbenzyl phthalate					10
2-Chloronaphthalene					10
4-Chlorophenyl phenyl ether					10
Chrysene					5
Dibenzo(a,h)anthracene					5
1,2-Dichlorobenzene [o-Dichlorobenzene]					10
1,3-Dichlorobenzene [m-Dichlorobenzene]					10
1,4-Dichlorobenzene [p-Dichlorobenzene]					10
3,3'-Dichlorobenzidine					5
Diethyl phthalate					10
Dimethyl phthalate					10
Di-n-butyl phthalate					10
2,4-Dinitrotoluene					10
2,6-Dinitrotoluene					10
Di-n-octyl phthalate					10
1,2-Diphenylhydrazine (as Azobenzene)					20
Fluoranthene					10
Fluorene					10
Hexachlorobenzene					5
Hexachlorobutadiene					10
Hexachlorocyclopentadiene					10
Hexachloroethane					20
Indeno(1,2,3-cd)pyrene					5
Isophorone					10
Naphthalene					10
Nitrobenzene					10
N-Nitrosodimethylamine					50

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
N-Nitrosodi-n-propylamine					20
N-Nitrosodiphenylamine					20
Phenanthrene					10
Pyrene					10
1,2,4-Trichlorobenzene					10

* Indicate units if different from µg/L.

Table 11 for Outfall No.: N/A

Samples are (check one): ☐ Composite ☐ Grab

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
Aldrin					0.01
alpha-BHC [alpha-Hexachlorocyclohexane]					0.05
beta-BHC [beta-Hexachlorocyclohexane]					0.05
gamma-BHC [gamma-Hexachlorocyclohexane]					0.05
delta-BHC [delta-Hexachlorocyclohexane]					0.05
Chlordane					0.2
4,4'-DDT					0.02
4,4'-DDE					0.1
4,4'-DDD					0.1
Dieldrin					0.02
Endosulfan I (alpha)					0.01
Endosulfan II (beta)					0.02
Endosulfan sulfate					0.1
Endrin					0.02
Endrin aldehyde					0.1
Heptachlor					0.01
Heptachlor epoxide					0.01
PCB 1242					0.2
PCB 1254					0.2
PCB 1221					0.2
PCB 1232					0.2
PCB 1248					0.2

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
PCB 1260					0.2
PCB 1016					0.2
Toxaphene					0.3

* Indicate units if different from µg/L.

Attachment: N/A

TABLE 12 (DIOXINS/FURAN COMPOUNDS)

Complete of Table 12 **is required** for **external outfalls**, as directed below. (Instructions, Pages 59-60)

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

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

Description: N/A

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): ☐ Composite ☐ Grab

Compound	Toxicity Equivalent Factors	Wastewater Concentration (ppq)	Wastewater Toxicity Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Toxicity Equivalents (ppt)	MAL (ppq)
2,3,7,8-TCDD	1					10
1,2,3,7,8-PeCDD	1.0					50
2,3,7,8-HxCDDs	0.1					50
1,2,3,4,6,7,8-HpCDD	0.01					50

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

TABLE 13 (HAZARDOUS SUBSTANCES)

Complete Table 13 **is required** for all **external outfalls** as directed below. (Instructions, Pages 60-61)

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

☐ Yes ☒ No

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

☐ Yes ☒ No

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

Table 13 for Outfall No.: N/A

Samples are (check one): ☐ Composite ☐ Grab

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

INDUSTRIAL WASTEWATER PERMIT APPLICATION

WORKSHEET 4.0: RECEIVING WATERS

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

Item 1. Domestic Drinking Water Supply (Instructions, Page 80)

- 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:

1. The legal name of the owner of the drinking water supply intake: N/A
2. The distance and direction from the outfall to the drinking water supply intake: N/A

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

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

Item 2. Discharge Into Tidally Influenced Waters (Instructions, Page 80)

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: 368 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

Item 3. Classified Segment (Instructions, Page 80)

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

☐ Yes ☒ No

If **yes**, stop here and do not 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.

Item 4. Description of Immediate Receiving Waters (Instructions, Page 80)

- a. Name of the immediate receiving waters: Victoria Barge Canal
- b. Check the appropriate description of the immediate receiving waters:
- ☐ Lake or Pond
 - Surface area (acres): Click to enter text.
 - Average depth of the entire water body (feet): Click to enter text.
 - Average depth of water body within a 500-foot radius of the discharge point (feet): Click to enter text.
 - ☒ Man-Made Channel or Ditch
 - ☐ Stream or Creek
 - ☐ Freshwater Swamp or Marsh
 - ☐ Tidal Stream, Bayou, or Marsh
 - ☐ Open Bay
 - ☐ Other, specify:

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

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

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

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

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

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

- d. List the names of all perennial streams that join the receiving water within three miles downstream of the discharge point: N/A
- 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: Victoria Barge Canal flows into San Antonio Bay

- f. General observations of the water body during normal dry weather conditions: The receiving waterbody is the Victoria Barge Canal Tidal. Observed green color with low visibility. Flow is often tide driven and appears to be very slow moving (imperceptible) from the surface. No sheen or odors observed.

Date and time of observation: 6/20/2019; 1:00 p.m.

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

☐ Yes ☒ No

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

Item 5. General Characteristics of Water Body (Instructions, Page 81)

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

☐ oil field activities	☒ urban runoff
☒ agricultural runoff	☐ septic tanks
☒ upstream discharges	☐ other, specify: <u>Click to enter text.</u>

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

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

- 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

INDUSTRIAL WASTEWATER PERMIT APPLICATION

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.

Item 1. Applicability (Instructions, Page 89)

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.

Item 2. Stormwater Coverage (Instructions, Page 89)

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	Authorization under MSGP	Authorized Under Individual Permit
002	☐	☒
003	☐	☒
	☐	☐
	☐	☐
	☐	☐
	☐	☐
	☐	☐
	☐	☐

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

Item 3. Site Map (Instructions, Page 90)

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 above information was provided on the facility site map(s).

Attachment: Attachment WS 7.0-3

Item 4. Facility/Site Information (Instructions, Page 90)

- 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)
002	35 acres	75 acres
003	8 acres	45 acres

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

Wettest month: January

Average rainfall for wettest month (total inches): 7.62

25-year, 24-hour rainfall (inches): 10.5

Source: https://hdsc.nws.noaa.gov/pfds/pfds_map_cont.html?bkmrk=tx

- c. Attach an inventory, or list, of materials currently handled at the facility that may be exposed to precipitation. **Attachment:** WS7.0-4.c
- 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:** WS7.0-4.d
- e. Describe any BMPs and controls the facility uses/proposes to prevent or effectively reduce pollution in stormwater discharges from the facility: WS7.0-4.e

Item 5. Pollutant Analysis (Instructions, Page 91)

- 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): 03/20/2025-04/11/2025
- 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 92 of the Instructions.

Table 17 for Outfall No.: 002 & 003 see WS2.0-4

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

Item 6. Storm Event Data (Instructions, Page 93)

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

Date of storm event: [Click to enter text.](#)

Duration of storm event (minutes): [Click to enter text.](#)

Total rainfall during storm event (inches): [Click to enter text.](#)

Number of hours the between beginning of the storm measured and the end of the previous measurable storm event (hours): [Click to enter text.](#)

Maximum flow rate during rain event (gallons/minute): Variable: Flow measurement based on visual observation at outfall locations

Total stormwater flow from rain event (gallons): Variable: Flow measurement based on visual observation at outfall locations

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



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

INDUSTRIAL WASTEWATER PERMIT APPLICATION

TECHNICAL REPORT 1.0

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, please refer to the [Instructions for Completing the Industrial Wastewater Permit Application](#)¹ available on the TCEQ website. Please contact the Industrial Permits Team at 512-239-4671 with any questions about this form.

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.

Item 1. Facility/Site Information (Instructions, Page 39)

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

SIC:2999 Production of calcined petroleum needle coke from decant oil (No. 6 oil) feedstock.

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

Wastewater is generated from the equipment/process area wash down, cooling tower blowdown, process areas and storm runoff from the process areas. Storm runoffs that are contaminated with process fluids are collected by both ground and underground drainage systems. Stormwater from non-process areas is isolated and discharged separately from stormwater from process areas.

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
Decant oil	"green" needle coke	Calcined needle coke
		Coker gas oil
		Coker naptha
		Coker Fines

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: See Attachment TR1.0-1.d

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

☐ Yes ☒ No

If **yes**, provide background discussion: [Click to enter text.](#)

- 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 Flood Map Service Center; See attachment TR1.0-1.f

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: [Click to enter text.](#)

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

Item 2. Treatment System (Instructions, Page 40)

- 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.

The following are used to provide treatment: Solids gravity separation basins; Corrugated Plate Interceptor (CPI); Chemical Treatment (Coagulant and Coagulant Aid as needed); Dissolved Air Flotation Unit (DAF); Surge Capacity Tank; and Activated Carbon Filters.

Wastewater from the unit is pumped via the oily water header or the oily water collection sump to the CPI. Treated wastewater from the CPI flows by gravity to mix tanks in which a coagulant (and coagulant aid as needed) is added prior to treatment in the DAF. Treated process water from the DAF may be discharged to Outfall 001. During periods of low rainfall or low basin levels, wastewater from CPI can be routed back to the Rain (East) Basin for storage and later use in the process instead of flowing through the DAF to Outfall 001. Additional coagulant aid is added to the DAF unit as needed to aid the separation process.

Storm runoff from the concrete areas within the process unit and coke cutting water tanks flows by gravity to the Rain Basin (East Basin) or Storm Basin (West Basin), which would eventually be pumped to the CPI, then the DAF unit.

Treated wastewater from the DAF unit is recycled to the process for coke cutting and other purposes. Water in excess for process needs is routed to activated carbon filters for final polishing. Treated water from the carbon filters flows to Outfall 001 and is discharged at the Victoria Barge Canal.

Domestic wastewater generated at the facility is routed to a package treatment plant which discharges via internal Outfall 101 at the final basin. All wastewaters in the final basin are pumped and discharged to the Victoria Barge Canal at Outfall 001.

- 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 TR1.0-2.b

Item 3. Impoundments (Instructions, Page 40)

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 40-42, 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. Attach additional copies of the Impoundment Information table, if needed.

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)	West Basin (c)	East Basin (c)		
Associated Outfall Number	001	001		
Liner Type (C) (I) (S) or (A)	Concrete Basin	Concrete Basin		
Alt. Liner Attachment Reference				
Leak Detection System, Y/N	N	N		
Groundwater Monitoring Wells, Y/N	N	N		
Groundwater Monitoring Data Attachment	N/A	N/A		
Pond Bottom Located Above The Seasonal High-Water Table, Y/N	Y	Y		
Length (ft)	110	100		
Width (ft)	90	50		
Max Depth From Water Surface (ft), Not Including Freeboard	14	12		
Freeboard (ft)	2	2		
Surface Area (acres)	.26	.14		
Storage Capacity (gallons)	890,000	370,000		

Parameter	Pond #	Pond #	Pond #	Pond #
40 CFR Part 257, Subpart D, Y/N	Y	Y		
Date of Construction	1983	1983		

Attachment: Attachment TR1.0-3.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**.

1. Liner data

☐ Yes ☐ No ☐ Not yet designed

2. Leak detection system or groundwater monitoring data

☐ Yes ☐ No ☐ Not yet designed

3. Groundwater impacts

☐ Yes ☐ No ☐ Not yet designed

NOTE: Item b.3 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

Item 4. Outfall/Disposal Method Information (Instructions, Page 42)

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

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

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

Outfall Longitude and Latitude

Outfall No.	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)
001	28.50861	96.79944
101	28.51139	96.79444
002	28.51444	96.7879
003	28.50833	96.79917

Outfall Location Description

Outfall No.	Location Description
001	Effluent of final basin is approximately 2000' to entering the Victoria Barge Canal
101	At the outlet weir of sanitary treatment plant prior to discharging into Outfall 001
002	Located approximately 1200' from State Highway 185 North immediately SE at the property boundary
003	SW of sample point 003 at Victoria Barge Canal

Description of Sampling Point(s) (if different from Outfall location)

Outfall No.	Description of sampling point
001	Effluent monitoring samples are taken from the discharge pumps, but before leaving company property.
101	Samples taken after final treatment and prior to commingling with any other waters
002	Approximately 150 yards South of Entrance Road
003	Approximately 500' east of Victoria Barge Canal

Outfall Flow Information - Permitted and Proposed

Outfall No.	Permitted Daily Avg Flow (MGD)	Permitted Daily Max Flow (MGD)	Proposed Daily Avg Flow (MGD)	Proposed Daily Max Flow (MGD)	Anticipated Discharge Date (mm/dd/yy)
001	0.202	0.821	0.202	0.821	-
101	0.015	0.030	0.015	0.030	-
002	-	-	-	-	Each significant rainfall event,

Outfall No.	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)
					equipment washing event, or process water diversion for compressor cooling event
003	-	-	-	-	Each significant rainfall event

Outfall Discharge - Method and Measurement

Outfall No.	Pumped Discharge? Y/N	Gravity Discharge? Y/N	Type of Flow Measurement Device Used
001	Y	N	Totalizer
101	Y	N	Weir
002	N	Y	Calculated Estimate
003	N	Y	Calculated Estimate

Outfall Discharge - Flow Characteristics

Outfall No.	Intermittent Discharge? Y/N	Continuous Discharge? Y/N	Seasonal Discharge? Y/N	Discharge Duration (hrs/day)	Discharge Duration (days/mo)	Discharge Duration (mo/yr)
001	Y	N	N	24	7	12
101	Y	N	N	24	7	12
002	Y	N	N	-	-	-
003	Y	N	N	-	-	-

Outfall Wastestream Contributions

Outfall No. 001

Contributing Wastestream	Volume (MGD)	Percent (%) of Total Flow
Process area wash down	0.108	20
Storm runoffs	0.360	63
RO reject	0.052	7
Outfall 101	0.020	4

Outfall No. 101

Contributing Wastestream	Volume (MGD)	Percent (%) of Total Flow
Sanitary Package	.0144	100

Outfall No. 002

Contributing Wastestream	Volume (MGD)	Percent (%) of Total Flow
Uncontaminated stormwater runoff		99.9
North Cooling Tower Wash Water	1.109 [*]	<0.1
Boiler Wash Water	0.004 [*]	<0.1
Process Water	0.058 [*]	<0.1

Attachment: TR1.0-4 ^{*} Intermittent, representative of MGD during discharge event.

Item 5. Blowdown and Once-Through Cooling Water Discharges (Instructions, Page 43)

a. Indicate if the facility currently or proposes to:

- ☒ Yes ☐ No Use cooling towers that discharge blowdown or other wastestreams
☒ Yes ☐ No Use boilers that discharge blowdown or other wastestreams
☒ Yes ☐ No Discharge once-through cooling water

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

b. If **yes** to any of the above, attach an 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.

In addition to each SDS, attach a summary of the above information for each specific wastestream and the associated chemical additives. Specify which outfalls are affected.

Attachment: TR 1.0-5.c

c. Cooling Towers and Boilers

If the facility currently or proposes to use cooling towers or boilers that discharge blowdown or other wastestreams to the outfall(s), complete the following table.

Cooling Towers and Boilers

Type of Unit	Number of Units	Daily Avg Blowdown (gallons/day)	Daily Max Blowdown (gallons/day)
Cooling Towers	2	40320	57600
Boilers	2	28800	86400

Item 6. Stormwater Management (Instructions, Page 44)

Will any existing/proposed outfalls 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 a manner which may result in exposure of the activities or materials to stormwater: See Attachment TR 1.0-6

Item 7. Domestic Sewage, Sewage Sludge, and Septage Management and Disposal (Instructions, Page 44)

Domestic Sewage - Waste and wastewater from humans or household operations that is discharged to a wastewater collection system or otherwise enters a treatment works.

- 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 disposed of by an on-site septic tank and drainfield system. Complete Item 7.b.
 - ☐ Domestic and industrial treatment sludge ARE commingled prior to use or disposal.
 - ☐ Industrial wastewater and domestic sewage are treated separately, and the respective sludge IS NOT commingled prior to sludge use or disposal. Complete Worksheet 5.0.

- ☐ Facility is a POTW. Complete Worksheet 5.0.
- ☐ Domestic sewage is not generated on-site.
- ☐ Other (e.g., portable toilets), specify and Complete Item 7.b: [Click to enter text.](#)

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

Domestic Sewage Plant/Hauler Name

Plant/Hauler Name	Permit/Registration No.
Plant -Guadalupe Blanco River Authority	Permit WQ0011078001
Hauler - Stanford Vacuum Service	Registration - 20766

Item 8. Improvements or Compliance/Enforcement Requirements (Instructions, Page 45)

- 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: [Click to enter text.](#)

Item 9. Toxicity Testing (Instructions, Page 45)

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: [Attachment TR1.0-9](#)

Additionally, attach a copy of all tests performed which **have not** been submitted to the TCEQ or EPA. **Attachment:** [N/A](#)

Item 10. Off-Site/Third Party Wastes (Instructions, Page 45)

- 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 **yes**, provide responses to Items 10.b through 10.d below.

If **no**, proceed to Item 11.

- 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.

Item 11. Radioactive Materials (Instructions, Page 46)

- 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 Name	Concentration (pCi/L)
N/A - Seadrift has instruments with radioactive parts but are sealed sources and inspected regularly.	

- 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 Name	Concentration (pCi/L)

Item 12. Cooling Water (Instructions, Page 46)

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

1. 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	Guadalupe— Blanco River Authority			
Operator	Guadalupe— Blanco River Authority			

2. 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: PWS No. 0290007

3. Cooling water is/will be obtained from a reclaimed water source?

☐ Yes ☐ No

If **no**, continue. If **yes**, provide the Reuse Authorization No. and stop here: [Click to enter text.](#)

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

☐ Yes ☐ No

If **no**, proceed to Item 12.d. If **yes**, provide the actual intake flow of the Independent Supplier's CWIS that is/will be used to provide water for cooling purposes and proceed: [Click to enter text.](#)

d. 316(b) General Criteria

1. The CWIS(s) used to provide water for cooling purposes to the facility has or will have a cumulative design intake flow of 2 MGD or greater.

☐ Yes ☐ No

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

☐ Yes ☐ No

3. The CWIS(s) withdraw(s)/propose(s) 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*: [Click to enter text.](#)

If **yes** to all three questions in Item 12.d, the facility **meets** the minimum criteria to be subject to the full requirements of Section 316(b) of the CWA. 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 Section 316(b) of the CWA; however, a determination is required based upon BPJ. Proceed to **Item 12.e**.

- e. The facility does not meet the minimum requirements to be subject to the fill requirements of Section 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.1-3 and 6, 2.b.1, and 3.a to allow for a determination based upon BPJ.

f. Oil and Gas Exploration and Production

1. The facility is subject to requirements at 40 CFR Part 435, Subparts A or D.

☐ Yes ☐ No

If **yes**, continue. If **no**, skip to Item 12.g.

2. The facility is an existing facility as defined at 40 CFR § 125.92(k) or a new unit at an existing facility as defined at 40 CFR § 125.92(u).

☐ Yes ☐ No

If **yes**, complete Worksheet 11.0, Items 1.a, 1.b.1-3 and 6, 2.b.1, and 3.a to allow for a determination based upon BPJ. If **no**, skip to Item 12.g.3.

g. Compliance Phase and Track Selection

1. Phase I – New facility subject to 40 CFR Part 125, Subpart I

☐ Yes ☐ No

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

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

Attachment: N/A

2. Phase II - Existing facility subject to 40 CFR Part 125, Subpart J

☐ Yes ☐ No

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

3. Phase III - New facility subject to 40 CFR Part 125, Subpart N

☐ Yes ☐ No

If **yes**, check the box next to the compliance track selection and provide the requested information.

- ☐ Track I - Fixed facility
 - Attach information required by 40 CFR § 125.136(b) and complete Worksheet 11.0, Items 2 and 3, and Worksheet 11.2.
- ☐ Track I - Not a fixed facility
 - Attach information required by 40 CFR § 125.136(b) and complete Worksheet 11.0, Item 2 (except CWIS latitude/longitude under Item 2.a).
- ☐ Track II - Fixed facility
 - Attach information required by 40 CFR § 125.136(c) and complete Worksheet 11.0, Items 2 and 3.

Attachment: N/A

Item 13. Permit Change Requests (Instructions, Page 48)

This item is only applicable to existing permitted facilities.

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.

Seadrift Coke is requesting approval to divert wash water from the Waste Heat Boiler and the North Cooling Tower to Outfall 002. These discharges would occur episodically, during plant outages when maintenance and cleaning activities take place. During such events, stormwater at Outfall 002 would potentially mix with wash water from the North Cooling Tower and the Waste Heat Boiler as these systems are drained. The de-inventorying process for these structures is expected to take one to two days and would occur approximately once every two to three years. Additionally, when the South Cooling Tower is offline, treated process wastewater from air compressor cooling will undergo necessary treatment before being redirected and combined with stormwater at Outfall 002. This redirection is expected to occur approximately once every two years, with the wastewater being treated as necessary to meet discharge requirements. Treatment includes solids gravity separation basins, a Corrugated Plate Interceptor (CPI), chemical treatment with coagulant and coagulant aid as needed, and a Dissolved Air Flotation (DAF) unit. The wastewater is pumped via the oily water header or the oily water collection sump to the CPI, where initial separation occurs. Treated wastewater then flows by gravity to mix tanks, where coagulant (and coagulant aid, if needed) is added before being processed in the DAF unit. Given these intermittent flow variations, future monitoring measures should be considered to ensure compliance with discharge regulations and environmental protection standards. Seadrift Coke is also requesting the removal of Outfall 101 flow reporting requirements. As an internal outfall that discharges directly to Outfall 001, its flow is already accounted for within Outfall 001 reporting, making separate reporting redundant. The same streams will continue to be discharged through Outfall 101, but their volumes will no longer be reported separately. Furthermore, Seadrift Coke is requesting the removal of specific waste stream contributions from Outfall 001. These include boiler blowdown and cooling tower blowdown, which will no longer be directed to this outfall. Additionally, the neutralized demineralized regenerant has been replaced with RO (reverse osmosis) water, reflecting an operational change in water treatment processes.

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

☐ Yes ☒ No

If **yes**, list and describe each change individually.

Click to enter text.

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

☐ Yes ☐ No

If **yes**, list and describe each change individually.

Click to enter text.

Item 14. Laboratory Accreditation (Instructions, Page 49)

All laboratory tests performed must meet the requirements of *30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification*, which includes the following general exemptions from National Environmental Laboratory Accreditation Program (NELAP) certification requirements:

- The laboratory is an in-house laboratory and is:
 - periodically inspected by the TCEQ; or
 - located in another state and is accredited or inspected by that state; or
 - performing work for another company with a unit located in the same site; or
 - performing pro bono work for a governmental agency or charitable organization.
- The laboratory is accredited under federal law.
- The data are needed for emergency-response activities, and a laboratory accredited under the Texas Laboratory Accreditation Program is not available.
- The laboratory supplies data for which the TCEQ does not offer accreditation.

The applicant should review *30 TAC Chapter 25* for specific requirements.

The following certification statement shall be signed and submitted with every application. See the *Signature Page* section in the Instructions, for a list of designated representatives who may sign the certification.

CERTIFICATION:

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

Printed Name: [Click to enter text.](#)

Title: [Click to enter text.](#)

Signature: _____

Date: _____

INDUSTRIAL WASTEWATER PERMIT APPLICATION

WORKSHEET 2.0: POLLUTANT ANALYSIS

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.

Item 1. General Testing Requirements (Instructions, Page 55)

- 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): [Click to enter text.](#)
- ☒ Check the box to confirm all samples were collected no more than 12 months prior to the date of application submittal.
- 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: [Click to enter text.](#)

Item 2. Specific Testing Requirements (Instructions, Page 56)

Attach correspondence from TCEQ approving submittal of less than the required number of samples, if applicable. **Attachment:** [Click to enter text.](#)

TABLE 1 and TABLE 2 (Instructions, Page 58)

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

Table 1 for Outfall No.: **001 & 002 WS 2.0-4**

☐ Composite

Samples are (check one):

☒ Grab

Pollutant	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)
BOD (5-day)				
CBOD (5-day)				
Chemical oxygen demand				
Total organic carbon				
Dissolved oxygen				
Ammonia nitrogen				
Total suspended solids				
Nitrate nitrogen				
Total organic nitrogen				
Total phosphorus				
Oil and grease				

Pollutant	Sample 1 (mg/L)	Sample 2 (mg/L)	Sample 3 (mg/L)	Sample 4 (mg/L)
Total residual chlorine				
Total dissolved solids				
Sulfate				
Chloride				
Fluoride				
Total alkalinity (mg/L as CaCO3)				
Temperature (°F)				
pH (standard units)				

Table 2 for Outfall No.: 001 & 002 WS 2.0-4 Samples are (check one): ☐ Composite ☐ Grab

Pollutant	Sample 1 (µg/L)	Sample 2 (µg/L)	Sample 3 (µg/L)	Sample 4 (µg/L)	MAL (µg/L)
Aluminum, total					2.5
Antimony, total					5
Arsenic, total					0.5
Barium, total					3
Beryllium, total					0.5
Cadmium, total					1
Chromium, total					3
Chromium, hexavalent					3
Chromium, trivalent					N/A
Copper, total					2
Cyanide, available					2/10
Lead, total					0.5
Mercury, total					0.005/0.0005
Nickel, total					2
Selenium, total					5
Silver, total					0.5
Thallium, total					0.5
Zinc, total					5.0

TABLE 3 (Instructions, Page 58)

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

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

Table 3 for Outfall No.: **001 & 002 WS 2.0-4**

Samples are (check one):

☐ Composite

☐ Grab

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

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

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
[Trichloroethylene]					
2,4,5-Trichlorophenol					50
TTHM (Total trihalomethanes)					10
Vinyl chloride					10

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

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

TABLE 4 (Instructions, Pages 58-59)

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)

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

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)**

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

Domestic wastewater is/will be discharged.

☐ Yes ☐ No

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

Table 4 for Outfall No.: **001**

Samples are (check one): ☐ Composite ☐ Grab

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

TABLE 5 (Instructions, Page 59)

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 that may contain pesticides or herbicides, check N/A.

☒ N/A

Table 5 for Outfall No.: **N/A**

Samples are (check one): ☐ Composite ☐ Grab

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
Aldrin					0.01
Carbaryl					5
Chlordane					0.2
Chlorpyrifos					0.05
4,4'-DDD					0.1
4,4'-DDE					0.1
4,4'-DDT					0.02
2,4-D					0.7
Danitol [Fenpropathrin]					—
Demeton					0.20
Diazinon					0.5/0.1
Dicofol [Kelthane]					1
Dieldrin					0.02
Diuron					0.090

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)*
Endosulfan I (<i>alpha</i>)					0.01
Endosulfan II (<i>beta</i>)					0.02
Endosulfan sulfate					0.1
Endrin					0.02
Guthion [Azinphos methyl]					0.1
Heptachlor					0.01
Heptachlor epoxide					0.01
Hexachlorocyclohexane (<i>alpha</i>)					0.05
Hexachlorocyclohexane (<i>beta</i>)					0.05
Hexachlorocyclohexane (<i>gamma</i>) [Lindane]					0.05
Hexachlorophene					10
Malathion					0.1
Methoxychlor					2.0
Mirex					0.02
Parathion (ethyl)					0.1
Toxaphene					0.3
2,4,5-TP [Silvex]					0.3

* Indicate units if different from µg/L.

TABLE 6 (Instructions, Page 59)

Completion of Table 6 is required for all external outfalls.

Table 6 for Outfall No.: **001 & 002 WS 2.0-4** Samples are (check one): ☐ Composite ☒ Grab

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	☐	☒					—
Boron, total	☒	☐					20
Cobalt, total	☐	☒					0.3
Iron, total	☒	☐					7
Magnesium, total	☒	☐					20
Manganese, total	☒	☐					0.5
Molybdenum, total	☒	☐					1
Tin, total	☐	☒					5
Titanium, total	☐	☒					30

TABLE 7 (Instructions, Page 60)

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
☐ Oil and Gas Extraction - Subparts A, D, E, F, G, H	435	☐ Yes	☐ Yes	☐ Yes	No
☐ 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 60)

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

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

Table 8 for Outfall No.: N/A

Samples are (check one): ☐ Composite ☐ Grab

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

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
1,1,1-Trichloroethane					10
1,1,2-Trichloroethane					10
Trichloroethylene [Trichloroethene]					10
Vinyl chloride					10

* Indicate units if different from µg/L.

Table 9 for Outfall No.: N/A

Samples are (check one): ☐ Composite ☐ Grab

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

* Indicate units if different from µg/L.

Table 10 for Outfall No.: N/A

Samples are (check one): ☐ Composite ☒ Grab

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
Acenaphthene					10
Acenaphthylene					10
Anthracene					10
Benzidine					50
Benzo(a)anthracene					5
Benzo(a)pyrene					5
3,4-Benzofluoranthene [Benzo(b)fluoranthene]					10
Benzo(ghi)perylene					20
Benzo(k)fluoranthene					5
Bis(2-chloroethoxy)methane					10

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
Bis(2-chloroethyl)ether					10
Bis(2-chloroisopropyl)ether					10
Bis(2-ethylhexyl)phthalate					10
4-Bromophenyl phenyl ether					10
Butylbenzyl phthalate					10
2-Chloronaphthalene					10
4-Chlorophenyl phenyl ether					10
Chrysene					5
Dibenzo(a,h)anthracene					5
1,2-Dichlorobenzene [o-Dichlorobenzene]					10
1,3-Dichlorobenzene [m-Dichlorobenzene]					10
1,4-Dichlorobenzene [p-Dichlorobenzene]					10
3,3'-Dichlorobenzidine					5
Diethyl phthalate					10
Dimethyl phthalate					10
Di-n-butyl phthalate					10
2,4-Dinitrotoluene					10
2,6-Dinitrotoluene					10
Di-n-octyl phthalate					10
1,2-Diphenylhydrazine (as Azobenzene)					20
Fluoranthene					10
Fluorene					10
Hexachlorobenzene					5
Hexachlorobutadiene					10
Hexachlorocyclopentadiene					10
Hexachloroethane					20
Indeno(1,2,3-cd)pyrene					5
Isophorone					10
Naphthalene					10
Nitrobenzene					10
N-Nitrosodimethylamine					50

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
N-Nitrosodi-n-propylamine					20
N-Nitrosodiphenylamine					20
Phenanthrene					10
Pyrene					10
1,2,4-Trichlorobenzene					10

* Indicate units if different from µg/L.

Table 11 for Outfall No.: N/A

Samples are (check one): ☐ Composite ☐ Grab

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
Aldrin					0.01
alpha-BHC [alpha-Hexachlorocyclohexane]					0.05
beta-BHC [beta-Hexachlorocyclohexane]					0.05
gamma-BHC [gamma-Hexachlorocyclohexane]					0.05
delta-BHC [delta-Hexachlorocyclohexane]					0.05
Chlordane					0.2
4,4'-DDT					0.02
4,4'-DDE					0.1
4,4'-DDD					0.1
Dieldrin					0.02
Endosulfan I (alpha)					0.01
Endosulfan II (beta)					0.02
Endosulfan sulfate					0.1
Endrin					0.02
Endrin aldehyde					0.1
Heptachlor					0.01
Heptachlor epoxide					0.01
PCB 1242					0.2
PCB 1254					0.2
PCB 1221					0.2
PCB 1232					0.2
PCB 1248					0.2

Pollutant	Sample 1 (µg/L)*	Sample 2 (µg/L)*	Sample 3 (µg/L)*	Sample 4 (µg/L)*	MAL (µg/L)
PCB 1260					0.2
PCB 1016					0.2
Toxaphene					0.3

* Indicate units if different from µg/L.

Attachment: N/A

TABLE 12 (DIOXINS/FURAN COMPOUNDS)

Complete of Table 12 **is required** for **external outfalls**, as directed below. (Instructions, Pages 59-60)

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

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

Description: N/A

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): ☐ Composite ☐ Grab

Compound	Toxicity Equivalent Factors	Wastewater Concentration (ppq)	Wastewater Toxicity Equivalents (ppq)	Sludge Concentration (ppt)	Sludge Toxicity Equivalents (ppt)	MAL (ppq)
2,3,7,8-TCDD	1					10
1,2,3,7,8-PeCDD	1.0					50
2,3,7,8-HxCDDs	0.1					50
1,2,3,4,6,7,8-HpCDD	0.01					50

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

TABLE 13 (HAZARDOUS SUBSTANCES)

Complete Table 13 **is required** for all **external outfalls** as directed below. (Instructions, Pages 60-61)

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

☐ Yes ☒ No

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

☐ Yes ☒ No

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

Table 13 for Outfall No.: N/A

Samples are (check one): ☐ Composite ☐ Grab

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

INDUSTRIAL WASTEWATER PERMIT APPLICATION

WORKSHEET 4.0: RECEIVING WATERS

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

Item 1. Domestic Drinking Water Supply (Instructions, Page 80)

- 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:

1. The legal name of the owner of the drinking water supply intake: N/A
2. The distance and direction from the outfall to the drinking water supply intake: N/A

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

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

Item 2. Discharge Into Tidally Influenced Waters (Instructions, Page 80)

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: 368 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

Item 3. Classified Segment (Instructions, Page 80)

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

☐ Yes ☒ No

If **yes**, stop here and do not 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.

Item 4. Description of Immediate Receiving Waters (Instructions, Page 80)

a. Name of the immediate receiving waters: Victoria Barge Canal

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

☐ Lake or Pond

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

☒ Man-Made Channel or Ditch

☐ Stream or Creek

☐ Freshwater Swamp or Marsh

☐ Tidal Stream, Bayou, or Marsh

☐ Open Bay

☐ Other, specify:

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

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

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

☐ Intermittent (dry for at least one week during most years)

☐ Intermittent with Perennial Pools (enduring pools containing habitat to maintain aquatic life uses)

☒ Perennial (normally flowing)

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

☐ USGS flow records

☒ personal observation

☐ historical observation by adjacent landowner(s)

☐ other, specify: Click to enter text.

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

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: Victoria Barge Canal flows into San Antonio Bay

- f. General observations of the water body during normal dry weather conditions: The receiving waterbody is the Victoria Barge Canal Tidal. Observed green color with low visibility. Flow is often tide driven and appears to be very slow moving (imperceptible) from the surface. No sheen or odors observed.

Date and time of observation: 6/20/2019; 1:00 p.m.

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

☐ Yes ☒ No

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

Item 5. General Characteristics of Water Body (Instructions, Page 81)

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

☐ oil field activities	☒ urban runoff
☒ agricultural runoff	☐ septic tanks
☒ upstream discharges	☐ other, specify: <u>Click to enter text.</u>

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

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

- 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

INDUSTRIAL WASTEWATER PERMIT APPLICATION

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.

Item 1. Applicability (Instructions, Page 89)

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.

Item 2. Stormwater Coverage (Instructions, Page 89)

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	Authorization under MSGP	Authorized Under Individual Permit
002	☐	☒
003	☐	☒
	☐	☐
	☐	☐
	☐	☐
	☐	☐
	☐	☐
	☐	☐

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

Item 3. Site Map (Instructions, Page 90)

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 above information was provided on the facility site map(s).

Attachment: Attachment WS 7.0-3

Item 4. Facility/Site Information (Instructions, Page 90)

- 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)
002	35 acres	75 acres
003	8 acres	45 acres

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

Wettest month: January

Average rainfall for wettest month (total inches): 7.62

25-year, 24-hour rainfall (inches): 10.5

Source: https://hdsc.nws.noaa.gov/pfds/pfds_map_cont.html?bkmrk=tx

- c. Attach an inventory, or list, of materials currently handled at the facility that may be exposed to precipitation. **Attachment:** WS7.0-4.c
- 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:** WS7.0-4.d
- e. Describe any BMPs and controls the facility uses/proposes to prevent or effectively reduce pollution in stormwater discharges from the facility: WS7.0-4.e

Item 5. Pollutant Analysis (Instructions, Page 91)

- 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): 03/20/2025-04/11/2025
- 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 92 of the Instructions.

Table 17 for Outfall No.: 002 & 003 see WS2.0-4

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

Item 6. Storm Event Data (Instructions, Page 93)

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

Date of storm event: [Click to enter text.](#)

Duration of storm event (minutes): [Click to enter text.](#)

Total rainfall during storm event (inches): [Click to enter text.](#)

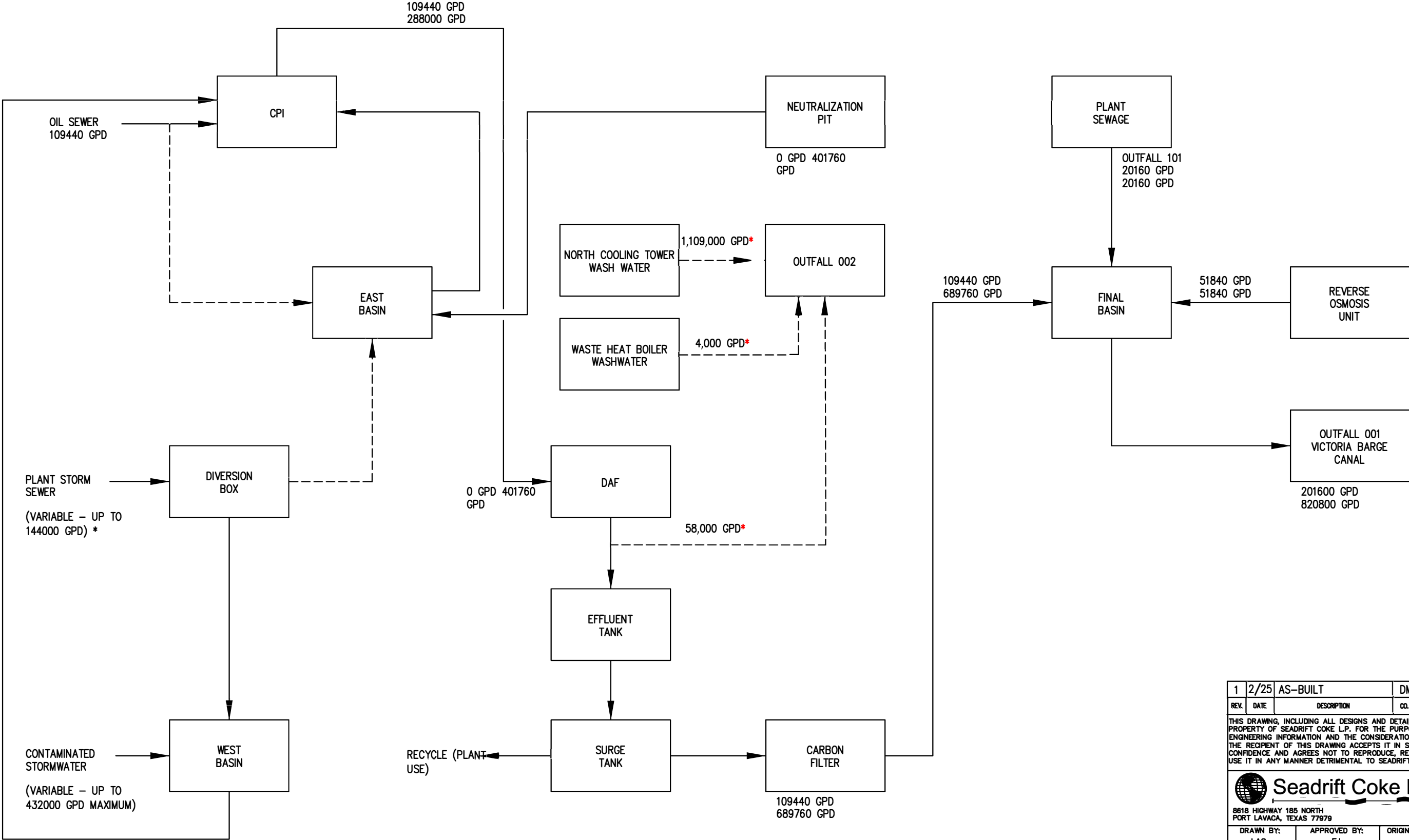
Number of hours the between beginning of the storm measured and the end of the previous measurable storm event (hours): [Click to enter text.](#)

Maximum flow rate during rain event (gallons/minute): Variable: Flow measurement based on visual observation at outfall locations

Total stormwater flow from rain event (gallons): Variable: Flow measurement based on visual observation at outfall locations

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

Maintenance-Related Flow Alternatives



1	2/25	AS-BUILT	DM	PD	PD
REV.	DATE	DESCRIPTION	CO.	CHK. BY:	APP. BY:
THIS DRAWING, INCLUDING ALL DESIGNS AND DETAILS, IS THE PROPERTY OF SEADRIFT COKE L.P. FOR THE PURPOSE OF ENGINEERING INFORMATION AND THE CONSIDERATION THEREOF. THE RECIPIENT OF THIS DRAWING ACCEPTS IT IN STRICT CONFIDENCE AND AGREES NOT TO REPRODUCE, REVEAL, OR USE IT IN ANY MANNER DETRIMENTAL TO SEADRIFT COKE L.P.					
 Seadrift Coke L.P. 8618 HIGHWAY 185 NORTH PORT LAVACA, TEXAS 77979					
DRAWN BY: LAC		APPROVED BY: FJ		ORIGINAL DATE: 4/06	
FLOW DIAGRAM ENVIRONMENTAL WATER PERMITS WASTE BALANCE WASTEWATER					
PROJ. NO.		PROJ. NAME			SCALE: NTS
AREA	PROCESS	DWG. TYPE	DWG. NO.		REV. No.
		1.08	WWAPP5		1

*Intermittent discharge.



ATTACHMENT TR 1.0-3.a

SEADRIFT COKE L.P. Retention Basin Inspection Report Dated July 2012



**CONDITION SURVEY AND EVALUATION OF THE
REINFORCED CONCRETE RAIN WATER
COLLECTION BASINS AT THE SEADRIFT COKE L.P.
FACILITY IN PORT LAVACA, TEXAS**

Prepared for:
Mr. Robert Norrell
Seadrift Coke L.P.
P.O. Box 192
Port Lavaca, Texas 77979

Prepared by:
STRUCTURAL TECHNOLOGIES
StrongPoint Engineering, LLC
1003 Clay Court
Deer Park, TX 77536
Phone 281-478-5300
Fax 281-478-5900

PROJECT No. 405549

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StrongPoint Engineering LLC. F-12662 "Texas Registered Engineering Firm"
--

July 20, 2012

Project No. 405549

Mr. Robert Norrell
Seadrift Coke L.P.
P.O. Box 192
Port Lavaca, TX 77979

email: Robert.Norrell@seadriftcoke.com

Re: Condition Assessment of the Reinforced Concrete Rain Water Collection Basins at the Seadrift Coke Port Lavaca Facility, Port Lavaca, Texas

Dear Mr. Norrell,

STRUCTURAL's Engineering and Material Science Division, STRUCTURAL Technologies' StrongPoint Engineering, LLC (SP) in association with Structural Preservation Systems, LLC Operating Division's Houston Branch, has prepared this Letter outlining the findings and observations concerning the two (2) Rain Water Collection Basins at the Seadrift Coke LLC Facility in Port Lavaca, Texas. This Letter includes a summary of findings and recommendations for repair. The Condition Survey was performed on April 18th and June 22nd, 2012 for the East & West Rain Water Collection Basins, respectively. Investigative field activities consisted of a Visual Inspection, Mapping of significant features, Acoustic Impact testing, Rebound Hammer Testing, Ultrasonic concrete surface testing and collection of powder samples for laboratory testing.

FINDINGS AND OBSERVATIONS

Based on the information developed during the course of investigative work, the following trends emerged that matched closely with similarly configured subsurface reinforced concrete Basins evaluated by STRUCTURAL over the years of similar design and vintage. Although each Rain Water Collection Basin is similar in design (i.e., construction details, sump, access ladder, etc.), some minor details are unique to the East Rain Water Collection Basin (e.g., interior column/platform, North Wall Drainage Scuppers, etc.) as well as it being approximately half the size of the adjacent West Basin.

East Rain Water Collection Basin (ERWCB)

Essentially, the most significant deterioration mechanism observed in the East Rain Water Collection Basin (ERWCB) was spalling as a result of mechanical impact associated with jack-hammering/drilling activities associated with the installation on North Wall surface groundwater drainage holes (i.e., scuppers). These groundwater scuppers appear to have been crudely installed along the exterior surface of the North Wall, penetrating through the Wall into the ERWCB. Exposed embedded reinforcing steel bars were noticeable at two (2) of the three (3) penetrations however no evidence of on-going corrosion was evident. All six (6) notched scupper areas along the North Wall

had patching repair materials along their outline perimeter and are in a complete state of failure. The repair materials are delaminated and partially detached from parent concrete substrate regions on the North Wall.

It should be noted that upon review of original construction documents, a total of three (3) expansion joints were noted and in the field only two (2) were detected. It's interesting to note that the Base Slab expansion joints do not extend up the Walls. Apparently, the Wall rigidly extends overtop of the expansion joint gap, an unusual detail should joint movement be necessary. The Wall and Base Slab surfaces, when Acoustic Impact tested (i.e., hammer sounding), revealed no delaminated or "unsound" concrete conditions. However, all expansion joint sealant materials were absent from joint cavities except the embedded waterstop which could be felt when probed approximately 4" below the Base Slab concrete surface. While viewing Base Slab surfaces, evidence of aggregate "pop-outs" were prevalent along the reinforced concrete Base Slab of the ERWCB in an apparently random occurrence frequency.

Assessing cracking non-destructively (NDT) required the use of ultrasonic technology in the form of a "surfer" fixed position transducer NDT meter. Essentially, the cracks detected within the ERWCB ranged in depth from 0.28" to 1.06" and were above the level of the embedded reinforcement. Recorded crack conditions are consistent with the belief that the cracking is associated with long term concrete material shrinkage. Visual Observations, Field Testing Results as well as Photographic Documentation for the ERWCB have been included in the attached Appendix.

West Rain Water Collection Basin (WRWCB)

Evidence of aggregate "pop-outs", as in the ERWCB, was prevalent along the reinforced concrete Base Slab of the WRWCB. Unlike the ERWCB, the WRWCB Base Slab was separated into quadrants with a single North-South and a single East-West Expansion Joint that extended from the Base Slab up each Wall. The Wall and Base Slab surfaces, when hammer sounded, revealed no delaminated or "unsound" concrete conditions. Expansion Joint sealant materials were observed deteriorated or absent from joint cavities. When probed, the embedded waterstop could be felt approximately 4" below the Base Slab concrete surface. Ultrasonic NDT crack depth results within the WRWCB ranged from 0.10" to 0.80" and were above the level of the embedded reinforcement. As with the ERWCB, it's believed the observed cracking is associated with long term concrete material shrinkage.

In an effort to further understand the chemical properties of the existing concrete mass and its role, if any, in potential embedded metal corrosion activity, a series of three (3) concrete powder samples were collected from Wall and Base Slab structural elements. The collection of these samples was prompted by visual examination of the corroded condition of the bottom rung of the embedded access ladder on the South Wall adjacent to the Basin Sump. After sample collection, the powder samples were then transported to the Laboratory for further chemical testing to determine the Chloride Ion (Cl⁻) content within the concrete mass, an important indicator as to the potential participation of the concrete mass in embedded metal corrosion activity. Laboratory test results of collected powder samples were well below the American Concrete Institute's (ACI) threshold for

Chloride Ion (Cl⁻) content and therefore the concrete mass is not believed to be an active participant in the very limited corrosion activity observed at the Rain Water Collection Basins. Visual Observations, Field and Laboratory Testing Results as well as Photographic Documentation for the WRWCB have been included in the attached Appendix.

OBSERVED DISTRESS TYPES

Cracking

Cracking observed at the subject structures typically took the form of hydrocarbon debris-impacted vertical and horizontal Wall and Base Slab cracks. Under close examination, the cracking was observed to have extensive hydrocarbon penetration. At most locations along the perimeter Walls and in Base Slab regions, the cracks were observed to be planar (i.e., level across crack shoulders). However in cracks in the immediate proximity of the ERWCB's North Wall notch scuppers and drilled drainage holes, cracks were observed to be faulted (i.e., co-planar across crack shoulders). A small amount of the cracking along the South Wall of the ERWCB was also observed to be moist and "weeping". The source(s) of moisture may be related cleaning activities that included high pressure water-blasting and the potential presence of "perched" water, emanating from crack fissure cavities. No weeping crack conditions were observed at the WRWCB. The WRWCB did not have post-original construction Wall penetrations however the cracking patterns in both Wall and Base Slab members were similar in orientation & size to existing cracking in the ERWCB.

Delamination

Areas of internal separation (i.e., delaminations) were only detected on the North Wall of the ERWCB associated with debonded concrete patch repairs. Parent concrete substrate surfaces exposed below the patch materials appeared sound when impacted with a hammer. No delaminated concrete conditions were detected at the WRWCB.

Surface Erosion

Areas of surface erosion were observed along the subject ERWCB Base Slab. Erosion depths varied between 1/8 to 3/8 inches, peak-to-valley. The erosion appears related to original construction defects in finishing as a very thin dense surface layer of mortar was observed to have "peeled" off of the concrete Base Slab. Erosion patterns and proximity do not appear to be consistent with aggressive chemical attack. Areas of surface erosion were localized, scattered and less than eight (8) inches in diameter. Surface erosion was not observed at the WRWCB in either Wall or Base Slab members.

Spalling

Concrete material cross-sectional losses (i.e., spalls) were observed in both the ERWCB & WRWCB. With small spalls ranging 2" to 4" in diameter and 1/8" to 3/4" in depth, in each instance an aggregate

impression was at the base of the spall with no evidence of embedded metal corrosion activity.

Exposed Reinforcing

Exposed reinforcing steel bars at groundwater drainage holes in the North Wall of ERWCB were only lightly corroded exhibiting various levels of deterioration. Due to the amount of hydrocarbon processed within the ERWCB, the process stream provides a reasonable amount of corrosion inhibiting protection. It should be noted however that the bottom “rung” of the cast-in-place access ladder in the WRWCB had significant cross-sectional losses as shown in Field Photographs in the attached Appendix.

RECOMMENDATIONS

Although some deterioration was detected as indicated above, the only significant damage was that caused during the installation of the groundwater drainage scuppers on the North Wall of the ERWCB. Standard maintenance items such as re-establishing joint sealant integrity overtop of waterstop/joints is required on both the ERWCB & WRWCB. However no evidence was observed during the investigation field effort that revealed egress of process fluids from containment through joint waterstops. Surface erosion and spalling occurrences were not deemed significant at this time. However, erosion and small surface spalling conditions should be monitored when short-duration outage opportunities arise for follow-up visual inspection to detect any potential change of condition.

A recommended Repair Strategy for the distress discussed in the **FINDINGS AND OBSERVATIONS** section noted above is as follows and can be implemented during the next short duration outage opportunity when the Rain Water Collection Basins are Off-Line:

Repair of Groundwater Drainage Scuppers in ERWCB:

- ◆ Layout and perimeter sawcut unsound concrete around Drainage Scuppers.
- ◆ Excavate unsound concrete within perimeter sawcuts, exposing embedded reinforcing steel bars and perform substrate surface preparation.
- ◆ Provide additional reinforcing steel bars using lap and/or rebar coupling criteria, as required. Existing reinforcement would remain in-place to maintain reinforcement continuity.
- ◆ Provide new Wall formwork with placement portals, mortar-tight and designed to resist the hydraulic pressures associated with “Form and Pour” placement techniques.
- ◆ Reestablish structural section to concrete Walls by placing very rapid setting, prebagged, high quality, dense shrinkage compensating repair concrete within formed cavity areas using Form and Pour placement techniques. Repairs to concrete elements will not involve significant volumetric quantities; however consistent material characteristics and properties will be required. Repair material will be cured in accordance with manufacturer’s recommendations.
- ◆ Remove mortar-tight formwork after the recommended curing period (typically less than 3 days) and surface grind concrete repairs to match original Wall surface contours. Subsequent to “dressing” the Wall surfaces, apply a concrete surface sealer/curing compound to exposed surfaces.

Repair of Wall & Base Slab Expansion Joints within the ERWCB & WRWCB:

- ◆ Remove existing deteriorated joint filler and/or sealant materials from the joint cavity to the depth of the existing embedded waterstop taking care not to puncture the waterstop.
- ◆ Mechanically & chemically clean Expansion Joint contact surfaces removing dust, dirt, debris and hydrocarbons.
- ◆ Prepare and prime Base Slab/Wall concrete surfaces to accept backing materials and sealant.
- ◆ Install a high-quality, chemically-resistant hydrocarbon tolerant polysulfide sealant in accordance with manufacturer's recommendations.

We hope the information presented in the text of this Letter meets your needs at this time and should you have any questions or comments please feel free to contact our office at 281-478-5300.

Sincerely,

Tom Kline
Division Manager
StrongPoint Engineering, LLC

Jason Monfils, P.E. (TX)
Sr. Civil/Structural Engineer
StrongPoint Engineering, LLC

cc. Bob Hall – STRUCTURAL – VP Sales & Marketing, Industrial Special Structures
Matt Johnson – STRUCTURAL – Senior VP Industrial Operations
Jonathan Sommer – STRUCTURAL - Project Manager



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APPENDIX A

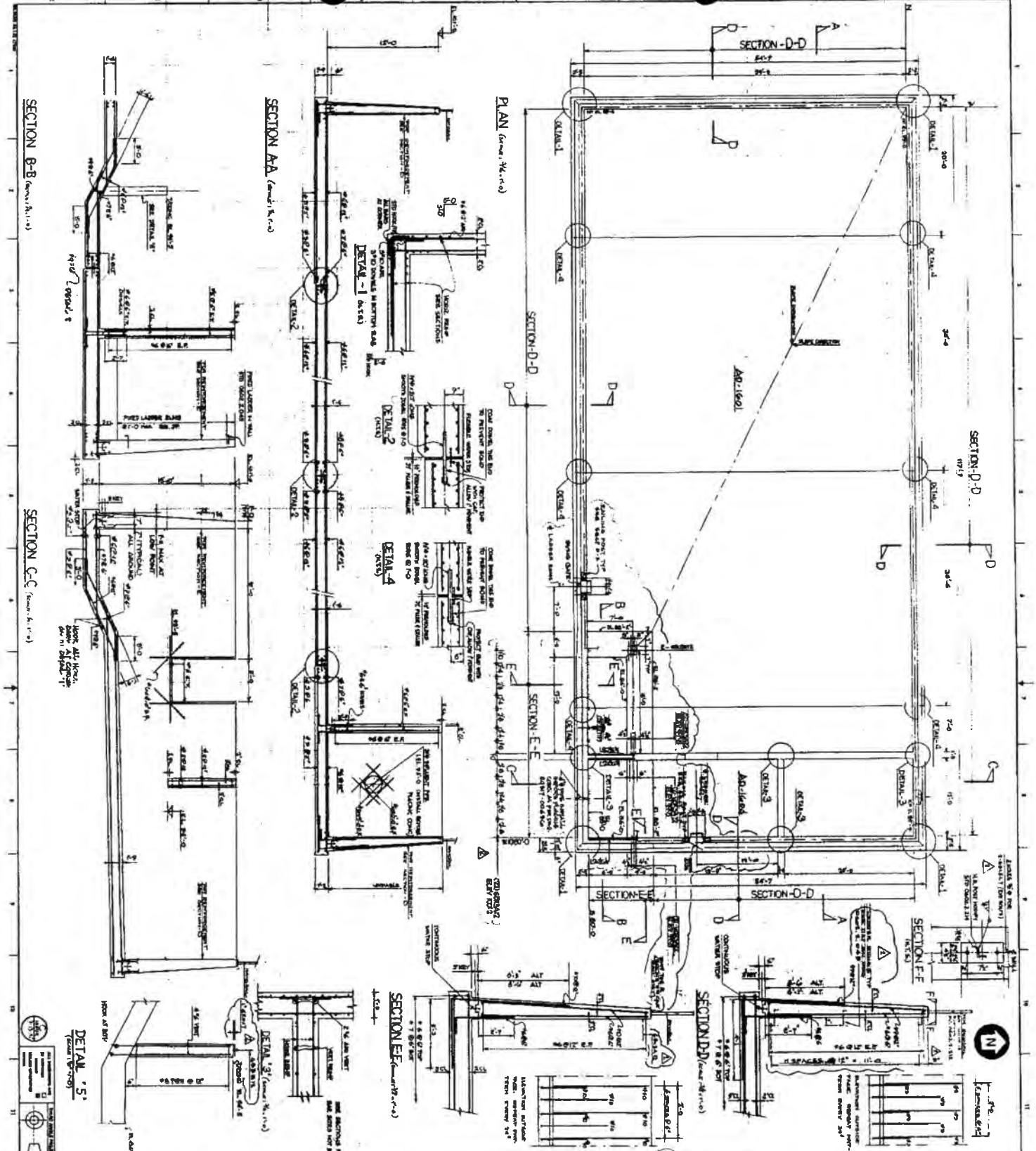
ARCHIVAL DOCUMENTS

ORIGINAL CONSTRUCTION DRAWING FOR THE
EAST RAIN WATER COLLECTION BASIN

DWG NO.
E9317-16162A-2

Project No. 405549

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ANCHOR BOLT SCHEDULE	
NO.	DESCRIPTION
1	ANCHOR BOLT SCHEDULE
2	ANCHOR BOLT SCHEDULE
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APPENDIX B

CONDITION SURVEY DRAWINGS

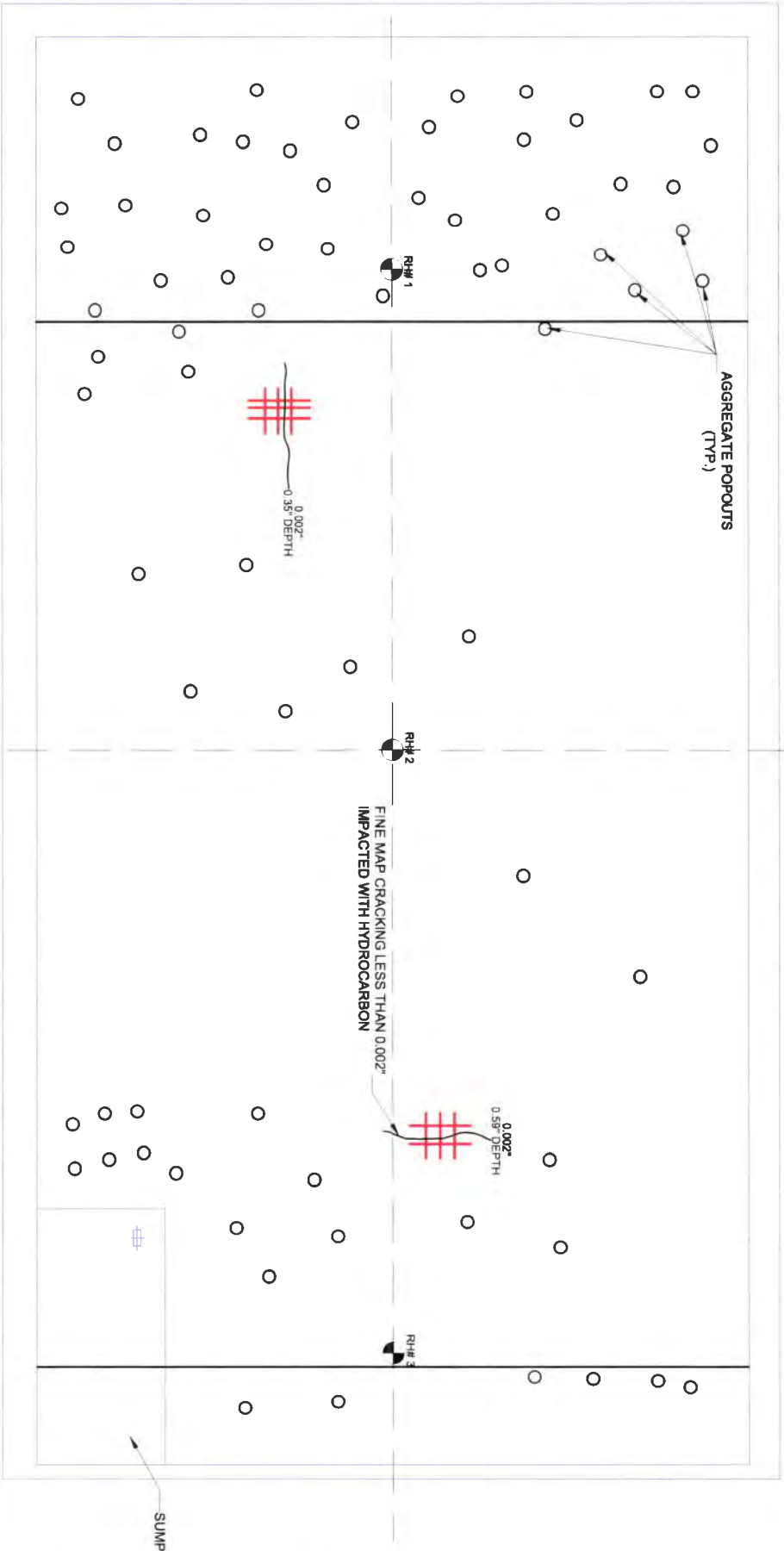
CONDITION SURVEY DRAWINGS

DWG B1
THROUGH B17

APPENDIX B

Project No. 405549

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PLAN VIEW

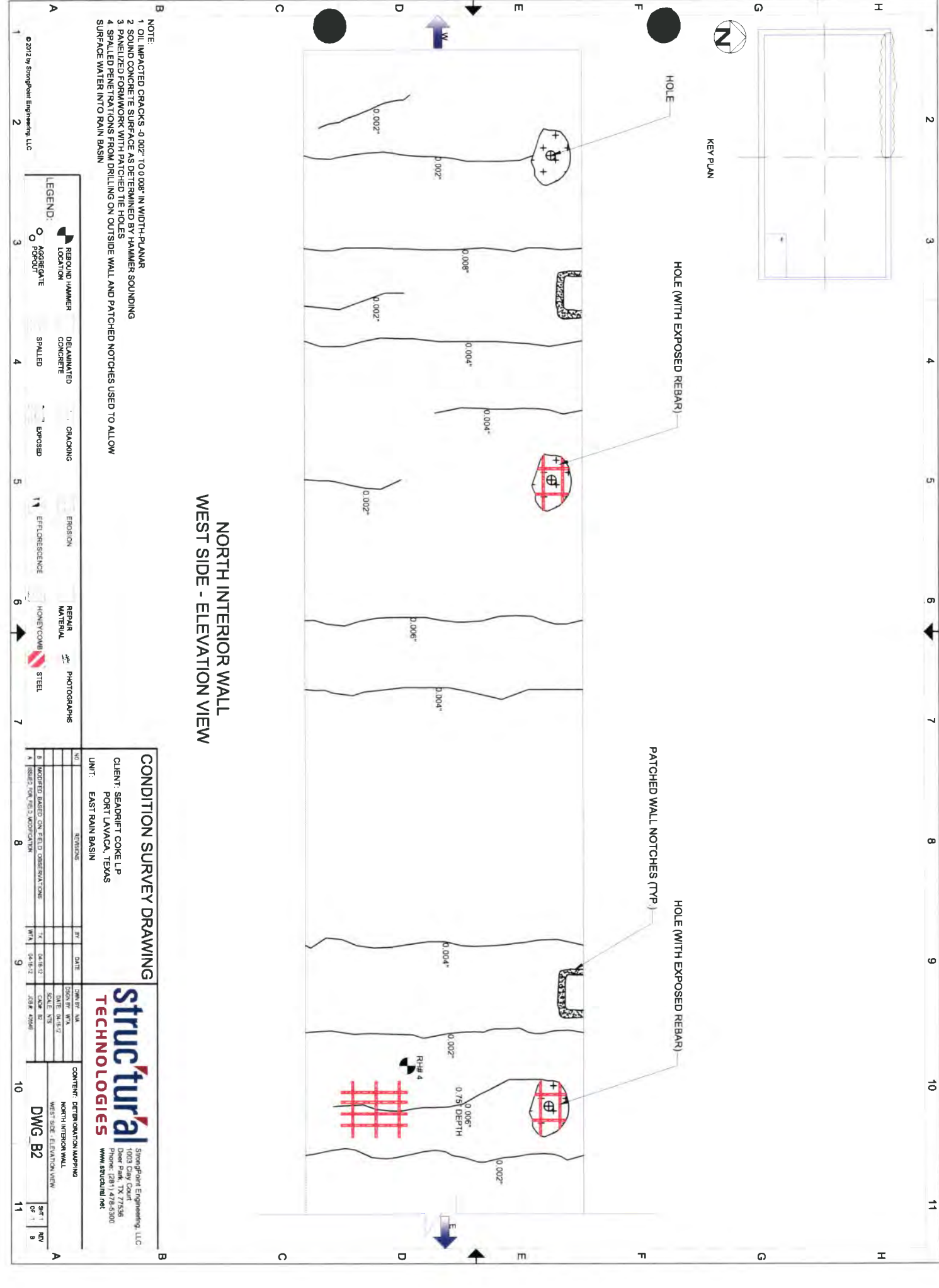
- NOTE:
1. AGGREGATE "POPOUT" SPALLS PRESENT ALONG FLOOR SLAB 2" TO 4" DIA. RANGING 1/4" TO 3/4" DEEP.
 2. SURFACE EROSION ALSO NOTICED AT VARIOUS LOCATIONS FROM 1/16" TO 1/4" IN DEPTH.
 3. FLOOR SOUND AS DETERMINED BY HAMMER SOUNDING.
 4. SUNNY AND 84°F.

LEGEND:	
	AGGREGATE LOCATION
	DELAMINATED CONCRETE
	SPALLED
	CRACKING
	EROSION
	EFFLORESCENCE
	HONEYCOMB
	STEEL
	REPAIR MATERIAL
	PHOTOGRAPHS

CONDITION SURVEY DRAWING			
CLIENT: SEADRIFT COKE L.P. PORT LAVACA, TEXAS			
UNIT: EAST RAIN BASIN			
NO.	REMARKS	BY	DATE
1	INSPECTED BASED ON FIELD OBSERVATION	TC	04-18-22
2	REPAIRS FOR FIELD OBSERVATION	TC	04-18-22
DRAWN BY: N/A DATE: 04-18-22 SCALE: N/A CHECK BY: N/A DATE: 04-18-22			
CONTENT: DETERMINATION MAPPING PLAN VIEW			
DWG_B1			
Sheet 1 of 1			

structural
TECHNOLOGIES

StrongPoint Engineering, LLC
1000 Clay Court
Deer Park, TX 77630
Phone: (281) 476-8300
www.structural.net



- NOTE:**
- 1. OIL IMPACTED CRACKS - 0.002" TO 0.008" IN WIDTH-PLANAR
 - 2. SOUND CONCRETE SURFACE AS DETERMINED BY HAMMER SOUNDING
 - 3. PATCHED FORMWORK WITH PATCHED THE HOLES
 - 4. SPALLS PENETRATIONS FROM DRILLING ON OUTSIDE WALL AND PATCHED NOTCHES USED TO ALLOW SURFACE WATER INTO RAIN BASIN

LEGEND:

	REBOUND HAMMER		DELAMINATED CONCRETE		CRACKING		EROSION		REPAIR MATERIAL		PHOTOGRAPHS
	AGGREGATE		SPALLED		EXPOSED		EFFLORESCEENCE		HONEYCOMB		STEEL

CONDITION SURVEY DRAWING			
CLIENT: SEADRIFT COKE L.P. PORT LAVACA, TEXAS			
UNIT: EAST RAIN BASIN			
NO.	REVISIONS	BY	DATE
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2			
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9			
10			
11			

StringPort Engineering, LLC
1000 Clay Court
Deer Park, TX 77536
(281) 371-4500
www.stringport.com

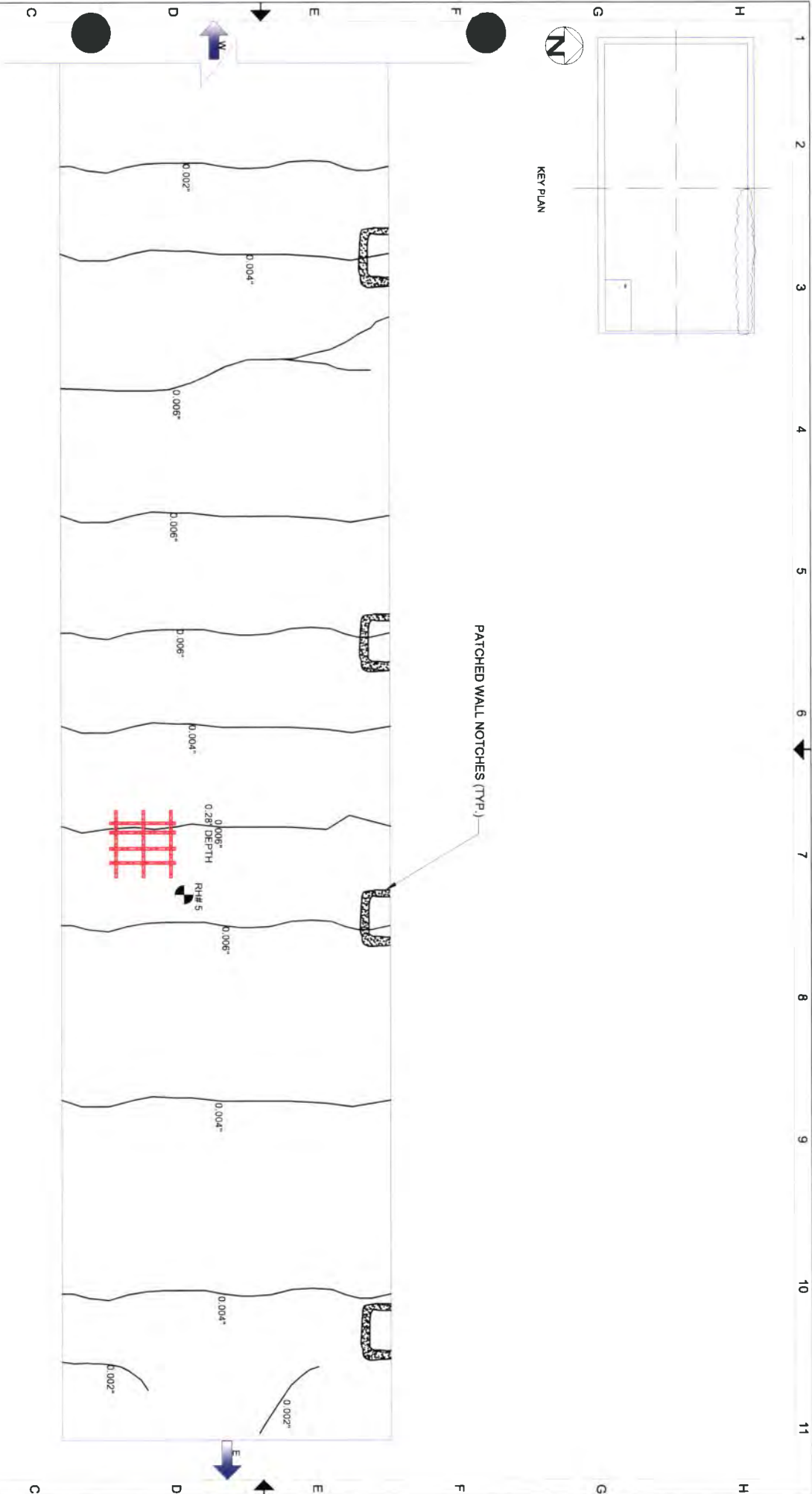
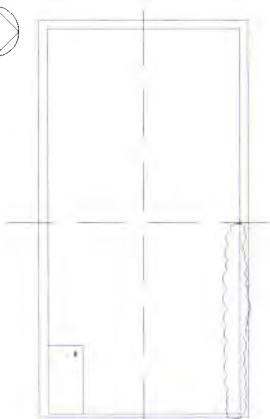
CONTENT: DETENTION MAPPING
NORTH INTERIOR WALL
WEST SIDE - ELEVATION VIEW

DWG_B2

SHEET 1 OF 1



KEY PLAN



- NOTE:
1. OIL IMPACTED CRACKS: 0.002" TO 0.006" IN WIDTH PLAIN
 2. SOUND CONCRETE SURFACE AS DETERMINED BY HAMMER SOUNDING
 3. PATCHED FORMWORK WITH PATCHED TIE HOLES
 4. SPALLS PENETRATIONS FROM DRILLING ON OUTSIDE WALL AND PATCHED NOTCHES USED TO ALLOW SURFACE WATER INTO RAIN BASIN

REBOUND HAMMER	DELAMINATED CONCRETE	CRACKING	EROSION	REPAIR MATERIAL	PHOTOGRAPHS
AGGREGATE	SPALLED	EXPOSED	EFFLORESCENCE	HONEYCOMB	STEEL
POP-OUT					

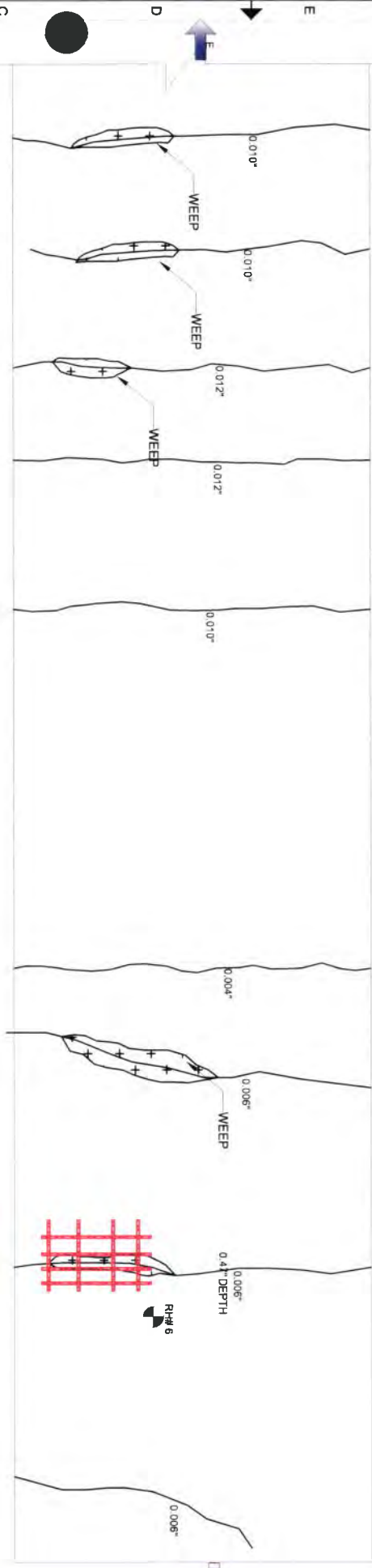
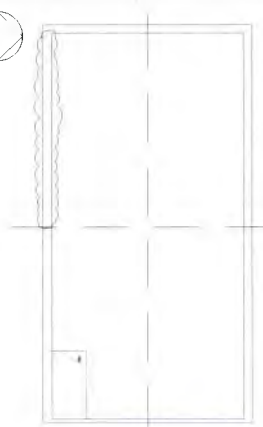
CONDITION SURVEY DRAWING				structural TECHNOLOGIES			
CLIENT: SEADRIFT COKE L.P. PORT LAVACA, TEXAS UNIT: EAST RAIN BASIN				StrongPoint Engineering, LLC 1003 Clay Court P.O. Box 1717330 Port Lavaca, TX 77950 www.structural.net			
NO.	REVISIONS	BY	DATE	DWN BY	W.A.	DATE	W.A.
1	ISSUED FOR FIELD INSPECTION	W.A.	04.16.12	W.A.	04.16.12	04.16.12	04.16.12
2	REVISION	W.A.	04.16.12	W.A.	04.16.12	04.16.12	04.16.12

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DWG_B3



KEY PLAN



SOUTH INTERIOR WALL
WEST SIDE - ELEVATION VIEW

- NOTE:
1. ALL IMPACTED CRACKS 0.004" TO 0.012" IN WIDTH PLANAR
 2. SOUND CONCRETE SURFACE AS DETERMINED BY HAMMER SOUNDING
 3. PANELIZED FORMWORK WITH PATCHED TIE HOLES
 4. SPALLS PENETRATIONS FROM DRILLING ON OUTSIDE WALL AND PATCHED NOTCHES USED TO ALLOW
 5. SURFACE WATER INTO RAIN BASIN
 6. WEEPS OBSERVED AT INDICATED LOCATIONS

LEGEND:

	REBOUND HAMMER LOCATION		DELAMINATED CONCRETE		CRACKING		EROSION		REPAIR MATERIAL		PHOTOGRAPHS
	AGGREGATE FORFEIT		SPALLED		EXPOSED		EFFLORESCENCE		HONEYCOMB		STEEL

CONDITION SURVEY DRAWING

CLIENT: SEADRIFT COKE L.P.
PORT LAVACA, TEXAS

UNIT: EAST RAIN BASIN

NO. 1

NO. 2

NO. 3

NO. 4

NO. 5

NO. 6

NO. 7

NO. 8

NO. 9

NO. 10

NO. 11

DATE: 04-18-12

SCALE: 1/8" = 1'-0"

DATE: 04-18-12

SCALE: 1/8" = 1'-0"

DESIGN BY: WTA

DATE: 04-18-12

SCALE: 1/8" = 1'-0"

DATE: 04-18-12

SCALE: 1/8" = 1'-0"

CONTENT: DETERMINATION MAPPING

WEST SIDE - ELEVATION VIEW

DWG_B4

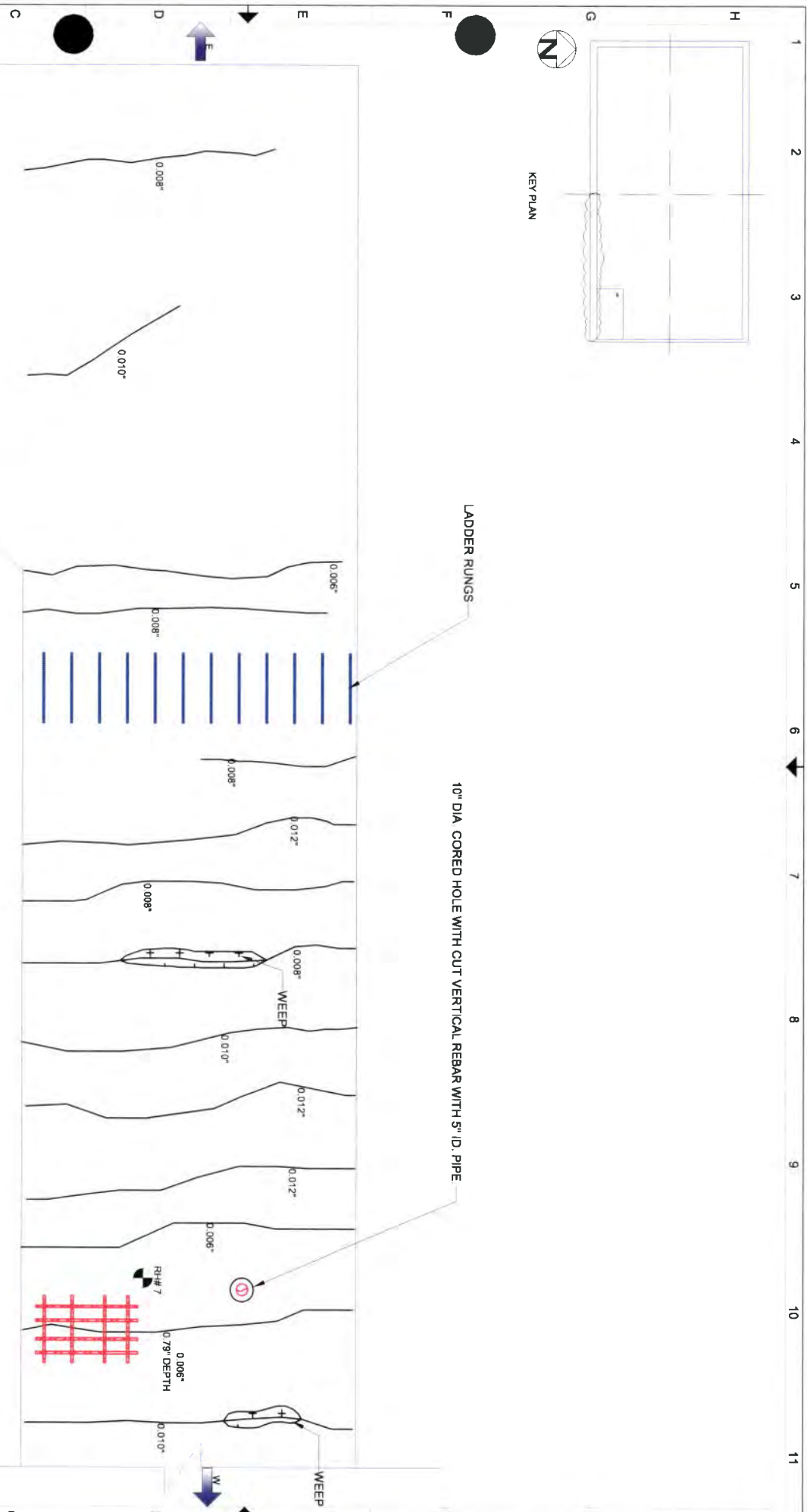
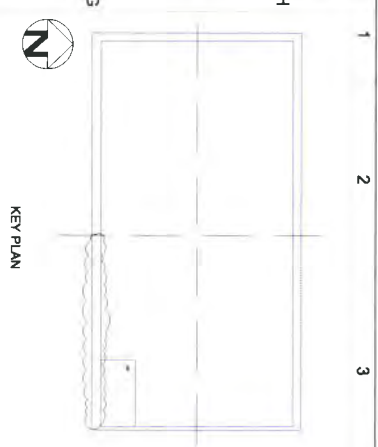
StrongPoint Engineering, LLC

1001 Clay Court

Dover, TX 77538

Phone: (281) 478-5500

www.speccentral.net



- NOTE:
- 1 CRACKS IMPACTED WITH OIL RANGING 0.006" TO 0.012" - PLUMAR
 - 2 WEEPS OBSERVED AT INDICATED LOCATIONS
 - 3 SURFACES SOUND BASED ON HAMMER SOUNDING
 - 4 PANELIZED CONCRETE WITH PATCHED TIE HOLES
 - 5 SURFACES CONTAMINATED WITH HYDROCARBON

LEGEND:

REBOUND HAMMER	DELAminated CONCRETE	CRACKING	EROSION	REPAIR MATERIAL	PHOTOGRAPHS
AGGREGATE	SPLIT	EXPLODED	EFFLORESCENCE	HONEYCOMB	STEEL

CONDITION SURVEY DRAWING

CLIENT: SEADRIFT COKE L.P.
PORT LAVACA, TEXAS

UNIT: EAST RAIN BASIN

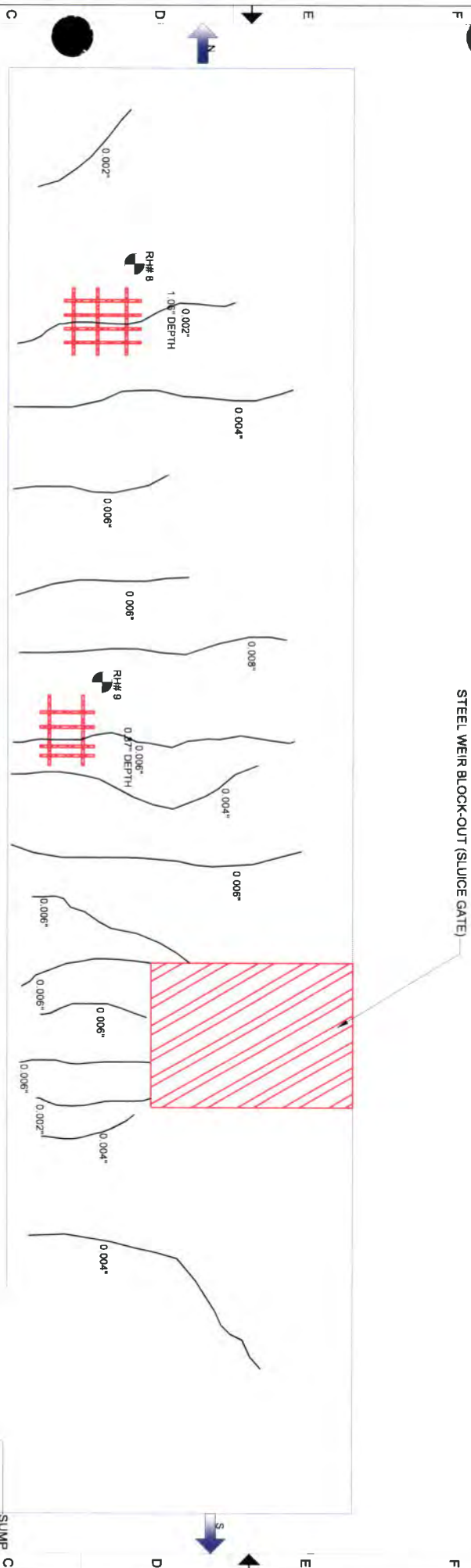
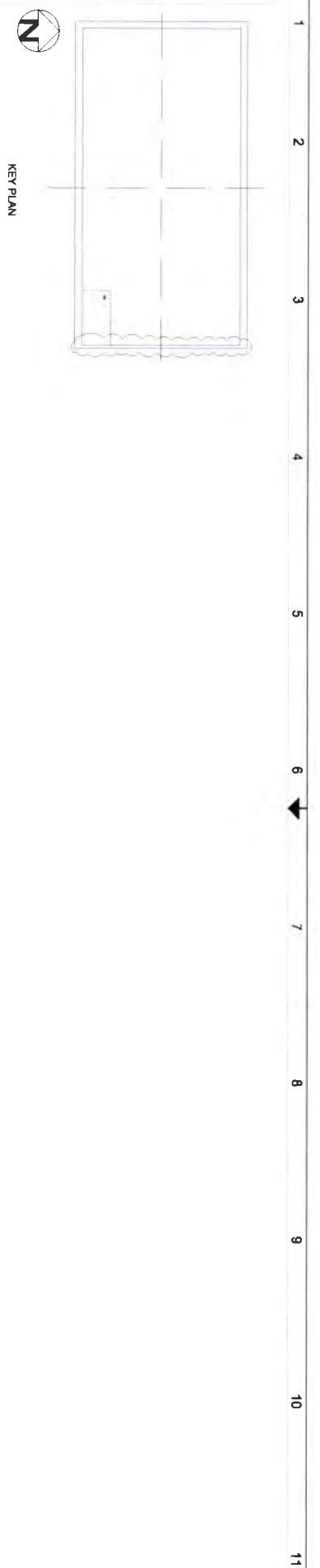
structural TECHNOLOGIES

StrongPoint Engineering, LLC
1003 Clay Court
Deer Park, TX 77536
Phone: (281) 478-6300
www.structuralnet.net

NO.	REVISIONS	BY	DATE	2000 BY	SCALE	DATE	SCALE	DATE	SCALE
1	ISSUED FOR FIELD OBSERVATIONS	WFA	04-18-17	04-18-17	1/8" = 1'-0"	04-18-17	1/8" = 1'-0"	04-18-17	1/8" = 1'-0"

DWG_B5

Sheet 1 of 1



**EAST INTERIOR WALL
ELEVATION VIEW**

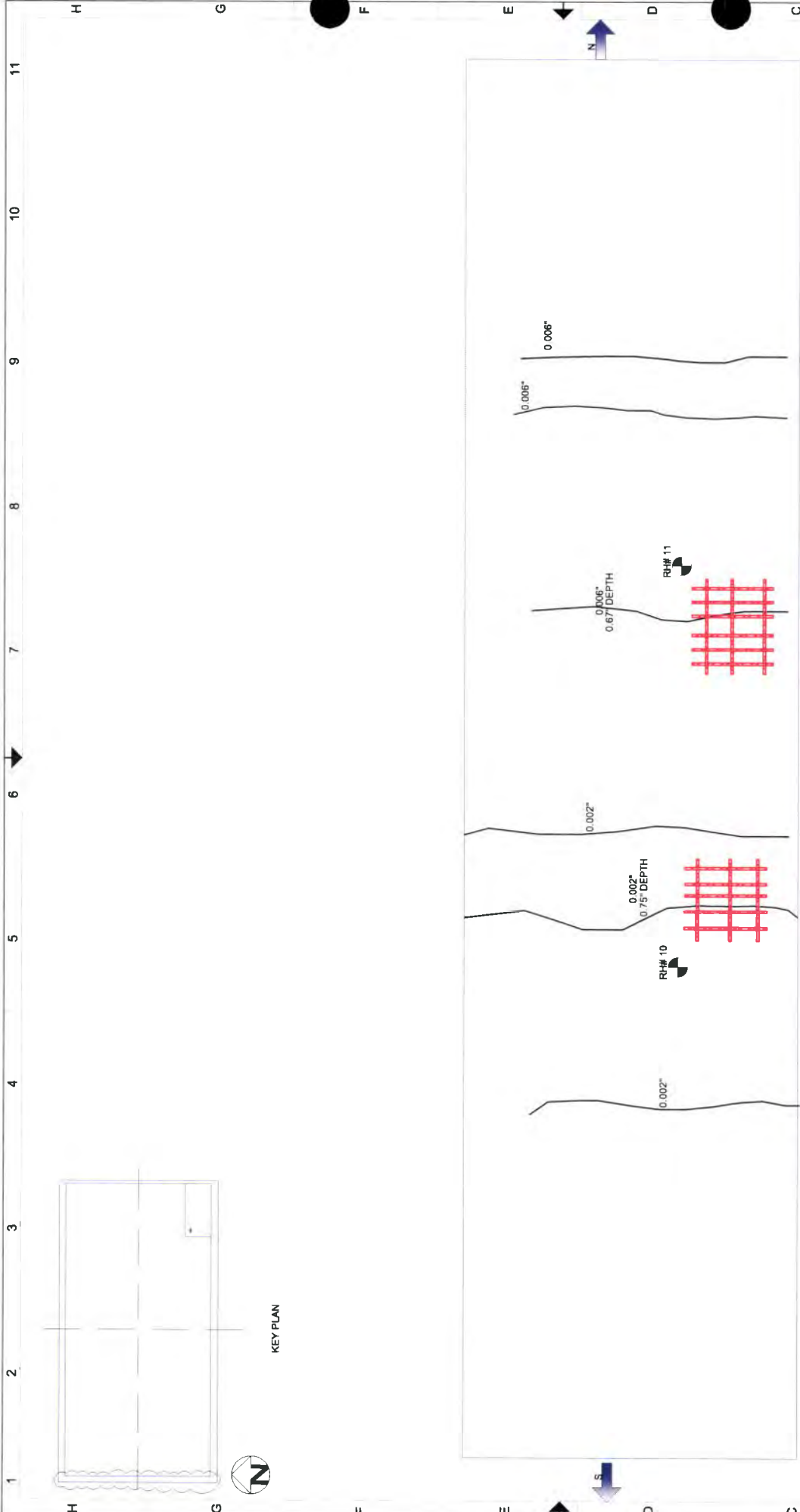
NOTE:
1 CRACKS IMPACTED WITH OIL RANGING 0.002" TO 0.008" - PLANAR
2 SURFACES SOUNDED BASED ON HAMMER SOUNDING
3 PANELIZED FORMWORK WITH PATCHED THE HOLES
4 SURFACES CONTAMINATED WITH HYDROCARBON

LEGEND:

	REBAR HAMMER		DELAMINATED CONCRETE		CRACKING		EROSION		REPAIR MATERIAL		PHOTOGRAPHS
	AGGREGATE FORFEIT		SPALLED		EXPOSED		EFFLUORESCENCE		HONEYCOMB		STEEL

CONDITION SURVEY DRAWING		structural TECHNOLOGIES StampPoint Engineering, LLC 1003 City Court Deer Park, TX 77538 Phone: (281) 419-5300 www.structural.net	
CLIENT: SEADRIFT COKE L.P.			
PORT LAVACA, TEXAS			
UNIT: EAST RAIN BASIN			
NO.	REVISIONS	BY	DATE
		DWG BY: N/A	
		SIGN BY: WTA	
		DATE: 04-18-12	
		SCALE: N/A	
		CAD #: 45564	
	MODIFIED BASED ON FIELD OBSERVATIONS		
	ISSUED FOR FIELD CORRELATION		
	WTA		
CONTENT: DETAIL LOCATION MAPPING			
EAST INTERIOR WALL			
ELEVATION VIEW			
DWG: B6			
REV	DATE	BY	
1			

A



WEST INTERIOR WALL ELEVATION VIEW

NOTE:
 1. CRACKS IMPACTED WITH OIL RANGING 0.002" TO 0.006" - PLANAR
 2. SURFACES SOUND BASED ON HAMMER SOUNDING
 3. PANELIZED FORMWORK WITH PATCHED TIE HOLES
 4. SURFACES CONTAMINATED WITH HYDROCARBON

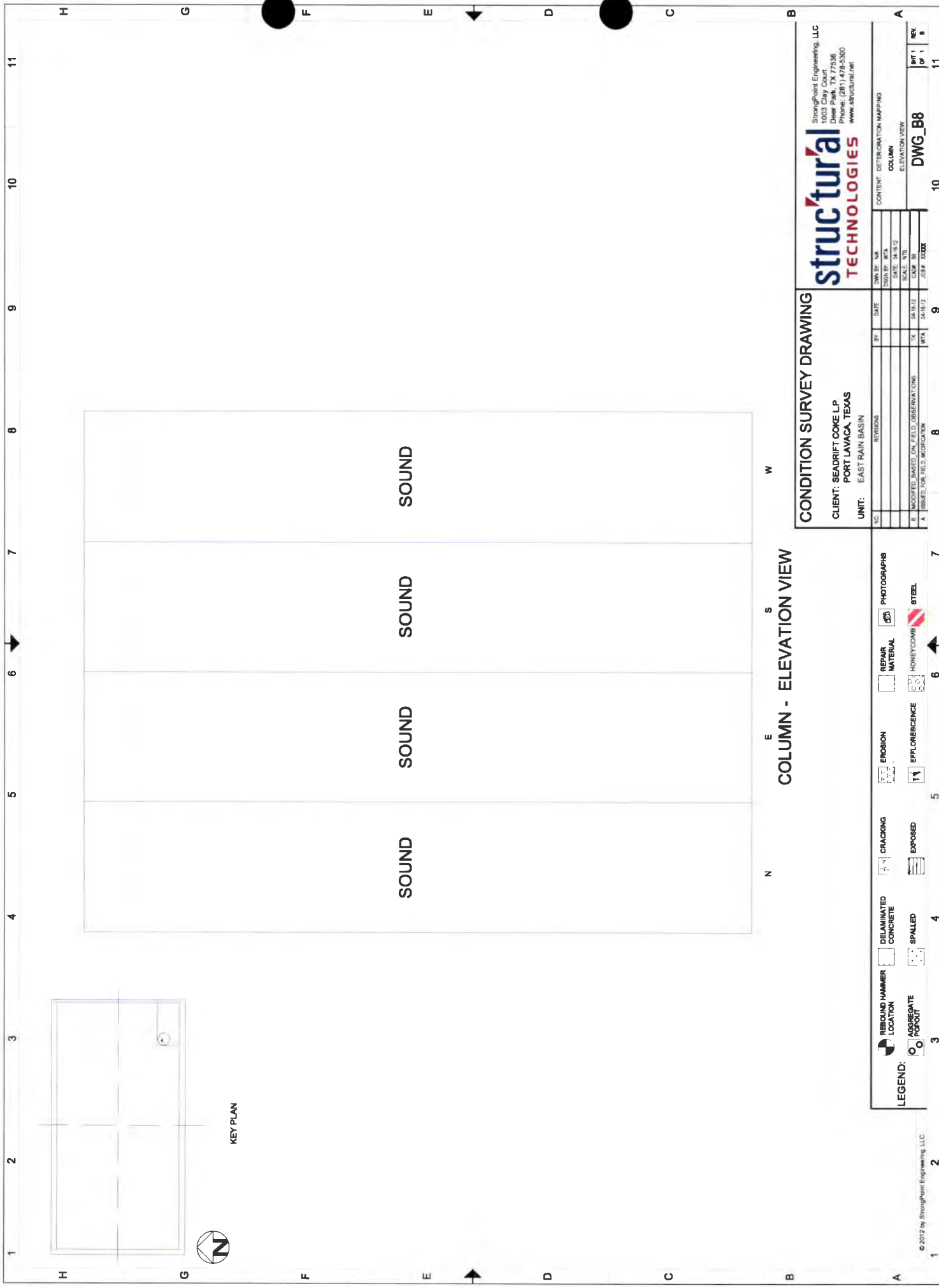
StrongPoint Engineering, LLC
 1003 Clay Court
 Deer Park, TX 77536
 Phone: (281) 478-5300
 www.structural.net

CONTENT: DETECTION MAPPING
 WEST INTERIOR WALL
 ELEVATION VIEW

CONDITION SURVEY DRAWING
 CLIENT: SEADRIFT COKE L.P.
 PORT LAVACA, TEXAS
 UNIT: EAST RAIN BASIN

NO.	REVISIONS	DATE	BY	CHKD BY	APP'D BY
1	ISSUED FOR FIELD MODIFICATION	04-16-12	WTA		
2	MODIFIED BASED ON FIELD OBSERVATIONS	04-16-12	WTA		
3	MODIFIED BASED ON FIELD OBSERVATIONS	04-16-12	WTA		
4	MODIFIED BASED ON FIELD OBSERVATIONS	04-16-12	WTA		

LEGEND:	REBOUND HAMMER LOCATION	DELAMINATED CONCRETE	CRACKING	EROSION	REPAIR MATERIAL	PHOTOGRAPHS
	○	□	□	□	□	□
	○	□	□	□	□	□
	○	□	□	□	□	□
	○	□	□	□	□	□



COLUMN - ELEVATION VIEW

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TECHNOLOGIES

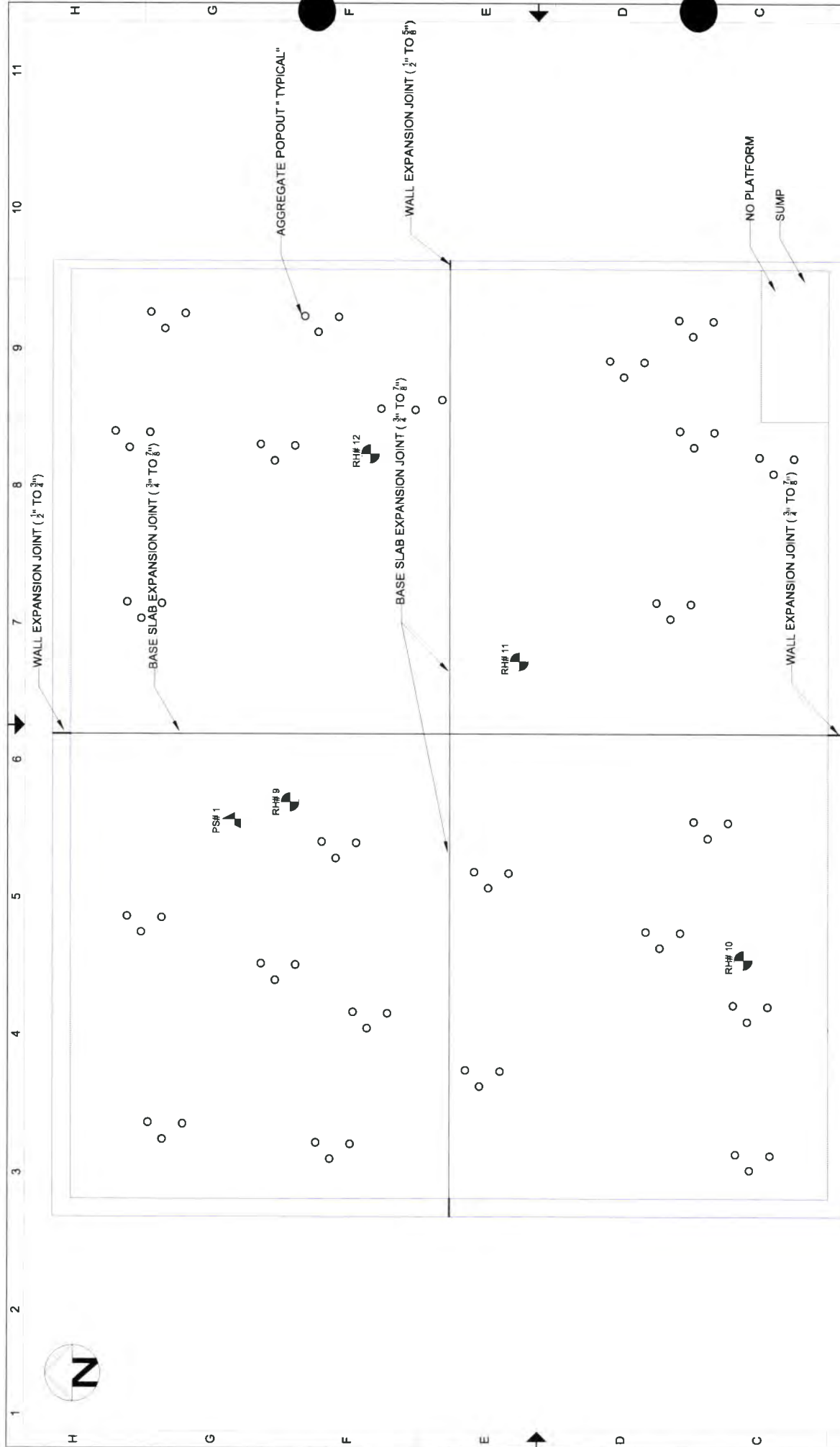
StrongPoint Engineering, LLC
1003 Clay Court
Deer Park, TX 77536
Phone: (281) 478-5300
www.structural.net

CONDITION SURVEY DRAWING

CLIENT: SEADRIFT COKE L.P.
PORT LAVACA, TEXAS
UNIT: EAST RAIN BASIN

NO.	REVISIONS	BY	DATE	DRAWN BY	WTA	DATE	SCALE	NTS	DATE	SCALE	NTS	DATE	SCALE	NTS
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														

LEGEND:
 REBOUND HAMMER
 AGGREGATE EXPOSURE
 DELAMINATED CONCRETE
 SPALLED CONCRETE
 CRACKING
 EROSION
 EFFLORESCE
 REPAIR MATERIAL
 PHOTOGRAPHS
 STEEL



PLAN VIEW

- NOTE:
1. AGGREGATE "POPOUT" SPALLS PRESENT ALONG FLOOR SLAB 2" TO 4" DIA. RANGING 1/8" TO 3/4" DEEP.
 2. SURFACE EROSION ALSO NOTICED AT VARIOUS LOCATIONS FROM 1/16" TO 3/8" IN DEPTH.
 3. FLOOR SOUNDED AS DETERMINED BY HAMMER SOUNDING
 4. ALL SURFACES OIL SOAKED
 5. EXPANSION JOINT IS MISSING OR JUST HAS REMNANTS OF EXPANSION JOINT MATERIALS AND BACKER ROD.
 6. VERY FINE SHRINKAGE CRACKING AND PLANAR- NO LEAKS.

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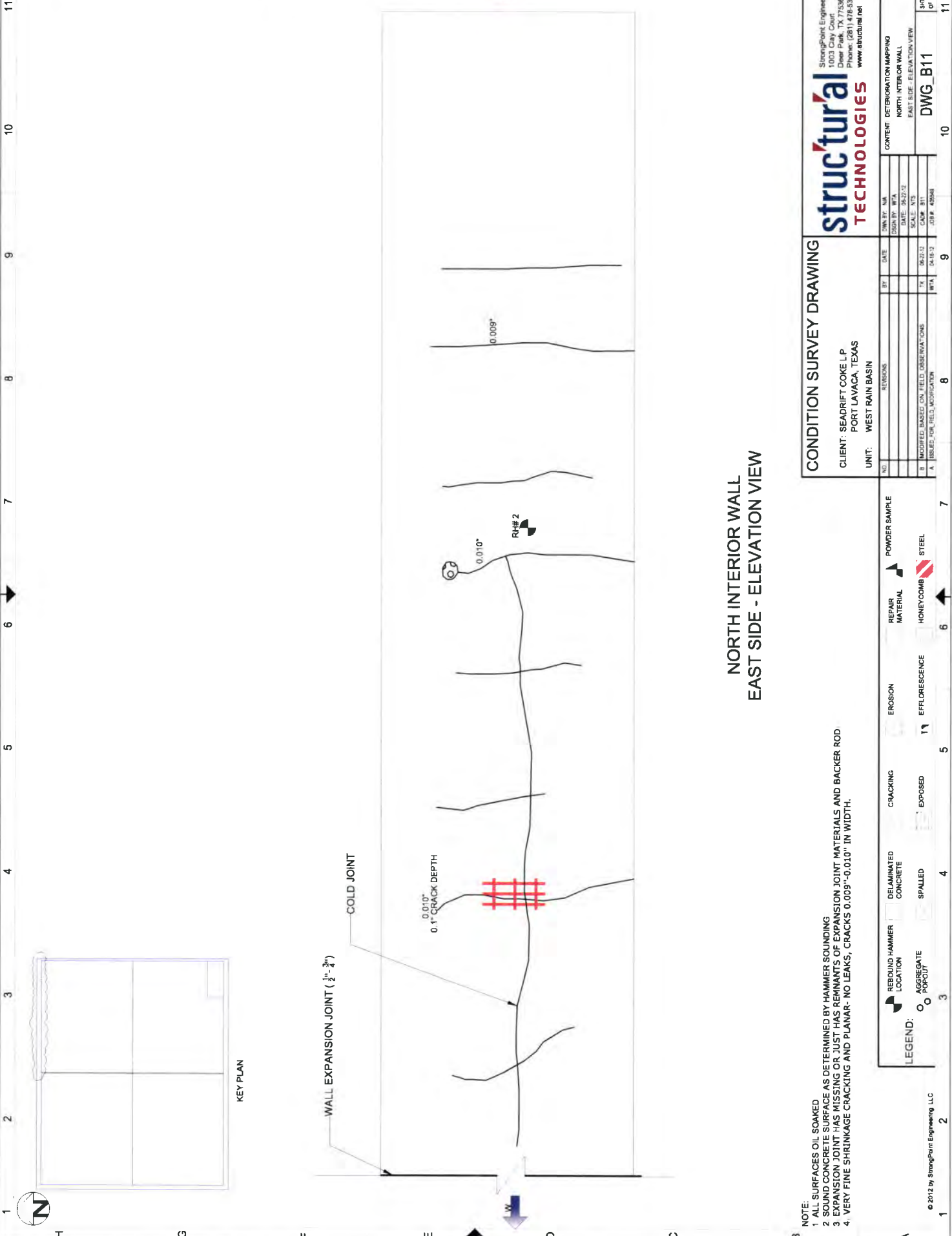
StrongPoint Engineering, LLC
1003 Clay Court
Deer Park, TX 77536
Phone: (281) 475-5300
www.structural.net

CONDITION SURVEY DRAWING

CLIENT: SEADRIFT COKE L.P.
PORT LAVACA, TEXAS
UNIT: WEST RAIN BASIN

NO.	REVISIONS	BY	DATE
1	ISSUED FOR FIELD MODIFICATION	WTA	04-16-12
2	MODIFIED BASED ON FIELD OBSERVATIONS	WTA	06-22-12
3	DATE	SCALE	N.T.S.
4	DATE	SCALE	N.T.S.
5	DATE	SCALE	N.T.S.
6	DATE	SCALE	N.T.S.
7	DATE	SCALE	N.T.S.
8	DATE	SCALE	N.T.S.
9	DATE	SCALE	N.T.S.
10	DATE	SCALE	N.T.S.
11	DATE	SCALE	N.T.S.

REBOUND-HAMMER LOCATION	DELAMINATED CONCRETE	CRACKING	EROSION	REPAIR MATERIAL	POWDER SAMPLE
AGGREGATE POPOUT	SPALLED	EXPOSED	11 EFFLORESCENCE	HONEYCOMB	STEEL



NORTH INTERIOR WALL
EAST SIDE - ELEVATION VIEW

CONDITION SURVEY DRAWING

CLIENT: SEADRIFT COKE L.P.
PORT LAVACA, TEXAS
UNIT: WEST RAIN BASIN

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Deer Park, TX 77536
Phone: (281) 475-5300
www.stringpoint.net

NO.	REVISIONS	BY	DATE	CON BY	WTA

NO.	REVISIONS	BY	DATE	CON BY	WTA

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NO.	REVISIONS	BY	DATE	CON BY	WTA

NO.	REVISIONS	BY	DATE	CON BY	WTA

NO.	REVISIONS	BY	DATE	CON BY	WTA

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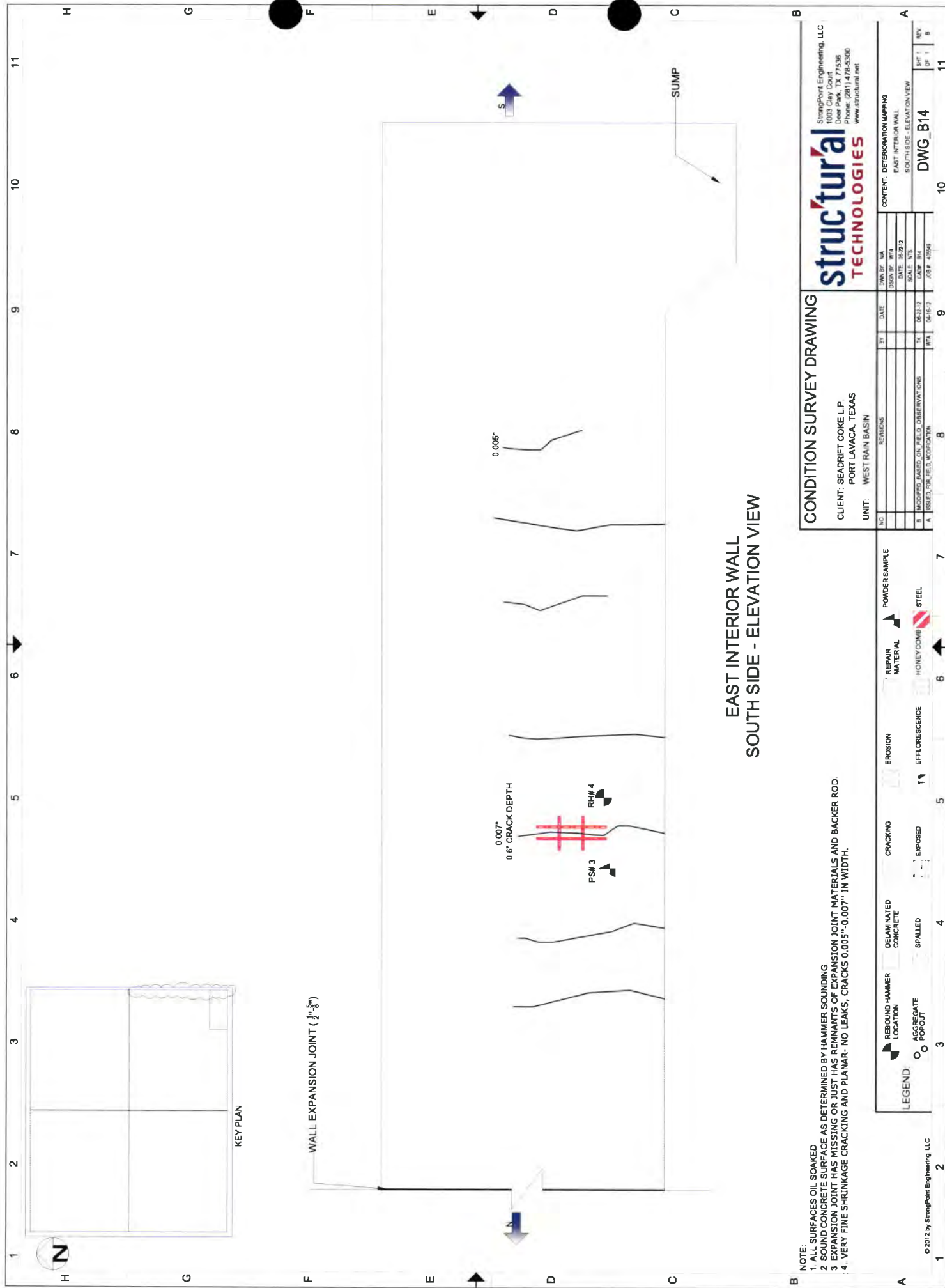
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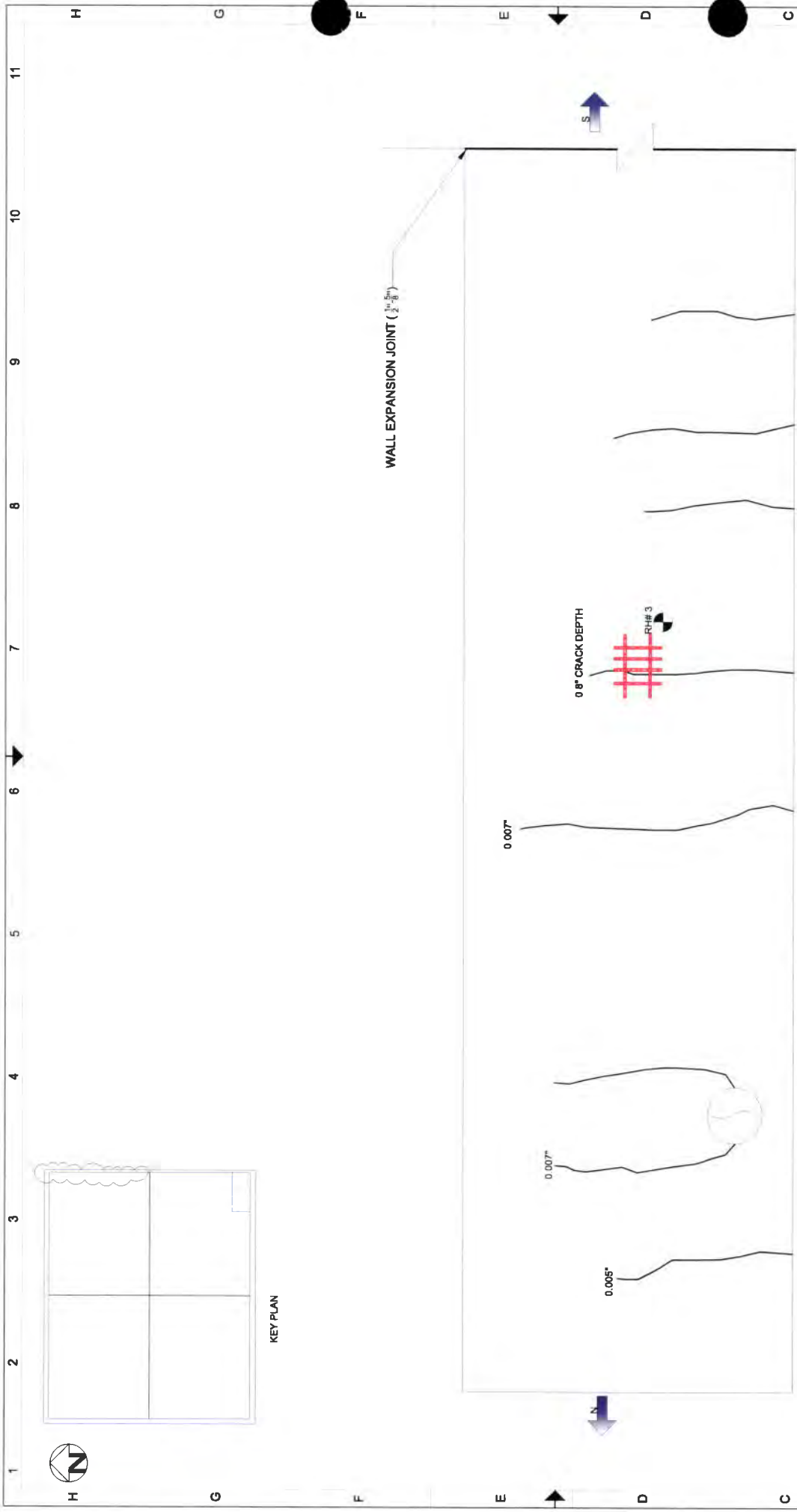
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NO.	REVISIONS	BY	DATE	CON BY	WTA

NO.	REVISIONS	BY	DATE	CON BY	WTA

NO.	REVISIONS	BY	DATE	CON BY	WTA





EAST INTERIOR WALL NORTH SIDE - ELEVATION VIEW

NOTE:
 1. ALL SURFACES OIL SOAKED
 2. SOUND CONCRETE SURFACE AS DETERMINED BY HAMMER SOUNDING
 3. EXPANSION JOINT IS MISSING OR JUST HAS REMNANTS OF EXPANSION JOINT MATERIALS AND BACKER ROD.
 4. VERY FINE SHRINKAGE CRACKING AND PLANAR- NO LEAKS, CRACKS 0.005"-0.007" IN WIDTH.

StrongPoint Engineering, LLC
 1003 Clay Court
 Deer Park, TX 77536
 Phone: (281) 478-5300
 www.struc'tural.net

CONDITION SURVEY DRAWING

CLIENT: SEADRIFT COKE L.P.
 PORT LAVACA, TEXAS

UNIT: WEST RAIN BASIN

NO.	REVISIONS	DATE	DRAWN BY	DATE	SCALE	NORTH	EAST	NORTH SIDE - ELEVATION VIEW	REV.	DWG. B15	REV.	OF	1	11
1	MODIFIED, BASED ON FIELD OBSERVATIONS	06-22-12	CAW	06-22-12	1/8"	0	0	0	0	0	0	0	0	0
2	ISSUED FOR FIELD MODIFICATION	06-18-12	CAW	06-18-12	1/8"	0	0	0	0	0	0	0	0	0

LEGEND:	REBOUND HAMMER LOCATION	DELAMINATED CONCRETE	SPALLED	EROSION	CRACKING	EXPOSED	POWDER SAMPLE	REPAIR MATERIAL	STEEL

2 3 4 5 6 7 8 9 10 11

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LEGEND:

by StrongPoint Engineering, LLC

5

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3



KEY PLAN

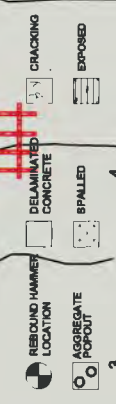
WEST INTERIOR WALL SOUTH SIDE - ELEVATION VIEW

WALL EXPANSION JOINT (3'-0")

0.005"

0.005"

- NOTE:**
- 1. ALL SURFACES SOIL SOAKED
 - 2. SOUND CONCRETE SURFACE AS DETERMINED BY HAMMER SOUNDING
 - 3. EXPANSION JOINT HAS MISSING OR JUST HAS REMNANTS OF EXPANSION JOINT MATERIALS AND BACKER ROD.
 - 4. VERY FINE SHRINKAGE CRACKING AND PLANAR- NO LEAKS, CRACKS 0.005"-0.007" IN WIDTH.



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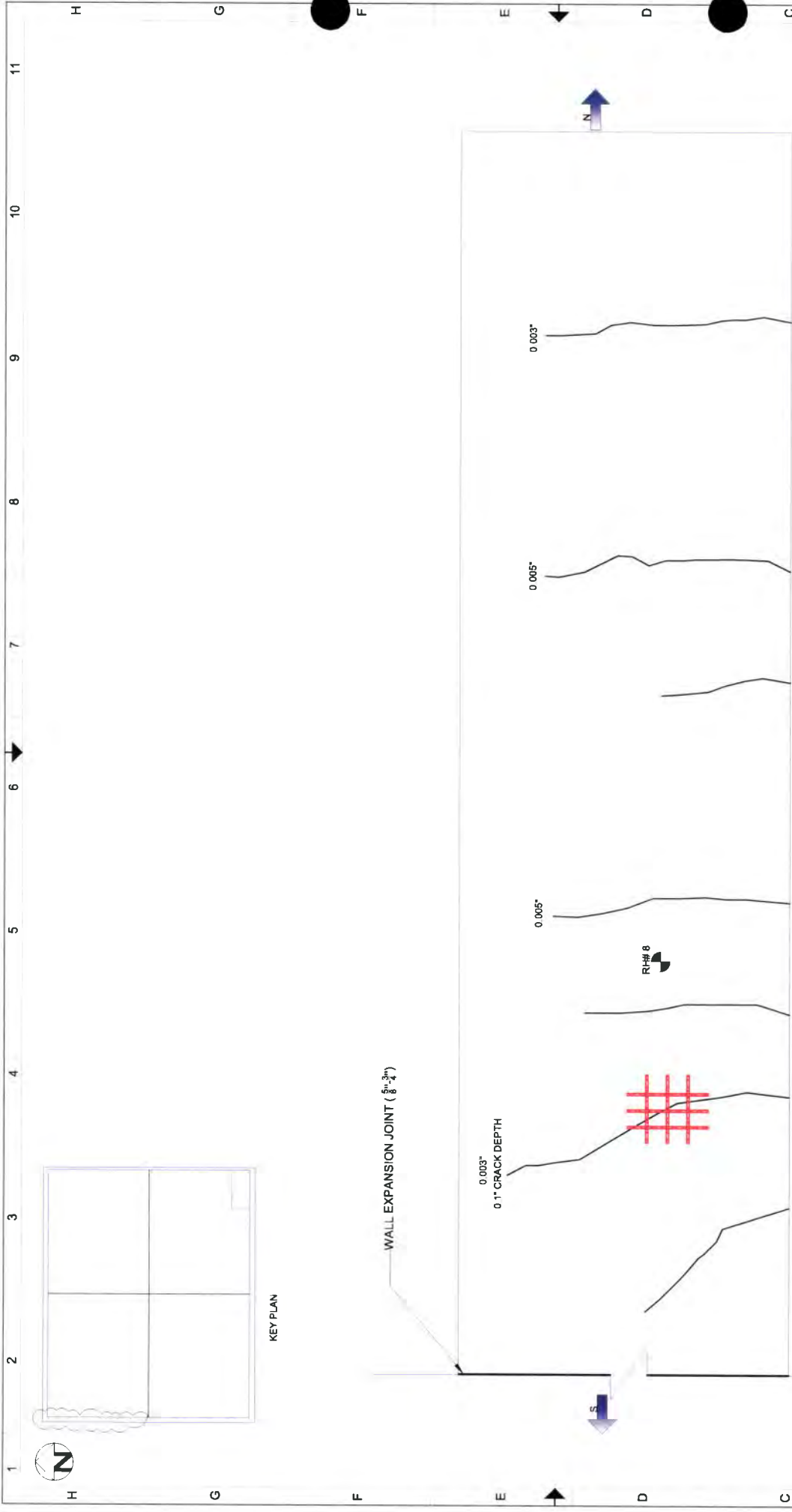
StrongPoint Engineering, LLC
1003 Clay Court
Deer Park, TX 77536
Phone: (281) 478-5300
www.structural.net

CONDITION SURVEY DRAWING

CLIENT: SEADRIFT COKE L.P.
PORT LAVACA, TEXAS
UNIT: WEST RAIN BASIN

NO.	REVISIONS	BY	DATE	DWG BY: N/A	SSDR BY: WTA	SCALE: N/A	DATE: 06-22-12	CAMP BY: N/A	JOB # 425046
1	MODIFIED BASED ON FIELD OBSERVATIONS	TL	06-22-12						
2	ISSUED FOR FIELD MODIFICATION	WTA	04-16-12						

CONTENT	DETERIORATION MAPPING	WEST INTERIOR WALL	SOUTH SIDE - ELEVATION VIEW
DWG_B16	1	1	1
REV	OF	1	1



EAST INTERIOR WALL NORTH SIDE - ELEVATION VIEW

NOTE:
 1. ALL SURFACES OIL SOAKED
 2. SOUND CONCRETE SURFACE AS DETERMINED BY HAMMER SOUNDING
 3. EXPANSION JOINT HAS MISSING OR JUST HAS REMNANTS OF EXPANSION JOINT MATERIALS AND BACKER ROD.
 4. VERY FINE SHRINKAGE CRACKING AND PLANAR - NO LEAKS, CRACKS 0.003"-0.005" IN WIDTH.

REBOUND HAMMER LOCATION	DELAMINATED CONCRETE	CRACKING	EROSION	REPAIR MATERIAL	POWDER SAMPLE

NO.	REVISIONS	BY	DATE
1	ISSUED FOR FIELD MODIFICATION	WTA	04-15-12
2	MODIFIED BASED ON FIELD OBSERVATIONS	TK	06-27-12
3	ISSUED FOR FIELD MODIFICATION	WTA	04-15-12

NO.	REVISIONS	BY	DATE
1	ISSUED FOR FIELD MODIFICATION	WTA	04-15-12
2	MODIFIED BASED ON FIELD OBSERVATIONS	TK	06-27-12
3	ISSUED FOR FIELD MODIFICATION	WTA	04-15-12

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 1003 Clay Court
 Deer Park, TX 77536
 Phone: (281) 475-5300
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NO.	REVISIONS	BY	DATE
1	ISSUED FOR FIELD MODIFICATION	WTA	04-15-12
2	MODIFIED BASED ON FIELD OBSERVATIONS	TK	06-27-12
3	ISSUED FOR FIELD MODIFICATION	WTA	04-15-12

NO.	REVISIONS	BY	DATE
1	ISSUED FOR FIELD MODIFICATION	WTA	04-15-12
2	MODIFIED BASED ON FIELD OBSERVATIONS	TK	06-27-12
3	ISSUED FOR FIELD MODIFICATION	WTA	04-15-12

NO.	REVISIONS	BY	DATE
1	ISSUED FOR FIELD MODIFICATION	WTA	04-15-12
2	MODIFIED BASED ON FIELD OBSERVATIONS	TK	06-27-12
3	ISSUED FOR FIELD MODIFICATION	WTA	04-15-12

NO.	REVISIONS	BY	DATE
1	ISSUED FOR FIELD MODIFICATION	WTA	04-15-12
2	MODIFIED BASED ON FIELD OBSERVATIONS	TK	06-27-12
3	ISSUED FOR FIELD MODIFICATION	WTA	04-15-12



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APPENDIX C

FIELD AND LABORATORY TESTING RESULTS

REBOUND HAMMER

RH 1 THROUGH
RH 2

WATER SOLUBLE CHLORIDE ION (CL^-) CONTENT
FOR THE WEST RAIN WATER COLLECTION BASIN

CC 1

WATER SOLUBLE CHLORIDE ION (CL^-) CONTENT
CHART FOR THE WEST RAIN WATER COLLECTION
BASIN

CC 2

APPENDIX C

Project No. 405549

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1 PROJECT INFORMATION

1.1	Client Name:	Seadrift Coke L.P.		
	Location:	Port Lavaca	Texas	U.S.
1.2	Process Unit/Structure Name:	East Rain Water Collection Basin		

2 TEST DETAILS

2.1	Nature:	Destructive ☐		Nondestructive ☒	
2.2	Test Equipment:	Model D-100 Concrete Test Hammer by Germann Instruments, Inc.			
2.3	Inspector(s) Name(s):	Tom Kline / Jonathan Sommer			
2.4	Date(s) of Testing:	Single Day ☒	04-18-12	Multiple days ☐	through
2.5	Testing Conditions:	Applicable	Yes ☒	No ☐	Air/Substrate Temperature: 85°F
					Moisture Content: Wet ☐ Damp ☐ Dry ☒
2.6	Reference Standards:	In accordance with ASTM C 805, BS 1881 Part 202			

3 DATA

Test Point	Test Location	Hammer Orientation ¹	Measurements			Interpretive f'_c (psi) ²
			High	Low	Aver	
1	West Side of the East Rain Basin Slab	V	52	45	49	7500
2	Central Area of the East Rain Basin Slab	V	50	44	47	7200
3	East Side of the East Rain Basin Slab	V	50	43	47	7100
4	Middle of the North Wall	H	48	38	43	5700
5	East side of the North Wall	H	48	41	45	6000
6	West side of the South Wall	H	46	38	42	5400
7	East side of the South Wall	H	45	37	41	5200
8	North side of the East Wall	H	49	41	45	6100
9	Middle of the East Wall	H	49	42	46	6200
10	South side of the West Wall	H	45	39	42	5400
11	North side of the West Wall	H	46	38	42	5400
12						
13						
14						
15						
16						
17						
18						

4 GENERAL REMARKS

¹ Hammer Orientation refers to the position of the instrument with respect to the concrete surface as follows: H (Horizontal), V (Vertical), and O (Overhead).

² Compressive Strength as interpreted from test equipment manufacturer charts supplied with hammer.

1	PROJECT INFORMATION			
1.1	Client Name:	Seadrift Coke L.P.		
	Location:	Port Lavaca	Texas	U.S.
1.2	Process Unit/Structure Name: West Rain Water Collection Basin			

2	TEST DETAILS			
2.1	Nature:	Destructive ☐		Nondestructive ☒
2.2	Test Equipment:	Model D-100 Concrete Test Hammer by Germann Instruments, Inc.		
2.3	Inspector(s) Name(s):	Tom Kline / Jonathan Sommer		
2.4	Date(s) of Testing:	Single Day ☒ 06-22-12	Multiple days ☐	through
2.5	Testing Conditions:	Applicable Yes ☒ No ☐ Air/Substrate Temperature: °F Moisture Content: Wet ☐ Damp ☐ Dry ☒		
2.6	Reference Standards:	In accordance with ASTM C 805, BS 1881 Part 202		

3 DATA						
Test Point	Test Location	Hammer Orientation ¹	Measurements			Interpretive f'_c (psi) ²
			High	Low	Aver	
1	West side of the North Wall	H	52	48	50	7300
2	East side of the North Wall	H	54	50	52	7800
3	North side of the East Wall	H	54	50	52	7800
4	South side of the East Wall	H	55	51	53	8000
5	East side of the South Wall	H	52	47	50	7200
6	West side of the South Wall	H	55	51	53	8000
7	South side of the West Wall	H	52	46	49	7100
8	North side of the West Wall	H	48	42	45	6100
9	Central Area of the West Rain Basin Slab	V	55	53	54	8500+
10	South Side of the West Rain Basin Slab	V	52	48	50	7900
11	Central Area of the West Rain Basin Slab	V	45	40	43	6200
12	East Side of the West Rain Basin Slab	V	52	46	49	7600
13						
14						
15						
16						
17						
18						

4	GENERAL REMARKS
¹ Hammer Orientation refers to the position of the instrument with respect to the concrete surface as follows: H (Horizontal), V (Vertical), and O (Overhead). ² Compressive Strength as interpreted from test equipment manufacturer charts supplied with hammer.	

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Date	07	18	12
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1	PROJECT INFORMATION
---	---------------------

1.1	Client Name:	Seadrift Coke L.P.		
	Location:	Port Lavaca	Texas	U.S.
1.2	Process Unit/Structure Name:	West Rain Water Collection Basin		

2 TEST DETAILS

2.1	Nature:	Destructive ☒	Nondestructive ☐
2.2	Test Equipment:	Hilti Rotary Impact Drill Rapid Chloride Test RCT-500 Kit by Germann Instruments, Inc.	
2.3	Inspector(s) Name(s):	Tom Kline / Jonathan Sommer	
2.4	Date of Testing:	07-18-12	
2.5	Date(s) of Sampling:	Single Day ☒ 06-22-12	Multiple days ☐ through
2.6	Sampling Conditions:	Applicable Yes ☒ No ☐	Air/Substrate Temperature: 96 °F Moisture Content: Damp ☐ Dry ☒
2.7	Depth of Drilling (Typ):	0 to 3 in. ☒	0 to 2 in. ☐ Other ☐
2.8	Reference Standards:	Per Germann Instruments RCT-500 Kit and ASTM C-1218 guidelines	

3	DATA
----------	-------------

Sample ID	Powder Sample Location	Sample Material ¹				% Cl ⁻ (wt. of sample)	% Cl ⁻ (wt. of cement) ²
		RC	FP	CR	O		
PS-1	Central Aarea of the West Rain Basin Slab	☒	☐	☐	☐	0.001	0.008
PS-2	West side of the North Wall	☒	☐	☐	☐	0.001	0.008
PS-3	South side of the East Wall	☒	☐	☐	☐	0.001	0.009

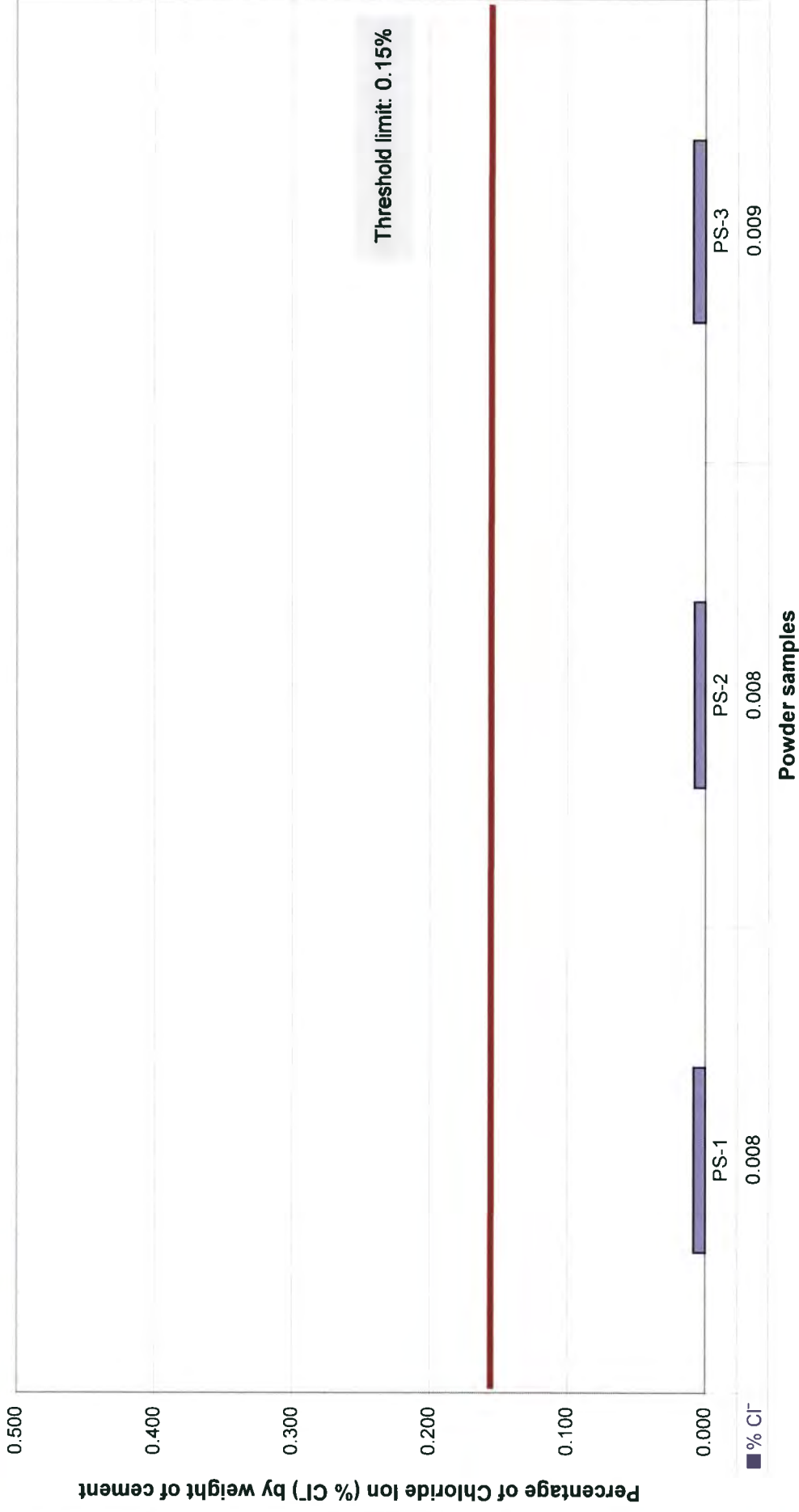
4	GENERAL REMARKS
---	-----------------

Abbreviations: RC (Reinforced Concrete), FP (Fireproofing Concrete), CR (Cementitious Repair), O (Other). Powder samples extracted using rotary hammer drill collection techniques.

² Percent by weight of cement based on assumed concrete cement of 564 pounds per cubic yard.

WATER SOLUBLE CHLORIDE ION (Cl⁻) CONTENT CHART

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Chart	C		1



NOTES

American Concrete Institute (ACI) Committee 222 Corrosion of Metals in Concrete, indicates that, "under some conditions, a chloride content of as little as 0.15 percent water-soluble chloride is sufficient to initiate corrosion of embedded steel in concrete exposed to chlorides in service." Chloride content is expressed as a percentage by weight of cement.



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APPENDIX D

FIELD PHOTOGRAPHS

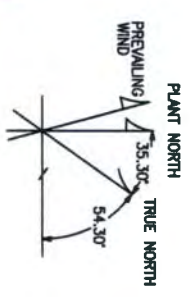
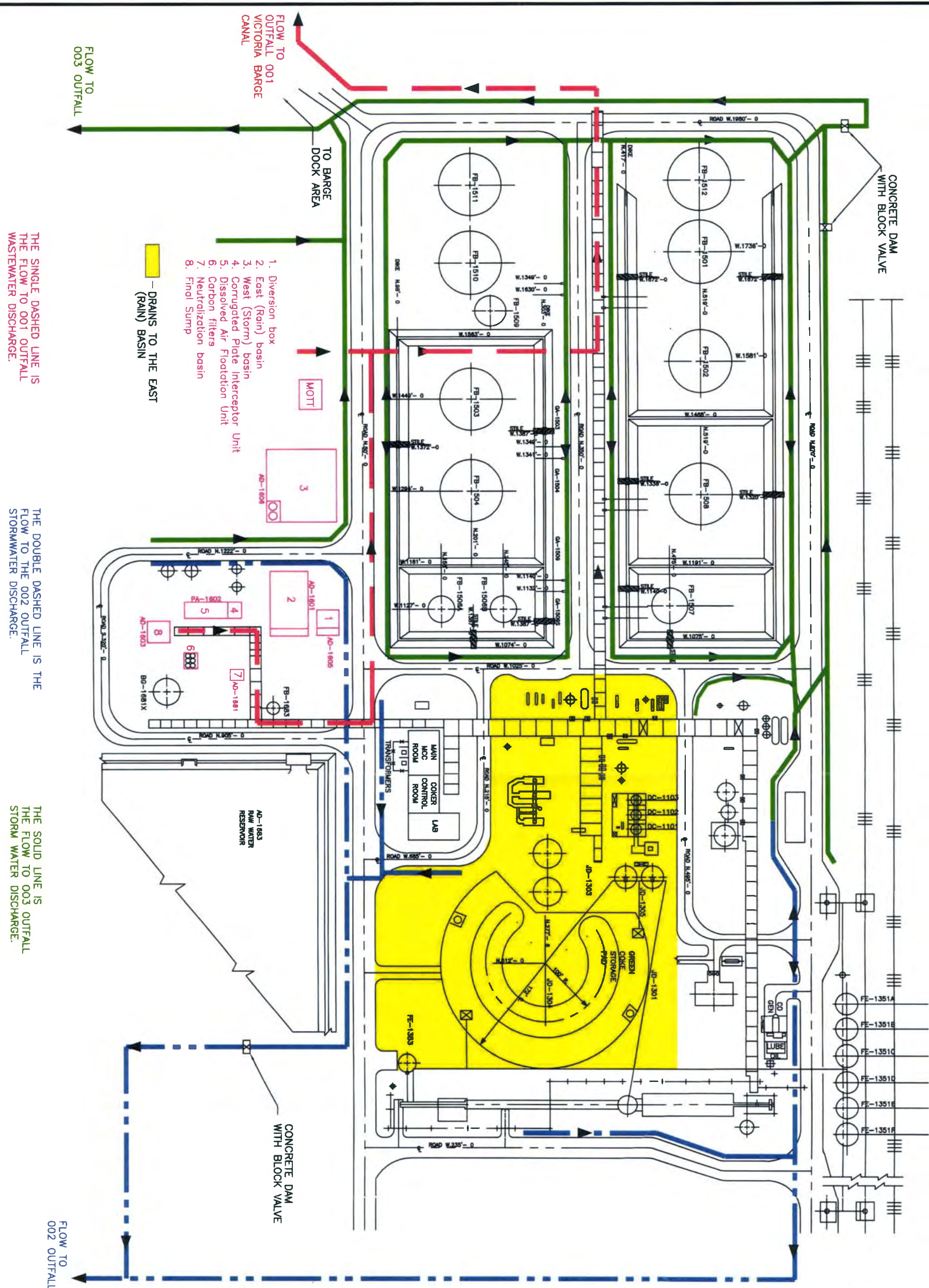
FIELD PHOTOGRAPHS

FP 1 THROUGH
FP 12

APPENDIX D

Project No. 405549

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RECEIVED
AUG 06 2014
Water Quality Division
Application Team
SOURCE:
BASEMAP PROVIDED BY SEADRIFT COKE L.P.

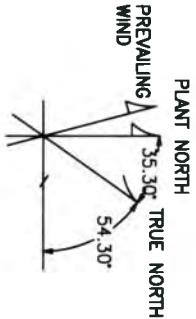
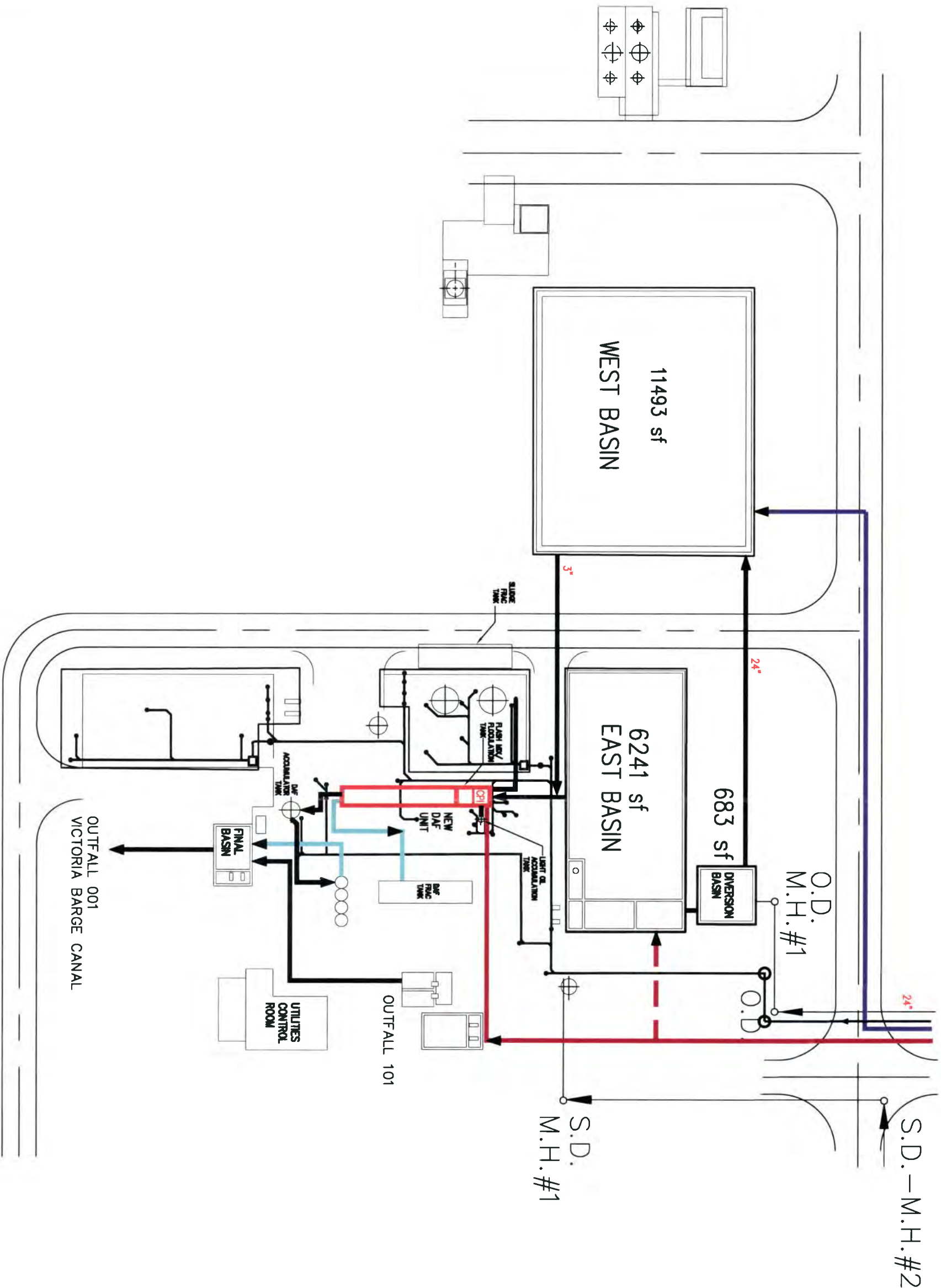


FIGURE 4
OUTFALL FLOW MAP

SEADRIFT COKE L.P.
WASTEWATER APPLICATION 2014
PORT LAVACA, TEXAS

DATE	PROJECT NO.	SCALE
JUN 2014	15085.004.001.0001	NOT TO SCALE

H:\Dwg\15085_Seedrift\0606141215.dwg Aug 05, 2014 - 10:28am



LEGEND:

- COOLING TWR. BLW. DWN./ COKE CUTTING OVERFLOW PIPELINE
- WASTEWATER PIPELINE
- 24" UNDERGROUND
- 2" SLOP PIPELINE
- 4" WASTEWATER PIPELINE
- 6" WASTEWATER PIPELINE
- 2" HEAVY OIL STORAGE LINE
- 2" LIGHT OIL STORAGE LINE
- CURBED AREA
- TREATED WASTE WATER

SOURCE:
BASEMAP PROVIDED BY SEADRIFT COKE L.P.



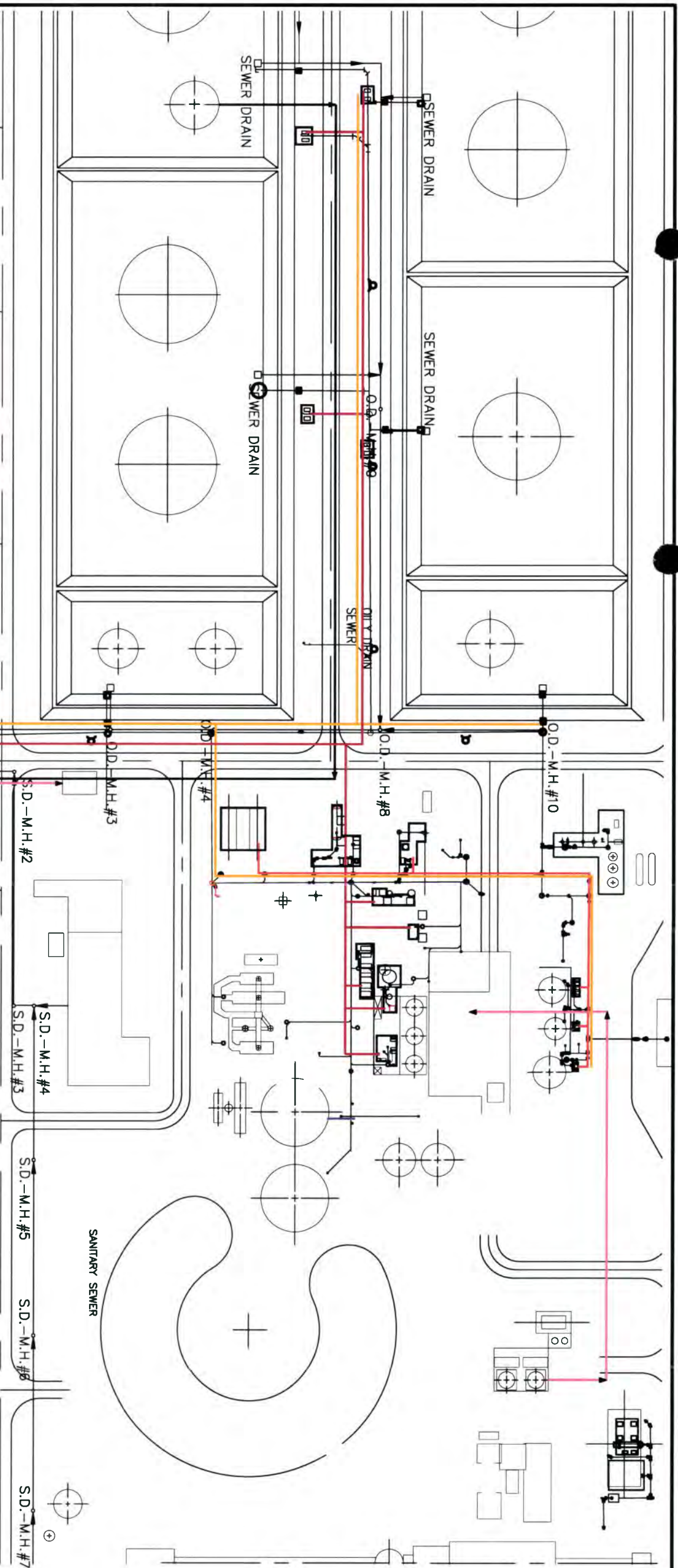
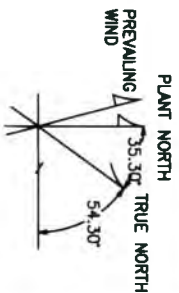
FIGURE 3

WASTEWATER
TREATMENT PLANT

SEADRIFT COKE L.P.
WASTEWATER APPLICATION 2014
PORT LAVACA, TEXAS

DATE	PROJECT NO	SCALE
JUN 2014	15085.004.001.0001	NOT TO SCALE

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- LEGEND:**
- COOLING TWR. BLW. DWN./ COKE CUTTING OVERFLOW PIPELINE
 - WASTEWATER PIPELINE
 - 24" UNDERGROUND
 - 2" SLOP PIPELINE
 - 4" WASTEWATER PIPELINE
 - 6" WASTEWATER PIPELINE
 - 2" HEAVY OIL STORAGE LINE
 - 2" LIGHT OIL STORAGE LINE
 - CURBED AREA
 - TREATED WASTE WATER

SOURCE:
BASEMAP PROVIDED BY SEADRIFT COKE L.P.

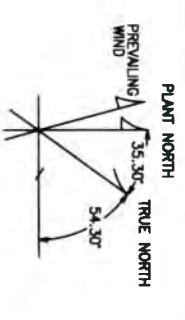
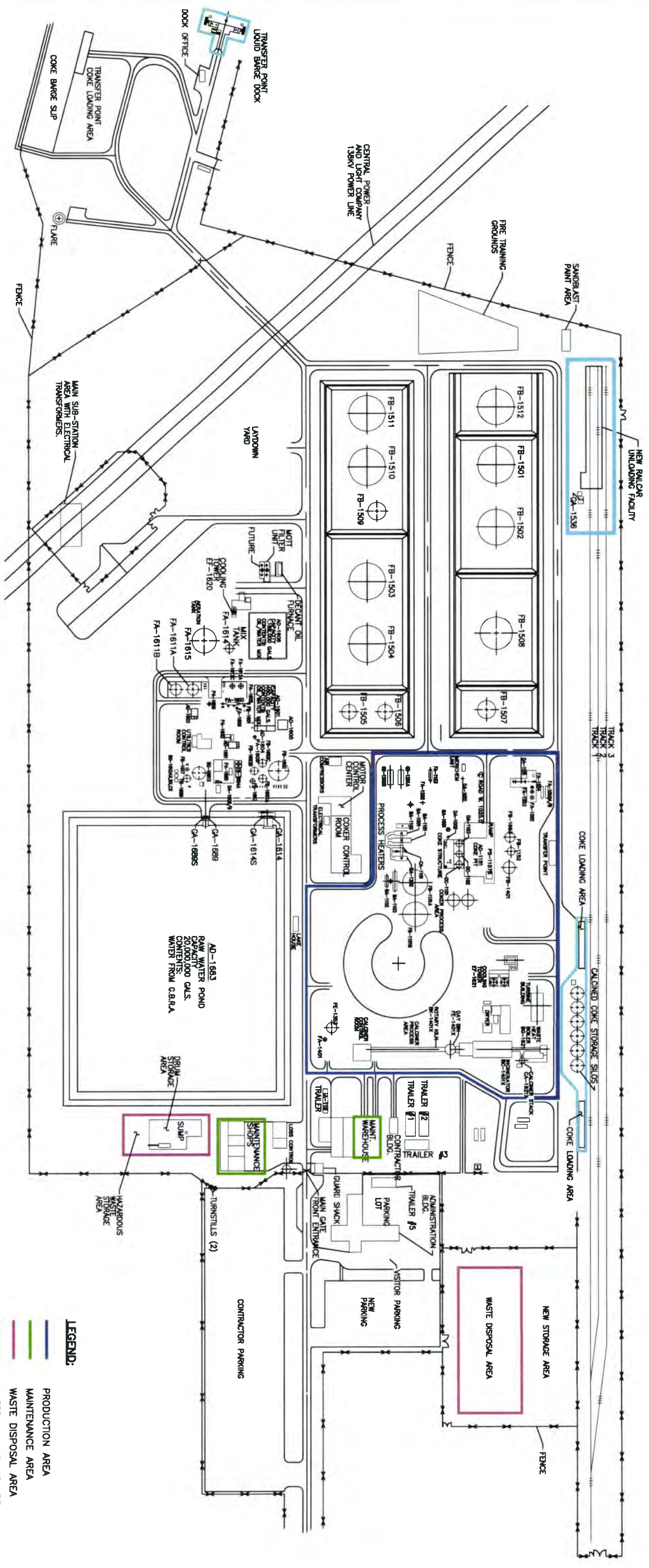


FIGURE 2

FACILITY SITE PLAN

SEADRIFT COKE L.P.
WASTEWATER APPLICATION 2014
PORT LAVACA, TEXAS

DATE	PROJECT NO.	SCALE
JUN 2014	15085.004.001.0001	NOT TO SCALE



**FIGURE 1
FACILITY SITE PLAN**

SEADRIFT COKE L.P.
WASTEWATER APPLICATION 2014
PORT LAVACA, TEXAS

DATE	PROJECT NO.	SCALE
JUN 2014	15085.004.001.0001	NOT TO SCALE

PROJECT INFORMATION

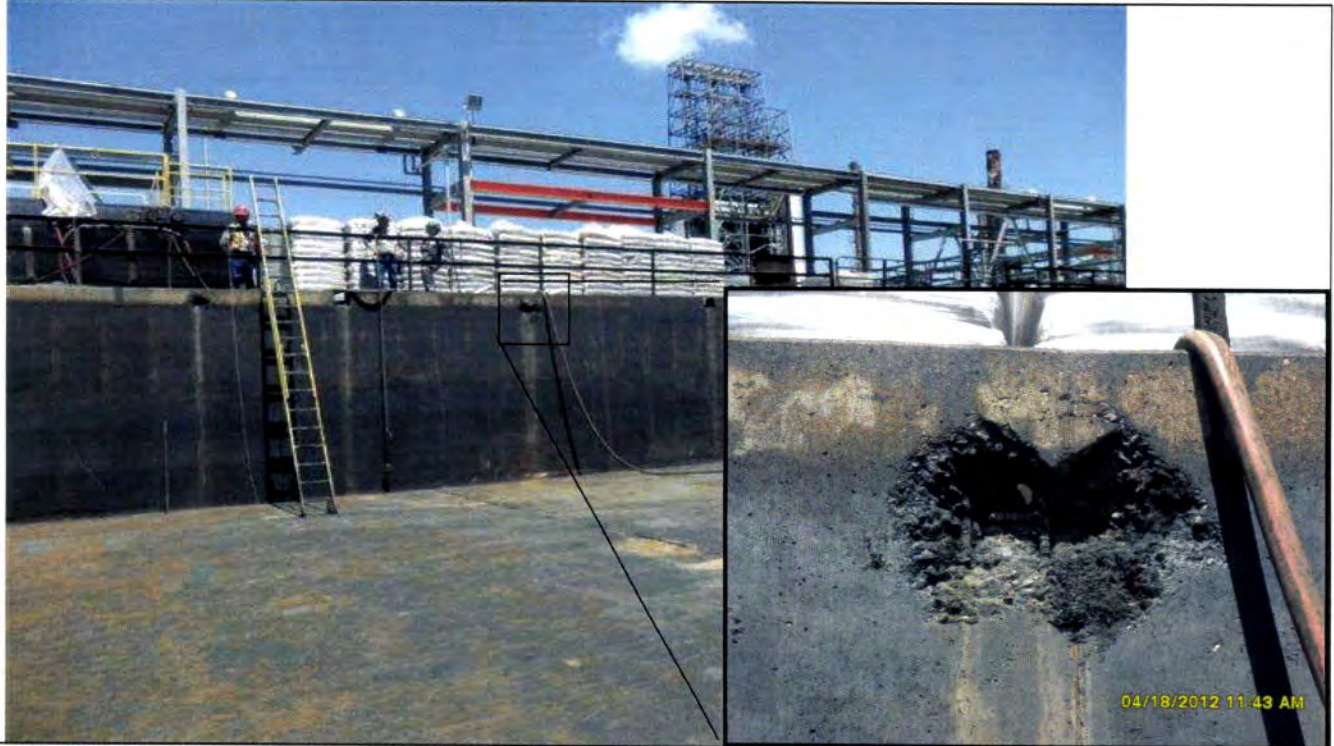
Client Name: Seadrift Coke L.P.

Location: Port Lavaca

Texas

U.S.

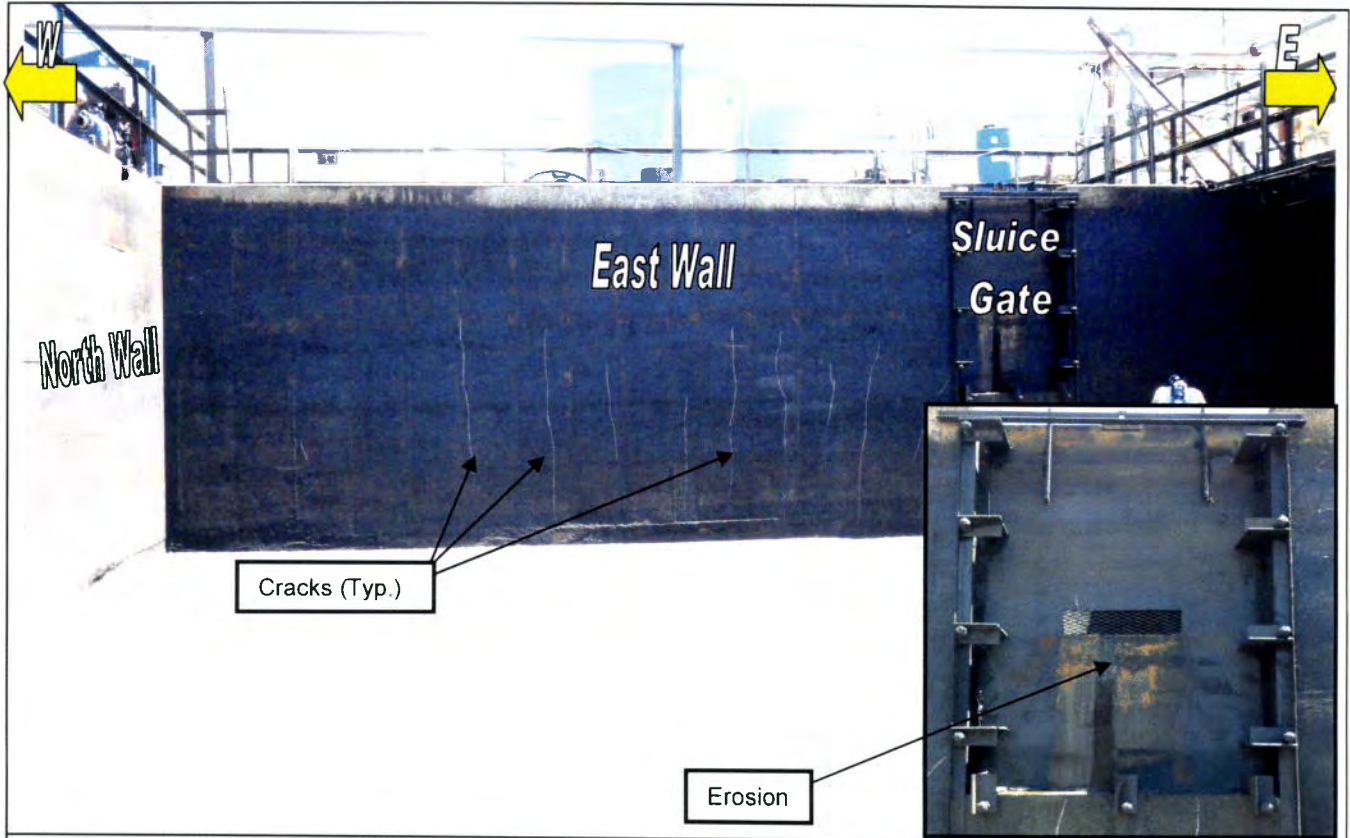
Process Unit/Structure Name: East Rain Water Collection Basin



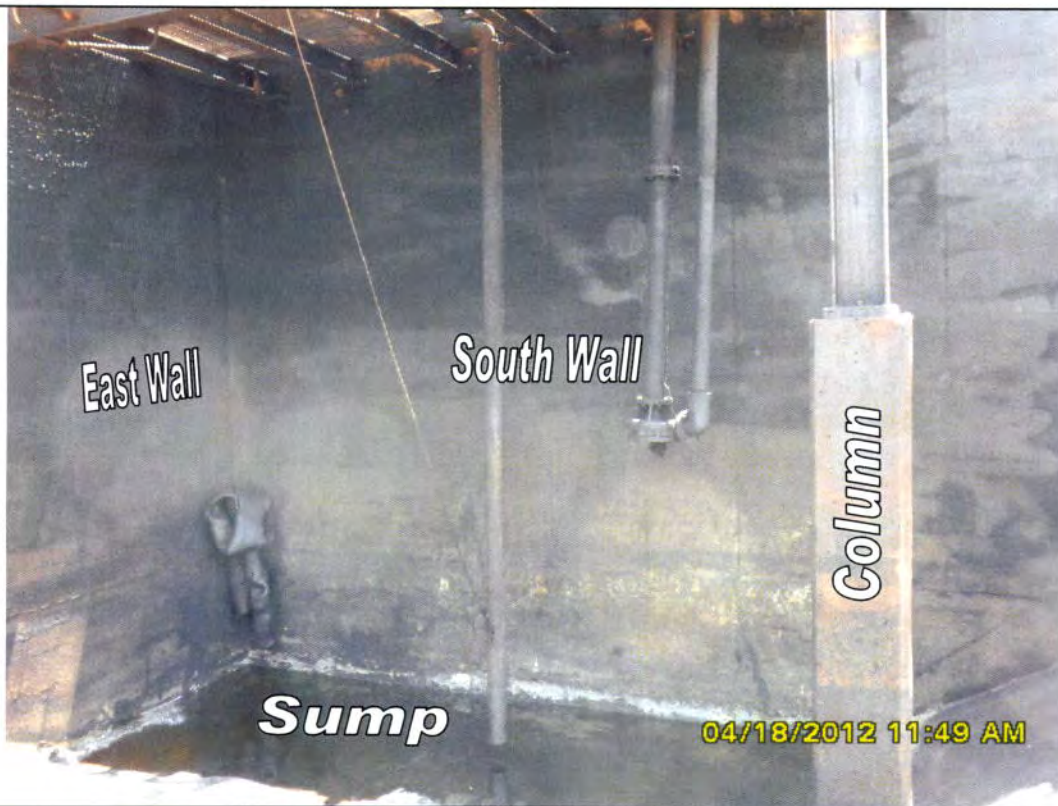
Photograph 1. Overview of the North Wall. Note spall and exposed rebar as a result of post-construction installation of additional groundwater drainage conduits into the East Rain Water Collection Basin.



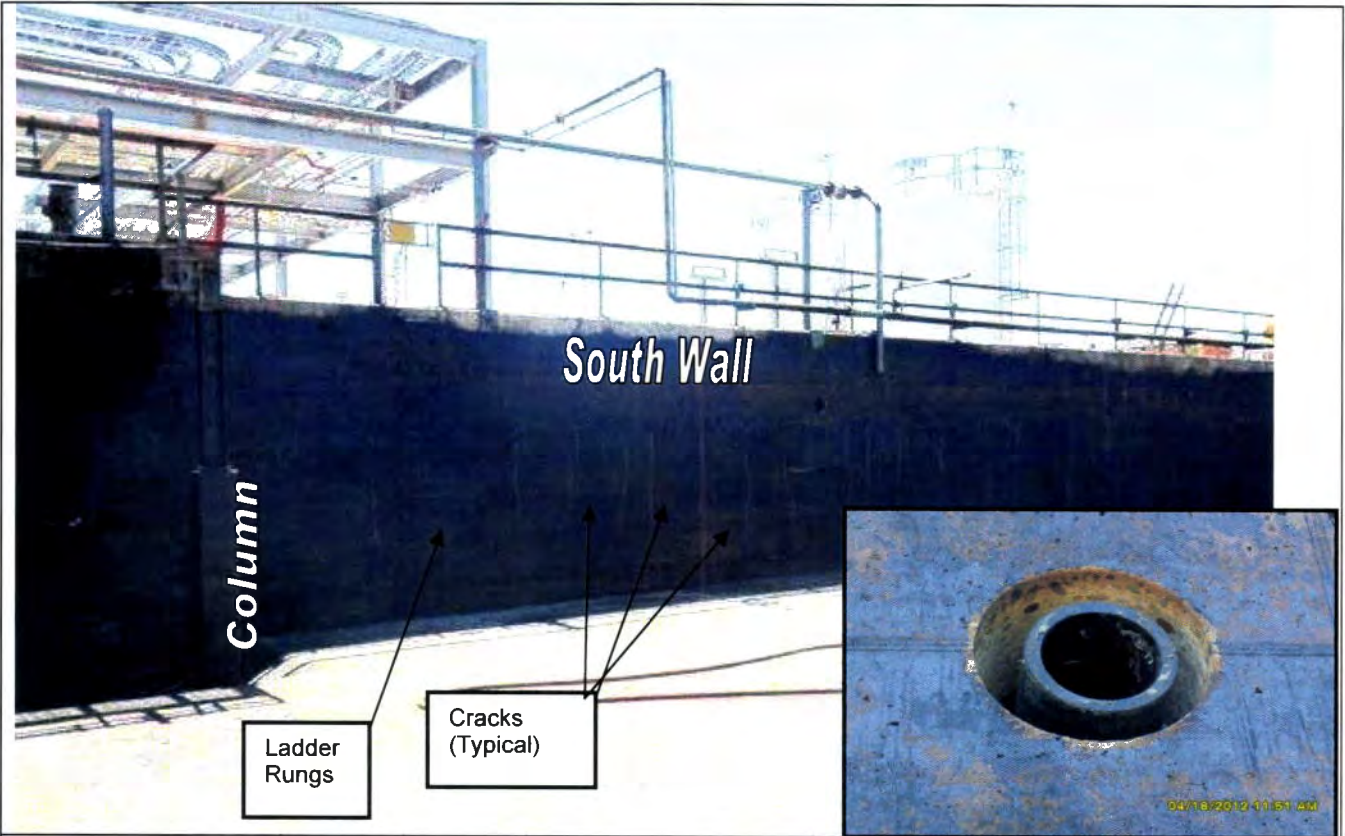
Photograph 2. View of North Wall from Southeast corner. Note Wall top scuppers and Typical crack propagation along the length of the Wall.



Photograph 3. View of East Wall from the West. Note Typical crack propagation in the East Rain Water Basin.



Photograph 4. View of Sump in Southeast corner of East Rain Water Collection Basin.

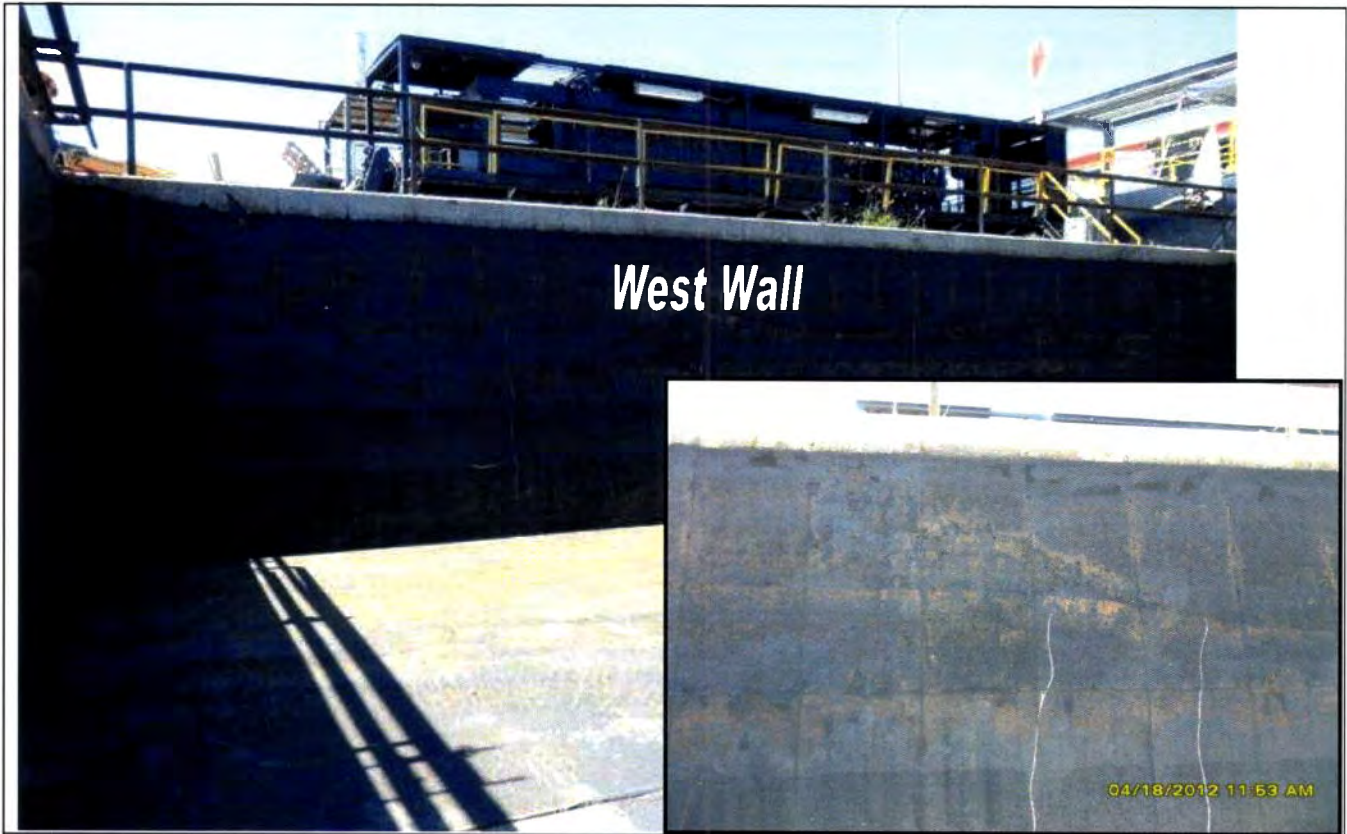


Photograph 5. View of South Wall from Northeast corner of the East Rain Water basin. Note Recently cored through-wall pipe penetration.

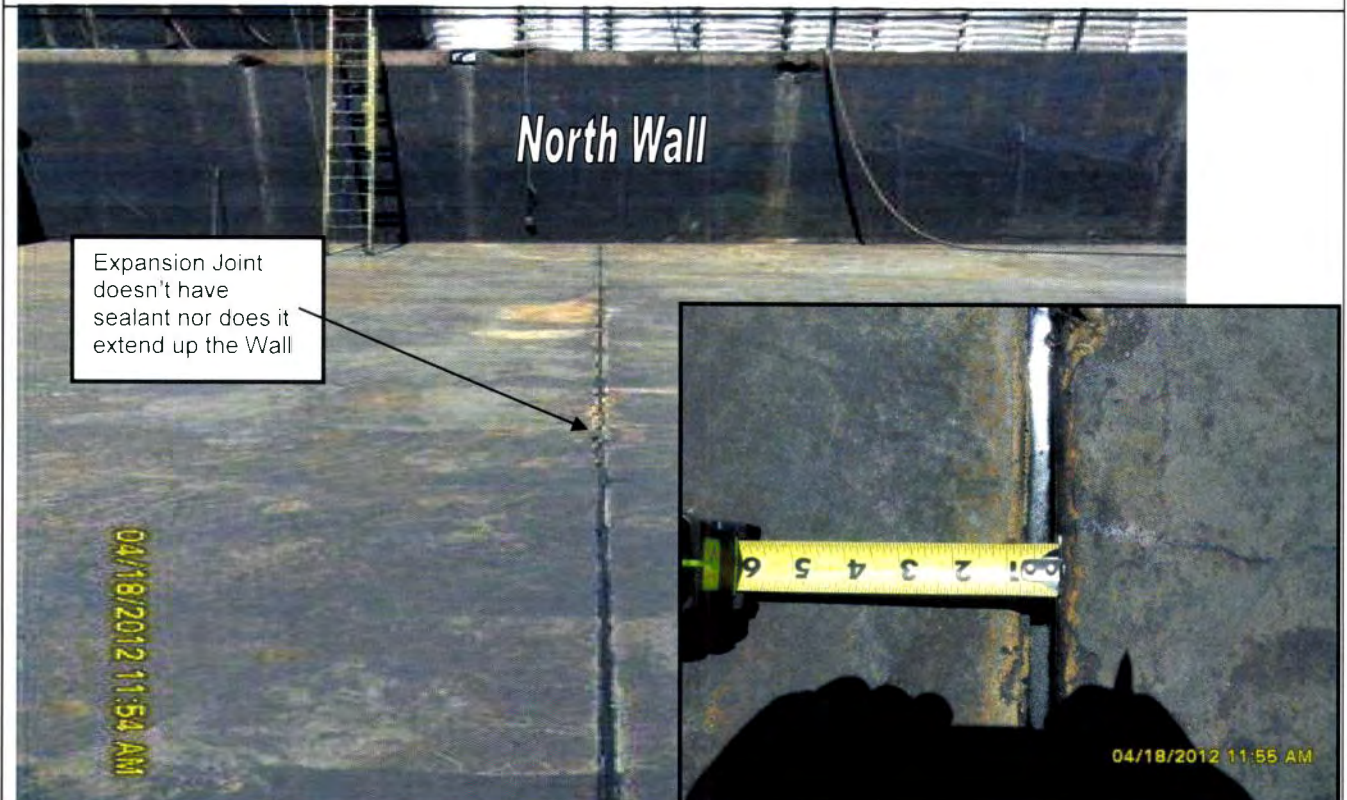


Photograph 6. View of South Wall from East corner. Note Typical crack propagation in East Rain Water Basin.

Project No.	405549		
Date	04	18	12
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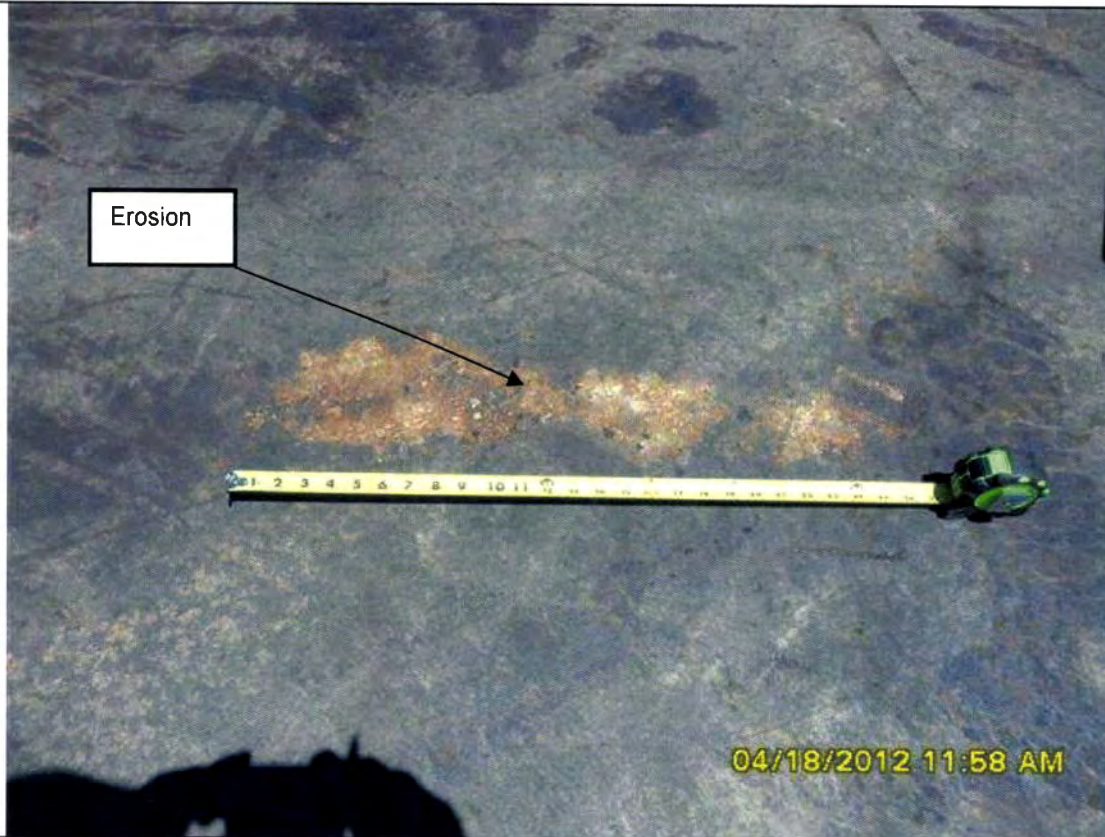


Photograph 7. View of West Wall from East. Note Typical crack propagation in the East Rain Water Basin.



Photograph 8. View of West Expansion Joint in Basin Base Slab looking North within the East Rain Water Basin.

Project No.	405549		
Date	04	18	12
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Photograph 9. View of Erosion on Basin Base Slab surface within the Rain Water Basin.

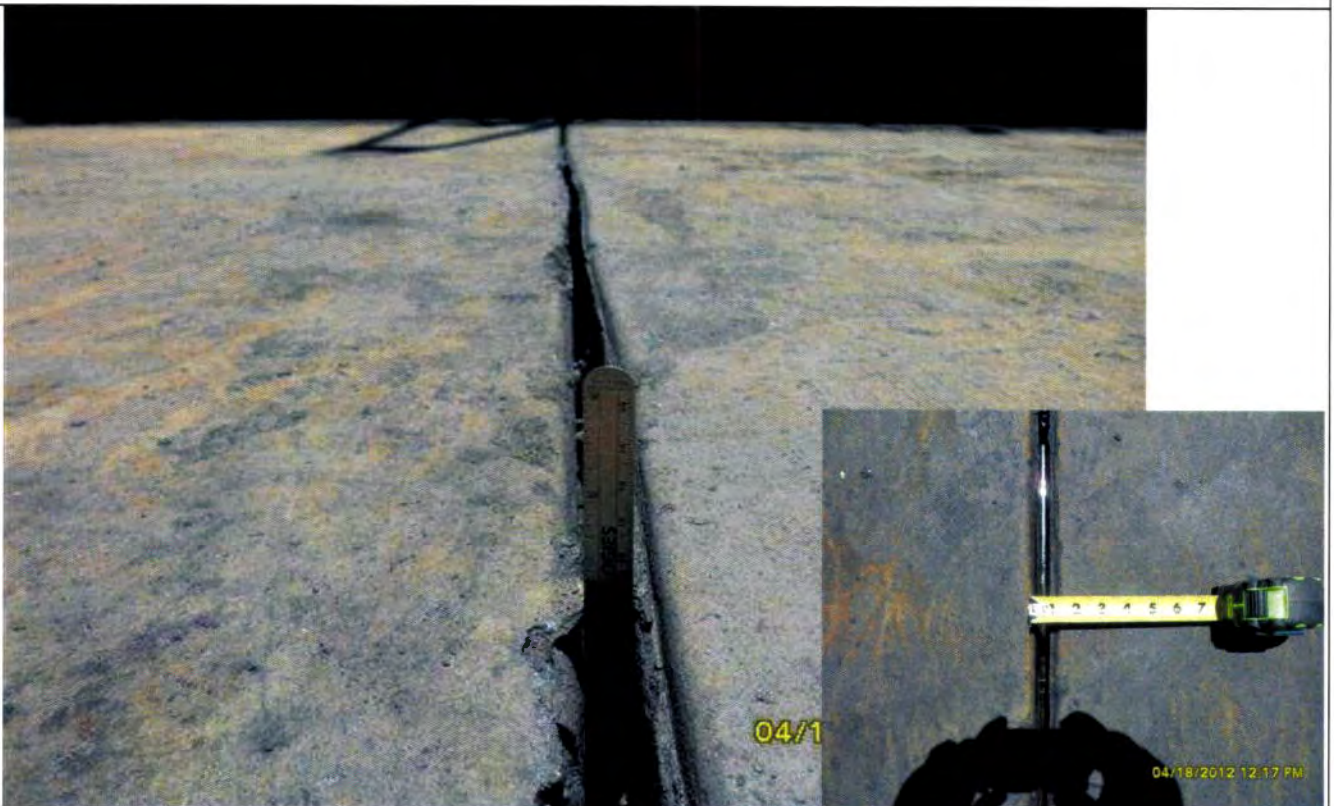


Photograph 10. View of Aggregate (Popout) on East Rain Water Basin Base Slab surface.

Project No.	405549		
Date	04	18	12
Sheet	FP		6



Photograph 11. View of East Expansion Joint within East Rain Water Basin **Base Slab** from South.



Photograph 10. View of East Expansion Joint within the East Rain Water Basin Base Slab – Joint Width and Depth to embedded Waterstop.

Project No.	405549		
Date	06	27	12
Sheet	FP	7	

PROJECT INFORMATION

Client Name: Seadrift Coke L.P.

Location: Port Lavaca

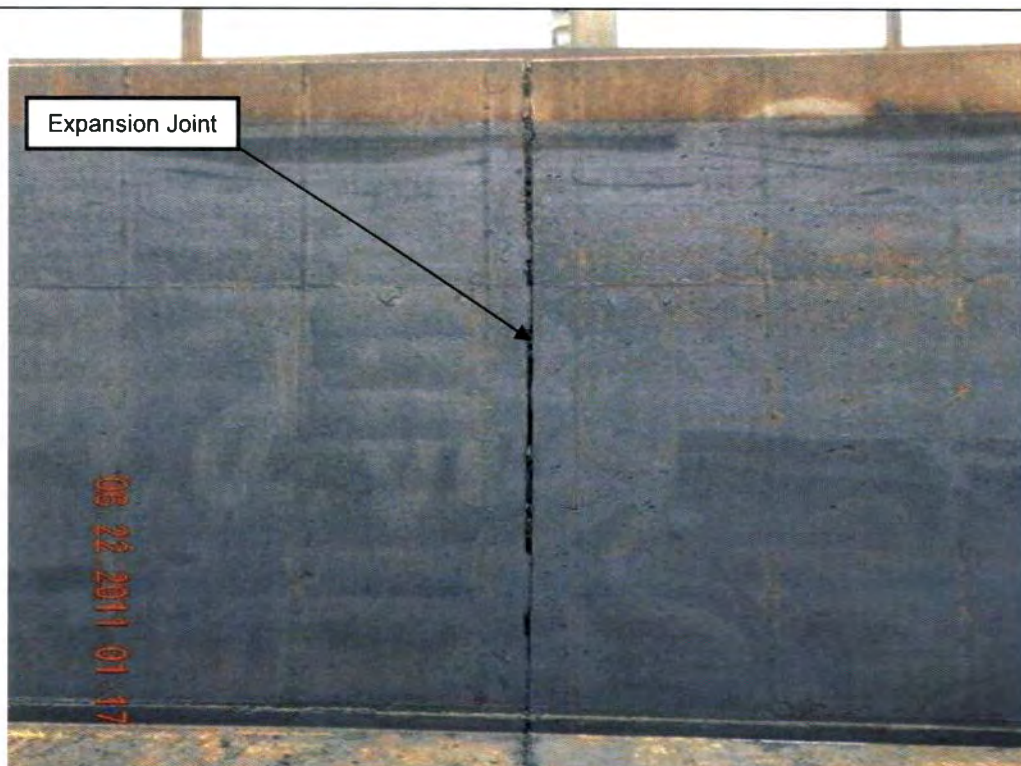
Texas

U.S.

Process Unit/Structure Name: West Rain Water Collection Basin



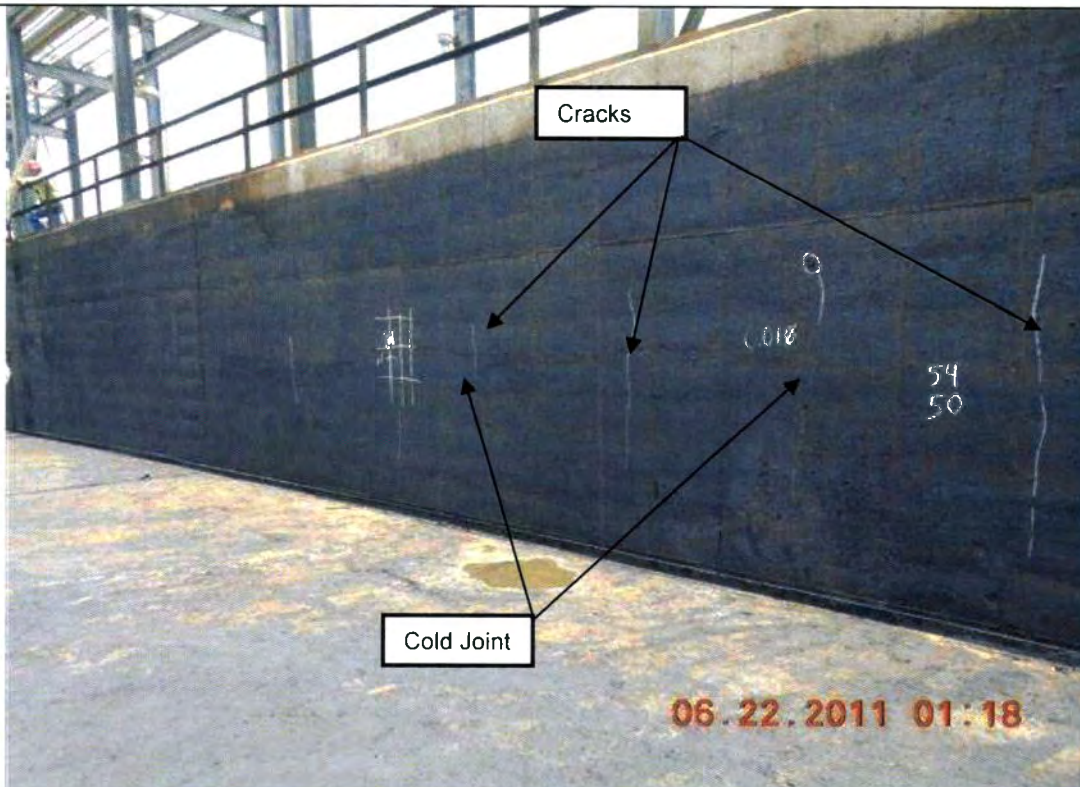
Photograph 1. Overview of the Southeast corner of the West Rain Basin.



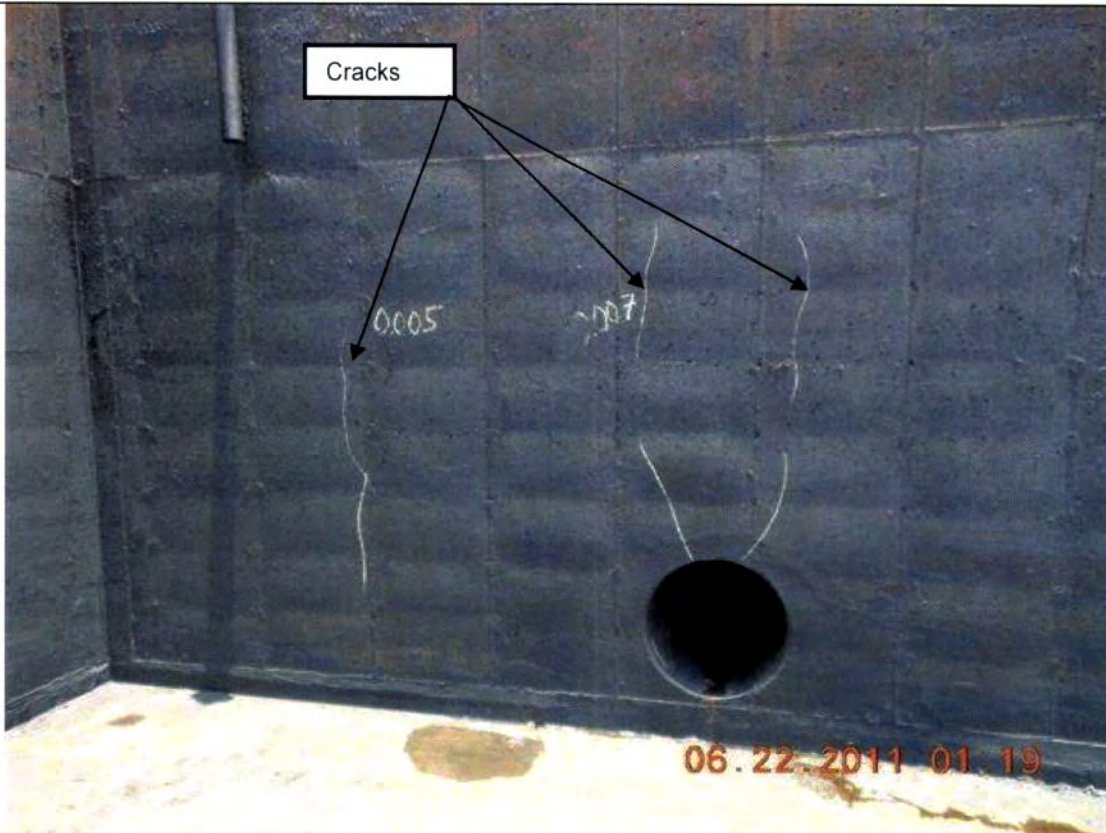
Photograph 2. View of Expansion Joint on the North Wall of the West Rain Basin.



Photograph 3. Overview of the Southwest corner of the West Rain Basin.



Photograph 4. View of North Wall vertical cracking and horizontal "Cold Joint".



Photograph 5. View of Pipe Penetration at the base of the East Wall of the West Rain Basin.



Photograph 6. View of Sump on the Southeast corner of the West Rain Basin.



Photograph 7. View of Sump on the Southeast corner of the West Rain Basin.



Photograph 8. View of corroded bottom ladder rung on the South interior Wall of the West Rain Basin.

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Date	06	27	12
Sheet	FP		11

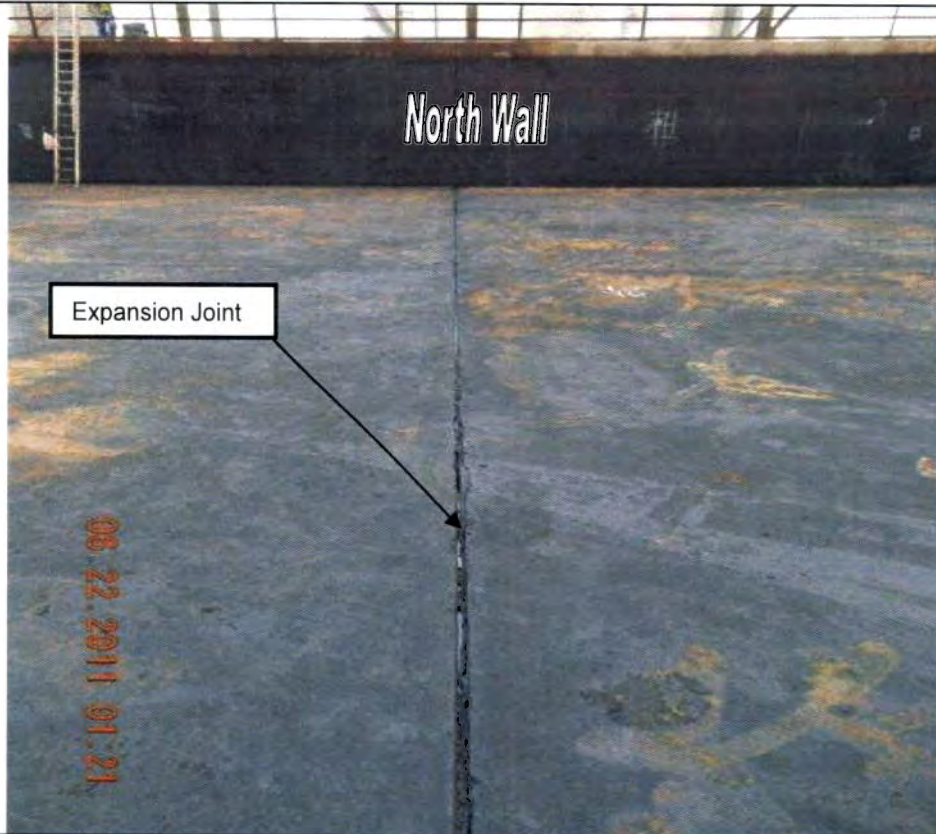


Photograph 9. Overview of the Southeast corner of the West Rain Basin.



Photograph 10. View of aggregate "popout" on the Base Slab of the West Rain Basin.

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Photograph 11. View of Expansion Joint from South to North in the West Rain Basin.



Photograph 12. Overview of the Northeast corner of the West Rain Basin.



ATTACHMENT WS 7.0-4.d

Descriptions of the industrial processes and activities involving materials that occur outdoors in some manner that may result to exposure of the materials to precipitation or runoff:

Green coke is stored outside. Wind can entrain green coke particles and carry them to the Outfall 002 drainage area. Green coke is removed by steam from coke drums. The steam can also entrain coke particles and carry the coke particles to the Outfall 002 drainage area. Finally, calcined coke is transferred via conveyors. Some spillage from conveyors may be located in the Outfall 002 drainage area.

Bulk hydrocarbon storage tanks are located within Outfall 003 drainage area; these tanks have secondary containment.

Chemical Additives			
Mfg.	Manufacturer's Product Identification Number	Product Use	Frequency of Product Use
Nalco	3DT231	Phosphate control at cooling towers	Continuous
Univar Solutions	Sodium Hypochlorite 12.5%	Biological control for potable water, cooling water, and process water	Continuous
ChemTreat	ChemTreat P829L	Coagulant aid	Continuous
ChemTreat	ChemTreat P890L	Coagulant	Continuous
Nalco	CNQR3588	Oxygen scavenger	Continuous
Suez	KLEEN MCT503	Reverse Osmosis membrane cleaner	As needed
Veolia	KLEEN MCT515	Reverse Osmosis membrane cleaner	As needed
Nalco	Ultrion 8186	Wastewater treatment for DAF	Continuous
Nalco	NexGuard22300	Boiler water Ph treatment	Continuous
Univar Solutions	Sulfuric Acid 93%	Ph control at cooling towers	Continuous
Univar Solutions	Caustic Soda 50%	Ph control for RO permeate	Continuous

SAFETY DATA SHEET

3D TRASAR™ 3DT231

Section: 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : 3D TRASAR™ 3DT231

Other means of identification : Not applicable.

Recommended use : COOLING WATER TREATMENT

Restrictions on use : Refer to available product literature or ask your local Sales Representative for restrictions on use and dose limits.

Company : Nalco Company
1601 W. Diehl Road
Naperville, Illinois 60563-1198
USA
TEL: (630) 305-1000

Emergency telephone number : (800) 424-9300 (24 Hours) CHEMTREC

Issuing date : 04/13/2022

Section: 2. HAZARDS IDENTIFICATION

GHS Classification

Skin corrosion : Category 1
Serious eye damage : Category 1

GHS Label element

Hazard pictograms :



Signal Word : Danger

Hazard Statements : Causes severe skin burns and eye damage.

Precautionary Statements : **Prevention:**
Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection. Do not mix with bleach or other chlorinated products – will cause chlorine gas.

Response:

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician. Wash contaminated clothing before reuse.

Storage:

Store locked up. Protect product from freezing.

Disposal:

SAFETY DATA SHEET

3D TRASAR™ 3DT231

Dispose of contents/ container to an approved waste disposal plant.

Other hazards : Do not mix with bleach or other chlorinated products – will cause chlorine gas.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	Concentration: (%)
Phosphoric Acid	7664-38-2	1 - 5
Sulfuric Acid	7664-93-9	1 - 5
Substituted aromatic amine	Proprietary	1 - 5

Section: 4. FIRST AID MEASURES

- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
- In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
- If swallowed : Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.
- Protection of first-aiders : In event of emergency assess the danger before taking action. Do not put yourself at risk of injury. If in doubt, contact emergency responders. Use personal protective equipment as required.
- Notes to physician : Treat symptomatically.
- Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

Section: 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : None known.
- Specific hazards during firefighting : Not flammable or combustible.
- Hazardous combustion products : Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus
- Special protective equipment for firefighters : Use personal protective equipment.

SAFETY DATA SHEET

3D TRASAR™ 3DT231

Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

Section: 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Do not allow contact with soil, surface or ground water.

Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

Section: 7. HANDLING AND STORAGE

Advice on safe handling : Do not ingest. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wash hands thoroughly after handling. Use only with adequate ventilation. Do not mix with bleach or other chlorinated products – will cause chlorine gas.

Conditions for safe storage : Keep away from strong bases. Keep out of reach of children. Keep container tightly closed. Store in suitable labelled containers.

Suitable material : The following compatibility data is suggested based on similar product data and/or industry experience: Shipping and long term storage compatibility with construction materials can vary; we therefore recommend that compatibility is tested prior to use.

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
Phosphoric Acid	7664-38-2	TWA	1 mg/m ³	ACGIH
		STEL	3 mg/m ³	ACGIH
		TWA	1 mg/m ³	NIOSH REL
		ST	3 mg/m ³	NIOSH REL
Sulfuric Acid	7664-93-9	TWA	1 mg/m ³	OSHA Z-1
		TWA (Thoracic particulate matter)	0.2 mg/m ³	ACGIH
		TWA	1 mg/m ³	NIOSH REL
		TWA	1 mg/m ³	OSHA Z-1

SAFETY DATA SHEET

3D TRASAR™ 3DT231

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Eye protection : Safety goggles
Face-shield

Hand protection : Wear the following personal protective equipment:
Standard glove type.
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin protection : Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

The Personal Protective Equipment (PPE) recommendations provided above have been made in good faith based on typical expected conditions of use. PPE selection should always be completed in conjunction with a proper risk assessment and in accordance with a PPE management program.

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Liquid

Colour : clear

Odour : Organic

Flash point : Not applicable.

pH : 1.1

Odour Threshold : no data available

Melting point/freezing point : Freezing Point: -4.6 °C, ASTM D-1177

Initial boiling point and boiling range : no data available

Evaporation rate : no data available

Flammability (solid, gas) : Not applicable.

Upper explosion limit : no data available

Lower explosion limit : no data available

Vapour pressure : 9.60 hPa, (0 °C), ASTM D-2879,
30.7 hPa, (20 °C),
72 hPa, (37.8 °C),
180 hPa, (65.6 °C),

SAFETY DATA SHEET

3D TRASAR™ 3DT231

	706 hPa, (93.3 °C), 1,010 hPa, (103.3 °C),
Relative vapour density	: no data available
Relative density	: 1.13, (15.5 °C),
Density	: 9.4 lb/gal
Water solubility	: no data available
Solubility in other solvents	: no data available
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: no data available
Thermal decomposition	: no data available
Viscosity, dynamic	: 4.14 mPa.s (20 °C), Method: ASTM D-445
Viscosity, kinematic	: no data available
Molecular weight	: no data available
VOC	: no data available

Section: 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Do not mix with bleach or other chlorinated products – will cause chlorine gas.
Conditions to avoid	: Extremes of temperature
Incompatible materials	: Strong bases
Hazardous decomposition products	: In case of fire, hazardous decomposition products may be produced such as: Carbon oxides nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus

Section: 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

Potential Health Effects

Eyes	: Causes serious eye damage.
Skin	: Causes severe skin burns.
Ingestion	: Causes digestive tract burns.

SAFETY DATA SHEET

3D TRASAR™ 3DT231

Inhalation : May cause nose, throat, and lung irritation.
Chronic Exposure : Health injuries are not known or expected under normal use.

Experience with human exposure

Eye contact : Redness, Pain, Corrosion
Skin contact : Redness, Pain, Corrosion
Ingestion : Corrosion, Abdominal pain
Inhalation : Respiratory irritation, Cough

Toxicity

Product

Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg
Acute inhalation toxicity : Acute toxicity estimate: 20.7 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Acute dermal toxicity : no data available
Skin corrosion/irritation : no data available
Serious eye damage/eye irritation : no data available
Respiratory or skin sensitization : no data available
Carcinogenicity : no data available
Reproductive effects : no data available
Germ cell mutagenicity : no data available
Teratogenicity : no data available
STOT - single exposure : no data available
STOT - repeated exposure : no data available
Aspiration toxicity : no data available

Components

Acute dermal toxicity : Phosphoric Acid
LD50 rabbit: > 2,000 mg/kg
Substituted aromatic amine
LD50 rabbit: > 10,000 mg/kg

Section: 12. ECOLOGICAL INFORMATION

Toxicity

Environmental Effects : This product has no known ecotoxicological effects.

Product

SAFETY DATA SHEET

3D TRASAR™ 3DT231

Toxicity to fish : LC50 Fathead Minnow: 2,387 mg/l
Exposure time: 96 hrs
Test substance: Product

NOEC Fathead Minnow: 1,800 mg/l
Exposure time: 96 hrs
Test substance: Product

LC50 Rainbow Trout: 758 mg/l
Exposure time: 96 h
Test substance: Product

NOEC Rainbow Trout: 500 mg/l
Exposure time: 96 h
Test substance: Product

Toxicity to daphnia and other aquatic invertebrates : LC50 Ceriodaphnia dubia: 2,208 mg/l
Exposure time: 48 hrs
Test substance: Product

LOEC Ceriodaphnia dubia: 1,800 mg/l
Exposure time: 48 hrs
Test substance: Product

Components

Toxicity to algae : Phosphoric Acid
EC50 Desmodesmus subspicatus (green algae): > 100 mg/l
Exposure time: 72 h

Substituted aromatic amine
EC50 algae: 15.4 mg/l
Exposure time: 72 h

Components

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : Substituted aromatic amine
NOEC: 0.97 mg/l
Exposure time: 21 d

Persistence and degradability

Total Organic Carbon (TOC) : 66,000 mg/l

Chemical Oxygen Demand (COD): 170,000 mg/l

Biochemical Oxygen Demand (BOD):

Incubation Period	Value	Test Descriptor
5 d	3,300 mg/l	

Mobility

The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the defined media. The information provided is

SAFETY DATA SHEET

3D TRASAR™ 3DT231

intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models.

If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages;

Air	: <5%
Water	: 10 - 30%
Soil	: 70 - 90%

The portion in water is expected to be soluble or dispersible.

Bioaccumulative potential

This preparation or material is not expected to bioaccumulate.

Other information

no data available

Section: 13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it could meet the criteria of a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Before disposal, it should be determined if the waste meets the criteria of a hazardous waste.

Disposal methods : Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of contents/container in accordance with local regulations
Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

Section: 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (DOT)

Proper shipping name	: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
Technical name(s)	: PHOSPHORIC ACID, SULFURIC ACID
UN/ID No.	: UN 3264
Transport hazard class(es)	: 8
Packing group	: III
Reportable Quantity (per package)	: 53,645 lbs
RQ Component	: Sulfuric Acid

Air transport (IATA)

Proper shipping name	: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
Technical name(s)	: PHOSPHORIC ACID, SULFURIC ACID
UN/ID No.	: UN 3264
Transport hazard class(es)	: 8
Packing group	: III

SAFETY DATA SHEET

3D TRASAR™ 3DT231

Reportable Quantity (per package) : 53,645 lbs
RQ Component : Sulfuric Acid

Sea transport (IMDG/IMO)

Proper shipping name : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
Technical name(s) : PHOSPHORIC ACID, SULFURIC ACID
UN/ID No. : UN 3264
Transport hazard class(es) : 8
Packing group : III

Section: 15. REGULATORY INFORMATION

TSCA list : No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Sulfuric Acid	7664-93-9	1000	53645

SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Sulfuric Acid	7664-93-9	1000	53645

SARA 311/312 Hazards : Skin corrosion or irritation
Serious eye damage or eye irritation

SARA 302 : The following components are subject to reporting levels established by SARA Title III, Section 302:
Sulfuric Acid 7664-93-9

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:
Sulfuric Acid 7664-93-9 1 - 5 %

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

INTERNATIONAL CHEMICAL CONTROL LAWS :

Canadian Domestic Substances List (DSL)

The substance(s) in this preparation are included in or exempted from the Domestic Substance List (DSL).

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3D TRASAR™ 3DT231

United States TSCA Inventory

On or in compliance with the active portion of the TSCA inventory

Australia. Australian Industrial Chemicals Introduction Scheme (AICIS)

On the inventory, or in compliance with the inventory.

Japan. ENCS - Existing and New Chemical Substances Inventory

not determined

Korea. Korean Existing Chemicals Inventory (KECI)

On the inventory, or in compliance with the inventory.

Philippines Inventory of Chemicals and Chemical Substances (PICCS)

On the inventory, or in compliance with the inventory.

China Inventory of Existing Chemical Substances

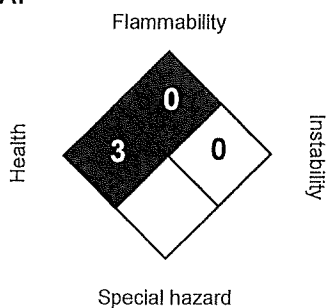
On the inventory, or in compliance with the inventory.

Taiwan Chemical Substance Inventory

not determined

Section: 16. OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Revision Date : 04/13/2022
Version Number : 1.7
Prepared By : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. For additional copies of an SDS visit www.nalco.com and request access.

Safety Data Sheet**SODIUM HYPOCHLORITE 12.5%**

Version 1.18

Revision Date: 02/10/2022

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**Product name** : SODIUM HYPOCHLORITE 12.5%**Recommended use of the chemical and restrictions on use****Recommended use** : Reserved for industrial and professional use.**Manufacturer or supplier's details****Company** : Univar Solutions USA, Inc.
Address : 3075 Highland Pkwy Suite 200
Downers Grove, IL 60515
United States of America (USA)**Emergency telephone number:**Transport North America: CHEMTREC (1-800-424-9300)
CHEMTREC INTERNATIONAL Tel # 703-527-3887**Additional Information:** : Responsible Party: Product Compliance Department
E-mail: SDSNA@univarsolutions.com
SDS Requests: 1-855-429-2661
Website: www.univarsolutions.com**SECTION 2. HAZARDS IDENTIFICATION****GHS Classification**

Corrosive to metals : Category 1

Skin corrosion : Category 1

Serious eye damage : Category 1

GHS label elements**Hazard pictograms** :**Signal word** : Danger**Hazard statements** : H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.**Precautionary statements** : **Prevention:**
P234 Keep only in original container.
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.

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P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.

P363 Wash contaminated clothing before reuse.

P390 Absorb spillage to prevent material damage.

Storage:

P405 Store locked up.

P406 Store in corrosive resistant container with a resistant inner liner.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

CAS-No.	Chemical name	Weight percent
7681-52-9	Sodium hypochlorite	12.5
1310-73-2	Sodium hydroxide	0 - 5

Actual concentration is withheld as a trade secret

Any Concentration shown as a range is due to batch variation.

Synonyms : Liquichlor, Bleach,

SECTION 4. FIRST AID MEASURES

General advice : Show this safety data sheet to the doctor in attendance.
Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

If inhaled : Take victim immediately to hospital.

Move to fresh air.

If breathing has stopped, apply artificial respiration.

If unconscious, place in recovery position and seek medical advice.

If symptoms persist, call a physician.

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- | | |
|-------------------------|---|
| In case of skin contact | : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Remove contaminated clothing. If irritation develops, get medical attention.
Burns must be treated by a physician. |
| In case of eye contact | : In case of eye contact
Immediately flush eye(s) with plenty of water.
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If easy to do, remove contact lens, if worn.
If eye irritation persists, consult a specialist.
Take victim immediately to hospital. |
| If swallowed | : Take victim immediately to hospital.
Do NOT induce vomiting.
Rinse mouth with water.
If victim is fully conscious, give a cupful of water.
If a person vomits when lying on his back, place him in the recovery position. |

SECTION 5. FIREFIGHTING MEASURES

- | | |
|---|---|
| Suitable extinguishing media | : Carbon dioxide (CO2)
Foam
Dry powder |
| Unsuitable extinguishing media | : High volume water jet |
| Specific hazards during fire-fighting | : Do not allow run-off from fire fighting to enter drains or water courses. |
| Hazardous combustion products | : No hazardous combustion products are known |
| Further information | : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |
| Special protective equipment for firefighters | : Wear self-contained breathing apparatus for firefighting if necessary. |

SECTION 6. ACCIDENTAL RELEASE MEASURES

- | | |
|---|--------------------------------------|
| Personal precautions, protective equipment and emergency procedures | : Use personal protective equipment. |
|---|--------------------------------------|

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- Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Neutralise with acid.
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Normal measures for preventive fire protection.
- Advice on safe handling : Do not breathe vapours/dust.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
To avoid spills during handling keep bottle on a metal tray.
Dispose of rinse water in accordance with local and national regulations.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

CAS-No.	Components	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
7681-52-9	Sodium hypochlorite	STEL	2 mg/m ³	US WEEL
1310-73-2	Sodium hydroxide	C	2 mg/m ³	ACGIH
		C	2 mg/m ³	NIOSH REL
		TWA	2 mg/m ³	OSHA Z-1
		C	2 mg/m ³	OSHA P0
		C	2 mg/m ³	CAL PEL

Personal protective equipment

- Respiratory protection : General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn.
Follow OSHA respirator regulations (29 CFR 1910.134) and

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use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

Hand protection

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: clear yellow
Odour	: Chlorine
Odour Threshold	: No data available
pH	: 11.5 - 13
Freezing Point (Melting point/freezing point)	: -20 - -15 °C (-4 - 5 °F)
Boiling Point ()	: 230 °F (230 °F) Decomposition: Decomposition temperature
Flash point	: Not Flammable
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper explosion limit	: No data available

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Lower explosion limit	: No data available
Vapour pressure	: 12 - 17.5 mmHg @ 20 °C (68 °F)
Relative vapour density	: No data available
Relative density	: 1.17 @ 20 °C (68 °F) Reference substance: (water = 1)
Density	: 1.17 g/cm ³
Solubility(ies) Water solubility	: completely soluble
Solubility in other solvents	: No data available
Partition coefficient: n- octanol/water	: No data available
Auto-ignition temperature	: No data available
Thermal decomposition	: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable
Possibility of hazardous reactions	: No hazards to be specially mentioned.
Conditions to avoid	: Keep away from heat, flame, sparks and other ignition sources.
Incompatible materials	: Acids Combustible material Halogenated compounds Metals metal salts Organic materials organic nitro compounds Zinc

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity**

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Components:**7681-52-9:**

Acute oral toxicity : LD50 (Rat, male): > 2,000 mg/kg

1310-73-2:

Acute oral toxicity : LD50 (Rabbit): 325 mg/kg

Skin corrosion/irritation**Components:****7681-52-9:**

Species: Rabbit

Result: Causes burns.

1310-73-2:

Species: Rabbit

Result: Causes severe burns.

Serious eye damage/eye irritation**Components:****7681-52-9:**

Species: Rabbit

Result: Risk of serious damage to eyes.

1310-73-2:

Species: Rabbit

Result: Risk of serious damage to eyes.

Carcinogenicity**IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

STOT - single exposure**Components:****7681-52-9:**

Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

Further information**Product:**

Remarks: No data available

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SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:****7681-52-9:**

- Toxicity to fish : LC50 (Salmo gairdneri (Rainbow Fish)): 0.06 mg/l
Exposure time: 96 h
Test Type: flow-through test
- LC50 (Pimephales promelas (fathead minnow)): 5.9 mg/l
Exposure time: 96 h
Test Type: static test
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.141 mg/l
Exposure time: 48 h
Test Type: flow-through test
- EC50 (Ceriodaphnia dubia): 0.035 mg/l
Exposure time: 48 h
Test Type: flow-through test
- Toxicity to algae : IC50: 0.023 mg/l
Exposure time: 7 d
Test Type: flow-through test
- M-Factor (Acute aquatic toxicity) : 10
- Acute aquatic toxicity- Assessment : Very toxic to aquatic life.
- Chronic aquatic toxicity- Assessment : Toxic to aquatic life with long lasting effects.

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects**Product:**

- Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I

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Substances

Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information

: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life.
Harmful to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues

: Dispose of in accordance with all applicable local, state and federal regulations.
For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Univar Solutions ChemCare: 1-800-637-7922

Contaminated packaging

: Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

DOT (Department of Transportation):

UN1791, Hypochlorite solutions, 8, III, Marine Pollutant (SODIUM HYPOCHLORITE)

IATA (International Air Transport Association):

UN1791, Hypochlorite solution, 8, III

IMDG (International Maritime Dangerous Goods):

UN1791, HYPOCHLORITE SOLUTION, 8, III, Marine Pollutant (SODIUM HYPOCHLORITE)

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Sodium hypochlorite	7681-52-9	100	800
Sodium hydroxide	1310-73-2	1000	20000

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards

: Corrosive to metals

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Skin corrosion or irritation
Serious eye damage or eye irritation

SARA 302 : This material does not contain any components with a section 302 EHS TPQ.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

7681-52-9	Sodium hypochlorite
1310-73-2	Sodium hydroxide

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

7681-52-9	Sodium hypochlorite
1310-73-2	Sodium hydroxide

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

Massachusetts Right To Know

7681-52-9	Sodium hypochlorite
1310-73-2	Sodium hydroxide

Pennsylvania Right To Know

7732-18-5	Water
7681-52-9	Sodium hypochlorite
1310-73-2	Sodium hydroxide

California Prop 65 : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:

TSCA	: On TSCA Inventory
DSL	: All components of this product are on the Canadian DSL
AICS	: On the inventory, or in compliance with the inventory
NZIoC	: Not in compliance with the inventory
ENCS	: On the inventory, or in compliance with the inventory
KECI	: On the inventory, or in compliance with the inventory
PICCS	: On the inventory, or in compliance with the inventory

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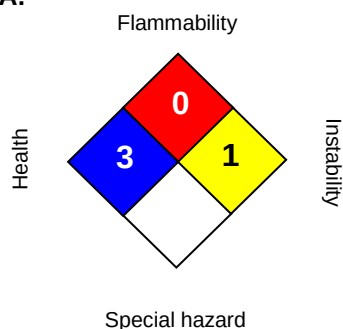
Revision Date: 02/10/2022

IECSC

: On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	3/
FLAMMABILITY	0
PHYSICAL HAZARD	1

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by NEXEO™ Solutions EHS Product Safety Department (1-855-429-2661) MSDS@nexeosolutions.com.

Revision Date : 02/10/2022

Legacy SDS: : R0004191

Material number:

16185565, 16185315, 16182803, 16182803, 16182146, 16180800, 16151747, 16144335, 16147791, 16179440, 16164756, 16164762, 16164766, 16173035, 16172686, 16173104, 16164347, 16164592, 16164731, 16164730, 16164686, 16164337, 16172598, 16147922, 16146040, 16151002, 16149524, 16158615, 16145640, 16148059, 16144666, 16147989, 16163791, 16160423, 16160441, 16158853, 16151253, 16149870, 16148071, 16148060, 16147684, 16147117, 16146776, 16146856, 16146855, 16146854, 16145965, 16145895, 16145890, 16145584, 16145144, 16145142, 16145140, 16145138, 16145137, 16145133, 16145130, 16145079, 16159810, 16150495, 16149123, 16147041, 16145471, 16144665, 16145772, 16145833, 16148433, 16148183, 16148162, 16145046, 16143737, 16135287, 16163624, 16161401, 16148721, 16155765, 16158840, 16145484, 16166710, 16148748, 16148260, 16166763, 16166591, 16145834, 16166014, 16159793, 16162934, 16165524, 16165444, 16165066, 16137823, 16137455, 16137753, 16147687, 16144215, 16150496, 16149504, 16145673, 16149243, 16136536

Safety Data Sheet

SODIUM HYPOCHLORITE 12.5%

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Revision Date: 02/10/2022

Key or legend to abbreviations and acronyms used in the safety data sheet			
ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%		



SAFETY DATA SHEET

Section 1. Chemical Product and Company Identification

Product Name: ChemTreat P829L
Product Use: Water Clarification Agent
Supplier's Name: ChemTreat, Inc.
Emergency Telephone Number: (800)424-9300 (Toll Free)
Address (Corporate Headquarters): 5640 Cox Road
Glen Allen, VA 23060
Telephone Number for Information: (800)648-4579
Date of MSDS: January 5, 2015
Revision Date: January 5, 2015
Revision Number: 15010501AN

Section 2. Hazard(s) Identification



Signal Word: WARNING

GHS Classification(s): Acute Toxicity Dermal – Category 5
Acute Toxicity Inhalation – Category 5
Acute Toxicity Oral – Category 5
Hazardous to the aquatic environment Acute – Category 1

Hazard Statement(s): May be harmful in contact with skin.
May be harmful if inhaled.
May be harmful if swallowed.
Very toxic to aquatic life.

Precautionary Statement(s): Avoid release into the environment.

Section 3. Composition/Hazardous Ingredients

Component	CAS Registry #	Wt.%
Copolymer of Epichlorohydrine and Dimethylamine	25988-97-0	15 – 40

Comments N/A

Section 4. First Aid Measures

Inhalation:	Remove to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.
Eyes:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.
Skin:	Wash with plenty of soap and water. Call a poison center or doctor/physician if you feel unwell.
Ingestion:	DO NOT INDUCE VOMITING. Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.
Notes to Physician:	N/A
Additional First Aid Remarks:	N/A

Section 5. Fire Fighting Measures

Flammability of the Product:	Not flammable.
Suitable Extinguishing Media:	Use extinguishing media suitable to surrounding fire.
Specific Hazards Arising from the Chemical:	None known.
Protective Equipment:	If product is involved in a fire, wear full protective clothing including a positive-pressure, NIOSH approved, self-contained breathing apparatus.

Section 6. Accidental Release Measures

Personal Precautions:	Use appropriate Personal Protective Equipment (PPE).
Environmental Precautions:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.



Methods for Cleaning up: Contain and recover liquid when possible. Flush spill area with water spray.
Material is very slippery if spilled.

Other Statements: None.

Section 7. Handling and Storage

Handling: Wear appropriate Personal Protective Equipment (PPE) when handling this product. Do not get in eyes, or on skin and clothing. Wash thoroughly after handling. Do not ingest. Avoid breathing vapors, mist or dust.

Storage: Store away from incompatible materials (see Section 10). Store at ambient temperatures. Keep container securely closed when not in use. Label precautions also apply to empty container. Recondition or dispose of empty containers in accordance with government regulations. For Industrial use only.
Protect from heat and sources of ignition.
Do not freeze. Store above Freeze Point. If freezes, then mechanical mixing is required.

Section 8. Exposure Controls/Personal Protection

Exposure Limits

Component	Source	Exposure Limits
Copolymer of Epichlorohydrine and Dimethylamine	N/E	N/E

Engineering Controls: Use only with adequate ventilation. The use of local ventilation is recommended to control emission near the source.

Personal Protection

Eyes: Wear chemical splash goggles or safety glasses with full-face shield. Maintain eyewash fountain in work area.

Skin: Maintain quick-drench facilities in work area.
Wear butyl rubber or neoprene gloves. Wash them after each use and replace as necessary. If conditions warrant, wear protective clothing such as boots, aprons, and coveralls to prevent skin contact.

Respiratory:

If misting occurs, use NIOSH approved organic vapor/acid gas dual cartridge respirator with a dust/mist prefilter in accordance with 29 CFR 1910.134.

Section 9. Physical and Chemical Properties

Physical State and Appearance:	Liquid, Straw, Clear
Specific Gravity:	1.088 @ 20°C
pH:	5.7 @ 20°C, 100.0%
Freezing Point:	30°F
Flash Point:	>200°F
Odor:	Mild
Melting Point:	N/A
Boiling Point:	N/D
Solubility in Water:	Complete
Evaporation Rate:	Similar to water
Vapor Density:	Similar to water
Molecular Weight:	N/D
Viscosity:	N/A
Flammable Limits:	N/A
Autoignition Temperature:	N/A
Density:	9.07 LB/GA
Vapor Pressure:	N/A
% VOC:	70
Odor Threshold	N/D
n-octanol Partition Coefficient	N/D
Decomposition Temperature	N/D

Section 10. Stability and Reactivity

Chemical Stability:	Stable at normal temperatures and pressures.
Incompatibility with Various Substances:	Strong oxidizers, Strong bases.
Hazardous Decomposition Products:	Oxides of carbon, Oxides of nitrogen, Ammonia.
Possibility of Hazardous Reactions:	None known.

Section 11. Toxicological Information

Chemical Name	Exposure	Type of Effect	Concentration	Species
N/D	N/D	N/D	N/D	N/D

Carcinogenicity Category

Component	Source	Code	Brief Description
Copolymer of Epichlorohydrine and Dimethylamine	N/E	N/E	N/E

Comments: None.

Section 12. Ecological Information

Species	Duration	Type of Effect	Test Results
Ceriodaphnia dubia	48h	LC50	0.817 mg/l
Fathead Minnow	96h	LC50	1.752 mg/l

Comments: None.

Section 13. Disposal Considerations

Dispose of in accordance with local, state and federal regulations.
Not a RCRA-regulated hazardous waste when disposed in the original product form.

Section 14. Transport Information

Controlling Regulation	Proper Shipping Name:	Technical Name:	Hazard Class:	UN/NA#:	Packing Group:
DOT	COMPOUND, INDUSTRIAL WATER TREATMENT, LIQUID	N/A	Not D.O.T. Regulated	N/A	N/A
IMDG	COMPOUND, INDUSTRIAL WATER TREATMENT, LIQUID	N/A	Not D.O.T. Regulated	N/A	N/A
TDG	COMPOUND, INDUSTRIAL WATER TREATMENT, LIQUID	N/A	Not D.O.T. Regulated	N/A	N/A
ICAO	COMPOUND, INDUSTRIAL WATER TREATMENT, LIQUID	N/A	Not D.O.T. Regulated	N/A	N/A



Note: N/A

Section 15. Regulatory Information

Inventory Status

United States (TSCA):
Canada (DSL/NDSL):

All ingredients listed.
All ingredients listed.

Federal Regulations

SARA Title III Rules

Sections 311/312 Hazard Classes

Fire Hazard:	No
Reactive Hazard:	No
Release of Pressure:	No
Acute Health Hazard:	Yes
Chronic Health Hazard:	No

Other Sections

Component	Section 313 Toxic Chemical	Section 302 EHS TPQ	CERCLA RQ
Copolymer of Epichlorohydrine and Dimethylamine	N/A	N/A	N/A

Comments: None.

State Regulations

California Proposition 65: None known.

Special Regulations

Component	States
Copolymer of Epichlorohydrine and Dimethylamine	None.



International Regulations

Canada

WHMIS Classification: N/A

Controlled Product Regulations (CPR): N/A

Section 16. Other Information

HMIS Hazard Rating

Health:	1
Flammability:	0
Physical Hazard:	0
PPE:	X

Notes:

The PPE rating depends on circumstances of use. See Section 8 for recommended PPE.

The Hazardous Material Information System (HMIS) is a voluntary, subjective alpha-numeric symbolic system for recommending hazard risk and personal protection equipment information. It is a subjective rating system based on the evaluator's understanding of the chemical associated risks. The end-user must determine if the code is appropriate for their use.

NSF:

Certified to NSF/ANSI Standard 60
Maximum use rate for potable water – 32 mg/l
This product ships as NSF from:
Facility #2 USA

FDA/USDA/GRAS:

N/A

KOSHER:

This product is certified by the Louisiana Kashrut Committee as kosher pareve.

FIFRA:

N/A

Other:

None

Abbreviations

Abbreviation	Definition
<	Less Than
>	Greater Than
ACGIH	American Conference of Governmental Industrial Hygienists



Abbreviation	Definition
EHS	Environmental Health and Safety Dept
N/A	Not Applicable
N/D	Not Determined
N/E	Not Established
OSHA	Occupational Health and Safety Dept
PEL	Personal Exposure Limit
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weight Average
UNK	Unknown

Prepared by: Product Compliance Department; ProductCompliance@chemtreat.com

Disclaimer

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Section 1. Chemical Product and Company Identification

Product Name:	ChemTreat P890L
Product Use:	Water Clarification Agent
Supplier's Name:	ChemTreat, Inc.
Emergency Telephone Number:	(800)424-9300 (Toll Free)
Address (Corporate Headquarters):	5640 Cox Road Glen Allen, VA 23060
Telephone Number for Information:	(800)648-4579
Date of MSDS:	January 5, 2015
Revision Date:	January 5, 2015
Revision Number:	15010501AN

Section 2. Hazard(s) Identification

Signal Word:	WARNING
GHS Classification(s):	Acute Toxicity Dermal – Category 5 Acute Toxicity Inhalation – Category 5 Acute Toxicity Oral – Category 5
Hazard Statement(s):	May be harmful in contact with skin. May be harmful if inhaled. May be harmful if swallowed.
Precautionary Statement(s):	No significant health risks are expected from exposures under normal conditions of use.

Section 3. Composition/Hazardous Ingredients

Component	CAS Registry #	Wt.%
Polyaluminum chloride	1327-41-9	15 – 40

Comments N/A

Section 4. First Aid Measures

Inhalation:	Remove to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.
Eyes:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.
Skin:	Wash with plenty of soap and water. Call a poison center or doctor/physician if you feel unwell.
Ingestion:	DO NOT INDUCE VOMITING. Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.
Notes to Physician:	N/A
Additional First Aid Remarks:	N/A

Section 5. Fire Fighting Measures

Flammability of the Product:	Not flammable.
Suitable Extinguishing Media:	Use extinguishing media suitable to surrounding fire.
Specific Hazards Arising from the Chemical:	None known.
Protective Equipment:	If product is involved in a fire, wear full protective clothing including a positive-pressure, NIOSH approved, self-contained breathing apparatus.

Section 6. Accidental Release Measures

Personal Precautions:	Use appropriate Personal Protective Equipment (PPE).
Environmental Precautions:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.



Methods for Cleaning up: Contain and recover liquid when possible. Flush spill area with water spray.

Other Statements: None.

Section 7. Handling and Storage

Handling: Wear appropriate Personal Protective Equipment (PPE) when handling this product. Do not get in eyes, or on skin and clothing. Wash thoroughly after handling. Do not ingest. Avoid breathing vapors, mist or dust.

Storage: Store away from incompatible materials (see Section 10). Store at ambient temperatures. Keep container securely closed when not in use. Label precautions also apply to empty container. Recondition or dispose of empty containers in accordance with government regulations. For Industrial use only. Protect from heat and sources of ignition. Do not freeze. Store above Freeze Point. If freezes, then mechanical mixing is required.

Section 8. Exposure Controls/Personal Protection

Exposure Limits

Component	Source	Exposure Limits
Polyaluminum chloride	N/E	N/E

Engineering Controls: Use only with adequate ventilation. The use of local ventilation is recommended to control emission near the source.

Personal Protection

Eyes: Wear chemical splash goggles or safety glasses with full-face shield. Maintain eyewash fountain in work area.

Skin: Maintain quick-drench facilities in work area. Wear butyl rubber or neoprene gloves. Wash them after each use and replace as necessary. If conditions warrant, wear protective clothing such as boots, aprons, and coveralls to prevent skin contact.

Respiratory: If misting occurs, use NIOSH approved organic vapor/acid gas dual cartridge respirator with a dust/mist prefilter in accordance with 29 CFR 1910.134.

Section 9. Physical and Chemical Properties

Physical State and Appearance:	Liquid, Colorless, Clear
Specific Gravity:	1.201 @ 20°C
pH:	2.7 @ 20°C, 100.0%
Freezing Point:	32°F
Flash Point:	N/D
Odor:	Mild
Melting Point:	N/D
Boiling Point:	220°F
Solubility in Water:	Miscible
Evaporation Rate:	N/D
Vapor Density:	N/D
Molecular Weight:	N/D
Viscosity:	N/A
Flammable Limits:	N/A
Autoignition Temperature:	N/A
Density:	10.02 LB/GA
Vapor Pressure:	N/D
% VOC:	0
Odor Threshold	N/D
n-octanol Partition Coefficient	N/D
Decomposition Temperature	N/D

Section 10. Stability and Reactivity

Chemical Stability:	Stable at normal temperatures and pressures.
Incompatibility with Various Substances:	Strong oxidizers, Strong bases.
Hazardous Decomposition Products:	None known.
Possibility of Hazardous Reactions:	None known.

Section 11. Toxicological Information

Chemical Name	Exposure	Type of Effect	Concentration	Species
N/D	N/D	N/D	N/D	N/D

Carcinogenicity Category

Component	Source	Code	Brief Description
Polyaluminum chloride	N/E	N/E	N/E

Comments: None.

Section 12. Ecological Information

Species	Duration	Type of Effect	Test Results
Fathead Minnow	96h	LC50	230.4 mg/l
Sheepshead Minnow	96h	LC50	>1000 mg/l
Mysid Shrimp	48h	LC50	>1000 mg/l
Ceriodaphnia dubia	7d	NOEC	<20 mg/l
	7d	LOEC	20 mg/l
	7d	IC25	28 mg/l

Comments: NOEC effect = Reproduction
Water clarification polymers function by multipoint adsorption and charge neutralization with suspended solids. Polymers inherently migrate with solids in the separation process and with the exception of uneconomic overdose do not remain in the clarified waters. Aquatic toxicity determinations in test method protocol waters without suspended solids overestimate the toxicity compared to natural receiving waters.

Section 13. Disposal Considerations

Dispose of in accordance with local, state and federal regulations.
Not a RCRA-regulated hazardous waste when disposed in the original product form.

Section 14. Transport Information

Controlling Regulation	Proper Shipping Name:	Technical Name:	Hazard Class:	UN/NA#:	Packing Group:
DOT	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.	(POLYALUMINUM CHLORIDE)	Corrosive	UN3264	PGIII
IMDG	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.	(POLYALUMINUM CHLORIDE)	Corrosive	UN3264	PGIII
ICAO	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.	(POLYALUMINUM CHLORIDE)	Corrosive	UN3264	PGIII
TDG	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.	(POLYALUMINUM CHLORIDE)	Corrosive	UN3264	PGIII

Note: N/A

Section 15. Regulatory Information

Inventory Status

United States (TSCA):
Canada (DSL/NDL):

All ingredients listed.
All ingredients listed.

Federal Regulations

SARA Title III Rules

Sections 311/312 Hazard Classes

Fire Hazard:	No
Reactive Hazard:	No
Release of Pressure:	No
Acute Health Hazard:	Yes
Chronic Health Hazard:	No

Other Sections

Component	Section 313 Toxic Chemical	Section 302 EHS TPQ	CERCLA RQ
Polyaluminum chloride	N/A	N/A	N/A

Comments: None.

State Regulations

California Proposition 65: None known.

Special Regulations

Component	States
Polyaluminum chloride	None.

International Regulations

Canada

WHMIS Classification: E (Corrosive Material)

Controlled Product Regulations (CPR): This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Section 16. Other Information

HMIS Hazard Rating

Health:	1
Flammability:	0
Physical Hazard:	0
PPE:	X

Notes:

The PPE rating depends on circumstances of use. See Section 8 for recommended PPE.

The Hazardous Material Information System (HMIS) is a voluntary, subjective alpha-numeric symbolic system for recommending hazard risk and personal protection equipment information. It is a subjective rating system based on the evaluator's understanding of the chemical associated risks. The end-user must determine if the code is appropriate for their use.



NSF: Certified to NSF/ANSI Standard 60
Maximum use rate for potable water – 250 mg/L
This product ships as NSF from:
Eldridge, IA
Nederland, TX
Ashland, VA
Facility #8 UK
Facility #4 USA
Facility #7 USA

FDA/USDA/GRAS: N/A

KOSHER: This product has not been evaluated for Kosher approval.

FIFRA: N/A

Other: None

Abbreviations

Abbreviation	Definition
<	Less Than
>	Greater Than
ACGIH	American Conference of Governmental Industrial Hygienists
EHS	Environmental Health and Safety Dept
N/A	Not Applicable
N/D	Not Determined
N/E	Not Established
OSHA	Occupational Health and Safety Dept
PEL	Personal Exposure Limit
STEL	Short Term Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weight Average
UNK	Unknown

Prepared by: Product Compliance Department; ProductCompliance@chemtreat.com

Disclaimer

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Section: 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : CONQUOR™ CNQR3588

Other means of identification : Not applicable.

Recommended use : CORROSION INHIBITOR

Restrictions on use : Refer to available product literature or ask your local Sales Representative for restrictions on use and dose limits.

Company : Nalco Company
1601 W. Diehl Road
Naperville, Illinois 60563-1198
USA
TEL: (630) 305-1000

Emergency telephone number : (800) 424-9300 (24 Hours) CHEMTREC

Issuing date : 09/28/2021

Section: 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 4

Acute toxicity (Oral) : Category 4

Acute toxicity (Dermal) : Category 4

Skin corrosion : Category 1A

Serious eye damage : Category 1

Skin sensitization : Category 1

Reproductive toxicity : Category 2

GHS Label element

Hazard pictograms :



Signal Word : Danger

Hazard Statements : Combustible liquid
Harmful if swallowed or in contact with skin.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
Suspected of damaging fertility or the unborn child.

Precautionary Statements : **Prevention:**
Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel

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unwell. Rinse mouth. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Storage:

Store in a well-ventilated place.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Other hazards : None known.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	Concentration: (%)
Methoxypropylamine	5332-73-0	10 - 30
Cyclohexylamine	108-91-8	10 - 30
Diethylhydroxylamine	3710-84-7	1 - 5

Section: 4. FIRST AID MEASURES

In case of eye contact	: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
In case of skin contact	: Wash off immediately with plenty of water for at least 15 minutes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
If swallowed	: Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
If inhaled	: Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.
Protection of first-aiders	: In event of emergency assess the danger before taking action. Do not put yourself at risk of injury. If in doubt, contact emergency responders. Use personal protective equipment as required.
Notes to physician	: Treat symptomatically.
Most important symptoms and effects, both acute and delayed	: See Section 11 for more detailed information on health effects and symptoms.

Section: 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Foam Carbon dioxide Dry powder Other extinguishing agent suitable for Class B fires For large fires, use water spray or fog, thoroughly drenching the burning
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material.

- Unsuitable extinguishing media : None known.
- Specific hazards during firefighting : Fire Hazard
Keep away from heat and sources of ignition.
Flash back possible over considerable distance.
- Hazardous combustion products : Decomposition products may include the following materials: Carbon oxides
nitrogen oxides (NOx)
- Special protective equipment for firefighters : Use personal protective equipment.
- Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

Section: 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Remove all sources of ignition. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Do not allow contact with soil, surface or ground water.
- Methods and materials for containment and cleaning up : Eliminate all ignition sources if safe to do so. Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Flush away traces with water.

Section: 7. HANDLING AND STORAGE

- Advice on safe handling : Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Do not ingest. Keep away from fire, sparks and heated surfaces. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wash hands thoroughly after handling. Use only with adequate ventilation.
- Conditions for safe storage : Keep away from heat and sources of ignition. Keep away from oxidizing agents. Keep out of reach of children. Keep container tightly closed. Store in suitable labelled containers.
- Suitable material : The following compatibility data is suggested based on similar product data and/or industry experience: Compatibility with Plastic Materials can vary; we therefore recommend that compatibility is tested prior to use.
- Unsuitable material : not determined

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Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
Methoxypropylamine	5332-73-0	TWA	5 ppm	AIHA WEEL
		STEL	15 ppm	AIHA WEEL
Cyclohexylamine	108-91-8	TWA	10 ppm	ACGIH
		TWA	10 ppm 40 mg/m3	NIOSH REL
Diethylhydroxylamine	3710-84-7	TWA	2 ppm	ACGIH

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Eye protection : Safety goggles
Face-shield

Hand protection : Wear impervious chemical-resistant gloves when handling this product. The following glove types are recommended based on our review of glove manufacturer information and/or other available sources.
Butyl rubber
Viton® gloves
Other glove types may be used for short term, incidental contact if determined by testing to provide adequate worker protection.
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin protection : Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

Respiratory protection : Use local exhaust ventilation or other engineering controls as necessary to control airborne mist and vapor.
Where concentrations in air may exceed the limits given in this section or when significant mists, vapors, aerosols are generated, an approved air purifying respirator equipped with suitable filter cartridges is recommended.
Use a particulate pre-filter where operations generate significant mists or aerosols.
Recommended gas and vapour cartridge:
Ammonia / amine cartridge.
In event of emergency or planned entry into unknown concentrations, a positive pressure, full-facepiece SCBA or supplied-air respirator should be used.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

The Personal Protective Equipment (PPE) recommendations provided above have been made in good faith based on typical expected conditions of use. PPE selection should always be completed in conjunction with a proper risk assessment and in accordance with a PPE management program.

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Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Liquid
Colour	: clear
Odour	: amine-like
Flash point	: 70 °C, Method: ASTM D 93, Pensky-Martens closed cup
pH	: 12.8 - 13.0,(100)
Odour Threshold	: no data available
Melting point/freezing point	: no data available
Initial boiling point and boiling range	: 96.1 °C, Method: ASTM D 86
Evaporation rate	: no data available
Flammability (solid, gas)	: Not applicable.
Upper explosion limit	: no data available
Lower explosion limit	: no data available
Vapour pressure	: 24.8 mm Hg, ASTM D 5191,
Relative vapour density	: no data available
Relative density	: 0.949 - 0.961,
Density	: 7.9 - 8.01 lb/gal
Water solubility	: completely soluble
Solubility in other solvents	: no data available
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: no data available
Thermal decomposition	: no data available
Viscosity, dynamic	: no data available
Viscosity, kinematic	: no data available
Molecular weight	: no data available
VOC	: 43.53 %, 419.3 g/l, EPA Method 24

Section: 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use.
Conditions to avoid	: Heat, flames and sparks.

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Incompatible materials : Strong oxidizing agents

Hazardous decomposition products : In case of fire, hazardous decomposition products may be produced such as:
Carbon oxides
nitrogen oxides (NOx)

Section: 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

Potential Health Effects

Eyes : Causes serious eye damage.

Skin : Harmful in contact with skin. Causes severe skin burns. May cause allergic skin reaction.

Ingestion : Harmful if swallowed. Causes digestive tract burns.

Inhalation : May cause nose, throat, and lung irritation.

Chronic Exposure : Suspected of damaging fertility or the unborn child.

Experience with human exposure

Eye contact : Redness, Pain, Corrosion

Skin contact : Redness, Pain, Irritation, Corrosion, Allergic reactions

Ingestion : Corrosion, Abdominal pain

Inhalation : Respiratory irritation, Cough

Toxicity

Product

Acute oral toxicity : Acute toxicity estimate: 1,234 mg/kg

Acute inhalation toxicity : Acute toxicity estimate: > 200 mg/l
Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : Acute toxicity estimate: 1,275 mg/kg

Skin corrosion/irritation : no data available

Serious eye damage/eye irritation : no data available

Respiratory or skin sensitization : no data available

Carcinogenicity : no data available

Reproductive effects : Prolonged exposure to cyclohexylamine in the diet has produced reproductive

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effects in rats. The relevance to humans is unknown.

- Germ cell mutagenicity : A mutagenicity test battery on cyclohexylamine was inconclusive. In a short-term test, cyclohexylamine caused mutation in human white blood cells. A bacterial mutagenicity (Ames) bioassay was negative for methoxypropylamine.
- Teratogenicity : no data available
- STOT - single exposure : no data available
- STOT - repeated exposure : no data available
- Aspiration toxicity : no data available

Section: 12. ECOLOGICAL INFORMATION

Toxicity

- Environmental Effects : This product has no known ecotoxicological effects.

Product

- Toxicity to fish : LC50 Pimephales promelas (fathead minnow): 220 mg/l
Exposure time: 96 hrs
Test substance: Product
- NOEC Pimephales promelas (fathead minnow): 125 mg/l
Exposure time: 96 hrs
Test substance: Product
- Toxicity to daphnia and other aquatic invertebrates : LC50 Ceriodaphnia dubia: 157 mg/l
Exposure time: 48 hrs
Test substance: Product
- LC50 Daphnia magna (Water flea): 274 mg/l
Exposure time: 48 hrs
Test substance: Product
- NOEC Ceriodaphnia dubia: 62.5 mg/l
Exposure time: 48 hrs
Test substance: Product
- Toxicity to fish (Chronic toxicity) : LOEC: 100 mg/l
Exposure time: 7 Days
Species: Fathead Minnow
Test substance: Product
- NOEC: 50 mg/l
Exposure time: 7 Days
Species: Fathead Minnow
Test substance: Product
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : LOEC: 25 mg/l
Exposure time: 7 Days
Species: Ceriodaphnia dubia
Test substance: Product
Test Type: 3 Brood

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NOEC: 12.5 mg/l
Exposure time: 7 Days
Species: Ceriodaphnia dubia
Test substance: Product
Test Type: 3 Brood

Components

Toxicity to algae : Methoxypropylamine
EC50 : 31 mg/l
Exposure time: 72 h

Diethylhydroxylamine
EC50 Pseudokirchneriella subcapitata (algae): > 101 mg/l
Exposure time: 72 h

Persistence and degradability

Chemical Oxygen Demand (COD): 1,100,000 mg/l

Biochemical Oxygen Demand (BOD):

Incubation Period	Value	Test Descriptor
5 d	11,200 mg/l	Product

Mobility

The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models.

If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages;

Air	: <5%
Water	: 30 - 50%
Soil	: 50 - 70%

The portion in water is expected to be soluble or dispersible.

Bioaccumulative potential

no data available

Other information

no data available

Section: 13. DISPOSAL CONSIDERATIONS

Disposal methods : Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an

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CONQUOR™ CNQR3588

approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

Section: 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

The presence of an RQ component (Reportable Quantity for U.S. DOT) in this product causes it to be regulated with an additional description of RQ for road, or as Environmentally hazardous for road and air, ONLY when the net weight in the package exceeds the calculated RQ for the product.

Land transport (DOT)

Proper shipping name : AMINES, LIQUID, CORROSIVE, N.O.S.
Technical name(s) : Cyclohexylamine, Methoxypropylamine
UN/ID No. : UN 2735
Transport hazard class(es) : 8
Packing group : II
Reportable Quantity (per package) : 470 lbs
RQ Component : Methoxypropylamine

Air transport (IATA)

Proper shipping name : AMINES, LIQUID, CORROSIVE, N.O.S.
Technical name(s) : Cyclohexylamine, Methoxypropylamine
UN/ID No. : UN 2735
Transport hazard class(es) : 8
Packing group : II
Reportable Quantity (per package) : 470 lbs
RQ Component : Methoxypropylamine

Sea transport (IMDG/IMO)

Proper shipping name : AMINES, LIQUID, CORROSIVE, N.O.S.
Technical name(s) : Cyclohexylamine, Methoxypropylamine
UN/ID No. : UN 2735
Transport hazard class(es) : 8
Packing group : II

Section: 15. REGULATORY INFORMATION

TSCA list : No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

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This product does not contain a RQ substance, or this product contains a substance with a RQ, however the calculated RQ exceeds the reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Cyclohexylamine	108-91-8	10000	47339

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)
Acute toxicity (any route of exposure)
Respiratory or skin sensitisation
Reproductive toxicity
Skin corrosion or irritation
Serious eye damage or eye irritation

SARA 302 : The following components are subject to reporting levels established by SARA Title III, Section 302:

Cyclohexylamine 108-91-8

The following components are subject to reporting levels established by SARA Title III, Section 302:

Cyclohexylamine 108-91-8

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

INTERNATIONAL CHEMICAL CONTROL LAWS :

United States TSCA Inventory

On or in compliance with the active portion of the TSCA inventory

Canadian Domestic Substances List (DSL)

The substance(s) in this preparation are included in or exempted from the Domestic Substance List (DSL).

Korea. Korean Existing Chemicals Inventory (KECI)

All substances in this product comply with the Chemical Control Act (CCA) and are listed on the Existing Chemicals List (ECL)

Japan. ENCS - Existing and New Chemical Substances Inventory

This product contains substance(s) which are not in compliance with the Law Regulating the Manufacture and Importation Of Chemical Substances and are not listed on the Existing and New Chemical Substances list (ENCS).

Australia. Australian Industrial Chemicals Introduction Scheme (AICIS)

All substances in this product comply with the Australian Industrial Chemicals Introduction Scheme (AICIS)

Philippines Inventory of Chemicals and Chemical Substances (PICCS)

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All substances in this product comply with the Republic Act 6969 (RA 6969) and are listed on the Philippines Inventory of Chemicals & Chemical Substances (PICCS).

China Inventory of Existing Chemical Substances

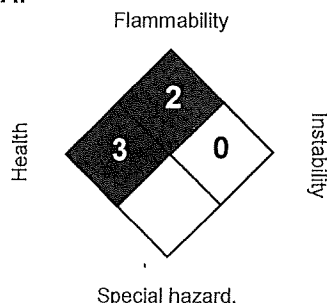
All substances in this product comply with the Provisions on the Environmental Administration of New Chemical Substances and are listed on or exempt from the Inventory of Existing Chemical Substances China (IECSC).

Taiwan Chemical Substance Inventory

not determined

Section: 16. OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	3*
FLAMMABILITY	2
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Revision Date : 09/28/2021
Version Number : 1.5
Prepared By : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. For additional copies of an SDS visit www.nalco.com and request access.



SAFETY DATA SHEET

KLEEN MCT515

1. Identification

Product identifier	KLEEN MCT515
Other means of identification	None.
Recommended use	Membrane cleaner
Recommended restrictions	None known.

Company/undertaking identification

Veolia WTS USA, Inc.
3600 Horizon Blvd.
Trevose, PA 19053
T 215 355 3300, F 215 953 5524

Emergency telephone

(800) 877 1940

2. Hazard(s) identification

Physical hazards	Corrosive to metals	Category 1
Health hazards	Skin corrosion/irritation	Category 1
	Serious eye damage/eye irritation	Category 1
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
OSHA defined hazards	Not classified.	

Label elements



Signal word	Danger
Hazard statement	May be corrosive to metals. Causes severe skin burns and eye damage. Causes serious eye damage. May cause respiratory irritation.
Precautionary statement	
Prevention	Keep only in original container. Do not breathe mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear eye protection/face protection.
Response	Wash contaminated clothing before reuse. If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Absorb spillage to prevent material damage.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store in corrosive resistant container with a resistant inner liner.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Components	CAS #	Percent
N-hydroxyethylenediamine triacetic acid trisodium salt	139-89-9	2.5 - 10
Potassium carbonate	584-08-7	2.5 - 10
Sodium carbonate	497-19-8	2.5 - 10
Benzene, 1,1'-oxybis-, Tetrapropylene Derivs., Sulfonated, Sodium Salts	119345-04-9	1 - 2.5

Composition comments Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this SDS for our assessment of the potential hazards of this formulation.

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion Call a physician or poison control center immediately. Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

General information If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

Fire fighting equipment/instructions In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Cool containers / tanks with water spray. Use standard firefighting procedures and consider the hazards of other involved materials.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb spillage to prevent material damage. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store locked up. Store in a cool, dry place out of direct sunlight. Store in corrosive resistant container with a resistant inner liner. Keep only in the original container. Store in original tightly closed container.

8. Exposure controls/personal protection

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Provide adequate ventilation. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection Splash proof chemical goggles. Face shield.

Skin protection

Hand protection Wear appropriate chemical resistant gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Glove selection must take into account any solvents and other hazards present.

Other

Wear appropriate chemical resistant clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance Liquid

Physical state Liquid.

Form Not available.

Color Colorless to pale yellow

Odor Mild

Odor threshold Not available.

pH (concentrated product) 12.5 Neat

Melting point/freezing point 15 °F (-9 °C)

Initial boiling point and boiling range 219 °F (104 °C)

Flash point Not Applicable

Evaporation rate Slower than Ether

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 18 mmHg

Vapor pressure temp. 70 °F (21 °C)

Vapor density < 1

Relative density 1.25

Relative density temperature 70 °F (21 °C)

Solubility(ies)

Solubility (water) 100 %

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	7 mPa.s
Viscosity temperature	70 °F (21 °C)
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
pH in aqueous solution	11.4 (5% Solution)
Pour point	20 °F (-7 °C)
VOC	0 % ESTIMATED

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Aluminum.
Hazardous decomposition products	Carbon oxides. Nitrogen oxides (NOx). Sulfur oxides. Hydrogen cyanide evolved in fire.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system.
Skin contact	Causes severe skin burns.
Eye contact	Causes serious eye damage.
Ingestion	Causes digestive tract burns.

Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.
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Information on toxicological effects

Acute toxicity

Product	Species	Test Results
KLEEN MCT515		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 5000 mg/kg (Calculated according to GHS additivity formula)
Inhalation		
<i>Mist</i>		
LC50	Rat	> 5 mg/l, 4 Hours (Calculated according to GHS additivity formula)
Oral		
LD50	Rat	> 5000 mg/kg (Calculated according to GHS additivity formula)

Components	Species	Test Results
Benzene, 1,1'-oxybis-, Tetrapropylene Derivs., Sulfonated, Sodium Salts (CAS 119345-04-9)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	> 5000 mg/kg

Components	Species	Test Results
N-hydroxyethylenediamine triacetic acid trisodium salt (CAS 139-89-9)		
<u>Acute</u>		
Inhalation		
LC50	Rat	> 10.05 mg/l, 4 Hour
Oral		
LD50	Rat	1780 mg/kg
Potassium carbonate (CAS 584-08-7)		
<u>Acute</u>		
Oral		
LD50	Rat	1870 mg/kg
Sodium carbonate (CAS 497-19-8)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	2800 mg/kg
Skin corrosion/irritation	Causes severe skin burns.	
Serious eye damage/eye irritation	Causes serious eye damage.	
Respiratory or skin sensitization		
Respiratory sensitization	This product is not expected to cause respiratory sensitization.	
Skin sensitization	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity	Not classified.	
Carcinogenicity	Not classified.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
Not listed.		
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)		
Not listed.		
US. National Toxicology Program (NTP) Report on Carcinogens		
Not listed.		
Reproductive toxicity	Not classified.	
Specific target organ toxicity - single exposure	May cause respiratory irritation.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not an aspiration hazard.	
Chronic effects	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.	

12. Ecological information

Ecotoxicity

Product	Species		Test Results
Aquatic			
Crustacea	LC50	Daphnia magna	282.8 mg/L, 48 H (pH adjusted)
	NOEL	Daphnia magna	200 mg/L, 48 H (pH adjusted)
Fish	LC50	Fathead Minnow	73.2 mg/L, 96 H (pH adjusted)
		Rainbow Trout	107.2 mg/L, 96 H (pH adjusted)
	NOEL	Fathead Minnow	50 mg/L, 96 H (pH adjusted)
		Rainbow Trout	50 mg/L, 96 H (pH adjusted)

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Benzene, 1,1'-oxybis-, Tetrapropylene Derivs., Sulfonated, Sodium Salts 7.84

Bioconcentration factor (BCF)

Benzene, 1,1'-oxybis-, Tetrapropylene Derivs., Sulfonated, Sodium Salts 3

Mobility in soil No data available.

Other adverse effects Not available.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code D002: Waste Corrosive material [pH <=2 or >=12.5, or corrosive to steel]
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information**DOT**

UN number UN1719

UN proper shipping name Caustic alkali liquids, n.o.s. (POTASSIUM HYDROXIDE, Sodium hydroxide)

Transport hazard class(es)

Class 8

Subsidiary risk -

Packing group III

Special precautions for user Not available.

ERG number 154

Some containers may be exempt from Dangerous Goods/Hazmat Transport Regulations, please check BOL for exact container classification.

IATA

UN number UN1719

UN proper shipping name CAUSTIC ALKALI LIQUID, N.O.S. (POTASSIUM HYDROXIDE; SODIUM HYDROXIDE)

Transport hazard class(es)

Class 8

Subsidiary risk -

Packing group III

Environmental hazards No

ERG Code 154

Special precautions for user Not available.

Some containers may not be approved under IATA, please check BOL for exact container classification.

IMDG

UN number UN1719

UN proper shipping name CAUSTIC ALKALI LIQUID, N.O.S. (POTASSIUM HYDROXIDE; SODIUM HYDROXIDE)

Transport hazard class(es)

Class 8

Subsidiary risk -

Packing group III

Environmental hazards

Marine pollutant No

EmS F-A, S-B

Special precautions for user Not available.

DOT



IATA; IMDG



15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical Yes
Classified hazard categories Corrosive to metal
Skin corrosion or irritation
Serious eye damage or eye irritation
Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
LEAD (CAS 7439-92-1)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA) Contains component(s) regulated under the Safe Drinking Water Act.

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

US state regulations

California Proposition 65



WARNING: WARNING: This product can expose you to chemicals including LEAD, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

LEAD (CAS 7439-92-1) Listed: October 1, 1992

US - California Proposition 65 - CRT: Listed date/Developmental toxin

LEAD (CAS 7439-92-1) Listed: February 27, 1987

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

LEAD (CAS 7439-92-1) Listed: February 27, 1987

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

LEAD (CAS 7439-92-1) Listed: February 27, 1987

16. Other information, including date of preparation or last revision

Issue date	Jun-29-2015
Revision date	Mar-23-2023
Version #	2.3
NFPA ratings	Health: 3 Flammability: 0 Instability: 0

NFPA ratings



List of abbreviations

CAS: Chemical Abstract Service Registration Number
ACGIH: American Conference of Governmental Industrial Hygienists
TWA: Time Weighted Average
STEL: Short Term Exposure Limit
LD50: Lethal Dose, 50%
LC50: Lethal Concentration, 50%
EC50: Effect Concentration, 50%
NOEL: No Observed Effect Level
COD: Chemical Oxygen Demand
BOD: Biochemical Oxygen Demand
TOC: Total Organic Carbon
IATA: International Air Transport Association
IMDG: International Maritime Dangerous Goods Code
TSRN indicates a Trade Secret Registry Number is used in place of the CAS number.

References: No data available

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Revision information Exposure controls/personal protection: Appropriate engineering controls
Toxicological information: Germ cell mutagenicity
Toxicological information: Reproductive toxicity

Prepared by This SDS has been prepared by Veolia Water Technologies & Solutions' Regulatory Department (1-215-355-3300).



SAFETY DATA SHEET

KLEEN MCT503

1. Identification

Product identifier KLEEN MCT503
Other means of identification None.
Recommended use Reverse Osmosis membrane cleaner
Recommended restrictions None known.

Company/undertaking identification

SUEZ WTS USA, Inc.
4636 Somerton Road
Trevose, PA 19053
T 215 355 3300, F 215 953 5524

Emergency telephone

(800) 877 1940

2. Hazard(s) identification

Physical hazards Corrosive to metals Category 1
Health hazards Skin corrosion/irritation Category 1
Serious eye damage/eye irritation Category 1
Specific target organ toxicity, single exposure Category 3 respiratory tract irritation
OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement May be corrosive to metals. Causes severe skin burns and eye damage. Causes serious eye damage. Causes serious eye irritation. May cause respiratory irritation.

Precautionary statement

Prevention Keep only in original container. Do not breathe mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

Response If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If eye irritation persists: Get medical advice/attention. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage.

Storage Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store in corrosive resistant container with a resistant inner liner.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

3. Composition/information on ingredients

Mixtures

Components	CAS #	Percent
Citric acid	77-92-9	40 - 60

Composition comments Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this SDS for our assessment of the potential hazards of this formulation.

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, trained personnel should give oxygen. Call a poison center or doctor/physician if you feel unwell.
Skin contact	Wash thoroughly with soap and water. Get medical attention if irritation develops or persists. Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse. If irritation persists, seek medical advice.
Eye contact	Rinse immediately with plenty of water for at least 20 minutes If easy to do remove contact lenses. Keep eyelids apart. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.
Ingestion	Do not feed anything by mouth to an unconscious or convulsive victim. Call a physician or poison control center immediately. Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. If a person is conscious and can swallow, give water.
Most important symptoms/effects, acute and delayed	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation. Respiratory tract irritation.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed. No other instruction than the ones already informed.
General information	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Acidic. Oxides of carbon evolved in fire.
Special protective equipment and precautions for firefighters	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Cool containers / tanks with water spray.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Acidic. Wear protective clothing, gloves and safety goggles. Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb spillage to prevent material damage. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions	Avoid discharge into drains, water courses or onto the ground. Prevent from entering sewers or the immediate environment. Water contaminated with this product may be sent to a sanitary sewer treatment facility, or a permitted waste treatment facility, in accordance with any local agreements.
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7. Handling and storage

Precautions for safe handling	Acidic. Do not mix with alkaline material. Corrosive to metal. See Section 8 of the SDS for Personal Protective Equipment. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store away from strong oxidizers. Keep away from strong bases. Store locked up. Store in a cool, dry place out of direct sunlight. Store in corrosive resistant container with a resistant inner liner. Store in tightly closed container. Keep only in the original container. Store away from incompatible materials (see Section 10 of the SDS). Do not freeze. If frozen, thaw completely and mix thoroughly prior to use.

8. Exposure controls/personal protection

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Eye wash facilities and emergency shower must be available when handling this product. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Wear safety glasses with side shields (or goggles) and a face shield.
Skin protection	
Hand protection	Chemical resistant gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Glove selection must take into account any solvents and other hazards present.
Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHA'S 29 CFR 1910.134 AND ANSI Z88.2 REQUIREMENTS MUST BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	
Color	Yellow
Physical state	Liquid
Odor	Slight
Odor threshold	Not available.
pH (concentrated product)	< 1
pH in aqueous solution	2 (5% SOL.)
Melting point/freezing point	18 °F (-8 °C)
Initial boiling point and boiling range	220 °F (104 °C)
Flash point	> 212 °F (> 100 °C) P-M(CC)
Evaporation rate	< 1 (Ether = 1)
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.

Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	18 mm Hg
Vapor pressure temp.	70 °F (21 °C)
Vapor density	< 1 (Air = 1)
Relative density	1.19
Relative density temperature	70 °F (21 °C)
Solubility(ies)	
Solubility (water)	100 %
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	10 cps
Viscosity temperature	70 °F (21 °C)
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Pour point	23 °F (-5 °C)
Specific gravity	1.188
VOC	0 % (Calculated)

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
Incompatible materials	Metals. Avoid contact with strong bases. Avoid contact with strong oxidizers.
Hazardous decomposition products	Oxides of carbon evolved in fire.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Irritating to respiratory system.
Skin contact	Causes severe skin burns.
Eye contact	Causes serious eye damage.
Ingestion	Causes digestive tract burns. Ingestion of large amounts may produce gastrointestinal disturbances including irritation, nausea, and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Irritating to eyes and respiratory system.
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Information on toxicological effects

Acute toxicity	Causes severe skin burns and eye damage. May cause respiratory irritation.
----------------	--

Product	Species	Test Results
KLEEN MCT503 (CAS Mixture)		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg, (Calculated according to GHS additivity)

Product	Species	Test Results
<i>Oral</i> LD50	Rat	> 5000 mg/kg, (Calculated according to GHS additivity formula)
Components	Species	Test Results
Citric acid (CAS 77-92-9)		
Acute		
<i>Dermal</i> LD50	Rabbit	> 2000 mg/kg
<i>Oral</i> LD50	Rat	5400 mg/kg
Skin corrosion/irritation	Causes severe skin burns and eye damage.	
Serious eye damage/eye irritation	Causes serious eye damage.	
Respiratory or skin sensitization		
Respiratory sensitization	This product is not expected to cause respiratory sensitization.	
Skin sensitization	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity	Not classified.	
Carcinogenicity	Not classified.	

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity	Not classified.
Specific target organ toxicity - single exposure	May cause respiratory irritation.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Based on available data, the classification criteria are not met. May be harmful if swallowed and enters airways. Aspiration of this product may cause the same corrosiveness/irritation impacts as if it were ingested.
Chronic effects	Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity

Product	Species		Test Results
KLEEN MCT503 (CAS Mixture)			
Aquatic			
Crustacea	LC50	Daphnia magna	570 mg/L, Static Renewal Bioassay, 48 hour, (pH adjusted)
	NOEL	Daphnia magna	274.6 mg/L, Static Renewal Bioassay, 48 hour, (pH adjusted)
Fish	0% Mortality	Fathead Minnow	500 mg/L, Static Bioassay with 48-Hour Renewal, 96 hour
		Rainbow Trout	3200 mg/L, Static Screen, 72 hour
	65% Mortality	Fathead Minnow	2000 mg/L, Static Bioassay with 48-Hour Renewal, 96 hour

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Citric acid -1.64

Bioconcentration factor (BCF)

Citric acid 3

Mobility in soil No data available.

Other adverse effects Not available.

Persistence and degradability

- COD (mgO ₂ /g)	320 (calculated data)
- BOD 5 (mgO ₂ /g)	170 (calculated data)
- BOD 28 (mgO ₂ /g)	185 (calculated data)
- Closed Bottle Test (% Degradation in 28 days)	57 (calculated data)
- Zahn-Wellens Test (% Degradation in 28 days)	72 (calculated data)
- TOC (mg C/g)	150 (calculated data)

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code D002: Waste Corrosive material [pH ≤2 or ≥12.5, or corrosive to steel]
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number	UN3265
UN proper shipping name	Corrosive liquid, acidic, organic, n.o.s. (CITRIC ACID)
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	III
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
ERG number	153

Some containers may be exempt from Dangerous Goods/Hazmat Transport Regulations, please check BOL for exact container classification.

IATA

UN number	UN3265
UN proper shipping name	Corrosive liquid, acidic, organic, n.o.s. (CITRIC ACID)
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	III
Environmental hazards	No.
ERG Code	153
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

Some containers may not be approved under IATA, please check BOL for exact container classification.

IMDG

UN number	UN3265
UN proper shipping name	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CITRIC ACID)
Transport hazard class(es)	
Class	8
Subsidiary risk	-
Packing group	III
Environmental hazards	
Marine pollutant	No.
EmS	F-A, S-B

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

DOT



IATA; IMDG



15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

Yes

Classified hazard categories

Corrosive to metal
Skin corrosion or irritation
Serious eye damage or eye irritation
Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Hydrochloric acid (CAS 7647-01-0)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Hydrochloric acid (CAS 7647-01-0)

Safe Drinking Water Act (SDWA)

Not regulated.

Inventory status

Country(s) or region

Canada

Canada

Inventory name

Domestic Substances List (DSL)

Non-Domestic Substances List (NDSL)

On inventory (yes/no)*

Yes

No

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Food and drug administration The ingredients in this product are affirmed as GRAS (Generally Recognized as Safe) for use in membrane applications.

US state regulations

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

No ingredient listed.

16. Other information, including date of preparation or last revision

Issue date	Jul-17-2014
Revision date	Jun-19-2019
Version #	3.0
NFPA ratings	Health: 3 Flammability: 0 Instability: 0

NFPA ratings



List of abbreviations

CAS: Chemical Abstract Service Registration Number
ACGIH: American Conference of Governmental Industrial Hygienists
NOEL: No Observed Effect Level
STEL: Short Term Exposure Limit
LC50: Lethal Concentration, 50%
TWA: Time Weighted Average
BOD: Biochemical Oxygen Demand
COD: Chemical Oxygen Demand
TOC: Total Organic Carbon
IATA: International Air Transport Association
IMDG: International Maritime Dangerous Goods Code
NFPA: National Fire Protection Association
LD50: Lethal Dose, 50%
TSRN indicates a Trade Secret Registry Number is used in place of the CAS number.

References: No data available

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Revision information This document has undergone significant changes and should be reviewed in its entirety.

Prepared by This SDS has been prepared by SUEZ Regulatory Department (1-215-355-3300).

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ULTRION™ 8186

Section: 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : ULTRION™ 8186

Other means of identification : Not applicable.

Recommended use : CLARIFICATION AID

Restrictions on use : Refer to available product literature or ask your local Sales Representative for restrictions on use and dose limits.

Company : Nalco Company
1601 W. Diehl Road
Naperville, Illinois 60563-1198
USA
TEL: (630)305-1000

Emergency telephone number : (800) 424-9300 (24 Hours) CHEMTREC

Issuing date : 06/27/2017

Section: 2. HAZARDS IDENTIFICATION

GHS Classification

Not a hazardous substance or mixture.

GHS Label element

Precautionary Statements : **Prevention:**
Wash hands thoroughly after handling.
Response:
Specific measures: consult SDS Section 4.
Storage:
Store in accordance with local regulations.

Other hazards : None known.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	Concentration: (%)
Aluminum Chloride Hydroxide	12042-91-0	10 - 30

Section: 4. FIRST AID MEASURES

In case of eye contact : Rinse with plenty of water. Get medical attention if symptoms occur.

In case of skin contact : Wash off with soap and plenty of water. Get medical attention if symptoms occur.

If swallowed : Rinse mouth. Get medical attention if symptoms occur.

If inhaled : Get medical attention if symptoms occur.

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- Protection of first-aiders : In event of emergency assess the danger before taking action. Do not put yourself at risk of injury. If in doubt, contact emergency responders. Use personal protective equipment as required.
- Notes to physician : Treat symptomatically.
- Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

Section: 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : None known.
- Specific hazards during firefighting : Not flammable or combustible.
- Hazardous combustion products : Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NOx) Hydrogen chloride
- Special protective equipment for firefighters : Use personal protective equipment.
- Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Section: 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : No special environmental precautions required.
- Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Flush away traces with water.

Section: 7. HANDLING AND STORAGE

- Advice on safe handling : For personal protection see section 8. Wash hands after handling.
- Conditions for safe storage : Keep out of reach of children. Keep container tightly closed. Store in suitable labelled containers.
- Suitable material : Keep in properly labelled containers.

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Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
Aluminum Chloride Hydroxide	12042-91-0	TWA	2 mg/m3 (Aluminium)	NIOSH REL

Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Personal protective equipment

Eye protection : Safety glasses

Hand protection : Wear protective gloves.
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin protection : Wear suitable protective clothing.

Respiratory protection : No personal respiratory protective equipment normally required.

Hygiene measures : Wash hands before breaks and immediately after handling the product.

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Liquid

Colour : Light yellow

Odour : odourless

Flash point : does not flash

pH : 4,(100 %), Method: ASTM E 70

Odour Threshold : no data available

Melting point/freezing point : FREEZING POINT: -5.6 °C, ASTM D-1177

Initial boiling point and boiling range : no data available

Evaporation rate : no data available

Flammability (solid, gas) : no data available

Upper explosion limit : no data available

Lower explosion limit : no data available

Vapour pressure : no data available

Relative vapour density : no data available

Relative density : 1.14 - 1.23, (25 °C), ASTM D-1298

Density : 9.5 - 10.2 lb/gal

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Water solubility	: completely soluble
Solubility in other solvents	: no data available
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: no data available
Thermal decomposition	: no data available
Viscosity, dynamic	: 135 mPa.s (23 °C), Method: ASTM D 2983
Viscosity, kinematic	: no data available
Molecular weight	: no data available
VOC	: no data available

Section: 10. STABILITY AND REACTIVITY

Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use.
Conditions to avoid	: Freezing temperatures.
Incompatible materials	: Contact with strong alkalies (e.g. ammonia and its solutions, carbonates, sodium hydroxide (caustic), potassium hydroxide, calcium hydroxide (lime), cyanide, sulfide, hypochlorites, chlorites) may generate heat, splattering or boiling and toxic vapors.
Hazardous decomposition products	: Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NOx) Hydrogen chloride

Section: 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

Potential Health Effects

Eyes	: Health injuries are not known or expected under normal use.
Skin	: Health injuries are not known or expected under normal use.
Ingestion	: Health injuries are not known or expected under normal use.
Inhalation	: Health injuries are not known or expected under normal use.
Chronic Exposure	: Health injuries are not known or expected under normal use.

Experience with human exposure

Eye contact : No symptoms known or expected.

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Skin contact : No symptoms known or expected.

Ingestion : No symptoms known or expected.

Inhalation : No symptoms known or expected.

Toxicity

Product

Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg

Acute inhalation toxicity : no data available

Acute dermal toxicity : no data available

Skin corrosion/irritation : no data available

Serious eye damage/eye irritation : no data available

Respiratory or skin sensitization : no data available

Carcinogenicity : no data available

Reproductive effects : no data available

Germ cell mutagenicity : no data available

Teratogenicity : no data available

STOT - single exposure : no data available

STOT - repeated exposure : no data available

Aspiration toxicity : no data available

Components

Acute dermal toxicity : Aluminum Chloride Hydroxide
LD50 rat: > 2,000 mg/kg

Section: 12. ECOLOGICAL INFORMATION

Ecotoxicity

Environmental Effects : This product has no known ecotoxicological effects.

Product

Toxicity to fish : LC50 Oncorhynchus mykiss (rainbow trout): 3.61 mg/l
Exposure time: 96 hrs
Test substance: Product

LC50 Pimephales promelas (fathead minnow): 8.57 mg/l
Exposure time: 96 hrs
Test substance: Product

LC50 Inland Silverside: > 10,000 mg/l
Exposure time: 96 hrs
Test substance: Product

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NOEC Oncorhynchus mykiss (rainbow trout): 2.5 mg/l
Exposure time: 96 hrs
Test substance: Product

NOEC Pimephales promelas (fathead minnow): 5.0 mg/l
Exposure time: 96 hrs
Test substance: Product

NOEC Inland Silverside: 2,500 mg/l
Exposure time: 96 hrs
Test substance: Product

LC50 Oncorhynchus mykiss (rainbow trout): 70.7 mg/l
Exposure time: 96 h
Test substance: Tested with 20 mg/L Humic Acid

NOEC Oncorhynchus mykiss (rainbow trout): 50 mg/l
Exposure time: 96 h
Test substance: Tested with 20 mg/L Humic Acid

Toxicity to daphnia and other aquatic invertebrates : LC50 Mysid Shrimp (Mysidopsis bahia): 770 mg/l
Exposure time: 48 hrs
Test substance: Product

EC50 Daphnia magna (Water flea): 22.7 mg/l
Exposure time: 48 hrs
Test substance: Product

NOEC Daphnia magna (Water flea): 12.5 mg/l
Exposure time: 48 hrs
Test substance: Product

NOEC Mysid Shrimp (Mysidopsis bahia): 78 mg/l
Exposure time: 48 hrs
Test substance: Product

EC50 Daphnia magna (Water flea): 44 mg/l
Exposure time: 48 h
Test substance: Tested with 20 mg/L Humic Acid

NOEC Daphnia magna (Water flea): 13 mg/l
Exposure time: 48 h
Test substance: Tested with 20 mg/L Humic Acid

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : EC25 / IC25: 2.1 mg/l
Exposure time: 7 d
Species: Ceriodaphnia dubia
Test substance: Product

LOEC: 2.5 mg/l
Exposure time: 7 d
Species: Ceriodaphnia dubia
Test substance: Product

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NOEC: 1.3 mg/l
Exposure time: 7 d
Species: Ceriodaphnia dubia
Test substance: Product

Components

Toxicity to bacteria : Aluminum Chloride Hydroxide
> 4.4 mg/l

Components

Toxicity to fish (Chronic toxicity) : Aluminum Chloride Hydroxide
NOEC: 0.013 mg/l
Exposure time: 60 d

Persistence and degradability

The organic portion of this preparation is expected to be poorly biodegradable.

Chemical Oxygen Demand (COD): 93,400 mg/l

Biochemical Oxygen Demand (BOD):

Incubation Period	Value	Test Descriptor
5 d	600 mg/l	

Mobility

The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models.

If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages;

Air	: <5%
Water	: 30 - 50%
Soil	: 30 - 50%

The portion in water is expected to be soluble or dispersible.

Bioaccumulative potential

No bioaccumulation will occur. The large size of the polymer is incompatible with transport across the cellular membranes.

Other information

no data available

Section: 13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it is not a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) 40 CFR 261, since it does not have the characteristics of Subpart C, nor is it listed under Subpart D.

Disposal methods : Where possible recycling is preferred to disposal or

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incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

Section: 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (DOT)

Proper shipping name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

Air transport (IATA)

Proper shipping name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

Sea transport (IMDG/IMO)

Proper shipping name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

Section: 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

INTERNATIONAL CHEMICAL CONTROL LAWS :

United States TSCA Inventory

The substances in this preparation are included on or exempted from the TSCA 8(b) Inventory (40 CFR 710)

Australia. Industrial Chemical (Notification and Assessment) Act

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All substances in this product comply with the National Industrial Chemicals Notification & Assessment Scheme (NICNAS).

Canadian Domestic Substances List (DSL)

The substance(s) in this preparation are included in or exempted from the Domestic Substance List (DSL).

Japan. ENCS - Existing and New Chemical Substances Inventory

All substances in this product comply with the Law Regulating the Manufacture and Importation Of Chemical Substances and are listed on the Existing and New Chemical Substances list (ENCS).

Korea. Korean Existing Chemicals Inventory (KECI)

All substances in this product comply with the Chemical Control Act (CCA) and are listed on the Existing Chemicals List (ECL)

China Inventory of Existing Chemical Substances

All substances in this product comply with the Provisions on the Environmental Administration of New Chemical Substances and are listed on or exempt from the Inventory of Existing Chemical Substances China (IECSC).

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand

All substances in this product comply with the Hazardous Substances and New Organisms (HSNO) Act 1996, and are listed on or are exempt from the New Zealand Inventory of Chemicals.

Taiwan Chemical Substance Inventory

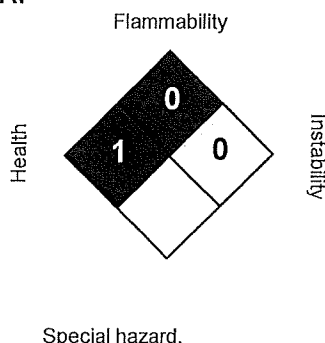
All substances in this product comply with the Taiwan Existing Chemical Substances Inventory (ECSI).

Philippines Inventory of Chemicals and Chemical Substances (PICCS)

All substances in this product comply with the Republic Act 6969 (RA 6969) and are listed on the Philippines Inventory of Chemicals & Chemical Substances (PICCS).

Section: 16. OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Revision Date : 06/27/2017
Version Number : 1.1
Prepared By : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

SAFETY DATA SHEET

ULTRION™ 8186

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. For additional copies of an SDS visit www.nalco.com and request access.

SAFETY DATA SHEET

NexGuard® 22300

Section: 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : NexGuard® 22300

Other means of identification : Not applicable.

Recommended use : BOILER WATER TREATMENT

Restrictions on use : Refer to available product literature or ask your local Sales Representative for restrictions on use and dose limits.

Company : Nalco Company
1601 W. Diehl Road
Naperville, Illinois 60563-1198
USA
TEL: (630) 305-1000

Emergency telephone number : (800) 424-9300 (24 Hours) CHEMTREC

Issuing date : 09/06/2019

Section: 2. HAZARDS IDENTIFICATION

GHS Classification.

Not a hazardous substance or mixture.

GHS Label element

Precautionary Statements : **Prevention:**
Wash hands thoroughly after handling.
Response:
Specific measures: consult SDS Section 4.
Storage:
Store in accordance with local regulations.

Other hazards : None known.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture : Mixture

No hazardous ingredients

Section: 4. FIRST AID MEASURES

In case of eye contact : Rinse with plenty of water. Get medical attention if symptoms occur.

In case of skin contact : Wash off with soap and plenty of water. Get medical attention if symptoms occur.

If swallowed : Rinse mouth. Get medical attention if symptoms occur.

If inhaled : Get medical attention if symptoms occur.

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NexGuard® 22300

- Protection of first-aiders : In event of emergency assess the danger before taking action. Do not put yourself at risk of injury. If in doubt, contact emergency responders. Use personal protective equipment as required.
- Notes to physician : Treat symptomatically.
Treat symptomatically.
- Most important symptoms and effects, both acute and delayed : See Section 11 for more detailed information on health effects and symptoms.

Section: 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : None known.
- Specific hazards during firefighting : Not flammable or combustible.
- Hazardous combustion products : Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NOx) Sulphur oxides
- Special protective equipment for firefighters : Use personal protective equipment.
- Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

Section: 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Do not allow contact with soil, surface or ground water.
- Methods and materials for containment and cleaning up : Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Flush away traces with water.

Section: 7. HANDLING AND STORAGE

- Advice on safe handling : Wash hands thoroughly after handling.
- Conditions for safe storage : Keep out of reach of children. Keep container tightly closed. Store in suitable

SAFETY DATA SHEET

NexGuard® 22300

labelled containers.

- Suitable material : The following compatibility data is suggested based on similar product data and/or industry experience: Brass, Stainless Steel 304, Stainless Steel 316L, Neoprene, EPDM, Polyurethane, Polyethylene, Polypropylene, PVC, HDPE (high density polyethylene), Buna-N, Epoxy phenolic resin, 100% phenolic resin liner, Chlorosulfonated polyethylene rubber, Fluoroelastomer
- Unsuitable material : The following compatibility data is suggested based on similar product data and/or industry experience: Mild steel

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

- Engineering measures : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Personal protective equipment

- Eye protection : Safety glasses
- Hand protection : Wear protective gloves.
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
- Skin protection : Wear suitable protective clothing.
- Respiratory protection : No personal respiratory protective equipment normally required.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling.

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : Liquid
- Colour : yellow
- Odour : Slight
- Flash point : > 93.3 °C, Method: ASTM D 93, Pensky-Martens closed cup
- pH : 8 - 12.5, (100 %), (25 °C)
- Odour Threshold : no data available
- Melting point/freezing point : Freezing Point: -1 °C, ASTM D-1177
- Initial boiling point and boiling range : no data available
- Evaporation rate : no data available
- Flammability (solid, gas) : no data available
- Upper explosion limit : no data available

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Lower explosion limit	: no data available
Vapour pressure	: no data available
Relative vapour density	: no data available
Relative density	: 1.065 - 1.105, (25 °C), ASTM D-1298
Density	: 1.05 - 1.10 g/cm ³ , 8.8 - 9.2 lb/gal
Water solubility	: completely soluble
Solubility in other solvents	: no data available
Partition coefficient: n-octanol/water	: no data available
Auto-ignition temperature	: no data available
Thermal decomposition	: no data available
Viscosity, dynamic	: no data available
Viscosity, kinematic	: no data available
Molecular weight	: no data available
VOC	: no data available

Section: 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reaction known under conditions of normal use.
Conditions to avoid	: Extremes of temperature None known.
Incompatible materials	: Contact with strong oxidizers (e.g. chlorine, peroxides, chromates, nitric acid, perchlorate, concentrated oxygen, permanganate) may generate heat, fires, explosions and/or toxic vapors. Strong acids
Hazardous decomposition products	: In case of fire, hazardous decomposition products may be produced such as: Carbon oxides nitrogen oxides (NO _x) Sulphur oxides

Section: 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

Potential Health Effects

Eyes : Health injuries are not known or expected under normal use.

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Skin : Health injuries are not known or expected under normal use.
Ingestion : Health injuries are not known or expected under normal use.
Inhalation : Health injuries are not known or expected under normal use.
Chronic Exposure : Health injuries are not known or expected under normal use.

Experience with human exposure

Eye contact : No symptoms known or expected.
Skin contact : No symptoms known or expected.
Ingestion : No symptoms known or expected.
Inhalation : No symptoms known or expected.

Toxicity

Product

Acute oral toxicity : rat: > 5,000 mg/kg
Test substance: Similar Product
Acute inhalation toxicity : no data available
Acute dermal toxicity : no data available
Skin corrosion/irritation : no data available
Serious eye damage/eye irritation : no data available
Respiratory or skin sensitization : no data available
Carcinogenicity : no data available
Reproductive effects : No toxicity to reproduction
Germ cell mutagenicity : Contains no ingredient listed as a mutagen
Teratogenicity : no data available
STOT - single exposure : no data available
STOT - repeated exposure : no data available
Aspiration toxicity : no data available

Section: 12. ECOLOGICAL INFORMATION

Ecotoxicity

Environmental Effects : Harmful to aquatic life.

Product

Toxicity to fish : LC50 Oncorhynchus mykiss (rainbow trout): > 1,000 mg/l
Exposure time: 96 hrs
Test substance: Similar Product

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LC50 Inland Silverside: > 5,000 mg/l
Exposure time: 96 hrs
Test substance: Product

NOEC Inland Silverside: 5,000 mg/l
Exposure time: 96 hrs
Test substance: Product

LC50 Pimephales promelas (fathead minnow): > 8,100 mg/l
Exposure time: 96 hrs
Test substance: Product

NOEC Pimephales promelas (fathead minnow): 8,100 mg/l
Exposure time: 96 hrs
Test substance: Product

Toxicity to daphnia and other aquatic invertebrates : LC50 Mysid Shrimp (*Mysidopsis bahia*): > 5,000 mg/l
Exposure time: 96 hrs
Test substance: Product

NOEC Mysid Shrimp (*Mysidopsis bahia*): 5,000 mg/l
Exposure time: 96 hrs
Test substance: Product

EC50 *Daphnia magna*: 6,274 mg/l
Exposure time: 48 hrs
Test substance: Product

NOEC *Daphnia magna*: 4,860 mg/l
Exposure time: 48 hrs
Test substance: Product

Toxicity to algae : EC50 Green Algae (*Pseudokirchneriella subcapitata*, previously *Selenastrum capricornutum*): 53 mg/l
Exposure time: 96 hrs
Test substance: Product

NOEC Green Algae (*Pseudokirchneriella subcapitata*, previously *Selenastrum capricornutum*): < 13 mg/l
Exposure time: 96 hrs
Test substance: Product

Persistence and degradability

The organic portion of this preparation is expected to be poorly biodegradable.

Mobility

The environmental fate was estimated using a level III fugacity model embedded in the EPI (estimation program interface) Suite TM, provided by the US EPA. The model assumes a steady state condition between the total input and output. The level III model does not require equilibrium between the defined media. The information provided is intended to give the user a general estimate of the environmental fate of this product under the defined conditions of the models.

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If released into the environment this material is expected to distribute to the air, water and soil/sediment in the approximate respective percentages;

Air	: <5%
Water	: 30 - 50%
Soil	: 50 - 70%

The portion in water is expected to be soluble or dispersible.

Bioaccumulative potential

This preparation or material is not expected to bioaccumulate.

Other information

no data available

Section: 13. DISPOSAL CONSIDERATIONS

If this product becomes a waste, it could meet the criteria of a hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Before disposal, it should be determined if the waste meets the criteria of a hazardous waste.

Disposal methods : The product should not be allowed to enter drains, water courses or the soil. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

Section: 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (DOT)

Proper shipping name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

Air transport (IATA)

Proper shipping name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

Sea transport (IMDG/IMO)

Proper shipping name : PRODUCT IS NOT REGULATED DURING TRANSPORTATION

Section: 15. REGULATORY INFORMATION

TSCA list : Not relevant

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

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This product does not contain a RQ substance, or this product contains a substance with a RQ, however the calculated RQ exceeds the reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

INTERNATIONAL CHEMICAL CONTROL LAWS :

United States TSCA Inventory

The substances in this preparation are included on or exempted from the TSCA 8(b) Inventory (40 CFR 710)

Australia. Industrial Chemical (Notification and Assessment) Act

All substances in this product comply with the National Industrial Chemicals Notification & Assessment Scheme (NICNAS).

Canadian Domestic Substances List (DSL)

The substance(s) in this preparation are included in or exempted from the Domestic Substance List (DSL).

Japan. ENCS - Existing and New Chemical Substances Inventory

This product and/or component(s) are exempt or excluded from the list of Existing and New Chemical Substances (ENCS) under the Law Regulating the Manufacture and Importation Of Chemical Substances.

Korea. Korean Existing Chemicals Inventory (KECI)

All substances in this product comply with the Chemical Control Act (CCA) and are listed on the Existing Chemicals List (ECL)

Philippines Inventory of Chemicals and Chemical Substances (PICCS)

All substances in this product comply with the Republic Act 6969 (RA 6969) and are listed on the Philippines Inventory of Chemicals & Chemical Substances (PICCS).

China Inventory of Existing Chemical Substances

All substances in this product comply with the Provisions on the Environmental Administration of New Chemical Substances and are listed on or exempt from the Inventory of Existing Chemical Substances China (IECSC).

Taiwan Chemical Substance Inventory

All substances in this product comply with the Taiwan Existing Chemical Substances Inventory (ECSI).

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand

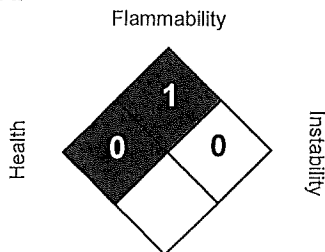
All substances in this product comply with the Hazardous Substances and New Organisms (HSNO) Act 1996, and are listed on or are exempt from the New Zealand Inventory of Chemicals.

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NexGuard® 22300

Section: 16. OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	0
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Revision Date : 09/06/2019
Version Number : 1.2
Prepared By : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. For additional copies of an SDS visit www.nalco.com and request access.

Safety Data Sheet

SULFURIC ACID 93% 66Be°

Version 1.4

Revision Date: 12/31/2020

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : SULFURIC ACID 93% 66Be°

Recommended use of the chemical and restrictions on use

Recommended use : Industrial chemical

Manufacturer or supplier's details

Company : Univar Solutions USA, Inc.
Address : 3075 Highland Pkwy Suite 200
 Downers Grove, IL 60515
 United States of America (USA)

Emergency telephone number:

Transport North America: CHEMTREC (1-800-424-9300)
 CHEMTREC INTERNATIONAL Tel # 703-527-3887

Additional Information: : Responsible Party: Product Compliance Department
 E-mail: SDSNA@univarsolutions.com
 SDS Requests: 1-855-429-2661
 Website: www.univarsolutions.com

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Skin corrosion : Category 1A

Serious eye damage : Category 1

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H314 Causes severe skin burns and eye damage.

Precautionary statements : **Prevention:**
 P264 Wash skin thoroughly after handling.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
 P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
 P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with

Safety Data Sheet**SULFURIC ACID 93% 66Be°**

Version 1.4

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water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

P363 Wash contaminated clothing before reuse.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

CAS-No.	Chemical name	Weight percent
7664-93-9	Sulfuric acid	90 - 100

Any Concentration shown as a range is due to batch variation.

Molecular formula : H₂-O₄-S

SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.
If on skin, rinse well with water.
If on clothes, remove clothes.
- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Continue rinsing eyes during transport to hospital.
Remove contact lenses.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.

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Keep respiratory tract clear.
Do NOT induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.

SECTION 5. FIREFIGHTING MEASURES

- | | |
|---|---|
| Suitable extinguishing media | : Dry chemical
Carbon dioxide (CO ₂) |
| Unsuitable extinguishing media | : High volume water jet
Water |
| Specific hazards during fire-fighting | : Do not allow run-off from fire fighting to enter drains or water courses. |
| Hazardous combustion products | : sulfur oxides |
| Specific extinguishing methods | : Use a water spray to cool fully closed containers. |
| Further information | : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |
| Special protective equipment for firefighters | : Wear self-contained breathing apparatus for firefighting if necessary. |

SECTION 6. ACCIDENTAL RELEASE MEASURES

- | | |
|---|---|
| Personal precautions, protective equipment and emergency procedures | : Use personal protective equipment. |
| Environmental precautions | : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities. |
| Methods and materials for containment and cleaning up | : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal. |

SECTION 7. HANDLING AND STORAGE

- | | |
|------------------------------|---|
| Advice on protection against | : Normal measures for preventive fire protection. |
|------------------------------|---|

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Revision Date: 12/31/2020

fire and explosion

Advice on safe handling : Do not breathe vapours/dust.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
To avoid spills during handling keep bottle on a metal tray.
Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid : Do not store near acids.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

CAS-No.	Components	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
7664-93-9	Sulfuric acid	TWA (Thoracic fraction)	0.2 mg/m ³	ACGIH
		TWA	1 mg/m ³	NIOSH REL
		TWA	1 mg/m ³	OSHA Z-1
		TWA	1 mg/m ³	OSHA P0

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Hand protection

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : When using do not eat or drink.
When using do not smoke.

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Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: Clear, Colorless, amber
Odour	: pungent
Odour Threshold	: No data available
pH	: 0.3 @ 25 °C (77 °F)
Freezing Point (Melting point/range)	: -31 - 10.56 °C (-24 - 51.01 °F)
Boiling Point (Boiling point/boiling range)	: 217 - 330 °C (423 - 626 °F)
Flash point	: No data available
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: < 0.3 mmHg @ 25 °C (77 °F)
Relative vapour density	: 3.4 @ 20 °C (68 °F) (Air = 1.0)
Relative density	: 1.8347 - 1.8437 @ 25 °C (77 °F) Reference substance: (water = 1)
Density	: Estimated 1.837 g/cm ³ @ 20 °C (68 °F) 15.3 - 15.4 lb/gal @ 25 °C (77 °F)
Solubility(ies) Water solubility	: completely miscible
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Thermal decomposition	: 340 °C

Safety Data Sheet**SULFURIC ACID 93% 66Be°**

Version 1.4

Revision Date: 12/31/2020

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Acid reacts with most metals to release hydrogen gas which can form explosive mixtures with air. Reacts with organic materials and may cause ignition of finely divided materials on contact.
Conditions to avoid	: Avoid contact with combustible material (paper, wool, oil).
Incompatible materials	: Alkalies Metals carbide chlorates fuminates nitrates Organic materials Strong oxidizing agents strong reducing agents water Sulphur compounds
Hazardous decomposition products	: corrosive vapors Sulphur oxides toxic fumes

SECTION 11. TOXICOLOGICAL INFORMATION**Skin corrosion/irritation****Product:**

Remarks: Extremely corrosive and destructive to tissue.

Components:**7664-93-9:**

Species: Rabbit

Result: Causes severe burns.

Serious eye damage/eye irritation**Product:**

Remarks: May cause irreversible eye damage.

Safety Data Sheet**SULFURIC ACID 93% 66Be°**

Version 1.4

Revision Date: 12/31/2020

Components:**7664-93-9:**

Species: Rabbit

Result: Risk of serious damage to eyes.

Germ cell mutagenicity**Components:****7664-93-9:**

Genotoxicity in vitro

: Test Type: Ames test

Species: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Result: negative

Carcinogenicity**IARC**

Group 1: Carcinogenic to humans

7664-93-9

Sulfuric acid

OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP

Known to be human carcinogen

7664-93-9

Sulfuric acid

STOT - single exposure**Product:**

Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

Further information**Product:**

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Safety Data Sheet**SULFURIC ACID 93% 66Be°**

Version 1.4

Revision Date: 12/31/2020

Mobility in soil

No data available

Other adverse effects**Product:**

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : Dispose of in accordance with all applicable local, state and federal regulations.
For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Univar Solutions ChemCare: 1-800-909-4897

Dispose of in accordance with all applicable local, state and federal regulations.
For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Univar Solutions ChemCare: 1-800-909-4897

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION**DOT (Department of Transportation):**

UN1830, SULFURIC ACID, 8, II

IATA (International Air Transport Association):

UN1830, SULPHURIC ACID, 8, II

IMDG (International Maritime Dangerous Goods):

UN1830, SULPHURIC ACID, 8, II

Safety Data Sheet

SULFURIC ACID 93% 66Be°

Version 1.4

Revision Date: 12/31/2020

SECTION 15. REGULATORY INFORMATION

WHMIS Classification : D2A: Very Toxic Material Causing Other Toxic Effects
D2B: Toxic Material Causing Other Toxic Effects
E: Corrosive Material

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Sulfuric acid	7664-93-9	1000	1000

SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Sulfuric acid	7664-93-9	1000	1000

SARA 311/312 Hazards : Skin corrosion or irritation
Serious eye damage or eye irritation

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

7664-93-9 Sulfuric acid

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

7664-93-9 Sulfuric acid

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

Massachusetts Right To Know

7664-93-9 Sulfuric acid

Pennsylvania Right To Know

7664-93-9 Sulfuric acid

7732-18-5 Water

California Prop 65

 **WARNING:** This product can expose you to chemicals including Sulfuric acid, which is/are

Safety Data Sheet

SULFURIC ACID 93% 66Be°

Version 1.4

Revision Date: 12/31/2020

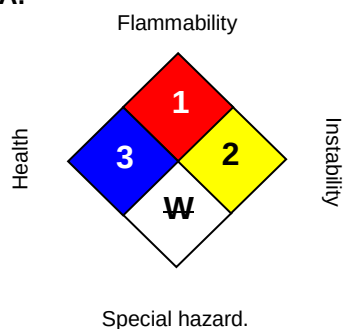
known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

The components of this product are reported in the following inventories:

TSCA	: On TSCA Inventory
DSL	: All components of this product are on the Canadian DSL
AICS	: On the inventory, or in compliance with the inventory
NZIoC	: Not in compliance with the inventory
ENCS	: On the inventory, or in compliance with the inventory
KECI	: On the inventory, or in compliance with the inventory
PICCS	: On the inventory, or in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	3*
FLAMMABILITY	1
PHYSICAL HAZARD	2

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Univar Solutions Product Compliance Department (1-855-429-2661) SDSNA@univarsolutions.com.

Revision Date : 12/31/2020

Material number:

Safety Data Sheet

SULFURIC ACID 93% 66Be°

Version 1.4

Revision Date: 12/31/2020

16145761, 16145532, 16145325, 16145036, 16144466, 16158800, 16152844, 16146037, 16147599, 16147477, 16158884, 16158841, 16145294, 16144737, 16143905, 16148041, 16144253, 16148755, 16163605, 16163600, 16148558, 16166436, 16166263, 16149587, 16138737, 16144430, 16159796, 16144634, 16144492, 16148416, 16152198, 16151380, 16151346, 16148456, 16148188, 16144447, 16144280, 16144100, 16144089, 16159794, 16143770, 16143771, 16160331, 16136043, 16149274, 16158943, 16149737, 16149062, 16148018, 16147993, 16145633, 16145526, 16144840, 16144220, 16143768, 16147033, 16147042, 16144370, 16144451, 16142210, 16140162, 16141097, 16140348, 16141851, 16141877, 16140763, 16143767, 16143769, 16142063, 16142367, 16142360, 16140603, 16142270

Key or legend to abbreviations and acronyms used in the safety data sheet			
ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%		



2 Madison Ave. Larchmont, NY 10538

Ph: 914-834-1881 Fax: 914-834-4611



Univar
3075 Highland Pkwy STE 200
Downers Grove, IL 60515
425-889-3400

SAFETY DATA SHEET

1. Identification

Product identifier: CAUSTIC SODA 50%

Other means of identification

Synonyms: Sodium Hydroxide

SDS number: 000100000088

Recommended use and restriction on use

Recommended use: Not available.

Restrictions on use: Not known.

Emergency telephone number:For emergency assistance Involving chemicals

call CHEMTREC day or night at: 1-800-424-9300. CHEMTREC INTERNATIONAL Tel# 703-527-3887

2. Hazard(s) identification

Hazard classification

Health hazards

Acute toxicity (Oral) Category 4

Skin corrosion/irritation Category 1A

Serious eye damage/eye irritation Category 1

Environmental hazardsAcute hazards Category 3
to the aquatic environment

Label elements

Hazard symbol



Version: 1.2
Revision date: 04/29/2015



Signal word	Danger
Hazard statement	Corrosive. Harmful if swallowed. Causes severe skin burns and eye damage.
Precautionary statement	
Prevention	Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dust or mists. Wear protective gloves/protective clothing/eye protection/face protection.
Response	IF INHALED: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF SWALLOWED: Call a POISON CENTER/doctor/ if you feel unwell. Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. Specific treatment (see this label). Wash contaminated clothing before reuse.
Storage	Store in a closed container. Keep container tightly closed. Store in a well-ventilated place. Store in a dry place. Store locked up.
Disposal	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Other hazards which do not result in GHS classification	None.

Version: 1.2
Revision date: 04/29/2015



3. Composition/information on ingredients

Substances

Chemical identity	Common name and synonyms	CAS number	Content in percent (%)*
Sodium hydroxide		1310-73-2	>=48 - <=52%
Water		7732-18-5	>=48 - <=52%
Sodium Chloride		7647-14-5	>=0 - <=5%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

General information:	CAUTION! First aid personnel must be aware of own risk during rescue!
Ingestion:	Do NOT induce vomiting. Never give liquid to an unconscious person. Get medical attention immediately.
Inhalation:	Move to fresh air. If breathing is difficult, give oxygen. Perform artificial respiration if breathing has stopped. Get medical attention immediately.
Skin contact:	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Eye contact:	If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.
Most important symptoms/effects, acute and delayed	
Symptoms:	No data available.

Indication of immediate medical attention and special treatment needed

Treatment: No data available.

5. Fire-fighting measures

General fire hazards: No data available.
Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:	Use: Powder. In case of fire in the surroundings: all extinguishing agents allowed.
Unsuitable extinguishing media:	No data available.

Version: 1.2
Revision date: 04/29/2015



Specific hazards arising from the chemical: No data available.
Special protective equipment and precautions for firefighters
Special fire fighting procedures: No data available.
Special protective equipment for fire-fighters: No data available.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Keep unauthorized personnel away.
Methods and material for containment and cleaning up: Absorb spillage with non-combustible, absorbent material. Dike for later disposal.

7. Handling and storage

Precautions for safe handling: Use personal protective equipment as required. Use only with adequate ventilation. Container must be kept tightly closed.
Conditions for safe storage, including any incompatibilities: No data available.

Version: 1.2
Revision date: 04/29/2015



8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Chemical identity	Type	Exposure Limit values	Source
Sodium hydroxide	Ceiling	2 mg/m ³	US. ACGIH Threshold Limit Values (03 2013)
	Ceil_Tim e	2 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	PEL	2 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	Ceiling	2 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	Ceiling	2 mg/m ³	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
Sodium hydroxide - Particulate.	ST ESL	20 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	AN ESL	2 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
Sodium hydroxide	Ceiling	2 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (02 2012)

Appropriate engineering controls No data available.

Individual protection measures, such as personal protective equipment

General information:

Use personal protective equipment as required. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned. Practice good housekeeping.

Eye/face protection:

Use personal protective equipment as required. Wear goggles/face shield.

Skin protection

Hand protection:

No data available.

Other:

No data available.

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Respiratory protection: No data available.
Hygiene measures: No data available.

9. Physical and chemical properties

Physical state: Liquid
Form: No data available.
Color: No data available.
Odor: No data available.
Odor threshold: No data available.
pH: 14
Melting point/freezing point: -12 - 10 °C
Initial boiling point and boiling range: 105 - 140 °C
Flash Point: No data available.
Evaporation rate: No data available.
Flammability (solid, gas): No data available.
Upper/lower limit on flammability or explosive limits
Flammability limit - upper (%): No data available.
Flammability limit - lower (%): No data available.
Explosive limit - upper (%): No data available.
Explosive limit - lower (%): No data available.
Vapor pressure: No data available.
Vapor density: No data available.
Relative density: No data available.
Solubility(ies)
Solubility in water: No data available.
Solubility (other): No data available.
Partition coefficient (n-octanol/water): No data available.
Auto-ignition temperature: No data available.
Decomposition temperature: No data available.
Viscosity: No data available.

Version: 1.2
Revision date: 04/29/2015



10. Stability and reactivity

Reactivity:	No data available.
Chemical stability:	No data available.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	No data available.
Incompatible materials:	No data available.
Hazardous decomposition products:	No data available.

11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion:	No data available.
Inhalation:	No data available.
Skin contact:	No data available.
Eye contact:	No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product:	ATEmix (): 353.488372 mg/kg
----------	-----------------------------

Dermal

Product:	Not classified for acute toxicity based on available data.
----------	--

Inhalation

Product:	No data available.
----------	--------------------

Specified substance(s):

Sodium Chloride	LC 50 (Rat,) : > 42 mg/l 2 (reliable with restrictions)
-----------------	--

Repeated dose toxicity

Product:	No data available.
----------	--------------------

Skin corrosion/irritation

Product:	No data available.
----------	--------------------

Serious eye damage/eye irritation

Product:	No data available.
----------	--------------------

Respiratory or skin sensitization

Product:	No data available.
----------	--------------------

Carcinogenicity

Product:	No data available.
----------	--------------------

Version: 1.2
Revision date: 04/29/2015



IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ cell mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific target organ toxicity - single exposure

Product: No data available.

Specific target organ toxicity - repeated exposure

Product: No data available.

Aspiration hazard

Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Sodium hydroxide

LC 50 (Western mosquitofish (*Gambusia affinis*), 24 h): 125 mg/l Mortality
LC 50 (Guppy (*Poecilia reticulata*), 24 h): 145 mg/l Mortality LC 50 (Goldfish (*Carassius auratus*), 24 h): 160 mg/l Mortality LC 50 (Bony fish superclass (*Osteichthyes*), 48 h): 33 - 100 mg/l Mortality LC 50 (Western mosquitofish (*Gambusia affinis*), 48 h): 125 mg/l Mortality

Aquatic invertebrates

Product: No data available.

Specified substance(s):

Sodium hydroxide

EC 50 (Water flea (*Ceriodaphnia dubia*), 48 h): 34.59 - 47.13 mg/l
Intoxication LC 50 (Common shrimp, sand shrimp (*Crangon crangon*), 48 h):
33 - 100 mg/l Mortality LC 50 (Cockle (*Cerastoderma edule*), 48 h): 330 -

Version: 1.2
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1,000 mg/l Mortality

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and degradability

Biodegradation

Product: No data available.

BOD/COD ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration factor (BCF)

Product: No data available.

Partition coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Sodium hydroxide No data available.

Water No data available.

Sodium chloride No data available.

Known or predicted distribution to environmental compartments

Water No data available.

13. Disposal considerations

Disposal instructions: No data available.

Contaminated packaging: No data available.

14. Transport information

DOT

UN number: UN 1824
UN proper shipping name: Sodium hydroxide solution
Transport hazard class(es)
Class: 8
Label(s): 8
Packing group: II
Marine Pollutant: Not regulated.

Version: 1.2
Revision date: 04/29/2015



Special precautions for user:	—
IMDG	
UN number:	UN 1824
UN proper shipping name:	SODIUM HYDROXIDE SOLUTION
Transport hazard class(es)	
Class:	8
Label(s):	8
EmS No.:	F-A, S-B
Packing group:	II
Marine Pollutant:	Not regulated.
Special precautions for user:	—
IATA	
UN number:	UN 1824
Proper Shipping Name:	Sodium hydroxide solution
Transport hazard class(es):	
Class:	8
Label(s):	8
Packing group:	II
Environmental hazards	Not regulated.
Special precautions for user:	—
Other information	
Passenger and cargo aircraft:	Allowed.
Cargo aircraft only:	Allowed.

15. Regulatory information

US federal regulationsUS. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Sodium hydroxide Reportable quantity: 1000 lbs.

Superfund amendments and reauthorization act of 1986 (SARA)

Hazard categories

Not listed.

Version: 1.2
Revision date: 04/29/2015



SARA 302 Extremely hazardous substance

None present or none present in regulated quantities.

SARA 304 Emergency release notification

Chemical identity	RQ
Sodium hydroxide	1000 lbs.

SARA 311/312 Hazardous chemical

Chemical identity	Threshold Planning Quantity
Sodium hydroxide	500 lbs
Sodium Chloride	500 lbs

SARA 313 (TRI reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

Sodium hydroxide Reportable quantity: 1000 lbs.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US state regulations

US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

US. New Jersey Worker and Community Right-to-Know Act

Sodium hydroxide Listed

US. Massachusetts RTK - Substance List

Sodium hydroxide Listed

US. Pennsylvania RTK - Hazardous Substances

Sodium hydroxide Listed

US. Rhode Island RTK

Sodium hydroxide Listed

Version: 1.2
 Revision date: 04/29/2015



Inventory Status: Australia AICS:	Not in compliance with the inventory.
Canada DSL Inventory List:	Not in compliance with the inventory.
EU EINECS List:	Not in compliance with the inventory.
EU ELINCS List:	Not in compliance with the inventory.
Japan (ENCS) List:	Not in compliance with the inventory.
EU No Longer Polymers List:	Not in compliance with the inventory.
China Inv. Existing Chemical Substances:	Not in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI):	Not in compliance with the inventory.
Canada NDSL Inventory:	Not in compliance with the inventory.
Philippines PICCS:	Not in compliance with the inventory.
US TSCA Inventory:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	Not in compliance with the inventory.
Japan ISHL Listing:	Not in compliance with the inventory.
Japan Pharmacopoeia Listing:	Not in compliance with the inventory.

16. Other information, including date of preparation or last revision

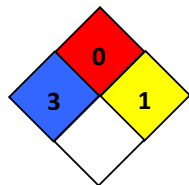
HMIS Hazard ID

Health	*	3
Flammability		0
Physical hazards		1
PERSONAL PROTECTION		B

B - Safety Glasses & Gloves

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; *Chronic health effect

NFPA Hazard ID



Flammability
Health
Reactivity
Special hazard.

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Issue date: 04/29/2015
Revision date: No data available.
Version #: 1.2
Further information: No data available.

Version: 1.2
Revision date: 04/29/2015



Univar USA Inc Material Safety Data Sheet

For Additional Information contact MSDS Coordinator during business hours, Pacific time: (425) 889-3400

Notice

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Do not use ingredient information and/or ingredient percentages in this MSDS as a product specification. For product specification information refer to a product specification sheet and/or a certificate of analysis. These can be obtained from your local Univar sales office.

All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources. While the information is believed to be accurate, Univar makes no representations as to its accuracy or sufficiency. Conditions of use are beyond Univar's control and therefore users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance upon, information contained herein.

This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process



ATTACHMENT WS 7.0-4.c

Inventory, or list of materials currently handled at the facility that may be exposed to precipitation.

- Green Coke is routinely exposed to precipitation. Calcined coke is stored in silos.

ATTACHMENT WS 2.0-4

CONSTITUENT LIST DEVELOPMENT

Seadrift Coke L.P.

TPDES Permit No. 025860

Outfalls 001, 002, & 003

- Outfall 001 Effluent testing is currently underway for Tables 1,2,3,4, and 6. A supplemental sheet of the tables will be provided to TCEQ upon completion of effluent sampling.
- Outfall 002 Effluent testing is currently underway for Tables 1,2,3,17 and 18. A supplemental sheet of the tables will be provided to TCEQ upon completion of effluent sampling.
- Outfall 003 Effluent testing is currently underway for Tables 17 and 18. A supplemental sheet of the tables will be provided to TCEQ upon completion of effluent sampling.

AR1.0 - ePay Receipt

TCEQ ePay Receipt

Transaction Information

Trace Number: 582EA000657885
Date: 03/05/2025 10:41 AM
Payment Method: CC - Authorization 000004781Z
ePay Actor: GEORGE NEWHOUSE
TCEQ Amount: \$350.00
Texas.gov Price:: \$358.13*

* This service is provided by Texas.gov, the official website of Texas. The price of this service includes funds that support the ongoing operations and enhancements of Texas.gov, which is provided by a third party in partnership with the State.

Payment Contact Information

Name: THOMAS NEWHOUSE
Company: CAMS TEXAS LLC
Address: 910 LOUISIANA ST STE 2400, HOUSTON, TX 77002
Phone: 281-685-3504

Cart Items

Voucher	Fee Description	AR Number	Amount
755985	WW PERMIT - MINOR FACILITY NOT SUBJECT TO 40 CFR 400-471 - MAJOR AMENDMENT		\$300.00
755986	30 TAC 305.53B WQ NOTIFICATION FEE		\$50.00
		TCEQ Amount:	\$350.00

TCEQ ePay Voucher Receipt

Transaction Information

Voucher Number:	755986
Trace Number:	582EA000657885
Date:	03/05/2025 10:41 AM
Payment Method:	CC - Authorization 000004781Z
Voucher Amount:	\$50.00
Fee Type:	30 TAC 305.53B WQ NOTIFICATION FEE
ePay Actor:	GEORGE NEWHOUSE

Payment Contact Information

Name:	THOMAS NEWHOUSE
Company:	CAMS TEXAS LLC
Address:	910 LOUISIANA ST STE 2400, HOUSTON, TX 77002
Phone:	281-685-3504

TCEQ ePay Voucher Receipt

Transaction Information

Voucher Number: 755985
Trace Number: 582EA000657885
Date: 03/05/2025 10:41 AM
Payment Method: CC - Authorization 000004781Z
Voucher Amount: \$300.00
Fee Type: WW PERMIT - MINOR FACILITY NOT SUBJECT TO 40 CFR 400-471 - MAJOR AMENDMENT
ePay Actor: GEORGE NEWHOUSE

Payment Contact Information

Name: THOMAS NEWHOUSE
Company: CAMS TEXAS LLC
Address: 910 LOUISIANA ST STE 2400, HOUSTON, TX 77002
Phone: 281-685-3504

Site Information

Site Name: SEADRIFT COKE
Site Address: 8618 STATE HIGHWAY 185 NORTH, PORT LAVACA, TX 77979
Site Location: 8618 STATE HIGHWAY 185 NORTH PORT LAVACA TX 77979

Customer Information

Customer Name: SEADRIFT COKE LP
Customer Address: 8618 STATE HIGHWAY 185 NORTH, PORT LAVACA, TX 77979

Other Information

Program Area ID: 0002586000



ATTACHMENT WS 7.0-4.e

Best Management Practice (BMP) for storm water discharges

Process areas and the green coke storage area storm water is segregated from the Outfall 002 and Outfall 003 drainage areas. See Figure 5 Attachment WS 7.0-3.

Good housekeeping and equipment maintenance is used to reduce the incidental spills of calcined coke from conveyors. Accumulations of the windblown and steam-entrained coke are removed from Outfall 002 drainage area. Any spills or leaks hydrocarbons from tanks area contained within the containment area berms and are removed. Storm water is visually inspected prior to opening area valves.

ATTACHMENT TR 1.0-6

STORMWATER MANAGEMENT

Stormwater runoff from process areas is treated with utility waters before being discharged at Outfall 001. At Outfall 002, stormwater may episodically mix with wash water from the North Cooling Tower and Waste Heat Boiler during outages. Additionally, when the South Cooling Tower is down, stormwater at Outfall 002 will also be commingled with process waste from air compressor cooling.



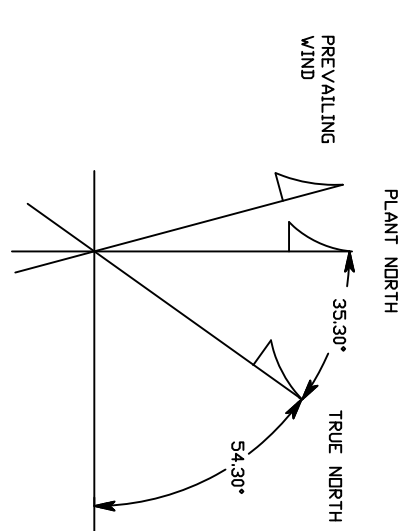
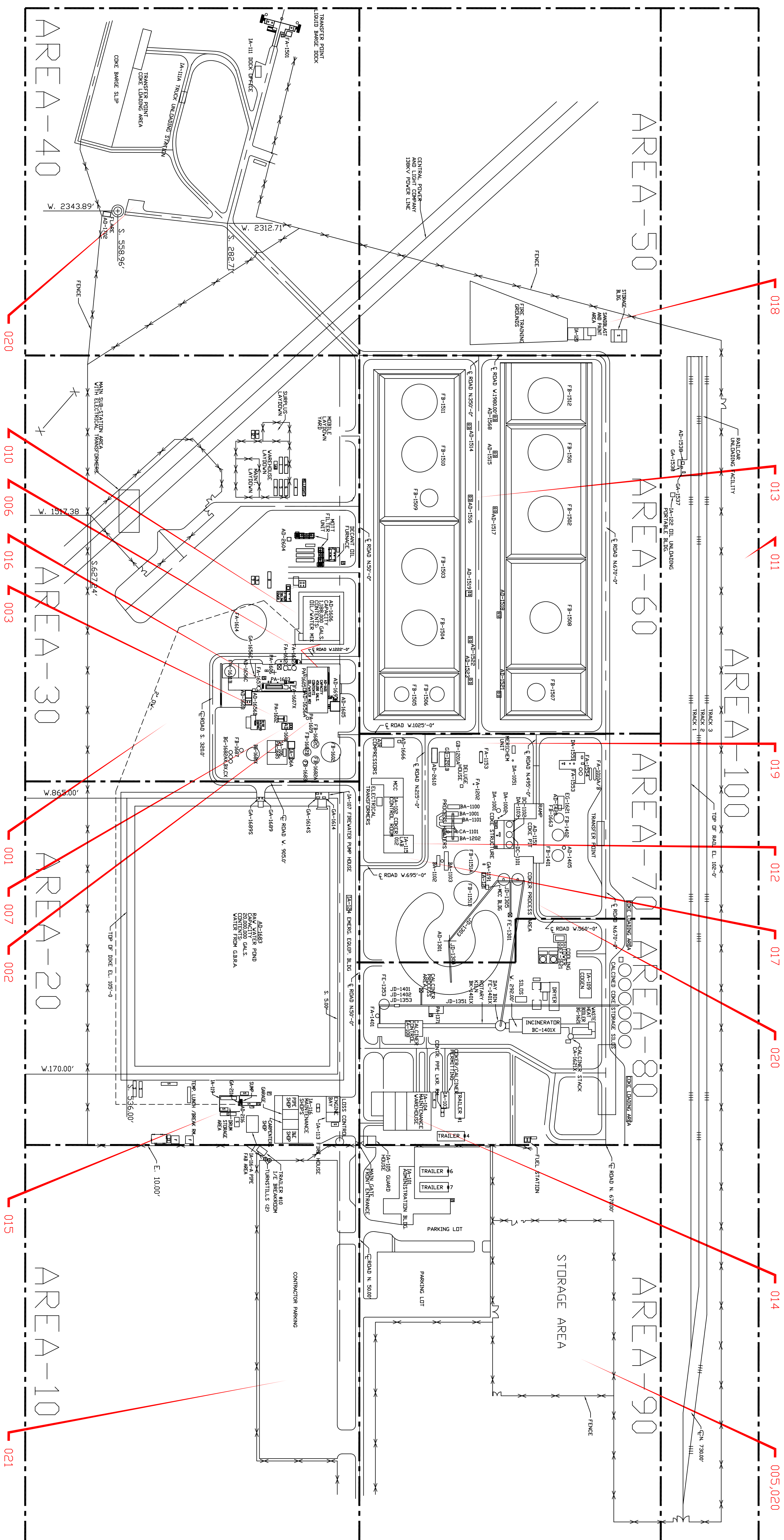
ATTACHMENT TR 1.0-9

TOXICITY TESTING INFORMATION

Permit 025860

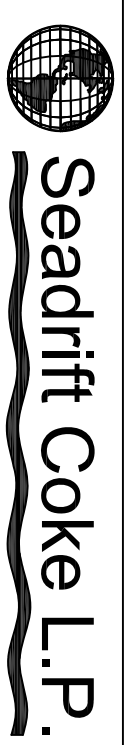
Quarterly chronic biomonitoring – Used to estimate chronic toxicity of effluents to marine and estuary organisms (mysid shrimp and inland silverside) by checking static renewal 7-day survival and growth rate. Results are sent to TCEQ. In 2016, a frequency reduction on quarterly chronic biomonitoring for the mysid shrimp was requested and approved by the TCEQ to be reduced to annual sampling while the inland silverside continues to be sampled quarterly.

Semiannual 24-hr acute – used to measure the static toxicity of effluents to freshwater and marine organisms (mysid shrimp and inland silverside).



0	01/28/25-AS-BUILT	DM	PD	PD
REV.	DATE	DESCRIPTION	CO.	CHK. APPR.

THIS DRAWING, INCLUDING ALL DETAILS AND DETAILS, IS THE PROPERTY OF SEADRIFF COKE, L.P. FOR THE PURPOSE OF ENGINEERING INFORMATION AND THE CONSIDERATION THEREOF. THE RECIPIENT OF THIS DRAWING ACCEPTS IT IN STRICT CONFIDENCE AND AGREES NOT TO REPRODUCE, REVEAL, OR USE IT IN ANY MANNER DETRIMENTAL TO SEADRIFF COKE, L.P.



8618 HIGHWAY 185 NORTH PORT LAVACA, TEXAS 77979	
DRAWN BY: -	APPROVED BY: CCH/PD
	ORIGINAL DATE: 01/28/25

SITE PLAN

PRJG. NO.	PRJG. NAME	SCALE
58779		N.T.S.
PROCESS	DWG. TYPE	DWG. NO.
OVERALL	201	E9317-00010A
		REV. No
		0

Waste Management Units	
#	Description
001	Surface impoundment listed as landfill used for the disposal of organic sediments generated from the treatment of raw river water.
002	Tripled rinsed containers.
003	This is an enclosed sanitary package which collects and treats sewage generated at the facility.
005	Contaminated material stored until disposed.
006	Collection basin for wastewater generated from process areas and storm runoff.
007	This unit part of a wastewater treatment system. It is active and serves to neutralize Reverse Osmosis reject streams.
010	Hazardous waste stored until disposed offsite. This is the main storage area a for waste.
011	Onsite disposal of material on deeded waste pile.
012	Hazardous waste satallite collection for liquids and rags from lab waste.
013	1509 slop oil solids/sludge satellite collection area.
014	Satellite accumulation area in millwright shop for hazardous waste rags and absorbents.
015	Temporary storage of hazardous waste generated from maintenance work and equipment cleaning.
016	This is a permitted TPDES unit which treats wastewater influent and discharges clean water.
017	Lab oil storage outtside East Lab exit.
018	Paint related storage at paint yard.
019	Used maintenance oil storage at coker blow down area.
020	Coker process area/flare area/east yard container storage area for temporary storage during episodic events (turnarounds, projects, etc.).
021	Contractor Parking Lot, Storage for Class 1 Sludge.



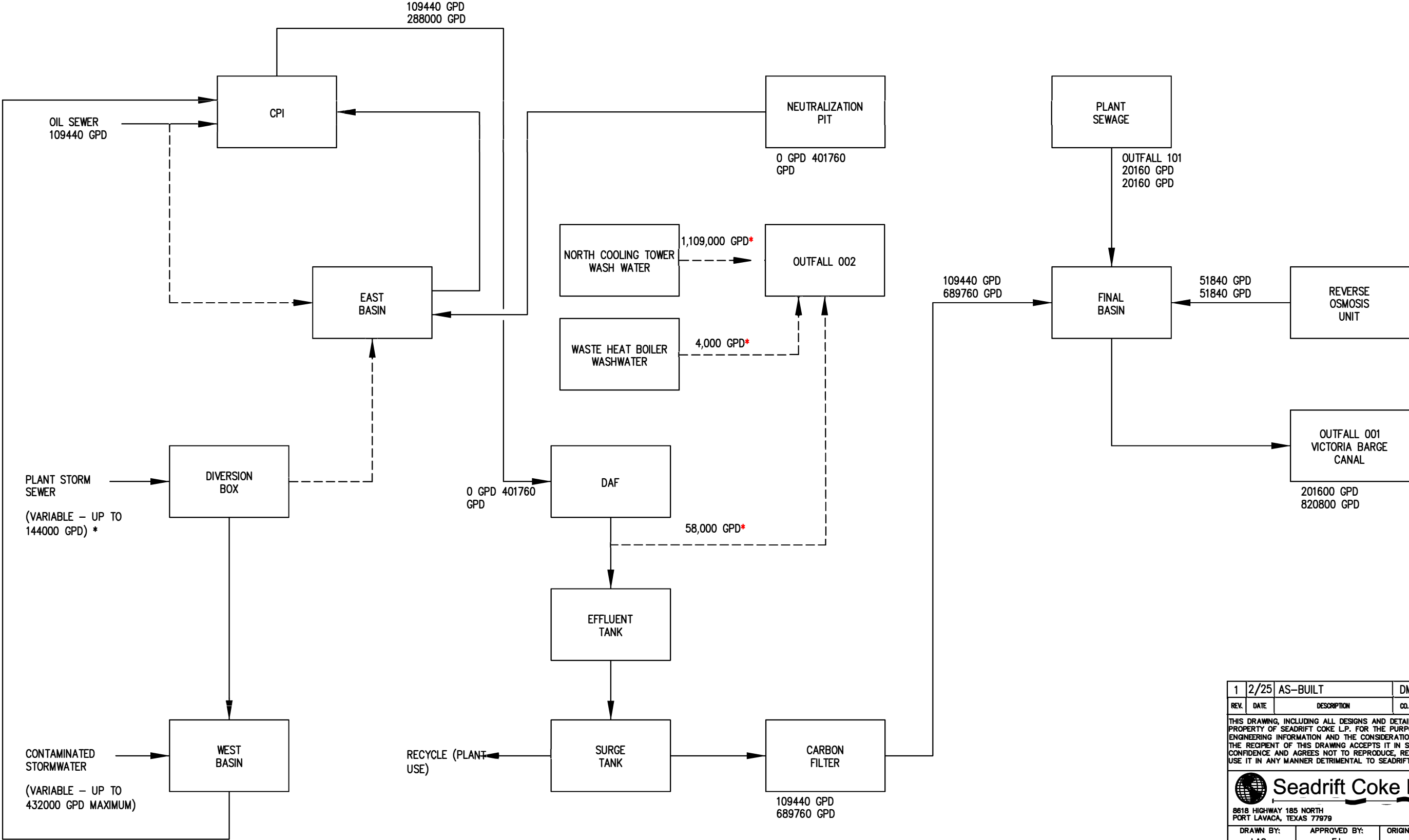
ATTACHMENT TR 1.0-4

ADDITIONAL OUTFALL WASTESTREAM CONTRIBUTION

Outfall No.: 003

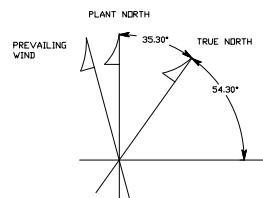
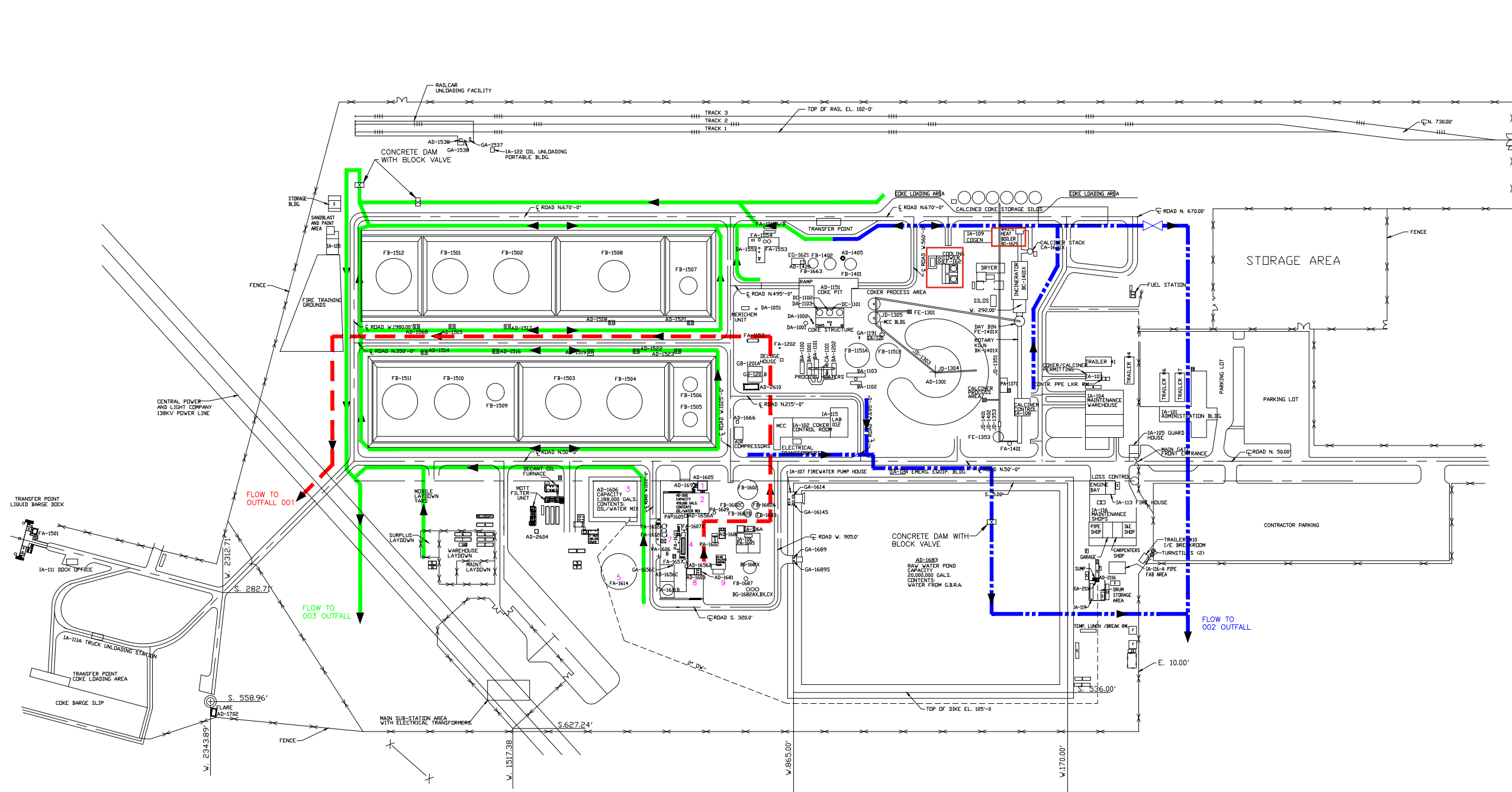
Contributing Wastestreams	Volume (MGD)	% of Total Flow
Uncontaminated Storm water runoff		100

Maintenance-Related Flow Alternatives



1	2/25	AS-BUILT	DM	PD	PD
REV.	DATE	DESCRIPTION	CO.	CHK. BY:	APP. BY:
THIS DRAWING, INCLUDING ALL DESIGNS AND DETAILS, IS THE PROPERTY OF SEADRIFT COKE L.P. FOR THE PURPOSE OF ENGINEERING INFORMATION AND THE CONSIDERATION THEREOF. THE RECIPIENT OF THIS DRAWING ACCEPTS IT IN STRICT CONFIDENCE AND AGREES NOT TO REPRODUCE, REVEAL, OR USE IT IN ANY MANNER DETRIMENTAL TO SEADRIFT COKE L.P.					
 Seadrift Coke L.P. 8618 HIGHWAY 185 NORTH PORT LAVACA, TEXAS 77979					
DRAWN BY: LAC		APPROVED BY: FJ		ORIGINAL DATE: 4/06	
FLOW DIAGRAM ENVIRONMENTAL WATER PERMITS WASTE BALANCE WASTEWATER					
PROJ. NO.		PROJ. NAME			SCALE: NTS
AREA	PROCESS	DWG. TYPE	DWG. NO.		REV. No.
		1.08	WWAPP5		1

*Intermittent discharge.



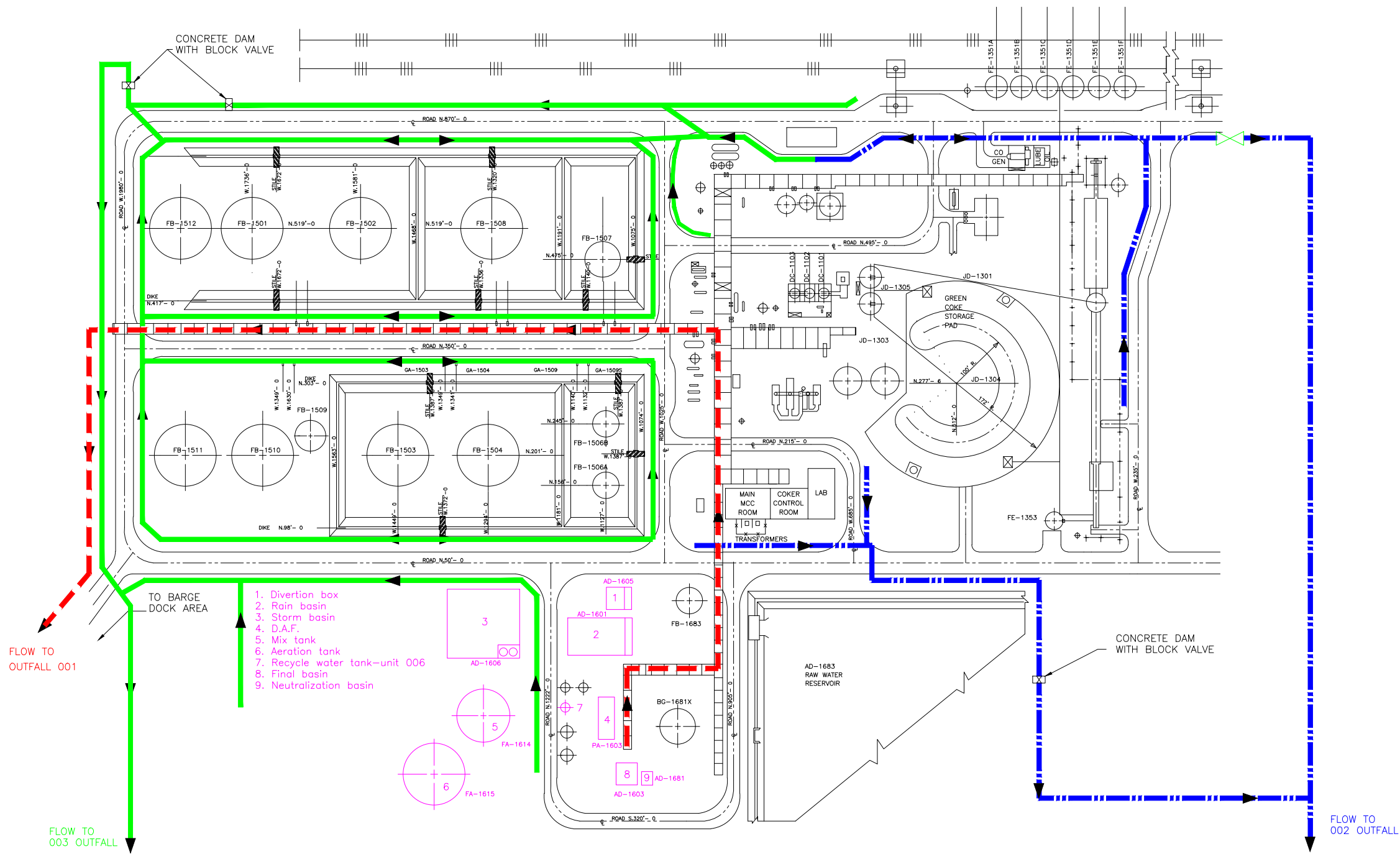
THE SINGLE DASHED LINE IS
THE FLOW TO 001 OUTFALL
WASTEWATER DISCHARGE.

THE DOUBLE DASHED LINE IS THE
FLOW TO THE 002 OUTFALL
STORMWATER DISCHARGE.

THE SOLID LINE IS THE
FLOW TO 003 OUTFALL
STORM WATER DISCHARGE.

1. DIVERSION BOX (AD-1605)
2. RAIN BASIN (AD-1601)
3. STORM BASIN (AD-1606)
4. D.A.F. (PA-1603)
5. MIX TANK (FA-1614) INACTIVE
6. AERATION TANK (FA-1615) DELETED
7. RECYCLE WATER TANK-UNIT 006
8. FINAL BASIN (AD-1603)
9. NEUTRALIZATION BASIN (AD-1681)

0	02/19/25	AS-BUILT	DM	PD	PD
REV.	DATE	DESCRIPTION	CO.	CHK. BY:	APR. BY:
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 Seadrift Coke L.P. 8618 HIGHWAY 185 NORTH PORT LAVACA, TEXAS 77979					
DRAWN BY: -		APPROVED BY: CCH/PD		ORIGINAL DATE: 02/19/25	
SITE PLAN FLOW DIAGRAM ENVIRONMENTAL WATER PERMITS OUTFALL FLOW					
PROJ. NO. -		PROJ. NAME			SCALE: NTS
AREA	PROCESS	DWG. TYPE	DWG. NO.		REV. NO.
OVERALL	2.01	E9317-00010A		0	



FLOW TO
OUTFALL 001

FLOW TO
003 OUTFALL

FLOW TO
002 OUTFALL

THE SINGLE DASHED LINE IS
THE FLOW TO 001 OUTFALL
WASTEWATER DISCHARGE.

THE DOUBLE DASHED LINE IS THE
FLOW TO THE 002 OUTFALL
STORMWATER DISCHARGE.

THE SOLID LINE IS
THE FLOW TO 003 OUTFALL
STORM WATER DISCHARGE.

VOID
PER AS-BUILT

1	02/19/25	VOID	DM	PD	PD
REV.	DATE	DESCRIPTION	CO.	CHK. BY:	APR. BY:
THIS DRAWING, INCLUDING ALL DESIGNS AND DETAILS, IS THE PROPERTY OF SEADRIFT COKE L.P. FOR THE PURPOSE OF ENGINEERING INFORMATION AND THE CONSIDERATION THEREOF. THE RECIPIENT OF THIS DRAWING ACCEPTS IT IN STRICT CONFIDENCE AND AGREES NOT TO REPRODUCE, REVEAL, OR USE IT IN ANY MANNER DETRIMENTAL TO SEADRIFT COKE L.P.					
 Seadrift Coke L.P. 8618 HIGHWAY 185 NORTH PORT LAVACA, TEXAS 77979					
DRAWN BY: MSP		APPROVED BY:		ORIGINAL DATE: 4/06	
FLOW DIAGRAM ENVIRONMENTAL WATER PERMITS OUTFALL FLOW					
PROJ. NO.		PROJ. NAME			SCALE: NTS
AREA	PROCESS	DWG. TYPE 1.08	DWG. NO. WW-0001		REV. No. 1

VOID