



Administrative Package Cover Page

This file contains the following documents:

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



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

If you are subject to the alternative language notice requirements in [30 Texas Administrative Code §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.** Note: You identified your alternative language requirements above in section I.(c) of this application. For your convenience, a Spanish template has been provided below. **Attach additional pages if necessary.**

English Template for TPDES New/Renewal/Amendment Applications

Phase I MS4 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 Texas Administrative Code Chapter 39. The information provided in this summary may change during the technical review of the application and are not federal enforceable representations of the permit application.

The City of Corpus Christi, Del Mar College, Port of Corpus Christi Authority of Nueces County, and Texas A&M University – Corpus Christi (CN60013858, CN605829449, CN600885248, CN601422033) operates the City of Corpus Christi Municipal Separate Storm Sewer System (MS4) (RN103138285) a Municipal Separate Storm Sewer System. The MS4 is located within the corporate boundary of the City of Corpus Christi served by, or otherwise contributing to discharges to the MS4s owned or operated by the permittees except for any agricultural lands and lands owned by the federal government that are under the jurisdiction of other stormwater permits, in Corpus Christi, Nueces, San Patricio, Kleberg, and Aransas Counties, Texas 78368, 78370, 78373, 78380, 78401, 78402, 78404, 78405, 78406, 78407, 78408, 78409, 78410, 78411, 78412, 78413, 78414, 78415, 78416, 78417, 78418, and 78419.

This application is for a renewal to discharge stormwater via the MS4 to Nueces River Tidal, Nueces River Below Lake Corpus Christi, Corpus Christi Bay, Nueces Bay, Corpus Christi Inner Harbor, Oso Bay, Oso Creek, Laguna Madre, and the Gulf of Mexico, Segments Nos. 2101 and 2102 of the Nueces River Basin, and Segments Nos. 2481, 2482, 2484, 2485, 2485A, 2491, and 2501 of the Bays and Estuaries, to various ditches and tributaries that eventually reach Nueces River Tidal, Nueces River Below Lake Corpus Christi, Corpus Christi Bay, Nueces Bay, Corpus Christi Inner Harbor, Oso Bay, Oso Creek, Laguna Madre, and the Gulf of Mexico.

Discharges from the MS4 are expected to contain biochemical oxygen demand, chemical oxygen demand, oil and grease, total suspended solids, total dissolved solids, total nitrogen, total Kjeldahl nitrogen, nitrate-nitrogen, ammonia-nitrogen, total phosphorus, dissolved phosphorus, total cadmium, total chromium, total copper, total cyanide, total lead, total nickel, total zinc, *E. coli*, *Enterococci*, hardness, and atrazine. Stormwater is treated in accordance with the storm water management plan (SWMP).

**PLANTILLA EN ESPAÑOL PARA SOLICITUDES
NUEVAS/RENOVACIONES/ENMIENDAS DE TPDES FASE I MS4 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 son representaciones federales exigibles de la solicitud de permiso.

La ciudad de Corpus Christi, Del Mar College, la autoridad del puerto de Corpus Christi del condado de Nueces y la Universidad Texas A&M – Corpus Christi (CN60013858, CN605829449, CN600885248, CN601422033) opera el Sistema Municipal Separado de Alcantarillado Pluvial (MS4) de la Ciudad de Corpus Christi (RN103138285) un sistema municipal separado de alcantarillado pluvial. La MS4 está ubicado dentro de los límites corporativos de la Ciudad de Corpus Christi atendidos por, o contribuyendo de otra manera a las descargas a los MS4 propiedad u operados por los titulares de permisos, excepto por cualquier tierra agrícola y tierra propiedad del gobierno federal que esté bajo la jurisdicción de otros permisos de aguas pluviales, en Corpus Christi , Condados de Nueces, San Patricio, Kleberg, and Aransas, Texas 78368, 78370, 78373, 78380, 78401, 78402, 78404, 78405, 78406, 78407, 78408, 78409, 78410, 78411, 78412, 78413, 78414, 78415, 78416, 78417, 78418, and 78419.

Esta solicitud es para una renovación para descargar aguas pluviales a través de la MS4 a Nueces River Tidal, Nueces River Below Lake Corpus Christi, Corpus Christi Bay, Nueces Bay, Corpus Christi Inner Harbor, Oso Bay, Oso Creek, Laguna Madre y el Golfo de México. , Tramos Nos. 2101 y 2102 de la Cuenca del Río Nueces, y Tramos Nos. 2481, 2482, 2484, 2485, 2485A, 2491 y 2501 de las Bahías y Estuarios, a varias zanjas y afluentes que eventualmente llegan a la marea del río Nueces, el río Nueces debajo del lago Corpus Christi, la bahía de Corpus Christi, la bahía de Nueces, el puerto interior de Corpus Christi, la bahía de Oso, el arroyo Oso , Laguna Madre y el Golfo de México.

Se espera que las descargas de la MS4 contengan demanda bioquímica de oxígeno, demanda química de oxígeno, aceite y grasa, sólidos suspendidos totales, sólidos disueltos totales, nitrógeno total, nitrógeno Kjeldahl total, nitrógeno nitrato, nitrógeno amoniacal, fósforo total, fósforo disuelto, cadmio total, cromo total, cobre total, cianuro total, plomo total, níquel total, zinc total, *E. coli*, *enterococos*, dureza y atrazina. Las aguas pluviales se tratan de acuerdo con el plan de gestión de aguas pluviales (SWMP).

O. Required Attachments

Provide the following attachments to the application:

(a) Attachment 1

See Attachment C

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



NOTICE OF RECEIPT OF APPLICATION AND INTENT TO OBTAIN A MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) PERMIT RENEWAL

PERMIT NO. WQ0004200000

APPLICATION. City of Corpus Christi, P.O. Box 9277, Corpus Christi, Texas 78469; Del Mar College District, 101 Baldwin Boulevard, MB 106, Corpus Christi, Texas 78404; Port of Corpus Christi Authority of Nueces County, P.O. Box 1541, Corpus Christi, Texas 78403; and Texas A&M University - Corpus Christi, 6300 Ocean Drive, Unit 5876, Corpus Christi, Texas 78412, have applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0004200000 (EPA I.D. No. TXS000601) to authorize discharges from the municipal separate storm sewer system including all areas, except for any agricultural lands and lands owned by the federal government that are under the jurisdiction of other stormwater permits, located within the corporate boundary of the City of Corpus Christi, served by, or otherwise contributing to discharges to the MS4s owned or operated by the permittees, in Nueces, San Patricio, Kleberg, and Aransas Counties, Texas 78368, 78370, 78373, 78380, 78401, 78402, and 78404 through 78419. The discharge route is from the municipal separate stormwater system to water in the State. TCEQ received this application on April 23, 2025. The permit application will be available for viewing and copying at City of Corpus Christi City Hall, City Secretary's Office, 1201 Leopard Street, Corpus Christi, in Nueces County, 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>.

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. TCEQ may act on an application to renew a permit for discharge of wastewater without providing an opportunity for a contested case hearing if certain criteria are met.**

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 City of Corpus Christi, Del Mar College District, Port of Corpus Christi Authority of Nueces County, and Texas A&M University - Corpus Christi at the address stated above or by calling Mr. Robert Anderson, Stormwater Superintendent, City of Corpus Christi, at 361-826-3589.

Issuance Date: May 12, 2025

Comisión de Calidad Ambiental del Estado de Texas



AVISO DE RECIBO DE LA SOLICITUD E INTENCION DE OBTENER UN PERMISO PARA EL SISTEMA SEPARADO MUNICIPAL DE AGUAS PLUVIALES (MS4) RENOVACION

PERMISO NO. WQ0004200000

SOLICITUD. City of Corpus Christi, P.O. Box 9277, Corpus Christi, Texas 78469; Del Mar College District, 101 Baldwin Boulevard, MB 106, Corpus Christi, Texas 78404; and the Corpus Christi Authority of Nueces County, P.O. Box 1541, Corpus Christi, Texas 78403; and Texas A&M University - Corpus Christi, 6300 Ocean Drive, Unit 5876, Corpus Christi, Texas 78412, have solicited the Texas Commission on Environmental Quality (TCEQ) to renew the Permit No. WQ0004200000 of the Texas Pollutant Discharge Elimination System (TPDES) (EPA I.D. No. TXS000601) to authorize discharges from the municipal separate stormwater system located within all areas, except agricultural lands and lands owned by the federal government that are under the jurisdiction of other stormwater permits, located within the corporate limits of the City of Corpus Christi, served by, or that in any other way contribute to discharges to the MS4 property owned or operated by the permittees in the County(s) of Nueces, San Patricio, Kleberg, and Aransas, Texas 78368, 78370, 78373, 78380, 78401, 78402 and 78404 to 78419. The discharge route is from the municipal separate stormwater system to the surface waters of the State. The TCEQ received this application on April 23, 2025. The application for the permit will be available for review and copying at the City of Corpus Christi Office of the Secretary of the City, 1201 Leopard Street, Corpus Christi, in the County of Nueces, Texas before the date of publication of this notice in the periodical. The application (any update and notice inclusive) is available electronically on the following website:

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

AVISO DE IDIOMA ALTERNATIVO. The notice of alternative language in Spanish is available on <https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications>.

AVISO ADICIONAL. The Executive Director of the TCEQ has determined that the application is administratively complete and will conduct a technical review of the application. After completing the technical review, the Executive Director may prepare a draft of the permit and issue a Preliminary Decision on the application. **The notice of the application and the preliminary decision will be published and sent to those who are on the mailing list of the persons who are in the county who wish to receive notices and those who are on the mailing list of the persons who wish to receive notices of this application. The notice will give the deadline for submitting public comments.**

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 todos 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. Si ciertos criterios se cumplen, la TCEQ puede actuar sobre una solicitud para renovar un permiso sin proveer una oportunidad de una audiencia administrativa de lo contencioso.

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.

INFORMACIÓN DISPONIBLE EN LÍNEA. Para detalles sobre el estado de la solicitud, favor de visitar la Base de Datos Integrada de los Comisionados en www.tceq.texas.gov/goto/cid. Para buscar en la base de datos, utilizar el número de permiso para esta solicitud que aparece en la parte superior de este aviso.

CONTACTOS E INFORMACIÓN A LA AGENCIA. Todos los comentarios públicos y solicitudes deben ser presentadas electrónicamente vía <https://www14.tceq.texas.gov/epic/eComment/> o por escrito dirigidos a la Comisión de Texas de Calidad Ambiental, Oficial de la Secretaría (Office of Chief Clerk), MC-105, P.O. Box 13087, Austin, Texas 78711-3087. 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. Para obtener más información acerca de esta solicitud de permiso o el proceso de permisos, llame al programa de educación pública de la TCEQ, gratis, al 1-800-687-4040. Si desea información en Español, puede llamar al 1-800-687-4040.

También se puede obtener información adicional del City of Corpus Christi, Del Mar College District, Port of Corpus Christi Authority of Nueces County, y Texas A&M University - Corpus Christi a la dirección indicada arriba o llamando a Sr. Robert Anderson, City of Corpus Christi, al 361-826-3589.

Fecha de emisión: el 12 de mayo de 2025



PLUMMER

0537-062-01

May 2, 2025

Ms. Leah Whallon
Texas Commission on Environmental Quality
Applications Review and Processing Team
Building F, Room 2101
12100 Park 35 Circle
Austin, Texas 78753

Re: Application to Renew Permit No. WQ0004200000
City of Corpus Christi (CN600131858) Del Mar College District (CN605829449); Port of Corpus Christi Authority of Nueces County (CN600885248); Texas A&M University - Corpus Christi (CN601422033)
City of Corpus Christi MS4 (RN103138285)

Dear Ms. Whallon:

On behalf of the City of Corpus Christi, Del Mar College District, Port of Corpus Christi Authority of Nueces County, and Texas A&M University – Corpus Christi, Plummer Associates, Inc. (Plummer) provides the following response to your Notice of Deficiency (NOD) letter dated April 30, 2025, regarding the application to renew the Texas Pollutant Discharge Elimination System (TPDES) permit for the above-referenced facility. The responses are provided in the order presented in your NOD letter. A copy of your NOD letter is provided as Enclosure A.

1. **TPDES Application for Permit-Large/Medium MS4 (TCEQ-20214):** The signed signature page for the City of Corpus Christi is included as Enclosure B.
2. **Notice of Receipt of Application and Intent to Obtain a Water Quality Permit (NORI):** Plummer has reviewed the proposed NORI language; no revisions are requested to the proposed language at this time.
3. **Spanish NORI:** The translated Spanish NORI is provided as Enclosure C.

Please feel free to contact me at alewis@plummer.com or (512) 687-2154, if you have any questions regarding this submittal.

Sincerely,

PLUMMER
TBPE Firm Registration No. F-13

Ashley Lewis
Water Quality/Permitting Team Leader

Ms. Leah Whallon

April 30, 2025

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Enclosures (3)

cc: Mr. Robert Anderson, Stormwater Superintendent, City of Corpus Christi
Mr. Peter Zaroni, City Manager, City of Corpus Christi
Mr. Kent Britton, Chief Executive Officer, Port of Corpus Christi Authority of Nueces County
Mr. John Strybos, Vice President and Chief Facilities Officer, Del Mar College
Ms. Kelly M. Miller, President and CEO, Texas A&M – Corpus Christi

ENCLOSURE A
Notice of Deficiency Letter
April 30, 2025

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

April 30, 2025

Mr. Robert Anderson
Stormwater Superintendent
City of Corpus Christi
2726 Holly Road
Corpus Christi, Texas 78415

RE: Application to Renew Permit No.: WQ0004200000 (EPA I.D. No. TXS000601)
Applicant Names: City of Corpus Christi (CN600131858); Del Mar College District (CN605829449); Port of Corpus Christi Authority of Nueces County (CN600885248); Texas A&M University - Corpus Christi (CN601422033)
Site Name: City of Corpus Christi MS4 (RN103138285)
Type of Application: Renewal without changes

VIA EMAIL

Dear Mr. Anderson:

We have received the application for the above-referenced permit, and it is currently under review. Your attention to the following items is requested before we can declare the application administratively complete. Please submit responses to the following items via email.

1. TPDES Application for Permit-Large/Medium MS4 (TCEQ-20214)
The signature page for the City of Corpus Christi is not signed. Please provide the signed and notarized signature page.
2. The following is a portion of the NORI which contains information relevant to your application. Please read it carefully and indicate if it contains any errors or omissions. The complete notice will be sent to you once the application is declared administratively complete.

APPLICATION. City of Corpus Christi, P.O. Box 9277, Corpus Christi, Texas 78469; Del Mar College District, 101 Baldwin Boulevard, MB 106, Corpus Christi, Texas 78404; Port of Corpus Christi Authority of Nueces County, P.O. Box 1541, Corpus Christi, Texas 78403; and Texas A&M University - Corpus Christi, 6300 Ocean Drive, Unit 5876, Corpus Christi, Texas 78412, have applied to the Texas Commission on Environmental Quality (TCEQ) to renew Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0004200000 (EPA I.D. No. TXS000601) to authorize discharges from the municipal separate storm sewer system including all areas, except for any agricultural lands and lands owned by the federal government that are under the jurisdiction of other stormwater permits, located within the corporate boundary of the City of Corpus Christi, served by, or otherwise contributing to discharges to the MS4s owned or operated by the permittees, in Nueces, San Patricio, Kleberg, and Aransas Counties, Texas 78368, 78370, 78373, 78380, 78401, 78402, and 78404 through 78419. The discharge route is from the municipal separate stormwater system to water in the State. TCEQ received this application on April 23, 2025. The permit application will be available for viewing and copying at City of Corpus Christi City Hall,

Mr. Robert Anderson
Page 2
April 30, 2025
Permit No. WQ0004200000

City Secretary's Office, 1201 Leopard Street, Corpus Christi, in Nueces County, 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:

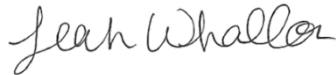
<https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications>.

Further information may also be obtained from City of Corpus Christi, Del Mar College District, Port of Corpus Christi Authority of Nueces County, and Texas A&M University - Corpus Christi at the addresses stated above or by calling Mr. Robert Anderson, Stormwater Superintendent, City of Corpus Christi, at 361-826-3589.

3. The application indicates that public notices in Spanish are required. After confirming the portion of the NORI above does not contain any errors or omissions, please use the attached template to translate the NORI into Spanish. Only the first and last paragraphs are unique to this application and require translation. Please provide the translated Spanish NORI in a Microsoft Word document.

Please submit the complete response addressed to my attention by May 14, 2025. If you should have any questions, please do not hesitate to contact me by phone at (512) 239-0084 or by email at leah.whallon@tceq.texas.gov

Sincerely,



Leah Whallon
Application Review and Processing Team (MC148)
Water Quality Division
Texas Commission of Environmental Quality

lcw

Enclosure
MS4 - Spanish NORI

ENCLOSURE B
City of Corpus Christi Signature Page

SIGNATURE PAGE

I, Peter Zanoni Title: City Manager, City of Corpus Christi
Typed or printed name

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 gathered and evaluated 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 known violations.

Signature: *Peter Zanoni* Date: 4.25.25

NOTE: ALL APPLICATIONS MUST BEAR THE SIGNATURE AND SEAL OF NOTARY PUBLIC.

Subscribed and Sworn to before me by the said Peter Zanoni
on this 25th day of April, 2025
My commission expires on the 16th day of March, 2026.

Martha Vazquez
Notary Public
Notary
County, Texas

[SEAL]

Approved as to legal form:

By: *[Signature]*
Assistant City Attorney



NOTE: If co-permittees are necessary, all entities must submit separate Signature Pages.

ENCLOSURE C
Spanish NORI

Comisión de Calidad Ambiental del Estado de Texas



AVISO DE RECIBO DE LA SOLICITUD E INTENCION DE OBTENER UN PERMISO PARA EL SISTEMA SEPARADO MUNICIPAL DE AGUAS PLUVIALES (MS4) RENOVACION

PERMISO NO. WQ0004200000

SOLICITUD. Ciudad de Corpus Christi, Apartado Postal 9277, Corpus Christi, Texas 78469; Distrito Universitario Del Mar, 101 Baldwin Boulevard, MB 106, Corpus Christi, Texas 78404; Autoridad Portuaria del Condado de Nueces, Apartado Postal 1541, Corpus Christi, Texas 78403; y Universidad Texas A&M - Corpus Christi, 6300 Ocean Drive, Unidad 5876, Corpus Christi, Texas 78412, ha solicitado a la Comisión de Calidad Ambiental de Texas (TCEQ) para renovar el Permiso No. WQ0004200000 del Sistema de Eliminación de Descargas de Contaminantes de Texas (TPDES) (EPA I.D. No. TXS000601) para autorizar las descargas del sistema separado municipal de aguas pluviales ubicada dentro de todas las áreas, excepto las tierras agrícolas y las tierras propiedad del gobierno federal que estén bajo la jurisdicción de otros permisos de aguas pluviales, ubicadas dentro del límite corporativo de la ciudad de Corpus Christi, servidas por, o que de otro modo contribuyan a las descargas a las MS4 propiedad de u operadas por los titulares de los permisos en el Condado(s) de Nueces, San Patricio, Kleberg, y Aransas, Texas 78368, 78370, 78373, 78380, 78401, 78402 y 78404 a 78419. La ruta de descarga es del sistema separado municipal de aguas pluviales a las aguas superficiales del Estado. La TCEQ recibió esta solicitud el día 23 de abril de 2025. La solicitud para el permiso estará disponible para leer y copiar en Ayuntamiento de Corpus Christi Oficina del Secretario de la Ciudad, 1201 Leopard Street, Corpus Christi, en el condado de Nueces, 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>.

AVISO DE IDIOMA ALTERNATIVO. El aviso de idioma alternativo en español está disponible en <https://www.tceq.texas.gov/permitting/wastewater/pending-permits/tpdes-applications>.

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 todos 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. Si ciertos criterios se cumplen, la TCEQ puede actuar sobre una solicitud para renovar un permiso sin proveer una oportunidad de una audiencia administrativa de lo contencioso.

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.

INFORMACIÓN DISPONIBLE EN LÍNEA. Para detalles sobre el estado de la solicitud, favor de visitar la Base de Datos Integrada de los Comisionados en www.tceq.texas.gov/goto/cid. Para buscar en la base de datos, utilizar el número de permiso para esta solicitud que aparece en la parte superior de este aviso.

CONTACTOS E INFORMACIÓN A LA AGENCIA. Todos los comentarios públicos y solicitudes deben ser presentadas electrónicamente vía <https://www14.tceq.texas.gov/epic/eComment/> o por escrito dirigidos a la Comisión de Texas de Calidad Ambiental, Oficial de la Secretaría (Office of Chief Clerk), MC-105, P.O. Box 13087, Austin, Texas 78711-3087. 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. Para obtener más información acerca de esta solicitud de permiso o el proceso de permisos, llame al programa de educación pública de la TCEQ, gratis, al 1-800-687-4040. Si desea información en Español, puede llamar al 1-800-687-4040.

También se puede obtener información adicional del Ciudad de Corpus Christi, Distrito Universitario Del Mar, Autoridad Portuaria del Condado de Nueces de Corpus Christi y Universidad Texas A&M - Corpus Christi a la dirección indicada arriba o llamando a Sr. Robert Anderson al 361-826-3589.

Fecha de emisión *[Date notice issued]*



PLUMMER

0537-065-01

April 23, 2025

Texas Commission on Environmental Quality
Applications Review and Processing Team
Building F, Room 2101
12100 Park 35 Circle
Austin, Texas 78753

Re: City of Corpus Christi, Port of Corpus Christi Authority of Nueces County, Del Mar College, and Texas A&M University – Corpus Christi (CN600131858, CN600885248, CN605829449, CN601422033)
Phase I Municipal Separate Storm Sewer System (MS4) Permit No. WQ0004200000

To Whom It May Concern:

On behalf of the City of Corpus Christi, Port of Corpus Christi Authority of Nueces County, Del Mar College, and Texas A&M University – Corpus Christi, Plummer Associates, Inc., (Plummer), submits one original of an MS4 Permit Renewal application for the above-referenced permit. The application fee of \$2,015.00 for the Phase I MS4 Permit Renewal Application has been submitted to the Texas Commission on Environmental Quality via ePay Voucher Nos. 759970 and 759971.

Please feel free to contact me at alewis@plummer.com or (512) 687-2154, if you have any questions regarding this submittal.

Sincerely,

PLUMMER
TBPE Firm Registration No. F-13

Ashley Lewis
Water Quality/Permitting Team Leader

Enclosures: TPDES MS4 Permit Application (1 original)

cc: Mr. Robert Anderson, Stormwater Superintendent, City of Corpus Christi
Mr. Peter Zanoni, City Manager, City of Corpus Christi
Mr. Kent Britton, Chief Executive Officer, Port of Corpus Christi Authority of Nueces County
Mr. John Strybos, Vice President and Chief Facilities Officer, Del Mar College
Ms. Kelly M. Miller, President and CEO, Texas A&M – Corpus Christi

RECEIVED

APR 23 2025

TCEQ MAIL CENTER

WT



**CITY OF CORPUS CHRISTI, PORT OF CORPUS CHRISTI
AUTHORITY OF NUECES COUNTY
DEL MAR COLLEGE, AND
TEXAS A&M UNIVERSITY – CORPUS CHRISTI
TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM
(TPDES) PERMIT RENEWAL APPLICATION
PHASE I MUNICIPAL SEPARATE STORM SEWER SYSTEM
(MS4) PERMIT NO. WQ0004200000**

SUBMITTED TO:

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



APRIL 2025

PROJECT #: 0537-065-01

PLUMMER

**CITY OF CORPUS CHRISTI
PHASE I MS4 PERMIT RENEWAL APPLICATION**

TABLE OF CONTENTS

I. TPDES APPLICATION FOR PHASE I MS4 PERMIT

II. SUPPLEMENTAL PERMIT INFORMATION FORM

SPIF 1 - General Location Map

SPIF 2 - USGS Map

III. ATTACHMENTS

<u>No.</u>	<u>Description</u>	<u>Reference</u>
A	Additional Co-Applicants	Application Form Item C
B	Permanent School Fund Land Letter	Application Form Item J.g
C	SWMP and Permit Modifications	Application Form Items K.d, O.a
D	Permits Held by Applicant and Co-Applicants	Application Form Item K.e
E	USGS Map	Application Form Item O.b
F	Current Storm Water Management Plans and 2024 MS4 Annual Report	Application Form Item O.c
G	Annual Report and SWMP Implementation	Application Form Item O.d

**APPLICATION FOR PERMIT TO DISCHARGE
FROM A LARGE OR MEDIUM (PHASE 1)
MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)
INTO SURFACE WATER IN THE STATE**

A. Application fee payment The application fee of \$2,015 was paid via ePay Voucher Nos. 759970, 759971.

Did you know you can pay the application fee online?

- (a) Go to <https://www3.tceq.texas.gov/epay/>
- (b) Select Fee Type: Individual Permit, MS4 Permit - Phase I
- (c) Select Application Type: New, Major Amendment, Minor Amendment (without renewal) or Renewal

The application fee for new, major amendment and renewal applications of the TPDES permit for this activity is \$2,000.00.

The application fee for minor amendment (without renewal of the permit term) of the TPDES permit for this activity is \$100.00

For new and major applications an additional fee of \$50.00 is required to be applied toward the cost of providing public notice. For renewal applications the fee is \$15.00.

You can also send the application fee by regular mail. A check or money order should then be made payable to the Texas Commission on Environmental Quality and must be sent under separate cover to:

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

B. Permittee (applicant)

- (a) If the applicant is currently a customer with TCEQ, provide the Customer Number (CN)? Search for your CN at:
<http://www12.tceq.state.tx.us/crpub/index.cfm?fuseaction=cust.CustSearch>

CN: 600131858_____

- (b) Provide the Legal Name of the entity (applicant) applying for this permit:
City of Corpus Christi_____

- (c) Provide the name and title of the person signing the application:

(The person must be an executive official meeting signatory requirements in TAC §305.44(a).)

Prefix: Mr._____
(e.g, Mr., Ms., Miss)
First/Last Name: Peter Zanoni_____
Suffix: N/A_____
Title: City Manager, City of Corpus Christi_____
Credential: N/A_____

- (d) Provide the applicant's mailing address as recognized by the US Postal Service: You may verify the address at:

<http://zip4.usps.com/zip4/welcome.jsp>

Street Address or P.O. Box: P.O. Box 9277
Internal Routing (Mail Code, Etc.): N/A
City: Corpus Christi
State: TX
ZIP Code: 78469

Electronic Contact Information: Robert Anderson, Stormwater Superintendent
Phone No.: (361) 826-3589
Extension: N/A
Fax No.: N/A
E-mail Address: roberta3@cctexas.com

- (e) Indicate the type of Customer:

- ☐ Federal Government
☐ State Government
☐ County Government
☒ City Government
☐ Other Government, Explain:
N/A

- (f) Number of Employees:

☐ 0-20; ☐ 21-100; ☐ 101-250; ☐ 251-500; or ☒ 501 or higher

C. Co-applicants(s)

Note: This section may be copied and attached to the application if there are additional co-applicants. Indicate if there are additional co-applicants:

Yes ☒

No ☐

See Attachment A for additional co-applicants' contact information.

- (a) If the co- applicant is currently a customer with TCEQ, provide the Customer Number (CN)? Search for your CN at
<http://www12.tceq.state.tx.us/crpub/index.cfm?fuseaction=cust.CustSearch>

CN: 600885248

- (b) Provide the Legal Name of the entity (applicant) applying for this permit:
Port of Corpus Christi Authority of Nueces County

- (c) Provide the name and title of the person signing the application:
(The person must be an executive official meeting signatory requirements in TAC §305.44(a).)

Prefix: Mr.
(e.g, Mr., Ms., Miss)
First/Last Name: Kent Britton
Suffix: N/A
Title: Chief Executive Officer

Credential: N/A

- (d) Provide the applicant's mailing address as recognized by the US Postal Service:

You may verify the address at: <http://zip4.usps.com/zip4/welcome.jsp>

Street Address or P.O. Box: P.O. Box 1541

Internal Routing (Mail Code, Etc.): Attention: Sarah Garza

City: Corpus Christi

State: TX

ZIP Code: 78403

Electronic Contact Information: Ms. Sarah Garza

Phone No.: (361) 885-6163

Extension: N/A

Fax No.: (361) 881-5167

E-mail Address: sarah@pocca.com

- (e) Indicate the type of Customer:

- ☐ Federal Government
☐ State Government
☐ County Government
☐ City Government
☒ Other Government, Explain Port Authority

- (f) Number of Employees:

☐ 0-20; ☐ 21-100; ☐ 101-250; ☒ 251-500; ☐ or 501 or higher

D. Billing Address

The operator is responsible for paying the annual fee. The annual fee will be assessed to permits active on September 1 of each year. TCEQ will send a bill to the address provided in this section. The operator is responsible for terminating the permit when it is no longer needed.

- (a) Is the billing address the same for the permittee or co-permittee(s)?

Yes ☐ No ☒

If the answer is No, please indicate the billing address for each party responsible to receive billing.

Prefix: Ms.

(e.g., Mr., Ms., Miss)

First/Last Name: Suffix: Adria Schreiber-Garza

Title: Finance & Resource Management Superintendent

Credential: N/A

Organization Name: City of Corpus Christi Storm Water Department

Street Address or P.O. Box: 2726 Holly Road

Internal Routing (Mail Code, Etc.): N/A

City: Corpus Christi

State: TX

ZIP: 78415

Electronic Contact Information:

Phone No.: (361) 826-1846

Extension: N/A

Fax No: (361) 826-4350

Email address: engineeringap@cctexas.com

E. Regulated Entity (RE) information on project or site

- (a) Has TCEQ issued a Regulated Entity Reference Number (RN) for the regulated MS4?

Yes ☒
No ☐

Provide the RN? RN: 103138285

TCEQ will assign the RN number after the application is submitted

- (b) Provide the name that is used to identify the MS4 (Regulated Entity):

City of Corpus Christi Municipal Separate Storm Sewer System (MS4)

(Example: City of xxx MS4)

- (c) Provide the name of the county where the largest residential population exists within the regulated MS4

boundaries? Nueces County

- (d) Provide the latitude and longitude of the approximate center of the regulated MS4?

Latitude: N 27° 45' 7.31"

Longitude: W 97° 26' 8.18"

- (e) In your own words, briefly describe the primary business of the Regulated Entity (Do not write the SIC and NAICS code description);

Municipal Separate Storm Sewer System (MS4)

F. Application contact

- (a) If TCEQ needs additional information regarding this application, who should be contacted?

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

First/Last Name: Robert Anderson

Suffix: N/A

Title: Stormwater Superintendent

Credential: N/A

Organization Name: City of Corpus Christi

Street Address or P.O. Box: 2726 Holly Road

Internal Routing (Mail Code, Etc.): N/A

City: Corpus Christi

State: TX

ZIP: 78415

Electronic Contact Information:

Phone No.: (361) 826-3589
Extension: N/A
Fax No.: N/A
Email address: roberta3@cctexas.com

G. Application contact (technical)

- (a) If TCEQ needs additional technical information to this application, who should be contacted? The person must be familiar with the MS4 and the requirements of any previously issued storm water discharge permit.

Prefix: Mr. (e.g., Mr., Ms., Miss)
First/Last Name: Robert Anderson
Suffix: N/A
Title: Stormwater Superintendent
Credential: N/A
Organization Name: City of Corpus Christi

Street Address or P.O. Box: 2726 Holly Road
Internal Routing (Mail Code, Etc.): N/A
City: Corpus Christi
State: TX
ZIP: 78415

Electronic Contact Information:
Phone No.: (361) 826-3589
Extension: N/A
Fax No.: N/A
Email address: roberta3@cctexas.com

H. DMR contact

- (a) Contact Responsible for Discharge Monitoring Report (DMR) forms (EPA 3320-1). Provide the name of the person and their complete mailing address delegated to receive and submit DMR Forms.

Prefix : Ms.
(e.g., Mr., Ms., Miss)
First/Last Name: Adria Schreiber-Garza
Suffix: N/A
Title: Finance & Resource Management Superintendent
Credential: N/A
Organization Name: City of Corpus Christi Storm Water Department

Street Address or P.O. Box: 2726 Holly Road
Internal Routing (Mail Code, Etc.): N/A
City: Corpus Christi
State: TX
ZIP: 78415

Electronic Contact Information:
Phone No.: (361) 826-1846
Extension: N/A
Fax No.: (361) 826-4350

Email address: adria@cctexas.com

I. Public participation

(a) Public notice contact:

Provide the name of the person that will be identified as the notice contact in the two notices that are mailed out and published as part of the permitting process? The person may be contacted by the public to answer general and specific questions about all aspects of the permit application. If the mailing address is a P.O. Box, insert the P.O. Box number within the space provided for the address.

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

First/Last Name: Robert Anderson

Suffix: N/A

Title: Stormwater Superintendent

Credential: N/A

Organization Name: City of Corpus Christi

Street Address or P.O. Box: 2726 Holly Road

Internal Routing (Mail Code, Etc.): N/A

City: Corpus Christi

State: TX

ZIP: 78415

Electronic Contact Information:

Phone No.: (361) 826-3589

Extension: N/A

Fax No.: N/A

Email address: roberta3@cctexas.com

(b) Application Viewing Information:

Provide the name and location of the public location where copies of the application and storm water management program (SWMP), as well as the draft permit and fact sheet, may be viewed?

Name of Public Place: City of Corpus Christi City Hall, City Secretary's Office

Street Address: 1201 Leopard Street

City: Corpus Christi

County: Nueces

State: TX

ZIP code: 78401

Preferred method for receiving public notice package(s) and instructions to publish:

☒ E-mail: E-mail address roberta3@cctexas.com

☐ Fax: Fax number: _____

☐ Overnight/Priority mail: (self addressed, prepaid envelope required)

☐ Regular Mail:

Street Address: _____

City: _____

County: _____

State: _____
ZIP code: _____

(c) Bilingual Notice Requirements:

Bilingual notice may be required for new permit applications, major amendment applications and renewal applications, (not applicable for minor amendment or minor modification applications). If an elementary school or middle school within the regulated area of the MS4 offers a bilingual program, notice may be required to be published in an alternative language. The Texas Education Code, upon which the TCEQ alternative language notice requirements are based, triggers a bilingual education program to apply to an entire school district should the requisite alternative language speaking student population exist. However, there may not be any bilingual-speaking students at a particular school within a district which is required to offer the bilingual education program. For this reason, the requirement to publish notice in an alternative language is triggered if any elementary or middle school within the MS4 area, as a part of a larger school district, is required to make a bilingual education program available to qualifying students and the school either has students enrolled at such a program on-site, or has students who attend such a program at another location in satisfaction of the school's obligation to provide such a program as a member of a triggered district.

If it is determined that a bilingual notice is required, the applicant is responsible for ensuring that the publication in the alternate language is complete and accurate in that language.

FOR NEW PERMIT APPLICATIONS, MAJOR AMENDMENT AND RENEWAL APPLICATIONS (Not applicable for minor amendment or minor modification applications.):

1. Is a bilingual program required by the Texas Education Code in any school district where the MS4 is located?
Yes ☒ No ☐ (If No, alternative language notice publication is not required; skip to item 4.)
2. If Yes to question 1, are students enrolled in a bilingual education program at any elementary school or the middle school within the regulated area of the MS4?
Yes ☒ No ☐ (If Yes to questions 1 and 2, alternative language publication is required; If No to question 2, then consider the next question.)
3. If Yes to question 1, are there students enrolled at either the elementary school or the middle school located within the regulated area of the MS4 who attend a bilingual education program at another location?
Yes ☐ No ☐ (If Yes to questions 1 and 3, alternative language publication is required; If No to question 3, then consider the next question.) N/A

4. If Yes to question 1, would either the elementary school or the middle school located within the regulated area of the MS4 be required to provide a bilingual education program but for the fact that it secured a waiver from this requirement, as available under 19 TAC §89.1205(g)? N/A

Yes ☐ No ☐ (If Yes to questions 1 and 4, alternative language publication is required; If No to question 4, alternative language notice publication not required.)

5. If a bilingual education program(s) is provided by either the elementary school or the middle school located within the regulated area of the MS4, which language(s) is required by the bilingual program? Spanish

- (d) Public Involvement Plan N/A - Renewal

Complete the Public Involvement Plan Form (TCEQ Form 20960) for each application for a new permit or major amendment to a permit and include as an attachment

- (e) List each person employed by the State of Texas who represented you and was paid for services regarding this application. NOTE: Any violation of §382.0591 of the Health and Safety Code, §26.0283 of the Water Code, or §572.054 of the Government Code, relating to conflict of interest, may result in denial of the application or filing of charges with the appropriate office. N/A

J. MS4 System Information

- (a) Application is for the following MS4(s):

City of Corpus Christi

- (b) The MS4(s) is located in the following county/counties:

Nueces, San Patricio, Kleberg, and Aransas Counties

If the MS4 is located in Bexar, Comal, Hays, Kinney, Medina, Travis, Uvalde or Williamson County, is the MS4, or a portion of the MS4, located in and area that is subject to TCEQ rules at 30 TAC Chapter 213, related to the Edwards Aquifer?

Yes ☐ No ☒ 78368, 78370, 78373, 78380, 78401, 78402, 78404, 78405, 78406, 78407, 78408, 78409, 78410, 78411, 78412, 78413,

- (c) ZIP codes located within the MS4: 78414, 78415, 78416, 78417, 78418, and 78419.

- (d) The MS4(s) is located in or is nearest to the following city: Corpus Christi

- (e) For an existing MS4: Is the location described on page one (1) of the existing TPDES permit correct?

Yes ☒ No ☐ ☐ N/A - this is a new permit

If No, provide a more accurate description in item (f) below.

- (f) For a new permit: Give a **written location description** of the MS4 (plant) with respect to known or easily identifiable landmarks which can be

found on the map provided with the application.

N/A - Renewal

Is the MS4 located on Indian Land?

Yes ☐

No ☒

- (g) If the State of Texas is a landowner adjacent to the MS4, your application may affect lands dedicated to the permanent school fund. Refer to Texas Water Code §5.115. To determine whether lands dedicated to the permanent school fund are affected, you may submit a request which includes the property location to the General Land Office at the following address:

GENERAL LAND OFFICE
DEPUTY COMMISSIONER OF ASSET MANAGEMENT
STEPHEN F AUSTIN BLDG, RM 840
1700 N CONGRESS
AUSTIN TX 78701- 1495

If it is determined that your application may affect lands dedicated to the permanent school fund, your application must include the following information:

1. State the location of the permanent school fund land to be affected.
Permanent School Fund land within the MS4 is not expected to be affected. See Attachment B.

2. Describe any foreseeable impact or effect of the proposed permitted action on permanent school fund land.

See Attachment B for a letter from the General Land Office regarding the previous permit application, which indicates no foreseeable impacts or effects on Permanent School Fund land within the MS4 as a result of the proposed permitted MS4 action.

K. Permit Information

(a) Existing TPDES MS4 permit number: WQ0004200000

(b) TPDES permit expiration date: October 21, 2025

(c) Type of permit for which application is submitted (check one):

☐ New TPDES Individual Permit (Original, unpermitted)

☐ Major Amendment of a TPDES MS4 permit (Renewing the permit term.)

☒ Renewal of existing TPDES MS4 permit (With no changes or with minor changes.)

☐ Minor Modification of a TPDES Permit (Retain current expiration date.)

☐ Minor Amendment to a TPDES Permit (Retain current expiration date. Application requirements are limited to those items that relate to the proposed modification. See application instructions to determine if proposed changes can be made through a minor amendment.)

- (d) Are there any modifications or changes from conditions of the current permit that are requested for consideration during the processing of this application for a TPDES MS4 permit?

Yes ☐

No ☒

If the application is for a major amendment (with or without renewal) or minor amendment without renewal, a minor modification, or a renewal with minor changes, briefly list the proposed changes requested in the amendment. **A major amendment includes, but is not limited to, any change that makes a monitoring requirement less stringent, removal of a monitoring requirement, major changes in sampling protocol related to outfalls monitored in the permit, etc.**

Applicants are encouraged to consider modifications or changes to the existing Storm Water Management Program (SWMP), during application for a TPDES permit, that would either more effectively control the discharge of pollution or more accurately monitor the effectiveness of the plan. Modifications and changes may be based on new data, water quality impacts from storm water discharges, past monitoring of discharges, and other similar considerations. Elements of the current plan may be strengthened, updated, replaced by new elements, or de-emphasized and even deleted, when appropriate. Provide a brief outline or list of any proposed changes (an in-depth discussion of proposed changes is required as a part of ATTACHMENT 1 to this application). **Attach additional pages if necessary.**

The City of Corpus Christi will add a sample location. See Attachment C

- (e) List any other permits, existing or pending, that are held by the applicant and/or co-applicant(s) and that pertain to pollution control. Provide the permit/registration number and a short description of the activity (ex. ##01234 City of Hope Municipal Solid Waste Landfill). If the applicant or co-applicants hold a significant number of permits, it would be appropriate to list only the water quality permits. If needed, attach a separate page(s) with additional permit numbers. See Attachment D

Permit Number	Permittee Name	Permit type

If the above list includes only water quality permits, please provide a general description below of the number of additional permits held by permit type (e.g., the number of water rights permits):

Permit Number	Permittee Name	Permit type

L. Implementation and Compliance with the Current TPDES Permit

Have all schedules of the current permit, relating to implementation and compliance with the Storm Water Management Program (SWMP), been met?

Yes ☒

No ☐

If the answer is no, provide a summary description of the current permit requirement/schedule that has not been met, cause for non-attainment,

compliance schedule, and current efforts to complete this activity
NA - All compliance schedules of the current permit have been met.-----

M. Discharge Information and Receiving Water Bodies

- (a) For a currently permitted discharge into a watercourse:

Are the point(s) of discharge and discharge route description the same as described on page one (1) of the current permit?

Yes ☒

No ☐

If no, provide a more accurate description below. If the point(s) of discharge has (have) changed or a new outfall is proposed that would change the discharge route description, an application for a major amendment may be required.

N/A-----

- (b) Item b. is required for NEW permit applications:

For a proposed discharge into a watercourse: Provide a written description of the discharge route from each MS4 outfall to the nearest major watercourse. (For example: "From the MS4 through a weir to an unnamed tributary to Doe Creek, to Doe Creek, then to the Bravos River."). N/A - Renewal-----

- (c) Item c. is required for ALL permit applications.

List any water bodies that will receive storm water discharges during the term of the requested TPDES permit that were not previously identified in the application for the current TPDES MS4 permit. Also, provide a description of any known water quality problems for these additional receiving waters. Known water quality problems include both measured and unmeasured (or simply observed) problems.

N/A - All water bodies have previously been identified.-----

N. Plain Language Summary

Complete the plain language summary template below.

Plain Language Summary Template and Instructions for Texas Pollutant Discharge Elimination System (TPDES) Phase I MS4 Permit Applications

This template is a guide to assist applicant's in developing a plain language summary as required by [30 Texas Administrative Code Chapter 39 Subchapter H](#). Applicant's may modify the template as necessary to accurately describe their 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 the applicant will control those pollutants, so that the proposed plant will not have an adverse impact on human health or the environment.

Fill in the blanks below to describe your facility and application. Instructions and examples are provided below. Make any other edits necessary to improve readability or grammar and to comply with the rule requirements.

If you are subject to the alternative language notice requirements in [30 Texas Administrative Code §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.** Note: You identified your alternative language requirements above in section I.(c) of this application. For your convenience, a Spanish template has been provided below. **Attach additional pages if necessary.**

English Template for TPDES New/Renewal/Amendment Applications

Phase I MS4 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 Texas Administrative Code Chapter 39. The information provided in this summary may change during the technical review of the application and are not federal enforceable representations of the permit application.

The City of Corpus Christi, Del Mar College, Port of Corpus Christi Authority of Nueces County, and Texas A&M University - Corpus Christi (CN60013858, CN605829449, CN600885248, CN601422033) operates the City of Corpus Christi Municipal Separate Storm Sewer System (MS4) (RN103138285) a Municipal Separate Storm Sewer System. The MS4 is located within the corporate boundary of the City of Corpus Christi served by, or otherwise contributing to discharges to the MS4s owned or operated by the permittees except for any agricultural lands and lands owned by the federal government that are under the jurisdiction of other stormwater permits, in Corpus Christi, Nueces, San Patricio, Kleberg, and Aransas Counties, Texas 78368, 78370, 78373, 78380, 78401, 78402, 78404, 78405, 78406, 78407, 78408, 78409, 78410, 78411, 78412, 78413, 78414, 78415, 78416, 78417, 78418, and 78419.

This application is for a renewal to discharge stormwater via the MS4 to Nueces River Tidal, Nueces River Below Lake Corpus Christi, Corpus Christi Bay, Nueces Bay, Corpus Christi Inner Harbor, Oso Bay, Oso Creek, Laguna Madre, and the Gulf of Mexico, Segments Nos. 2101 and 2102 of the Nueces River Basin, and Segments Nos. 2481, 2482, 2484, 2485, 2485A, 2491, and 2501 of the Bays and Estuaries, to various ditches and tributaries that eventually reach Nueces River Tidal, Nueces River Below Lake Corpus Christi, Corpus Christi Bay, Nueces Bay, Corpus Christi Inner Harbor, Oso Bay, Oso Creek, Laguna Madre, and the Gulf of Mexico.

Discharges from the MS4 are expected to contain biochemical oxygen demand, chemical oxygen demand, oil and grease, total suspended solids, total dissolved solids, total nitrogen, total Kjeldahl nitrogen, nitrate-nitrogen, ammonia-nitrogen, total phosphorus, dissolved phosphorus, total cadmium, total chromium, total copper, total cyanide, total lead, total nickel, total zinc, *E. coli*, *Enterococci*, hardness, and atrazine. Stormwater is treated in accordance with the storm water management plan (SWMP).

**PLANTILLA EN ESPAÑOL PARA SOLICITUDES
NUEVAS/RENOVACIONES/ENMIENDAS DE TPDES FASE I MS4 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 son representaciones federales exigibles de la solicitud de permiso.

La ciudad de Corpus Christi, Del Mar College, la autoridad del puerto de Corpus Christi del condado de Nueces y la Universidad Texas A&M – Corpus Christi (CN60013858, CN605829449, CN600885248, CN601422033) opera el Sistema Municipal Separado de Alcantarillado Pluvial (MS4) de la Ciudad de Corpus Christi (RN103138285) un sistema municipal separado de alcantarillado pluvial. La MS4 está ubicado dentro de los límites corporativos de la Ciudad de Corpus Christi atendidos por, o contribuyendo de otra manera a las descargas a los MS4 propiedad u operados por los titulares de permisos, excepto por cualquier tierra agrícola y tierra propiedad del gobierno federal que esté bajo la jurisdicción de otros permisos de aguas pluviales, en Corpus Christi , Condados de Nueces, San Patricio, Kleberg, and Aransas, Texas 78368, 78370, 78373, 78380, 78401, 78402, 78404, 78405, 78406, 78407, 78408, 78409, 78410, 78411, 78412, 78413, 78414, 78415, 78416, 78417, 78418, and 78419.

Esta solicitud es para una renovación para descargar aguas pluviales a través de la MS4 a Nueces River Tidal, Nueces River Below Lake Corpus Christi, Corpus Christi Bay, Nueces Bay, Corpus Christi Inner Harbor, Oso Bay, Oso Creek, Laguna Madre y el Golfo de México. , Tramos Nos. 2101 y 2102 de la Cuenca del Río Nueces, y Tramos Nos. 2481, 2482, 2484, 2485, 2485A, 2491 y 2501 de las Bahías y Estuarios, a varias zanjas y afluentes que eventualmente llegan a la marea del río Nueces, el río Nueces debajo del lago Corpus Christi, la bahía de Corpus Christi, la bahía de Nueces, el puerto interior de Corpus Christi, la bahía de Oso, el arroyo Oso , Laguna Madre y el Golfo de México.

Se espera que las descargas de la MS4 contengan demanda bioquímica de oxígeno, demanda química de oxígeno, aceite y grasa, sólidos suspendidos totales, sólidos disueltos totales, nitrógeno total, nitrógeno Kjeldahl total, nitrógeno nitrato, nitrógeno amoniacal, fósforo total, fósforo disuelto, cadmio total, cromo total, cobre total, cianuro total, plomo total, níquel total, zinc total, *E. coli*, *enterococos*, dureza y atrazina. Las aguas pluviales se tratan de acuerdo con el plan de gestión de aguas pluviales (SWMP).

O. Required Attachments

Provide the following attachments to the application:

(a) Attachment 1

See Attachment C

Provide an in-dept description of all proposed modifications to the Storm Water Management Program (SWMP) or existing TPDES permit requirements for both the permittee and co-permittees. Provide rationale, based on findings collected during the previous TPDES permit term or from other sources, to support the proposed modifications.

(b) Attachment 2 See Attachment E

Provide an original USGS topographic quadrangle map, or a similar topographic map with a scale between 1:10,000 and 1:24,000, which clearly delineates the following information. If the regulated area is too large to include on only one map, the applicant may use a different scale as appropriate.

- (1) The location and boundaries of the MS4, including an area extending at least one (1) mile beyond the service boundaries of the MS4; See Attachment E.2 and E.3
- (2) all point(s) of discharge from the MS4; See Attachment E.3
- (3) a delineation of the discharge route that begins at the MS4 outfalls that are part of the Wet Weather Characterization Program (001, 002, etc.) and traced with a highlighter for a distance of three (3) stream miles or to the point that the discharge reaches a classified segment listed in 30 TAC, Chapter 307, Appendix A, (Note: Do not mark with dark ink over the discharge route. A new original map will be required if the discharge route is not visible.); See Attachment E.2 and E.3
- (4) a description of the land use activities, including estimations of population density and projected growth for a ten (10)-year period within the MS4 drainage area; See Attachment E.1 and E.4
- (5) the location and a description of the activities of each currently operating or closed municipal landfill or the treatment, storage or disposal facility for municipal waste; See Attachment E.1 and E.2
- (6) the location of major structural controls for storm water discharge, including detention/retention ponds, major infiltration devices, etc.; and See Attachment E.3
- (7) the identification of publicly owned parks, recreational areas, and other open lands. See Attachment E.2

For very large MS4 areas, these map requirements may be revised upon approval of the TCEQ Wastewater Permitting Section.

(c) Attachment 3 See Attachment F

Provide a copy of the current SWMP, a description of monitoring and screening programs, and a summary of monitoring results for the previous year. A description of monitoring and screening programs and monitoring results for the previous year are summarized in the 2024 MS4 Annual Report, provided in Attachment F.

(d) Attachment 4 See Attachment G

Review the most recent annual report and the SWMP and provide a brief description (1 to 2 paragraphs) of how all program elements have been implemented to meet the requirements in the existing permit. If the permit has several permittees, please provide a description of how each permittee meets the program requirements.

Address the program elements listed below: See Attachment G

(1) MCM 1, MS4 Maintenance Activities.

a. Structural Controls. The existing permit requires that the permittee(s) operate the MS4 and any stormwater structural controls associated with the MS4 in a manner to reduce the discharge of pollutants to the Maximum Extent Practicable (MEP).

b. Floatables. The existing permit requires the permittee(s) to reduce the discharge of floatables, such as litter and other human generated solid refuse, into the MS4.

c. Roadways. The existing permit requires the permittee(s) operate and maintain public streets, roads, and highways in a manner to minimize discharge of pollutants, including pollutants related to deicing or sanding activities.

(2) MCM 2, Post-Construction Stormwater Control Measures.

a. The existing permit requires the permittee(s) to continue implementation and enforcement of the controls to minimize the discharge of pollutants from areas of new development and significant redevelopment after construction is completed.

b. The existing permit requires that the comprehensive master planning process (or equivalent) must be expanded to include all new development and redevelopment projects that disturb one acre or more of land, including projects less than one acre that are part of a larger common plan of development or sale that will result in the disturbance of one acre or more.

c. The existing permit requires the permittee(s) to evaluate the existing SWMP(s) as necessary to ensure that this MCM includes a regulatory mechanism, such as an ordinance, to implement and enforce the new requirements of this program and shall ensure that the SWMP includes strategies for structural and non-structural controls (i.e., BMPs) appropriate for the community. In addition, the permittee(s) shall provide for adequate long-term operation and maintenance of BMPs.

d. The existing permit requires the permittee(s) to assess the impacts on the receiving water(s) for all flood control projects. Where feasible, new flood control structures must be designed, constructed, and maintained to provide erosion prevention and pollutant removal from stormwater. If applicable, the retrofitting of existing structural flood control devices to provide additional pollutant removal from stormwater shall be implemented to the MEP.

SIGNATURE PAGE

I, Peter Zaroni Title: City Manager, City of Corpus Christi
Typed or printed name

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 gathered and evaluated 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 known violations.

Signature: _____ Date: _____

NOTE: ALL APPLICATIONS MUST BEAR THE SIGNATURE AND SEAL OF NOTARY PUBLIC.

Subscribed and Sworn to before me by the said _____

on this _____ day of _____, 20____

My commission expires on the _____ day of _____, 20_____.

Notary Public [SEAL]

County, Texas

The original signature from the City of Corpus Christi
will be provided as soon as possible.

NOTE: If co-permittees are necessary, all entities must submit separate Signature Pages.

Co-applicant:

SIGNATURE PAGE

I, Kent Britton Title: Chief Executive Officer, Port of Corpus Christi Authority of
Typed or printed name Nueces County

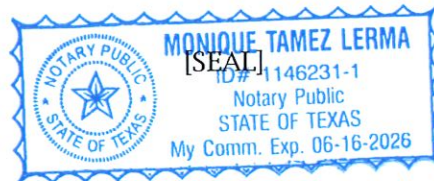
certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage 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 known violations.

Signature: Kent C Britton Date: 3/31/25

NOTE: ALL APPLICATIONS MUST BEAR THE SIGNATURE AND SEAL OF NOTARY PUBLIC.

Subscribed and Sworn to before me by the said Kent A. Britton, Chief Executive Officer
on this 31st day of March, 2025
My commission expires on the 16th day of June, 2025.

Monique Lamy Serini
Notary Public
Nueces
County, Texas



NOTE: If co-permittees are necessary, all entities must submit separate Signature Pages.

Co-applicant:

SIGNATURE PAGE

I, John Strybos Title: Vice President and Chief Physical Facilities Officer,
Typed or printed name Del Mar College

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 gathered and evaluated 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 known violations.

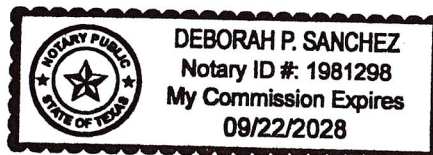
Signature: John Strybos Date: MARCH 31, 2025

NOTE: ALL APPLICATIONS MUST BEAR THE SIGNATURE AND SEAL OF NOTARY PUBLIC.

Subscribed and Sworn to before me by the said John Strybos
on this 31 day of March, 2025
My commission expires on the 22 day of September, 2028.

Deborah P. Sanchez
Notary Public
Nueces
County, Texas

[SEAL]



NOTE: If co-permittees are necessary, all entities must submit separate Signature Pages.

Co-applicant:

SIGNATURE PAGE

I, Kelly M. Miller Title: President and CEO, Texas A&M - Corpus Christi
Typed or printed name

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 gathered and evaluated 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 known violations.



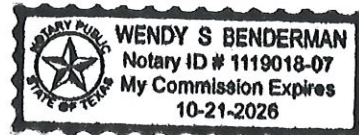
Signature: Kelly M. Miller Date: 3-31-25

NOTE: ALL APPLICATIONS MUST BEAR THE SIGNATURE AND SEAL OF NOTARY PUBLIC.

Subscribed and Sworn to before me by the said Kelly M. Miller
on this 31st day of March, 2025

My commission expires on the 21st day of October, 2026.

Wendy S. Benderman [SEAL]
Notary Public
Nueces
County, Texas



NOTE: If co-permittees are necessary, all entities must submit separate Signature Pages.

=====

For TCEQ staff use only:

Application Type: Renewal
 Major Amendment
 Minor Amendment
 New

Agency Receiving Texas Historical Commission
SPIF: Texas Parks & Wildlife
 US Fish & Wildlife
 Army Corps of Engineers

County: _____

Segment: _____

Admin Complete Date: _____

SUPPLEMENTAL PERMIT INFORMATION FORM (SPIF)

This form applies to TPDES applications

The SPIF must be completed as a separate document. We will mail a copy of the SPIF to each agency as required by the TCEQ agreement with EPA. If any of the items are not completely addressed and/or further information is needed, you will be contacted to provide the information before the permit is issued. Each item must be completely addressed. DO NOT REFER TO A RESPONSE OF AN ITEM IN THE PERMIT APPLICATION FORM. Each attachment must be provided with this form, separately from the administrative report of the application. The application will not be declared administratively complete without this form being completed in its entirety including all attachments.

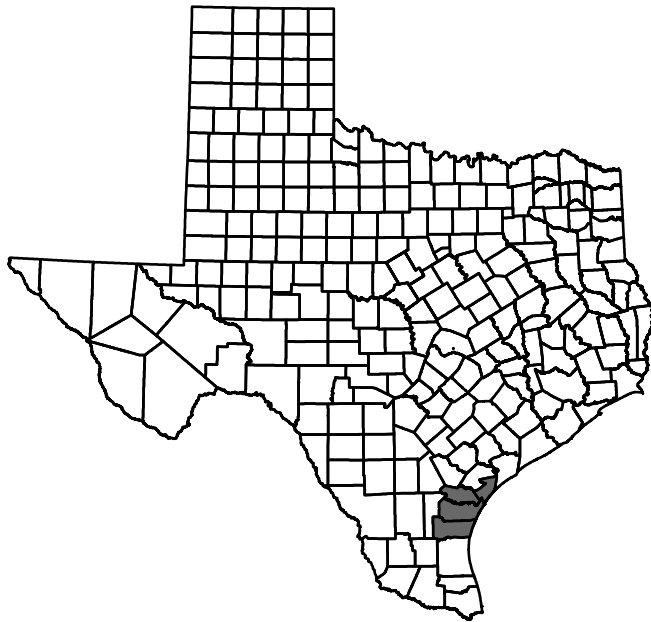
The following applies to all applications:

- City of Corpus Christi, Port of Corpus Christi Authority of Nueces County
1. Permittee(s): Del Mar College, and Texas A&M University - Corpus Christi
 2. TPDES Permit No.: WQ0004200000
 3. (EPA ID No.): TXS000601
 4. Address of the project (description of the MS4 boundaries):
 5. Provide the name, address, telephone and fax number of an individual that can be contacted to answer specific questions about the property.
Mr. Robert Anderson; 2726 Holly Road, Corpus Christi, TX 78415 Phone: (361) 826-3589
 6. List the county in which the MS4 is located: Nueces, Kleberg, San Patricio, & Aransas Counties

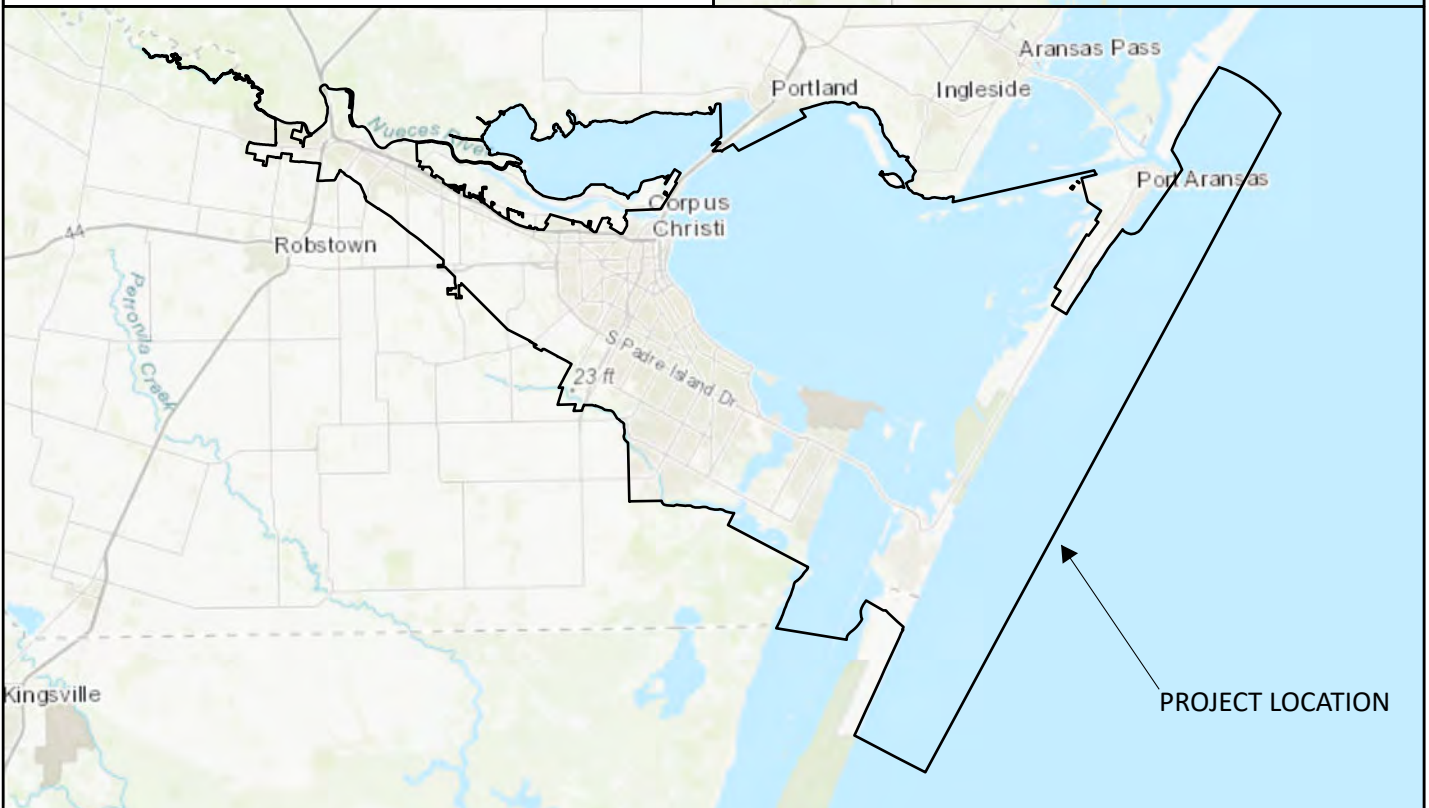
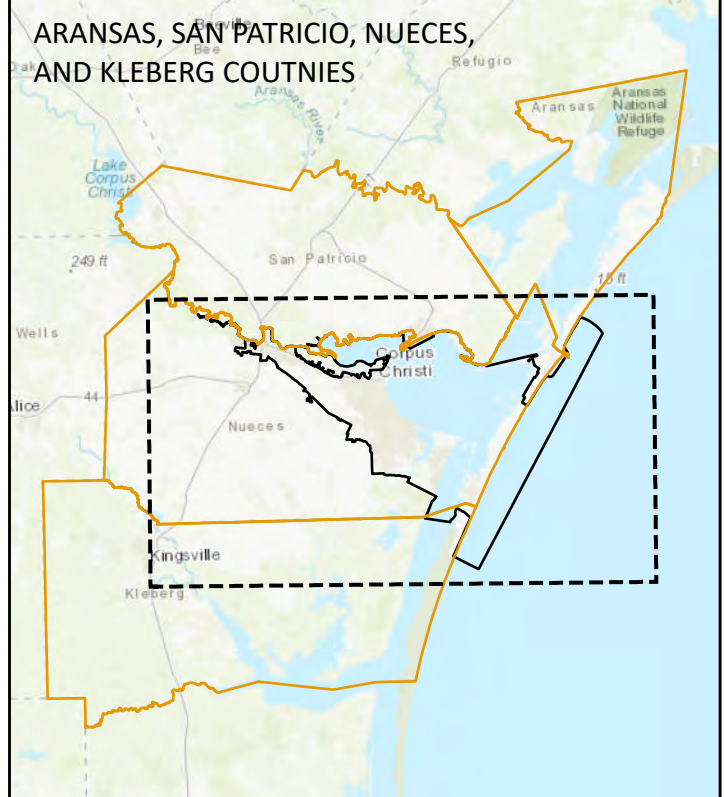
7. If the property is publicly owned and the owner is different than the permittee/applicant, please identify the owner: N/A
8. Identify the name of the water body (receiving waters) or TCEQ segment number that will receive the discharge:
Segment Nos. 2101, 2102, 2481, 2482, 2484, 2485, 2485A, 2491, and 2501
9. Provide a 7.5 minute USGS quadrangle map with the project boundaries plotted and a general location map showing the project area. (This map is required in addition to the map requested in the application administrative report.) See SPIF 1 and SPIF 2
10. Provide original photographs of any structures 50 years or older on the property. N/A - MS4 Renewal Application
11. Does your project involve any of the following? None Apply
- ☐ Proposed access roads, utility lines, and 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 of caves, fractures, sinkholes, or other karst features
 - ☐ Disturbance of vegetation or wetlands
12. List proposed construction impact (surface acres to be impacted, depth of excavation, sealing of caves or other karst features):
N/A - MS4 permit renewal application.
13. Describe existing disturbances, vegetation & land use (plowing, other ground disturbances): N/A - MS4 permit renewal application.
- The following applies only to applications for New TPDES permits and Major Amendments to TPDES Permits:**
14. List construction dates of any buildings or structures on the property:
N/A - MS4 permit renewal application.
15. Provide a brief history of the property, and name of the architect/builder, if known:
N/A - MS4 permit renewal application.



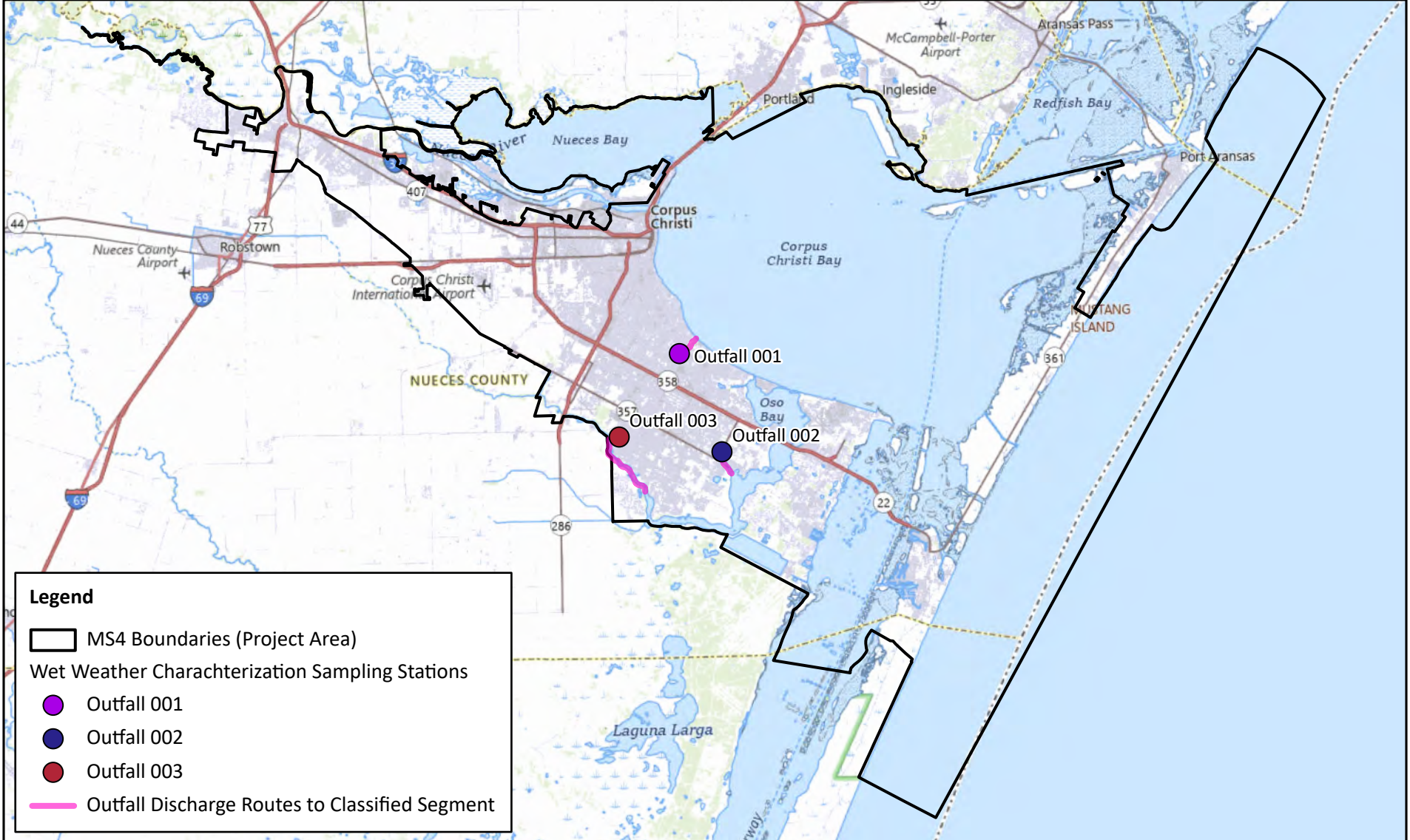
PLUMMER




ARANSAS, SAN PATRICIO, NUECES,
AND KLEBERG COUNTIES




SPIF 1
CITY OF CORPUS CHRISTI
PHASE I MS4 PERMIT RENEWAL APPLICATION
GENERAL LOCATION MAP





Legend

 MS4 Boundaries (Project Area)

Wet Weather Characterization Sampling Stations

 Outfall 001

 Outfall 002

 Outfall 003

 Outfall Discharge Routes to Classified Segment

SPIF 2
CITY OF CORPUS CHRISTI
PHASE I MS4 PERMIT RENEWAL APPLICATION
USGS MAP

ATTACHMENT A

**Additional Co-Applicants
Application Form Item C**

Attachment A
City of Corpus Christi
Phase I MS4 Permit Renewal Application
Additional Co-Applicants

The City of Corpus Christi (City), Port of Corpus Christi Authority of Nueces County (POCCA), Del Mar College (Del Mar), and Texas A&M University – Corpus Christi (TAMUCC) are Co-Applicant's for Texas Pollutant Discharge Elimination System (TPDES) Municipal Separate Storm Sewer System (MS4) permit No. WQ0004200000. Contact information for the City and POCCA are included in Sections B and C of the permit application, respectively. Contact information for Del Mar and TAMUCC are included below.

Co-applicants(s)

- (a) If the co- applicant is currently a customer with TCEQ, provide the Customer Number (CN) Search for your CN at

<http://www12.tceq.state.tx.us/crpub/index.cfm?fuseaction=cust.CustSearch>

CN: 605829449

- (b) Provide the Legal Name of the entity (applicant) applying for this permit:

Del Mar College District

- (c) Provide the name and title of the person signing the application:
(The person must be an executive official meeting signatory requirements in TAC §305.44(a).)

Prefix: Mr.

First/Last Name: John Strybos

Title: Vice President and Chief Physical Facilities Officer

Credential: N/A

- (d) Provide the applicant's mailing address as recognized by the US Postal Service:

You may verify the address at: <http://zip4.usps.com/zip4/welcome.jsp>

Street Address or P.O. Box: 101 Baldwin Boulevard

Internal Routing (Mail Code, Etc.): MB 106

City: Corpus Christi

State: TX

ZIP Code: 78404-3897

Electronic Contact Information: Mr. J. Chris Tweddle

Phone No.: (361) 698-1641

Fax No.: (361) 698-2019

E-mail Address: jtweddle@delmar.edu

- (e) Indicate the type of Customer:

Other Government, Explain: Public Institution of Higher Education

- (f) Number of Employees: 501 or higher

Attachment A
City of Corpus Christi
Phase I MS4 Permit Renewal Application
Additional Co-Applicants

Co-applicants(s)

- (a) If the co- applicant is currently a customer with TCEQ, provide the Customer Number (CN) Search for your CN at <http://www12.tceq.state.tx.us/crpub/index.cfm?fuseaction=cust.CustSearch>

CN: 601422033

- (b) Provide the Legal Name of the entity (applicant) applying for this permit:

Texas A&M University - Corpus Christi

- (c) Provide the name and title of the person signing the application:
(The person must be an executive official meeting signatory requirements in TAC §305.44(a).)

Prefix: Dr.

First/Last Name: Kelly M. Miller

Title: President and CEO

Credential: Ph.D

- (d) Provide the applicant's mailing address as recognized by the US Postal Service:

You may verify the address at: <http://zip4.usps.com/zip4/welcome.jsp>

Street Address or P.O. Box: 6300 Ocean Drive

Internal Routing (Mail Code, Etc.): Unit 5876

City: Corpus Christi

State: TX

ZIP Code: 78412

Electronic Contact Information: Mr. Alfred Sustaita Jr.

Phone No.: (361) 825-5555

Fax No.: (361) 825-5556

E-mail Address: EHS@tamucc.edu

- (e) Indicate the type of Customer:

Other Government, Explain: Public Institution of Higher Education

- (f) Number of Employees: 501 or higher

ATTACHMENT B

**Permanent School Fund Land Letter
Application Form Item J.g**

**Texas General
Land Office**



**David Dewhurst
Commissioner**

May 30, 2000

Ms. Angela K. Moorman
Lloyd, Gosselink, Blevins, Rochelle,
Baldwin & Townsend, P.C.
P. O. Box 1725
Austin, Texas 78767

Re: Application to TNRCC For Renewal of the City of Corpus Christi's and
Its Co-permittees' NPDES MS4 Permit, Application Renew Permit No.
04200, EPA I.D. No. TXS000601 (134005).

Dear Ms. Moorman:

We have reviewed the captioned permit application for impacts to
Permanent School Fund lands. The Permanent School Fund owns most of
the submerged lands around Corpus Christi; however, we have determined
that this permit will not result in any significant impacts to Permanent School
Fund Lands.

We therefore conclude that no Permanent School Fund land will be
effected by the issuance of this permit.

If you have any questions, please call me at 512-463-5236.

Sincerely,

Spencer Reid
Acting Deputy Commissioner
For Asset Management

SR/top

Stephen F. Austin Building

1700 North
Congress Avenue

Austin, Texas
78701-1495

512-463-5001

ATTACHMENT C

**SWMP and Permit Modifications
Application Form Items K.d, O.a**

Attachment C
City of Corpus Christi
Phase I MS4 Permit Renewal Application
Proposed SWMP and Permit Modifications

The City of Corpus Christi (City), Port of Corpus Christi Authority of Nueces County (POCCA), Del Mar College (Del Mar), and Texas A&M University – Corpus Christi (TAMUCC) [collectively referred to as Co-Applicants] hold a Phase I Texas Pollutant Discharge Elimination System (TPDES) Municipal Separate Storm Sewer System (MS4) permit (No. WQ0004200000) to discharge storm water from the MS4 boundaries. The existing permit was issued October 21, 2020, and will expire October 21, 2025.

Each Co-Applicant has developed their own Stormwater Management Plan (SWMP), which are included in Attachment F. The Co-Applicants may periodically implement minor updates and formatting adjustments to the SWMP, however, these do not constitute significant modifications to the plan. The City of Corpus Christi is requesting a minor modification to its TPDES permit and SWMP.

The City of Corpus Christi will add one additional grab sample site at the Oso Campus of Del Mar College in the forthcoming renewal permit. During Reporting Year 2024, the City submitted a revised draft SWMP, which includes the Oso Creek Campus MS4 information. The revised SWMP has not yet been finalized.

ATTACHMENT D

**Permits Held by Applicant and Co-Applicants
Application Form Item K.e**

Attachment D
City of Corpus Christi
Phase I MS4 Permit Renewal Application
Permits Held by Applicant and Co-Applicants

The following tables provide pollution control permits and registrations for the City of Corpus Christi (City), Port of Corpus Christi Authority of Nueces County (POCCA), Del Mar College District (Del Mar), and Texas A&M University – Corpus Christi (TAMUCC) [collectively referred to as Co-applicants]. Active water quality permits and registrations are provided in Table 1. A summary of the number of other relevant pollution control permits and registrations is provided in Table 2. In addition to the permits and registrations provided, the Co-applicants have a number of authorizations to operate under the general storm water permit for construction activities (General Permit No. TXR150000). Since these construction general permit authorizations are numerous and are temporary authorizations intended for short periods of time, they are not specifically listed here.

Table 1. Water Quality Permits			
Co-Applicant	Facility	ID Type	ID No.
City	Corpus Christi Water Department	Wastewater General Permit	2E0000130
City	Greenwood WWTF	210 Reuse Authorization	R10401003
City	Oso WWTF	210 Reuse Authorization	R10401004
City	New Broadway WWTF	210 Reuse Authorization	R10401005
City	Allison WWTF	210 Reuse Authorization	R10401006
City	Laguna Madre WWTF	210 Reuse Authorization	R10401008
City	Whitecap WWTF	210 Reuse Authorization	R10401009
TAMUCC	Fleet Refueling	Water Quality Non-Permitted	R14109526228
City	Vector	Pesticide General Permit	TXG870029
City	Vector	Pesticide General Permit	TXG870033
City	Mercury Air Center	Multi-Sector General Permit	TXR05AR36
City	Whitecap WWTF	Multi-Sector General Permit	TXR05AZ20
City	Cefe Valenzuela Landfill	Multi-Sector General Permit	TXR05AZ63
City	Greenwood WWTF	Multi-Sector General Permit	TXR05DM76
POCCA	Marine Cargo Dock 3	Multi-Sector General Permit	TXR05DZ49
City	J.C. Elliott Landfill	Multi-Sector General Permit	TXR05FG38
POCCA	Marine Cargo Handling	Multi-Sector General Permit	TXR05GF43
City	Mercury Air Center	Multi-Sector General Permit	TXR05GJ10
POCCA	Marine Cargo Handling	Multi-Sector General Permit	TXR05K365
City	American Eagle Airport	Multi-Sector General Permit	TXR05T857
City	Corpus Christi International Airport	Multi-Sector General Permit	TXR05W968
City	Municipal Marina	Multi-Sector General Permit	TXR05W969
City	Oso WWTF	Multi-Sector General Permit	TXR05X003
City	Laguna Madre WWTF	Multi-Sector General Permit	TXR05X004
City	New Broadway WWTF	Multi-Sector General Permit	TXR05X005
City	Allison WWTF	Multi-Sector General Permit	TXR05X026
POCCA	Bulk Terminal	Wastewater Permit	WQ0002540000
City	Pollywog Ponds WTP Residuals	Sludge Permit	WQ0004934000

Attachment D
City of Corpus Christi
Phase I MS4 Permit Renewal Application
Permits Held by Applicant and Co-Applicants

Table 1. Water Quality Permits			
Co-Applicant	Facility	ID Type	ID No.
POCCA	Petroleum Storage and Handling	Wastewater Permit	WQ0004977000
POCCA	Harbor Island Marine Cargo Handling	Wastewater Permit	WQ0005253000
POCCA	La Quinta Marine Cargo Handling	(Pending) Wastewater Permit	WQ0005254000
City	Inner Harbor Desalination Plant	(Pending) Wastewater Permit	WQ0005289000
City	La Quinta Channel Desalination Plant	(Pending) Wastewater Permit	WQ0005290000
City	Greenwood WWTF	Wastewater Permit	WQ0010401003
City	Oso WWTF	Wastewater Permit & Pretreatment Permit	WQ0010401004
City	New Broadway WWTF	Wastewater Permit	WQ0010401005
City	Allison WWTF	Wastewater Permit	WQ0010401006
City	Laguna Madre WWTF	Wastewater Permit	WQ0010401008
City	Whitecap WWTF	Wastewater Permit	WQ0010401009

Table 2. Other Relevant Pollution Control Permits and Registrations			
Co-Applicant	Program Type	ID Type	No. of ID Type
City	Air Emissions Inventory	Account Number	4
City	Air New Source Permit	Account Number	11
City	Air New Source Permit	AFS Num	4
City	Air New Source Permit	Registration	6
City	Air Operating Permit	Permit	2
City	Air Quality Non-Permitted	ID Number	1
City	Construction over Closed MSW Landfill	Registration	1
City	Industrial Hazardous Waste	OTS Request	1
City	Industrial Hazardous Waste	Solid Waste Registration	1
City	Industrial Hazardous Waste Non-Permitted	ID Number	1
City	Leaking Petroleum Storage Tank Remediation	ID Number	1
City	Municipal Solid Waste Disposal	Permit	2
City	Municipal Solid Waste Processing	Registration	2 + (1 Pending)
City	Municipal Solids Waste Non-Permitted	ID Number	4
City	Petroleum Storage Tank Registration	Registration	21
City	Public Water System/Supply	Registration	1
City	Sludge	Registration	1
City	Tires	Registration	2
City	Underground Injection Control	Permit	1

Attachment D
City of Corpus Christi
Phase I MS4 Permit Renewal Application
Permits Held by Applicant and Co-Applicants

Table 2. Other Relevant Pollution Control Permits and Registrations			
Co-Applicant	Program Type	ID Type	No. of ID Type
City	Used Oil	Registration	1
POCCA	Air Emissions Inventory	Account Number	6
POCCA	Air New Source Permit	Account Number	5
POCCA	Air New Source Permit	AFS Num	6
POCCA	Air New Source Permit	Permit	7
POCCA	Air New Source Permit	Registration	14
POCCA	IHW Corrective Action	Solid Waste Registration	1
POCCA	Industrial and Hazardous Waste	OTS Request	1
POCCA	Industrial and Hazardous Waste	Solid Waste Registration	1
POCCA	Industrial and Hazardous Waste Non-Permitted	ID Number	1
POCCA	Municipal Solid Waste Non-Permitted	ID Number	3
POCCA	On Site Sewage Facility	Permit	1
POCCA	Petroleum Storage Tank Registration	Registration	3
TAMUCC	Air Quality Non-Permitted	ID Number	1
TAMUCC	Industrial and Hazardous Waste	Solid Waste Registration	1
TAMUCC	Petroleum Storage Tank Registration	Registration	1
TAMUCC	Pollution Prevention Planning	ID Number	1

ATTACHMENT E

**USGS Map
Application Form Item O.b**

Attachment E.1
City of Corpus Christi
Phase I MS4 Permit Renewal Application
Descriptions of Maps

This attachment provides supplementary information and descriptions of maps provided in Attachments E.2, E.3, and E.4. The following information is in response to Questions O.b (1-7) of the Phase I Municipal Separate Storm Sewer System (MS4) permit application (Form No. TCEQ - 20214).

O.(b)(1) The location and boundaries of the MS4, including an area extending at least one (1) mile beyond the service boundaries of the MS4.

The Corpus Christi Municipal Separate Storm Sewer System (MS4) service boundaries include all areas, except for any agricultural lands and lands owned by the federal government that are under the jurisdiction of other storm water permits, located within the corporate boundary of the City of Corpus Christi (City). The map in Attachment E.2 delineates the boundaries of the MS4 and one mile beyond the service boundaries.

O.(b)(2) All point(s) of discharge from the MS4.

For purposes of this permit application, a point of discharge is defined as a point source discharge from the MS4 to surface water in the state or to a location outside the MS4 boundaries. Points of discharge from the MS4 are provided on the map in Attachment E.3.

O.(b)(3) Delineate the discharge route that begins at the MS4 outfalls that are part of the Wet Weather Characterization Program (Outfalls 001, 002, and 003), with a highlighter for a distance of three (3) stream miles or to the point that the discharge reaches a classified segment listed in 30 TAC, Chapter 307, Appendix A.

As shown on the map in Attachment E.2, the discharge routes have been traced with a pink highlighter which ends when the route reaches a Classified Segment. The discharge route originates from the MS4 outfalls that are part of the Wet Weather Characterization Program (Outfalls 001, 002, and 003), which are demarcated on the map with colored circles.

O.(b)(4) Provide a description of the land use activities, including estimations of population density and projected growth for a ten (10)-year period within the MS4 drainage area.

Land Use Activities: Within the Corpus Christi MS4 boundaries, approximately 13% is open land, 6% is residential, 6% is public use, 5% is transportation and utilities, 1% is commercial, 1% is industrial, and 68% is water. Land Use Data were obtained from land use geographic information systems shapefiles developed by the City of Corpus Christi.

Estimations of Population Density: Population densities are provided in Attachment E.4 for 2020 Census Blocks within the Corpus Christi MS4 boundaries. Data was obtained from the United States Census Bureau.

Estimations of Projected Growth: The City is a moderately-urban area, with a population of 306,770 in 2020. The population is expected to increase to approximately 334,135 by 2030. Data was obtained from the Texas Water Development Board, *2021 Region N Regional Water Plan*.

O.(b)(5) Provide the location and description of the activities of each currently operating or closed municipal landfill or the treatment, storage or disposal facility for municipal waste.

The City owns and operates six wastewater treatment facilities within the Corpus Christi MS4 boundaries. Wastewater treatment facilities are demarcated on the map in Attachment E.2 with orange triangles.

Within the Corpus Christi MS4 boundaries, the City owns the J.C. Elliott Landfill, which no longer accepts municipal waste. Municipal solid waste is currently disposed at the Cefe Valenzuela Landfill, which is located outside of the MS4 boundaries. The J.C. Elliott Landfill is located in the southwestern portion of the City and is

Attachment E.1
City of Corpus Christi
Phase I MS4 Permit Renewal Application
Descriptions of Maps

labeled on the map in Attachment E.2. The site currently functions as a transfer station and citizen collection center. There are no other landfills either currently operating or closed within the MS4 boundaries. The City owns the closed Westside Landfill which is located just outside the MS4 boundaries. Historical landfills and landfills that were closed prior to the promulgation of 40 Code of Federal Regulations Part 258 (Subtitle D of the Resource Conservation and Recovery Act) in 1993 have not been included in this description.

O.(b)(6) Provide the location of the major structural controls for storm water discharge.

Major structural controls that are owned by the City, Port of Corpus Christi Authority of Nueces County (POCCA), Del Mar College (Del Mar), and Texas A&M University – Corpus Christi (TAMUCC) are summarized in Table 1 below.

Table 1
Major Structural Controls within the MS4

Co-Applicant	Major Structural Control (Count)	Location
City	Detention Area	Brawner Parkway
City	Detention Area	Carmel Parkway; S. Staples to Corpus Christi Bay
City	Detention Pond	Lakeview Acres, 5.118 Acre Park
City	Detention Pond	Northwest Estates Lots 1 & 2 Block 3
City	Detention Pond	River Heights Lot 14 Block 2
City	Diversion Channel	Oso Demonstration Project; 5525 Oso Pkwy
City	Flattened Side Slopes	Crossgate Ditch; 4900 Cedar Pass Dr/7200 Prairie Dr
City	Flattened Side Slopes	Los Vientos Ditch; 2633 Las Brisas St.
City	Flattened Side Slopes	Master Channel 27; 7200 Brooke Rd.
City	Flattened Side Slopes	New Unnamed Channel; 1402 Flour Bluff Drive
City	Flattened Side Slopes	Schanen Ditch; Cedar Pass to Yorktown
City	Interlocking Erosion Control Blocks	Cullen Ditch; Belmeade to Oso Golf Course
City	Interlocking Erosion Control Blocks	Mary Carroll Ditch; Schanen Ditch to Everhart
City	Interlocking Erosion Control Blocks	Master Channel 27; Adjacent to Slough Rd
City	Interlocking Erosion Control Blocks	Schanen Ditch; Saratoga to Congressional
City	Levee Gates (5)	Inner Harbor Basin; Inner Harbor to West Broadway
City	Levee System, Earthen	Inner Harbor Basin; Inner Harbor to West Broadway
City	Meandering Channel	Mary Carroll Ditch; Oso Parkway to Oso Bay
City	Outfall Gates, Primary Duck-bill Style (18)	Sea Wall Corpus Christi Bay; Shoreline Blvd
City	Outfall Gates, Primary Flap (7)	Salt Flats Ditch
City	Outfall Gates, Primary Flap (2)	Sea Wall Corpus Christi Bay; Shoreline Blvd
City	Outfall Gates, Secondary Flap (16)	Sea Wall Corpus Christi Bay; Shoreline Blvd
City	Pilot Channel	Flynn Parkway Ditch; Tiger Lane to Saratoga
City	Pilot Channel	Los Vientos Ditch; 2633 Las Brisas St.
City	Pilot Channel	Mary Carroll Ditch; Flynn Parkway to Everhart
City	Pilot Channel	Master Channel 27; 7200 Brooke Rd.
City	Pilot Channel	Schanen Ditch; Saratoga to Tiger Ditch

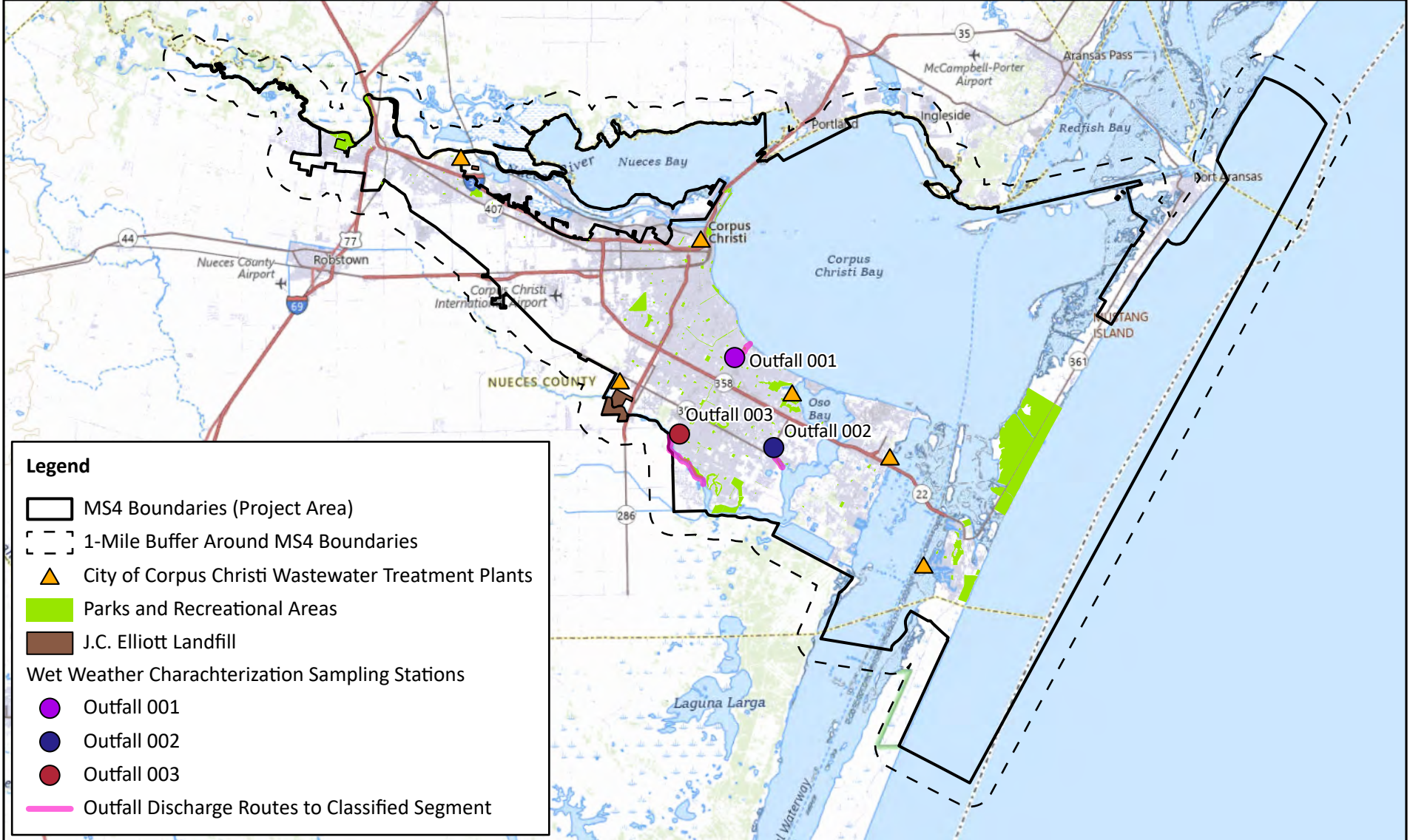
Attachment E.1
City of Corpus Christi
Phase I MS4 Permit Renewal Application
Descriptions of Maps

Table 1 (continued)
Major Structural Controls within the MS4

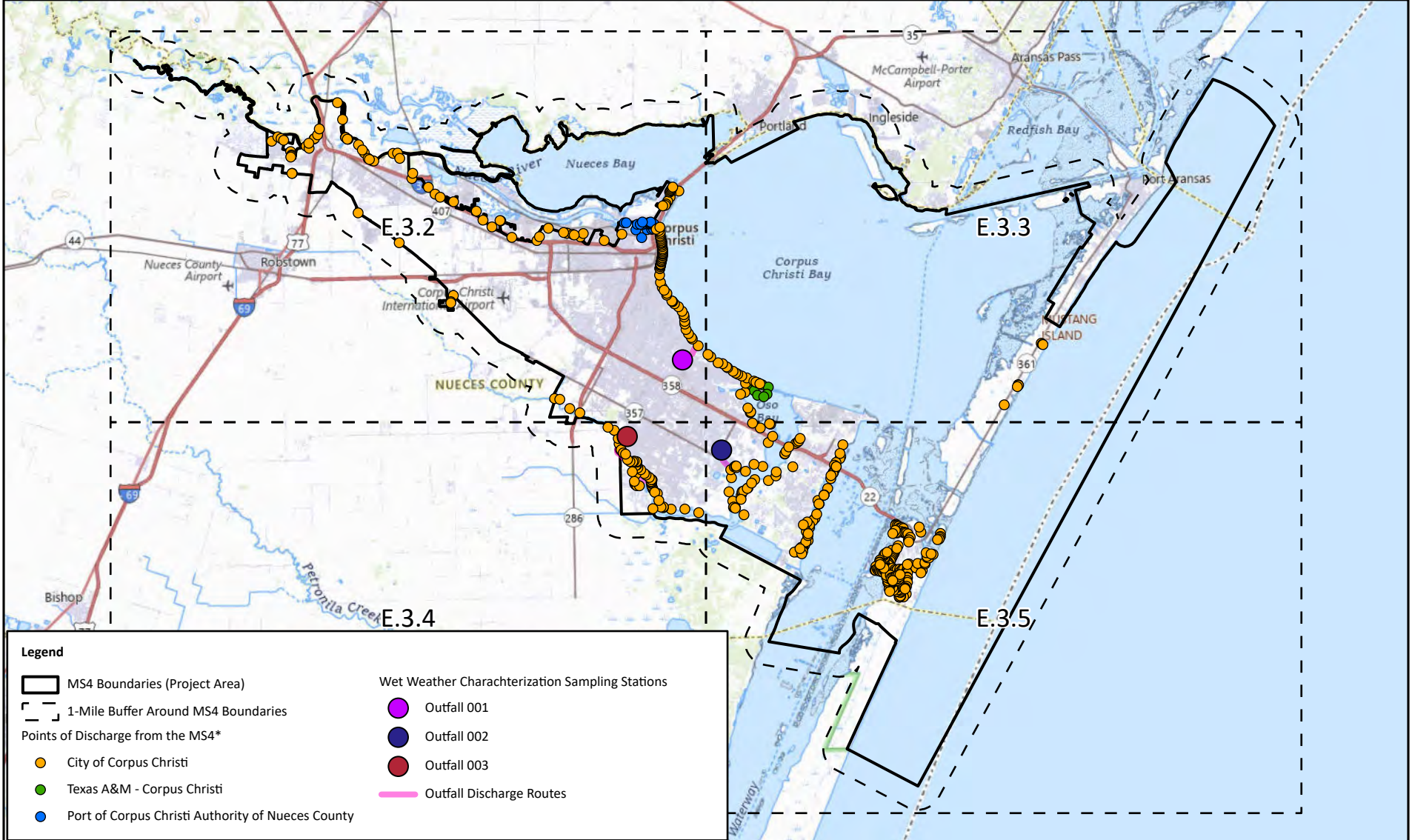
Co-Applicant	Major Structural Control (Count)	Location
City	Rock Gabions	Cornerstone Ditch; 1654 Flour Bluff Drive at Cornerstone Dr
City	Rock Gabions	Mary Carroll Ditch; La Costa Dr at Staples St.
City	Rock Gabions	Wood River #2; Behind Pecos River Dr.
City	Trash Rake	Kinney Street Pump Station; 302 S. Water St.
City	Trash Rake	Power Street Pump Station; 1218 N. Water St.
City	Trash Sump & Screen	Oso Demonstration Project; 5525 Oso Pkwy
City	Turf Reinforcement Mat	Cullen Ditch; Gollihar from Airline to Belmeade
City	Turf Reinforcement Mat	Triple Crown Ditch; Triple Crown
City	Turf Reinforcement Mat	Wood River #2; Behind Pecos River Dr.
City	Turf Reinforcement Mat	Cornerstone Ditch; 1654 Flour Bluff Drive at Cornerstone Dr
City	Turf Reinforcement Mat	Gateway Minor; 5825 Hopkins Rd.
City	Turf Reinforcement Mat	Laguna Shores Road; 1500 Laguna Shores
City	Turf Reinforcement Mat	New Unnamed Channel; 1402 Flour Bluff Drive
City	Turf Reinforcement Mat	Schanen Ditch; Cedar Pass to Yorktown
City	Vegetated Bioswale	Oso Demonstration Project; 5525 Oso Pkwy
City	Velocity Dissipation Structure	New Unnamed Channel Outfall; 1402 Flour Bluff Drive
City	Velocity Dissipation Structure	Wood River #1; Behind Spring Creek Drive
City	Velocity Dissipation Structure	Country Estates Ditch; 3717 Country Estates
City	Velocity Dissipation Structure	Emory Ditch; 3454 Emory Drive
City	Velocity Dissipation Structures	Wood River #2; Behind Pecos River Drive
POCCA	Sedimentation Basin	Intersection of Navigation Blvd and Texaco St
Del Mar	Earthen Channel	Driscoll Ditch on West Campus
Del Mar	Detention Pond	Driscoll Ditch on West Campus
Del Mar	Velocity Dissipation Structure	Adjacent to Health Science Building on West Campus
Del Mar	Vegetated Swale	Adjacent to Health Science Building on West Campus
Del Mar	Inlet Protection Device (14)	East Campus
TAMUCC	Storm Water Collection Tanks for Irrigation	Bayside Parking Garage on Surf Lane
TAMUCC	Vegetated Swale	West of Carlos Truan Natural Resources Center Building
TAMUCC	Vegetated Swale	West of Conrad Blucher Institute for Surveying/Science
TAMUCC	Vegetated Swale	South of Turtle Cove Parking Lot
TAMUCC	Retention Pond	Northwest of Harte Research Institute

O.(b)(7) Identify publicly owned parks, recreational areas, and other open lands.

Publicly-owned parks and recreational areas accessible by the public are delineated by green polygons on the map in Attachment E.2.

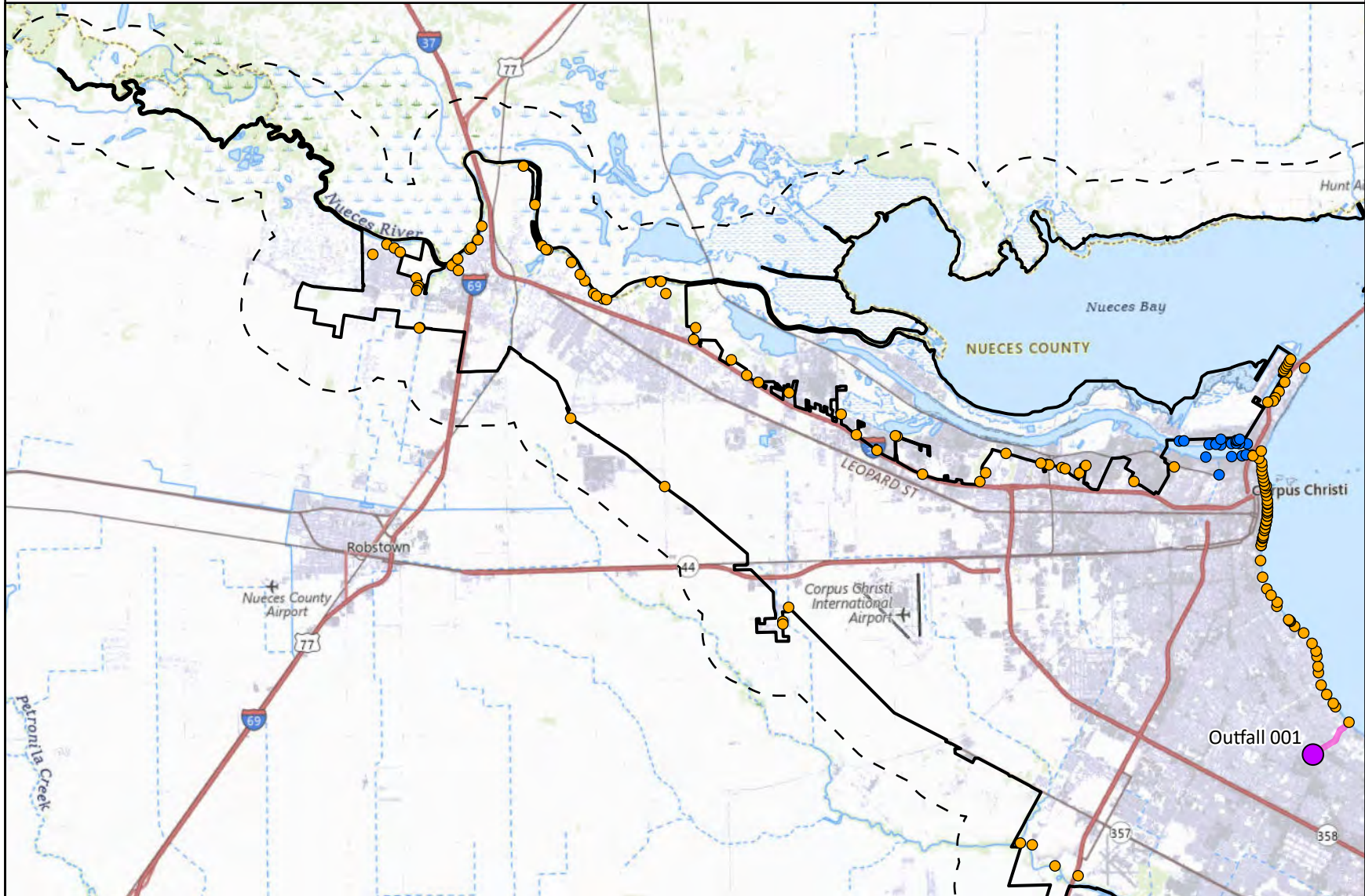


ATTACHMENT E.2
CITY OF CORPUS CHRISTI
PHASE I MS4 PERMIT RENEWAL APPLICATION
USGS MAP








*Note: Please see Attachment E.1 for a definition of "Points of Discharge from the MS4"





**ATTACHMENT E.3.1
CITY OF CORPUS CHRISTI
PHASE I MS4 PERMIT RENEWAL APPLICATION
USGS MAP**



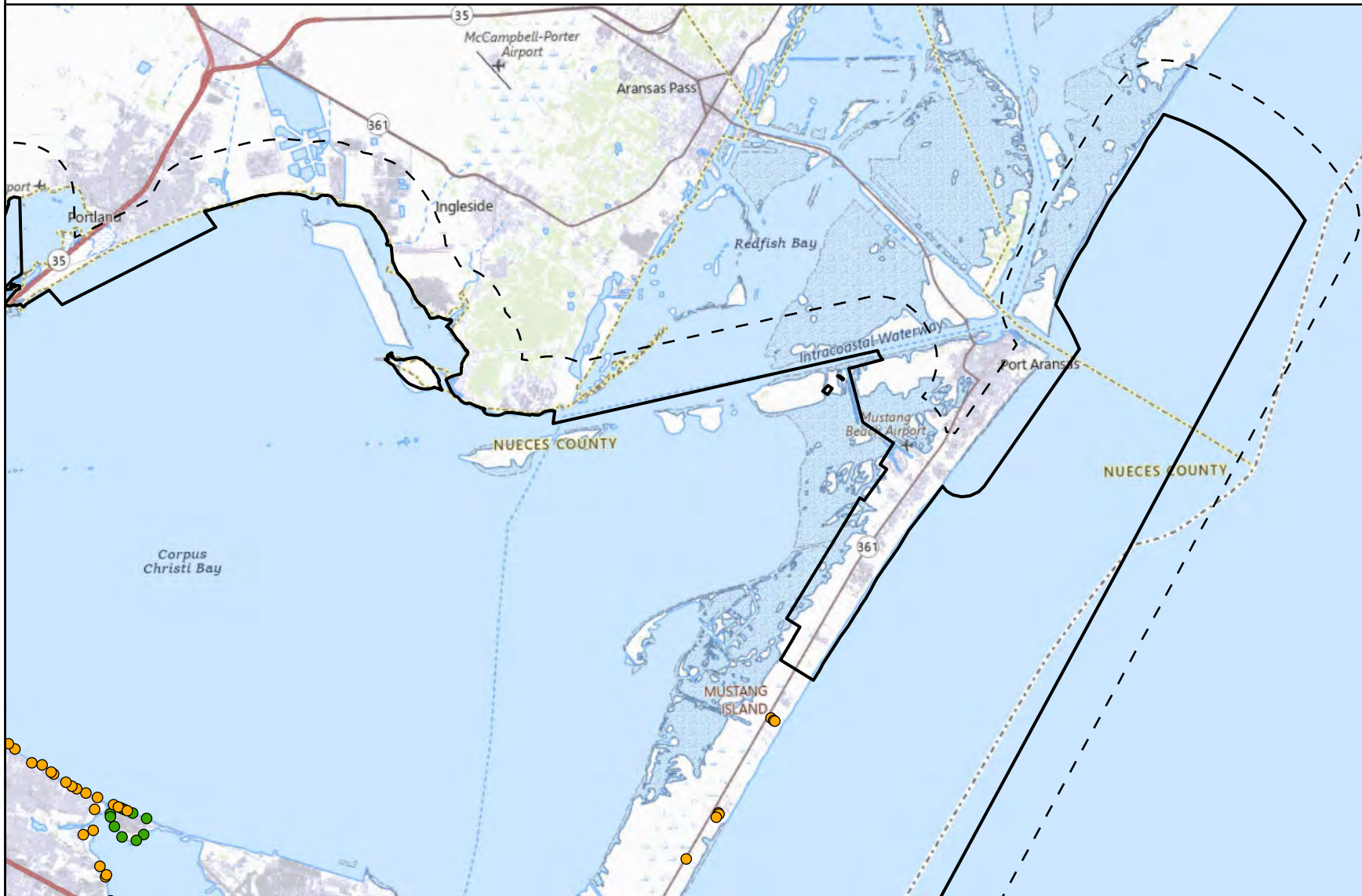
ATTACHMENT E.3.2
CITY OF CORPUS CHRISTI
PHASE I MS4 PERMIT RENEWAL APPLICATION
USGS MAP

Legend

-  MS4 Boundaries (Project Area)
-  1-Mile Buffer Around MS4 Boundaries
- Points of Discharge from the MS4*
-  City of Corpus Christi
-  Texas A&M - Corpus Christi
-  Port of Corpus Christi Authority of Nueces County










- Wet Weather Characterization Sampling Stations
-  Outfall 001
-  Outfall 002
-  Outfall 003
-  Outfall Discharge Routes to Classified Segment

*Note: Please see Attachment E.1 for a definition of "Points of Discharge from the MS4"

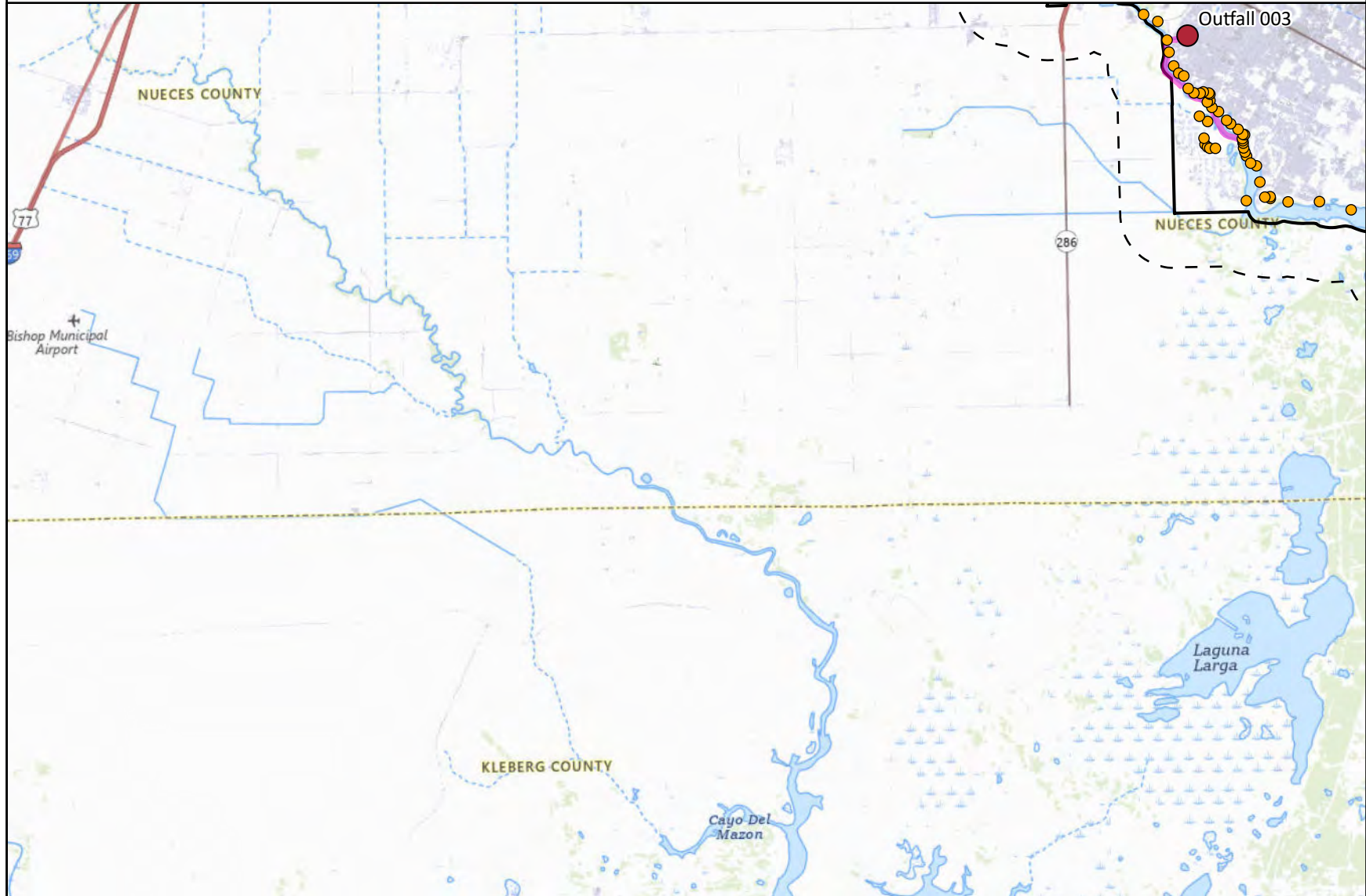


ATTACHMENT E.3.3
CITY OF CORPUS CHRISTI
PHASE I MS4 PERMIT RENEWAL APPLICATION
USGS MAP

Legend










-  MS4 Boundaries (Project Area)
-  1-Mile Buffer Around MS4 Boundaries
- Points of Discharge from the MS4*
-  City of Corpus Christi
-  Texas A&M - Corpus Christi
-  Port of Corpus Christi Authority of Nueces County
-  Wet Weather Characterization Sampling Stations
-  Outfall 002
-  Outfall 003
-  Outfall Discharge Routes to Classified Segment

*Note: Please see Attachment E.1 for a definition of "Points of Discharge from the MS4"

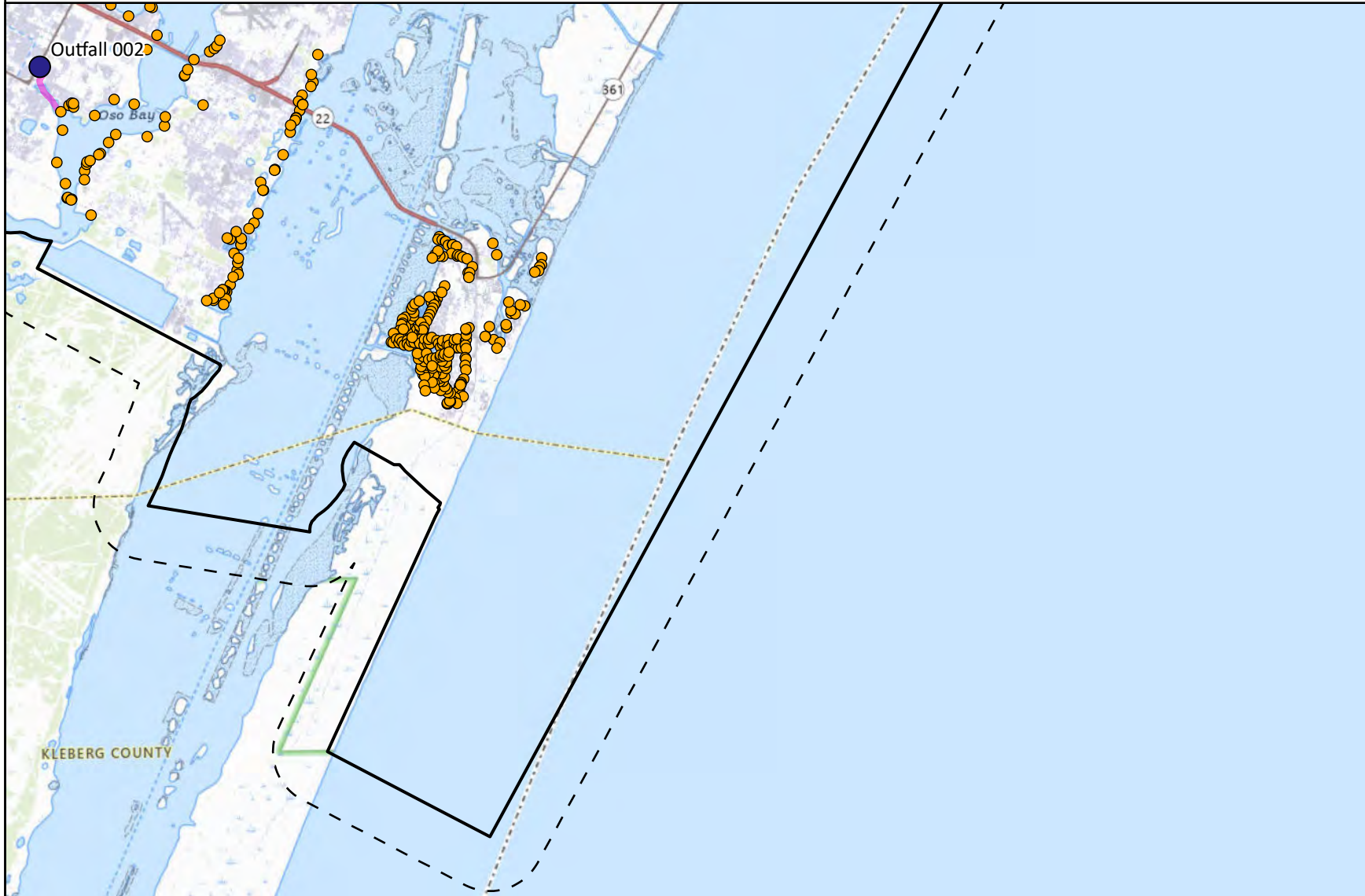


ATTACHMENT E.3.4
CITY OF CORPUS CHRISTI
PHASE I MS4 PERMIT RENEWAL APPLICATION
USGS MAP

Legend



- | | |
|--|---|
| <ul style="list-style-type: none">  MS4 Boundaries (Project Area)  1-Mile Buffer Around MS4 Boundaries Points of Discharge from the MS4*  City of Corpus Christi  Texas A&M - Corpus Christi  Port of Corpus Christi Authority of Nueces County | <ul style="list-style-type: none"> Wet Weather Characterization Sampling Stations  Outfall 001  Outfall 002  Outfall 003  Outfall Discharge Routes to Classified Segment |
|--|---|




*Note: Please see Attachment E.1 for a definition of "Points of Discharge from the MS4"







ATTACHMENT E.3.5
CITY OF CORPUS CHRISTI
PHASE I MS4 PERMIT RENEWAL APPLICATION
USGS MAP

Legend

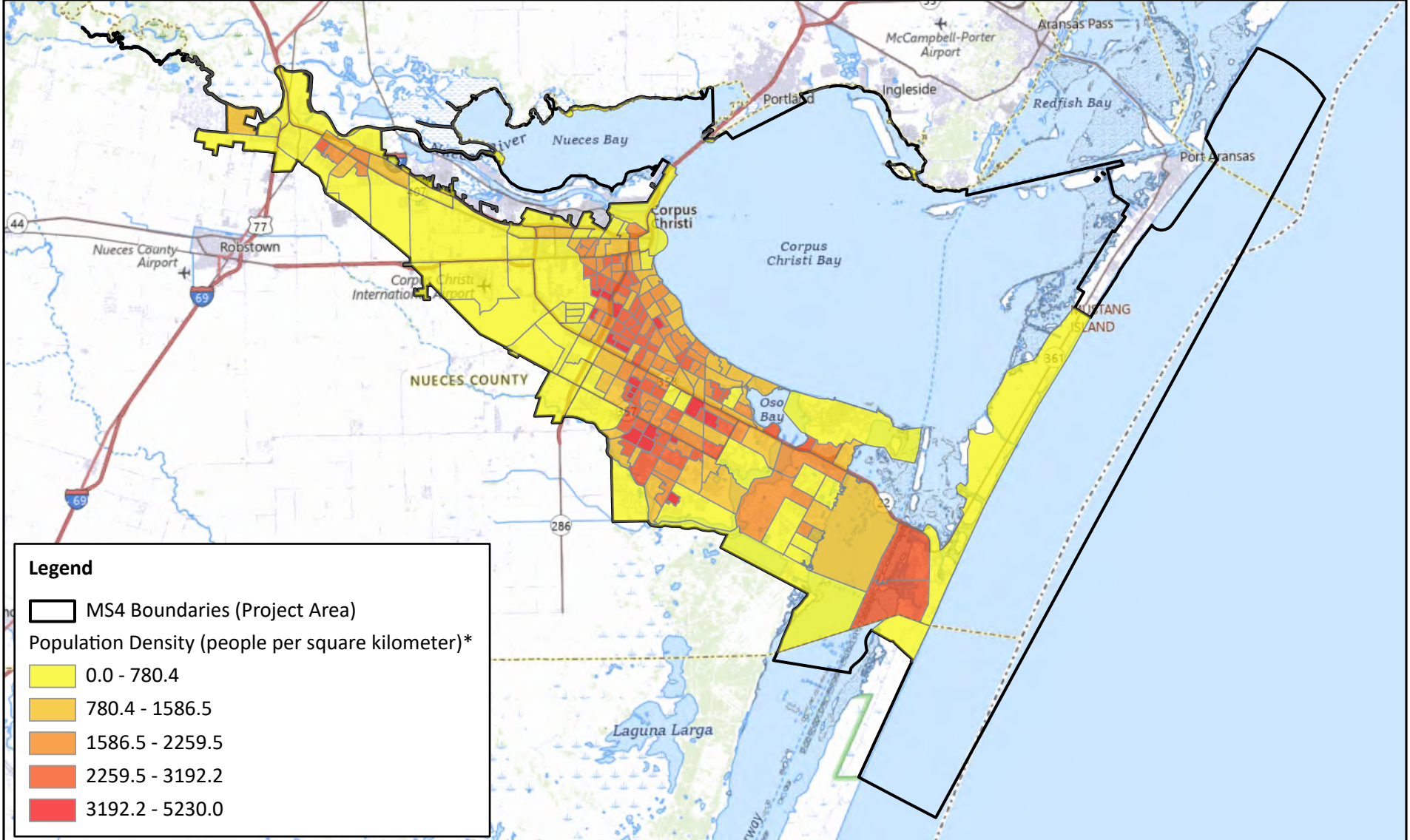
-  MS4 Boundaries (Project Area)
-  1-Mile Buffer Around MS4 Boundaries
- Points of Discharge from the MS4*

-  City of Corpus Christi
-  Texas A&M - Corpus Christi
-  Port of Corpus Christi Authority of Nueces County

Wet Weather Characterization Sampling Stations

-  Outfall 001
-  Outfall 002
-  Outfall 003
-  Outfall Discharge Routes to Classified Segment

*Note: Please see Attachment E.1 for a definition of "Points of Discharge from the MS4"



*Population density data obtained from the U.S. Census Bureau for 2020 Census Blocks in Corpus Christi, Texas

ATTACHMENT E.4
CITY OF CORPUS CHRISTI
PHASE I MS4 PERMIT RENEWAL APPLICATION
POPULATION DENSITY MAP

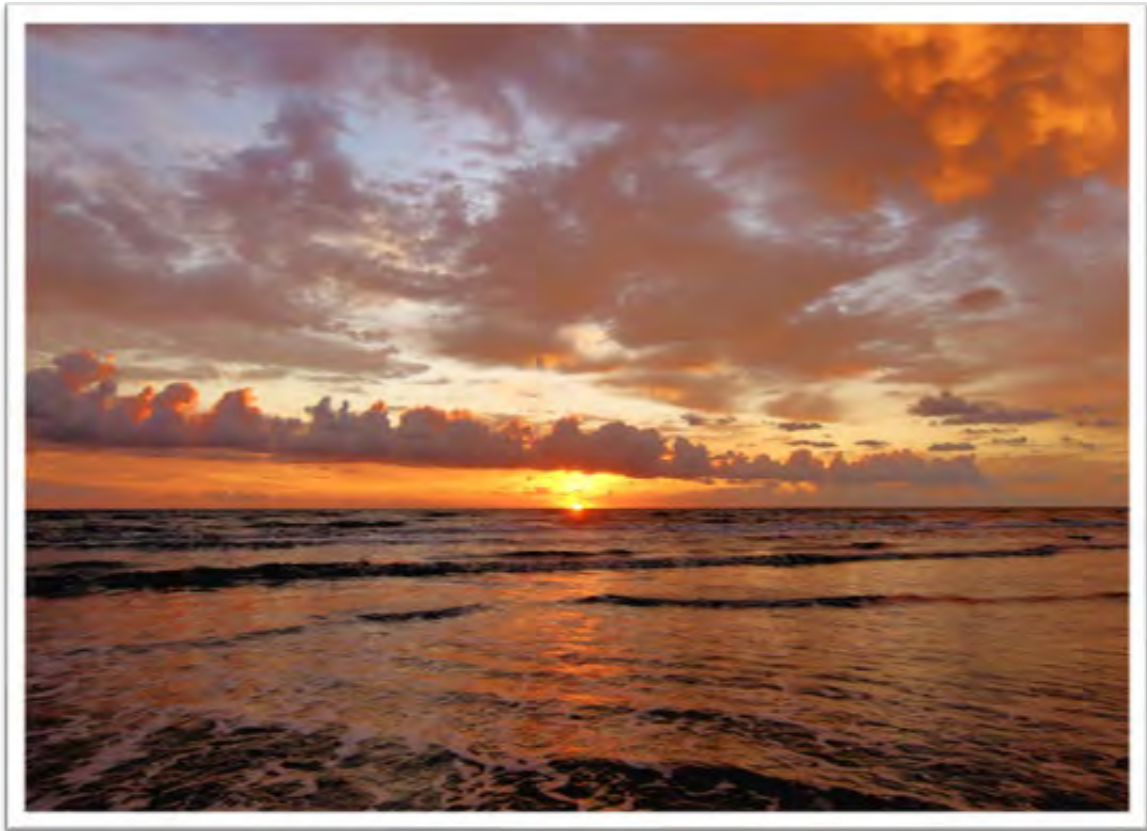
ATTACHMENT F

**Current Storm Water Management Plans and 2024 MS4 Annual Report
Application Form Item O.c**

SWMP - City of Corpus Christi

STORM WATER MANAGEMENT PLAN

for compliance with
Municipal Separate Storm Sewer System
Permit No. WQ0004200000
Permit Renewed: October 29, 2020



Prepared by the City of Corpus Christi, Storm Water Environmental Quality Division,
to meet the requirements of the TPDES General Permit for Storm Water discharges
from Large MS4s.



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Introduction

Regulatory Requirement

The regulatory requirement for establishing a Stormwater Management Program (SWMP) came out of the Clean Water Act (CWA) and its amendments. Congress passed the act into law by two thirds majority on October 18, 1972. The CWA directed the U.S. Environmental Protection Agency (EPA) to promulgate rules to implement the new law. In doing so, it developed the National Pollutant Discharge Elimination System (NPDES) to issue permits aimed at reducing the pollutants from point sources. In 1990, the CWA was amended to require certain Municipal Separate Stormwater Sewer Systems (MS4) to obtain NPDES permits. The MS4 program was rolled out in two phases: Phase I required medium and large MS4s that served a population of 250,000 or more to implement a stormwater management program to reduce and control pollution to receiving waters. Phase II included smaller cities that were not covered in Phase I. Phase II permits are general permits while Phase I permits are individual permits. This permitting structure considers the unique characteristics of the large urban watershed. The City of Corpus Christi is a Phase I MS4.

Corpus Christi Stormwater Permit History:

Corpus Christi was the first city in Texas to receive a Phase I NPDES permit that became effective on June 1, 1996 (Permit number TXS000601). The Texas Commission on Environmental Quality received authority to administer the NPDES permit program for stormwater discharges on September 14, 1998. This program is called the Texas Pollutant Discharge Elimination System (TPDES). The City applied for the TPDES permit on November 30, 1999 and was declared administratively complete on June 22, 2000. The TPDES permit became effective on August 1, 2008, for a period of five years. The City applied for a minor permit amendment that eliminated fecal streptococcus from the grab sample requirement. The permit change request was granted, and the permit was re-issued with an effective date of December 1, 2009. The City and its co-permittees submitted and the TCEQ received an application for renewal of TPDES MS4 Permit WQ000420000 on February 11, 2013. The executive director declared the application administratively complete on April 10, 2013. Prior to the 2016/17 reporting period, Texas Department of Transportation – Corpus Christi TXDOT-CC was a co-permittee to TPDES MS4 Permit WQ0004200000. On November 30, 2016, TXDOT-CC received authority to withdraw from the City of Corpus Christi's MS4 permit and was issued Permit WX0005011000. On October 20, 2020, TPDES MS4 Permit WQ0004200000 was revised and renewed for another 5-year permit term effective 10/20/2020 to 9/30/2025.

Permit Area

The City of Corpus Christi MS4 is located in Nueces, Kleberg, San Patricio, and Aransas Counties, Texas, and encompasses approximately 460 square miles with only 155 square miles being land and the balance covered by water. The MS4 watershed collects stormwater runoff

from eight major stormwater drainage basins (Figure 1). The discharge route is from the MS4 to Nueces River Tidal, Nueces River Below Lake Corpus Christi, Corpus Christi Bay, Nueces Bay, Corpus Christi Inner Harbor, Oso Bay, Oso Creek, Laguna Madre, and the Gulf of Mexico, Segments Nos. 2101 and 2102 of the Nueces River Basin, and Segments Nos. 2481, 2482, 2484, 2485, 2485A, 2491, and 2501 of the Bays and Estuaries, to various ditches and tributaries that eventually reach Nueces River Tidal, Nueces River Below Lake Corpus Christi, Corpus Christi Bay, Nueces Bay, Corpus Christi Inner Harbor, Oso Bay, Oso Creek, Laguna Madre, and the Gulf of Mexico. The unclassified receiving waters have a presumed minimum aquatic life use of high for perennial streams, limited aquatic life use for intermittent streams with perennial pools, and no significant life use for intermittent streams. The designated uses for Segment No. 2101 are primary contact recreation and high aquatic life. The designated uses for Segment No. 2102 are primary contact recreation, high aquatic life and public water supply. The designated uses for Segment No. 2481, 2482, 2485, 2491, and 2501 are primary contact recreation, exceptional aquatic use, and oyster water. The designated uses for Segment No. 2484 are noncontact recreational and intermediate aquatic life use. The following unclassified Segment No. 2485A Oso Creek has been evaluated as a perennial stream with a presumed primary contact recreation and high aquatic life use.

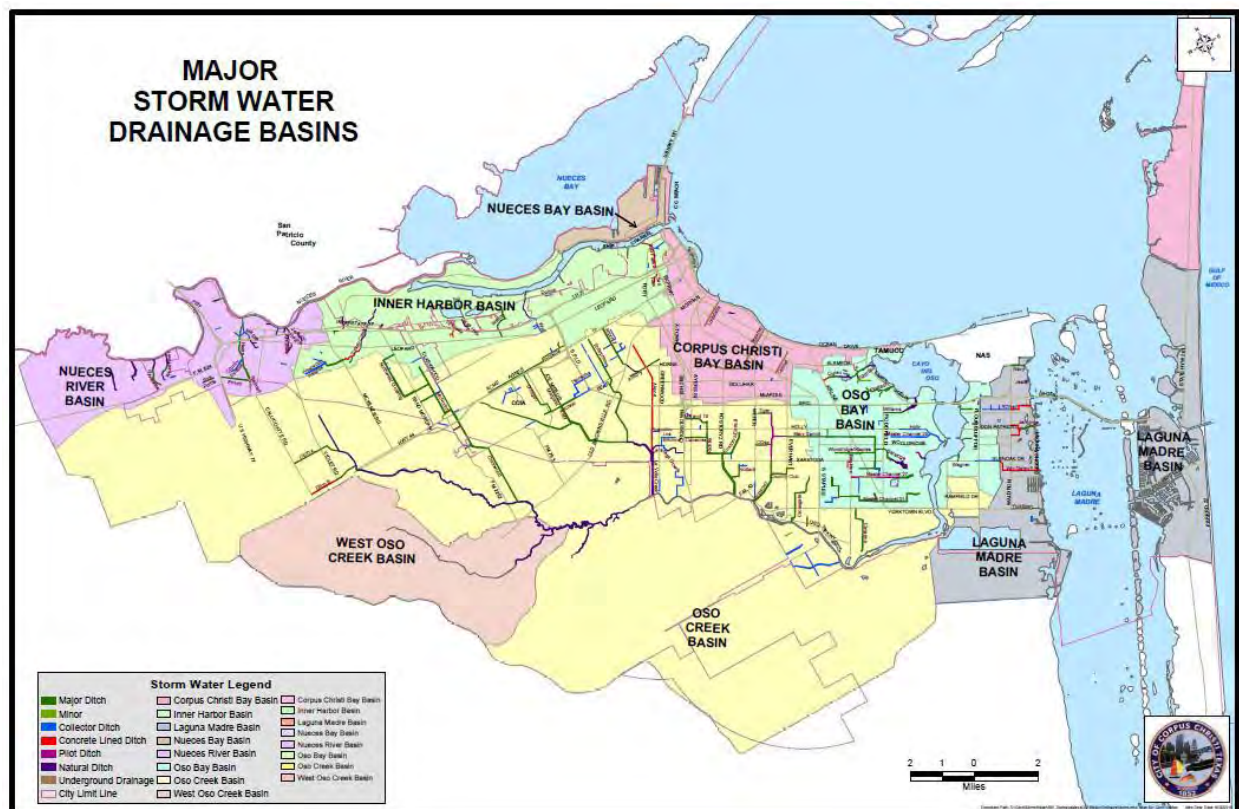


Figure 1 – Major Stormwater Drainage Basins in Corpus Christi, Texas.

Stormwater Management Program (SWMP)

The SWMP is a guide to facilitate pollution reduction in stormwater that discharges to receiving waters from the MS4 system to the maximum extent practicable and to fulfill requirements of the TPDES permit. Reduction of pollutants in stormwater is expected to improve surface water quality of the receiving waters. Pollution reduction or elimination is achieved by a variety of activities known as Best Management Practices (BMPs) that may include public awareness, education and engagement, inspections of construction sites and industrial facilities, enforcement of ordinances, watershed and development planning, flood control projects, MS4 system design, maintenance and management, and discharge monitoring, to name a few.

This SWMP was developed to facilitate regulatory review and follows the format of the TPDES permit. It specifies the activities that the city will take to achieve the eight minimum control measures (MCMs) required by the permit. Measurable goals are developed and implemented according to the schedule over the five-year permit term. The effectiveness of the SWMP is examined every year with the Annual Report and changes are made if any BMP is deemed to be ineffective.

The Stormwater Treatment Division of the Public Works Department is primarily responsible for developing and implementing the SWMP, but nearly all city departments have varying degrees of responsibility for developing and implementing BMPs and reporting to the Stormwater Treatment Division on their effectiveness.

The City of Corpus Christi has three co-permittees: The Port of Corpus Christi, Del Mar College, and Texas A&M University at Corpus Christi. Each permittee is responsible for developing and implementing their own SWMP. Each has unique concerns that are best addressed on an individual basis.

Legal Authority

The City of Corpus Christi is operated by a council-manager form of government. The elected mayor presides over eight elected council members from five districts and three cities at-large, elected positions. A city manager is appointed by the council. Activities within the city are regulated by the Home Rule Authority by passing ordinances designed to protect the health, safety, welfare of its residents and that of the unique natural environments within the city limits. Ordinances that support the implementation of the SWMP include, but are not limited to, Stormwater Quality Management Plans, Prohibition of Pollution of the MS4, Pollution Control, Control of Aeolian Soils, Animal Care and Control, Emergency Management, Litter, Maintenance and Operation of Grease Interceptors and Oil/Sand Interceptors, Garbage, Trash and Refuse, and Beachfront Management and Construction.

SWMP Updates, Revisions, and Rationales for Revisions

This SWMP replaces the one developed for the permit with the effective date of December 1, 2009. Many of the selected BMPs and measurable goals remain the same as they have proven to be effective at reducing pollution in stormwater. New BMPs and measurable goals have been added to the existing ones to enhance the effectiveness of previous SWMPs and to meet the new TMDL requirements of the current permit.

SWMP Availability

The SWMP is available for review by contacting the Stormwater Treatment Division of the Public Works Department at (361) 826-1863. It is also posted on the City of Corpus Christi website at www.cctexas.com/departments/storm-water/about-our-system. Questions may be directed to the Environmental Services Superintendent position at (361) 826-3589.

Total Maximum Daily Load

1. Discharges to Water Quality Impaired Water Bodies with an Approved Total Maximum Daily Load (TMDL)

The permittees shall control the discharges of pollutant(s) that are of concern to impaired waters and waters with approved TMDLs....and shall assess the progress in controlling those pollutants (TPDES Permit, Part II, Section C.2.)

The city of Corpus Christi is currently subject to bacteria TMDL's in certain segments of its receiving waters. These impaired areas are Cole, Ropes, and Poenisch Parks (2481CB_03, 04, and 06 respectively), and segment 2485A of Oso Creek. There is a wasteload allocation for Stormwater (WLASW) in the Oso Creek, but a 2012 study indicated that Stormwater discharges are responsible for <10% of the loading and will be difficult to address. There is a TMDL for segment 2485 of Oso Bay, but it has been determined that Stormwater discharge is not a significant source of bacterial loading to the segment. An I-plan for these segments is currently being developed.

A. Targeted Controls

(Identifying areas of focused effort or implementing additional BMPs to reduce the pollutant(s) of concern in the impaired waters)

The city has implemented targeted controls in the TMDL areas by focusing on existing programs in these sections. The city has a Stormwater quality team that focuses on illicit connection and discharge detection and elimination through an MS4 screening program. This team also enforces local ordinances related to Stormwater pollution and has citation power.

The city is in the process of upgrading the sanitary sewer system in the TMDL areas in order to address capacity, sanitary sewer overflow issues, and pump station inadequacies. The progress of this program is monitored by the Utilities Compliance program.

Education is done by multiple departments to address the causes of bacterial loading to the impaired waters. This education includes information on how fats oils and greases (FOGs) can cause sanitary sewer overflows (SSO) through clogging sanitary sewer lines, the contribution of residential sites to bacterial loading, proper disposal of pet waste, and the proper maintenance and operation of decorative ponds.

As a TCEQ Authorized Agent, the Corpus Christi- Nueces County Public Health District is responsible for the proper implementation of Texas Health and Safety Code, Chapter 366, and 30 TAC Chapter 285 which regulate On Site Sewage Facilities (OSSF). As the authorized agent, the

Corpus Christi Nueces County Public Health District administers the OSSF program within Nueces County and Corpus Christi as approved by the Executive Director of the TCEQ.

B. Measurable Goals

For each targeted control, the SWMP must include a measurable goal and implementation schedule describing BMPs to be implemented during each year of the permit term, provided in the table below which is similar to MCMs.

Progress towards the goal of reducing the Stormwater component of bacterial loading will be measured by reducing the number of SSOs occurring in the TMDL segments, increasing the number of Stormwater inspections seeking illicit connections and discharges, reports of illegal dumping, focused residential education efforts on sources of bacteria, and the number of upgrades made to the sanitary sewer system and pump stations.

C. Identification of Benchmarks

The benchmark the Stormwater management program aims to achieve is the waste load allocation to Stormwater from the respective TMDL. Benchmark units are in billions of colonies forming units per day (bil CFU/day).

Impaired Water	Impairment	Benchmark
Segments: Cole, 2481CB_03 Ropes, 2481CB_04 Poensch: 2481CB_06	Bacteria	CB_03: 734 bil CFU/day CB_04: 4,199 bil CFU/day CB_06: In progress
Oso Creek, 2485A	Bacteria	26.748 bil MPN/day Enterococci
Oso Bay, 2485	Bacteria	Stormwater not a significant bacterial loading contributor.

D. Implementation Schedule

Permit year one	Develop schedule for increased focus of dry/wet weather screening programs in TMDL zones with goal of improving detection of illicit discharges into the MS4.
Permit year two	Develop and implement education plan in TMDL zones with focus on pet and grass waste disposal. Work with consent decree program to track upgrades to wastewater infrastructure to decrease wastewater overflows to MS4. Develop and implement program with pretreatment department to target restaurants for education on proper disposal of fats, oils, and greases.

	Implement dry/wet weather screening emphasis in priority areas.
Permit year three to five	Evaluate effectiveness of new BMPs and adjust as necessary to achieve permit compliance. Effectiveness to be measured by increase in educational events, number of illicit discharge detections and eliminations, and number of reports of illegal dumping.

MCM 1 - MS4 Activities

Structural Controls

To the MEP, the permittees shall continue to operate and maintain the MS4, including any stormwater structural controls in such a manner as to reduce erosion and the discharge of pollutants (TPDES Permit Part III, Section B.1.a.i)

Channel Side Slopes

Channel geometry criteria affect water quality by reducing erosion and increasing the sedimentation of pollutants and percolation at low flows which contain the highest concentration of pollutants. A channel with flat side slopes will erode less and maintain a better vegetative ground cover which filters stormwater and allows percolation into the channel bottom. The proposed comprehensive drainage master plan will require 4:1 slope, space permitting for all new channels, and major upgrades. To assess the effect of changes in the drainage criteria for channel construction, an economic analysis was performed on the cost impact of various ditch criteria.

With the change in the side slope of a channel to a flatter grade, the amount of erosion decreases and the ability to maintain vegetation improves. These factors, in turn, improve the hydraulic capacity of the channel - which is its primary purpose. Thus, a channel with flat side slopes, which is well maintained, can be constructed significantly smaller in width and carry the same amount of stormwater runoff as a wider, poorly maintained ditch.

To analyze the actual cost of various channel side slopes, a numerical model which contained the variables of water depth, bottom width, side slope, frictional coefficients of the sides and the channel bottom, channel slope, flow quantity, and velocity, was constructed. From these variables, estimates were determined for excavation quantities, right of way requirements, vegetative treatment areas, and maintenance factors.

The model has been examined for a variety of different slopes, flow depth, and flow quantities. The optimum channel geometry to enhance water quality, considering all of the above factors, is a trapezoidal section with a flat bottom with 4:1 side slope. The benefit to water quality is significant due to reduced erosion and improved percolation of low intensity and frequent rainfall runoff into the soil of the grassed-bottomed channels.

Vegetative Cover Requirements

Stabilizing slopes with a vegetative treatment greatly reduce the amount of soil erosion which occurs before native grasses and weeds take hold. Lower erosion reduces the amount

of pollutants reaching receiving waters and reduces regarding maintenance of slopes. The choice of vegetative treatment compares acceptable levels of initial erosion versus the cost of the treatment. The most effective vegetative treatment is complete sodding, but the cost is high.

Cost effective vegetative treatment of some sort abates pollution and reduces maintenance action. The success of different treatments will depend upon the effectiveness of maintaining the slopes after application. Construction contractors are required to achieve vegetative growth on side slopes before a project is accepted as complete and usable. Treatment is a very minor portion of the total lifetime cost of a drainage channel. Therefore, the initial cost should not be the sole factor in determining the optimum method for adoption as standard construction practice on channels within the City. The City of Corpus Christi has traditionally favored vegetative cover but has utilized pervious pavers in areas with high erosion.

Erosion Prevention in Agriculture Areas

Reducing channel side slopes and providing vegetative treatment will greatly reduce the problems caused by soil erosion, but a problem remains in agricultural areas of the city where farming practices contribute to the erosion of channel banks. The problem is generally caused by farming practices that cultivate too closely to the top edge of the channel bank. The tilling under of the soil-retaining vegetation, several times a year, allows numerous washouts to occur when rainfall runs off the fields.

A line of vegetation along the top bank, in conjunction with a low berm which directs the runoff from the fields to a structure, will solve this problem and is the remediation method used by stormwater maintenance crews. Maintenance of an undisturbed vegetation zone or other stabilization method at least 10 feet wide along the top of all channels within a drainage ditch right-of-way should be considered on channels constructed adjacent to agricultural lands. Some regulations by the U.S. Soil Conservation Service require agricultural operations to maintain and follow a plan for preventing soil erosion. The actions by the City are also limited by the Agriculture Code which "limits the circumstances under which agricultural operations may be regulated or considered to be a nuisance" for agricultural areas of the City annexed after 1981.

Drainage System Maintenance and Mowing Programs

The goal of maintaining and mowing drainage facilities is to ensure satisfactory operations and to preserve and enhance the quality of stormwater runoff.

The City's Stormwater Department maintains drainage ditch slopes and bottoms and maintains stormwater pump stations. The Parks and Recreation Department maintains street right of way and ditch easements. Complaints related to illegal dumping into the City's storm sewer system are also investigated by Stormwater Department personnel.

These activities help eliminate obstructions from the drainage system to improve flow conveyance and water quality.

Removal of excessive vegetation, sediment, obstructions, and debris from drainage ways is performed year-around.

Certain channels require grading and dredging operations after large storms have changed the characteristics and conveyance. Heavy storm damage is the major cause of maintenance and repair of the stormwater drainage system.

Citizen inquiries and requests concerning the drainage system are assigned to an investigator. If a solution is determined to be feasible and appropriate, the work is assigned to a maintenance unit for action. Critical or emergency situations are dispatched by two-way radio to a maintenance unit for immediate action.

The City's mowing contracts require the contractor to furnish suitable machinery, equipment, and labor as necessary to meet contract specifications.

The City shall set priorities for maintenance and repair activities based on the following criteria:

- a. Risk to public health and safety (including potential flooding)
- b. Water quality
- c. Complaints (usually about aesthetics)

Floatables

The permittees shall continue to implement a program to reduce the discharge of floatables (for example litter and other human generated solid refuse) into the MS4. The permittees shall include source controls at a minimum, and structural controls and other appropriate controls where necessary (TPDES Permit Part III, Section B.2.a.ii.)

a. Litter Removal

Litter is picked up along roadways and other public areas by city staff and mowing contractors. Additionally, contract personnel collect litter and debris prior to mowing the rights-of-way.

In addition to regular curbside garbage pickup, the City of Corpus Christi Litter Control Program targets (1) litter pickup in City rights-of-way, medians, and parks; (2) neighborhood cleanups of brush and bulky items on a scheduled basis; and (3) trash collection.

Heavy brush (tree limbs, shrubs, clippings, etc.) is picked up by crews from the Solid Waste Services Department citywide on a scheduled basis. Although not as critical as litter in terms of leachate, excessive loose brush contributes to runoff obstruction and pollution.

The Litter Critter program of the Solid Waste Services Department allows neighbors to collectively dispose of household and yard debris. A resident may apply to have a brush truck placed in front of their home for the weekend to do a neighborhood cleanup. The Litter Critter was restarted in June of 2021 after being placed on hiatus during the 2020-2021 pandemic and will take place at set locations monthly in addition to resident requests.

In addition to the above programs, litter abatement (enforcement) is an active program within the City. The City employs Compliance Officers who cite illegal dumpers and refer cases to the Environmental Court for prosecution.

By Ordinance, the City of Corpus Christi has the right to require premises within the city limits to be free of weeds, rubbish and unhealthy matter. As litter-filled or overgrown vacant lots are identified, the owner is contacted and is notified to clean up his/her property within 10 days. If a follow-up inspection shows the owner to be in “non-compliance,” the City will issue a work order to a subcontractor for remediation. Any expense incurred by the City will be billed to the property owner. If the property owner refuses to pay the City, a lien is placed on the property.

The City of Corpus Christi evaluates ordinances on a regular basis and has recently modified several which relate to litter, brush, and care of premises. The City employs several Code Enforcement Officers across multiple departments that actively enforce these ordinances. The City frequently partners with non-profit organizations such as the Beautify Corpus Christi Association, and the Coastal Bend Bays Foundation to assist in volunteer cleanups and education and outreach.

The City’s two downtown stormwater drainage pump stations have been retrofitted with trash rakes that capture trash and debris from the runoff, preventing it from being discharged into the receiving waters. The trash rake system captures an average of over 50 tons of trash and debris annually.

The City has over 18,000 inlets within its stormwater drainage infrastructure. Three vacuum trucks are assigned to clean each inlet on a three-year cycle or when conditions demand more frequent cleaning. This best management practice prevents over 2600 tons of debris from being discharged into receiving waters.

Roadways

The permittees shall continue to operate and maintain public streets, roads, and highways (excluding public streets, roads, and highways under

jurisdiction of the Texas Department of Transportation's MS4 permit) to minimize the discharge of pollutants, including pollutants related to deicing or sanding activities (TPDES Permit Part III, Section B.2.a.iii)

a. City Street Department Activities

The City assesses the need for inlet protection on individual street projects depending on the size of the repair and the proximity of a storm water inlet. Inlet barriers will be placed in front of an inlet as needed to prevent the discharge of street repair materials and removed following the completion of the repair.

As needed, following street overlays or seal coating, street sweepers are contracted to remove excess rock from the streets, and curbs and gutters.

b. Street Sweeping

The City currently performs street sweeping operations in the downtown area, on selected collector streets, and after street projects. The Storm Water Department is responsible for management and operation of this program which targets the cleaning of City streets to remove trash, litter and dirt which have collected in the streets and gutters. This program addresses health, safety, aesthetic, and water quality concerns. The City contracts this service to a private company.

As needed, following street overlays or seal coating, street sweepers are contracted to remove excess rock from the streets, curbs, and gutters. At the end of 2021 all contracts ended, and 3 new street sweepers were purchased totaling 6 street sweepers as of 2023.

(3.C. Measure: number of miles of curb and streets swept in a year.)

c. Litter Control

The City of Corpus Christi Code of Ordinance. Chapter 22, Sec. 22-2. Littering prohibited in public places.

Litter is picked up along roadways and other public areas by city staff and mowing contractors. Additionally, contract personnel collect litter and debris prior to mowing the rights-of-way. In addition to regular curbside garbage pickup, the City of Corpus Christi Litter Control Program targets (1) litter pickup in City rights-of-way, medians, and parks; (2) neighborhood cleanups of brush and bulky items on a scheduled basis; and (3) trash collection. The Litter Critter program of the Solid Waste Services Department allows neighbors to collectively dispose of household and yard debris. A resident may apply to have a roll off box placed in front of their home for the weekend to do a neighborhood cleanup. The city uses ordinance **Chapter 22, Sec. 22-2. Littering is prohibited in public places** to regulate and control litter from the public and commercial interests within the city.

d. Deicing

The City of Corpus Christi coordinates activities associated with icy roads with the Texas Department of Transportation. On the rare occasions that icy conditions may cause hazards, the City Street personnel apply trap rock to roads and bridges, and have it removed when conditions allow.

MCM 2-Post Construction Stormwater Control Measures

Areas of New Development and Significant Redevelopment

The permittees shall continue implementation and enforcement of the controls to minimize discharge of pollutants from areas of new development and significant redevelopment, after construction is completed. The goals of such controls must include a) limiting increases in erosion and the discharge of pollutants because of new development and 2) reducing erosion and the discharge of pollutants in stormwater from areas of redevelopment. (TPDES Permit Part III, Section B.2.b.i)

City of Corpus Christi Code of Ordinance. Chapter 14, Article X, Sec. 14-1003. Stormwater Quality Management Plans.

A site-specific stormwater quality management plan for all residential, commercial, and industrial development of one (1) acre or more must be submitted with a preliminary/final plat. As a minimum the plan must include the location of ultimate outfall, receiving waters, and any environmentally sensitive areas. The plan must also state whether an NPDES or TPDES stormwater pollution prevention plan or a pollution plan will be submitted to the City of Corpus Christi. Moreover, the stormwater quality plan must be sealed by a registered professional engineer licensed to practice engineering in Texas.

Comprehensive Master Planning Process

The permittees shall continue to implement a comprehensive master planning process (or equivalent) to include all new development and redevelopment projects that disturb one acre or more of land including projects that are part of a larger common plan of development or sale that will result in a disturbance of one acre or more (TPDES Permit Part III, Section B.2.b.ii.)

The City of Corpus Christi's Comprehensive Plan identifies the management objectives for receiving waters. In 1987, the City Council adopted a policy statement concerning storm water, which has been incorporated into the Comprehensive Plan. One of the most important goals of the policy statement is to protect the natural amenities of the Corpus Christi area. The natural amenities of the area such as the bayfront, the aquatic recreation areas, and the topography all play an important role in making Corpus Christi a desirable place to live. These amenities provide a direct and inherent economic advantage over other communities. For these reasons, it is critical that these

natural amenities be protected from pollution and the area preserved for the future. Area Development Plans included in this management plan address issues such as protecting environmentally sensitive lands, protecting water quality, and ensuring the best use of private and public open spaces. The Comprehensive Plan indicates future growth areas of the community are included in the Future Land Use and Area Development Plans.

The Comprehensive Plan also includes a Master Plan for Storm Water Drainage which provides detailed information on topography and proposed drainage channels.

Regulatory Mechanism, Structural and Non-Structural Controls, and Long-term Operation and Maintenance of BMPs

The permittees shall evaluate the existing SWMP as necessary to ensure that this MCM includes a regulatory mechanism such as an ordinance to implement and enforce the new requirements of this program and shall ensure that the SWMP includes strategies for structural and/or nonstructural controls (i.e., BMPs) appropriate for the community. In addition, the permittees shall provide for adequate long-term operation and maintenance of BMPs. (TPDES Permit Part III, Section B.2.b.iii)

a. Platting Ordinance

The City of Corpus Christi Platting Ordinance, Chapter 42, Sec. 42-1, No. 4168 details requirements for establishing criteria for design and construction of subdivision improvements including minimum design flows for drainage, acceptable limits of street flood, and gutter and inlet construction standards. The City of Corpus Christi passed an ordinance authorizing the enforcement of a Flood Hazard Prevention Code in compliance with FEMA requirements. The ordinance also includes provisions for development permits for construction within the City.

b. Stormwater Quality Management Plans

City of Corpus Christi Code of Ordinance. Chapter 14, Article X, Sec. 14-1003. Stormwater Quality Management Plans.

The Storm Water Quality Management Plans---requires a site-specific storm water quality management plan for all residential, commercial, and industrial development of one (1) acre or more be submitted with a preliminary/final plat. As a minimum the plan must include the location of ultimate outfall, receiving waters, and any environmentally sensitive areas. Moreover, the storm water quality plan must be sealed by a registered professional engineer licensed to practice engineering in Texas.

(2.C. Measure: number of accepted and approved Storm Water Quality Management Plans with total acreage encompassed.)

c. Guidance Document – Post Construction

The city adopted a handbook, “GUIDANCE DOCUMENT FOR DEVELOPMENTAL PLANNING & CONSTRUCTION ACTIVITIES”. This handbook has been prepared to provide technical guidance related to erosion and sediment controls and other measures to reduce pollutants from developing sites. The document is to be used as a guidance manual to implement a local storm water quality management program for new residential, commercial, and industrial developments and significant redevelopments. It is to be used as a general guidance manual in preparing individual storm water permit applications for construction activities or in preparing and implementing SWP3s required under provisions of the general permits for construction activities. It is also to be used as a guidance manual to implement a local storm water management program for construction activities.

The technical guidance and best management practices (BMPs) described in this handbook will provide information to owners, engineers, architects, and contractors to facilitate compliance with storm water permit requirements and with local regulations. The handbook discusses the preparation of erosion and sediment and other source control plans, the incorporation of BMPs in the design phase of improvements, and their implementation during construction. The Development Services Department will establish a library or City document area for the public regarding technical construction standards and guidance documents related to erosion and sediment controls on development sites. In addition, handouts are provided to the customers at the time of permit issuance.

d. Development along the Nueces River

Portions of the Nueces River are within the city limits and other portions lie within the extraterritorial jurisdiction (ETJ). These areas must comply with all conditions set forth by the City’s Platting Ordinance, such as- the establishment of minimum requirements for lot sizes, road right-of-way widths, and ditch slope design. Drainage plans must be prepared and submitted by a registered engineer to the Development Services Department to determine compliance with the platting ordinance.

Flood Control Projects

The permittees shall assess the impacts on the receiving water(s) for all flood control projects. Where feasible, new flood control structures must be designed, constructed, and maintained to provide erosion prevention and pollutant removal from stormwater. (TPDES Permit Part III, Section B.2.b.iv)

a. Federal Emergency Management Agency (FEMA)

The City of Corpus Christi is authorized by local, state, and federal regulations to provide floodplain management to reduce flood damages and minimize the risk and danger of flooding. The floodplain management practices employed by the City of Corpus Christi are

endorsed by the Federal Emergency Management Agency (FEMA) because of their assigned reduction in risk and federal government floodplain insurance obligations.

The Federal Emergency Management Agency (FEMA) has studied the major creeks and drainage ways within the Corpus Christi area. As a result, FEMA has established floodplain elevations and floodplain widths for various design storms. Additionally, FEMA has specified floodways which comprise the minimum areas of the mainstream channel which must remain open and free from future land development improvement in order to pass the 100-year storm with no net rise in flood waters. This effectively prevents the placement of any fills or structures within this area along the main channel. In order to participate in the National Flood Insurance Program, the City and County are required to maintain FEMA's criteria for construction within the designated special flood hazard areas. To establish flood hazard areas, the City Council has adopted the Flood Insurance Rate Maps (FIRM) and Flood Boundary and Floodway Maps (FBFM) and supporting data. The FIRMs include, at a minimum, areas of special flood hazard as identified by the Federal Emergency Management Agency in an engineering report entitled "The Flood Insurance Study for Nueces County, Texas, unincorporated areas," dated September 27, 1972, as amended or revised, with the accompanying FIRM and FBFM and related supporting data. The criterion requires structures to be elevated above the 100-year flood elevation (or flood proofed), and to be located outside of the floodway.

b. Flood Hazard Prevention Code

City of Corpus Christi Code of Ordinance. Chapter 14, Article V. Flood Hazard Prevention Code.

The purpose of the Flood Hazard Prevention Code is to promote public health, safety, and general welfare and to minimize public and private losses due to flood conditions in specific areas.

Whenever necessary to make an inspection to enforce any of the provisions of the Code, or whenever the Floodplain Administrator, or duly authorized representative, has reasonable cause to believe that there exists in any building or upon any premises any condition of code violation which makes such building or premises unsafe, dangerous or hazardous, the Floodplain Administrator may enter such building or premises at all reasonable times to inspect the same or to perform any duty imposed upon the Floodplain Administrator by this Code, provided that if such building or premises is occupied, he shall first present proper credentials and request entry.

Upon notice from the Floodplain Administrator that work on any building, structure, dike, bridge or any improvement which would affect water drainage, is being done contrary to the provisions of this Code or in a dangerous or unsafe manner, such work shall be immediately stopped.

The Code lists provisions for flood hazard reduction that relate to drainage ways, new development, and significant redevelopment. The procedures for obtaining permits within flood hazard areas, and additional rules relating to the construction of structures within flood hazard areas, are published in the City of Corpus Christi Code of Ordinances. Development is prohibited within floodways unless a hydrologic and hydraulic study determines no net rise. Floodways are located in special flood hazard areas where velocity of waters which carry debris, potential projectiles, and erosion potential are addressed.

The Floodplain Administrator is assisted by the Floodplain Review Committee consisting of three positions, as follows:

- 1) Engineering Services staff member knowledgeable in subdivision development and hydrology.
- 2) Planning Department staff member knowledgeable in subdivision planning, and platting.
- 3) Community Development staff member knowledgeable in construction practices.

c. Information Bulletin – IB008 Pre/Post Construction Drainage Plan

The city adopted information bulletin IB008 in 2021. IB008 addresses the need for a design professional stamped pre and post construction drainage plans for infill and island lot construction. We look to expand this IB in conjunction with any storm water design manual to implement in the coming four years.

d. Training and Education

Development Services Department continues to educate our staff and our customers with our extensive outreach programs and internal trainings. Our staff trains twice a month on varied subjects and storm water management has been a subject. We also inform our customers and citizens through numerous meetings and varied communication outlets like social media and email blasts.

MCM 3-Illicit Discharge Detection and Elimination

Illicit Discharge and Improper Disposal Screening and Inspections

The permittees shall prohibit illicit non-stormwater discharges from entering the MS4. The permittees shall continue to implement a program, including a schedule to detect and eliminate illicit discharges and improper disposal into the MS4. This program shall include:

A) A description of the program, including inspections procedures, frequencies, and methods for detecting and preventing illicit discharges, to implement and enforce an ordinance, orders, or similar means to prevent illicit discharges to the MS4; In addition, within one year from the date of permit issuance, the program must include items B) thru G):

B) A description of procedures to conduct on-going field screening activities, including areas or locations that will be evaluated by such field screens.

C) A description of procedures to be followed to investigate portions of the MS4 that indicate a reasonable potential of containing illicit discharges or other sources of non-stormwater; (TPDES Permit Part III, Section B.2.c.i)

a. Dry / Wet Weather Screening Program

The City of Corpus Christi – Environmental Services Division has implemented a dry / wet weather screening program to detect and eliminate illicit connections and discharges into the MS4. Throughout the permit period EQS's systematically inspect outfalls, manholes, and Stormwater inlets for flowing water. The goal of the program is to inspect at least 20% of the outfalls and manholes in the city during the permit duration to ensure proper flow and quality of the MS4. Areas of priority for inspection are the TMDL discharge segments, with a set schedule to inspect these outfalls and manholes several times during the permit year.

b. Improper Disposal Screening Program

The city of Corpus Christi is divided into five zones with an EQS assigned to each zone. Throughout the day the EQS will patrol their zone looking for signs of illegal dumping into the city MS4. Signs can include staining around storm drains, sediment in the curbs and gutters, and residents and contractors placing grass into streets, curbs, and storm drains. If the EQS finds violations, they will address the responsible party (RP) regarding the violation. The EQS will first educate the RP as to ordinances related to the violation. If

violations continue to occur the EQS can escalate to warnings, notices of violation, and finally citations and liens as needed.

c. Spill Prevention, Containment, and Response

A description of procedures to prevent, contain and respond to spills that may discharge to the MS4 (TPDES Permit Part III, Section B.2.c.i.D)

d. Hazardous Material Spill Response Team

The City of Corpus Christi has the potential for hazardous material spills that threaten the safety, health and welfare of its citizens and the environment. The potential is realistic considering Corpus Christi's location and the many industrial facilities located in the area.

To properly respond to hazardous and non-hazardous material emergencies, the City's Fire Department created the Hazardous Material Response Team (HMRT) in 1987. The goal of the HMRT is to provide specialized response techniques and services that minimize damage to humans or the environment, either through direct contact or through contamination of soil, water, or air. This is accomplished through training, pre-planning, acquisition of equipment, etc.

The City of Corpus Christi Fire Department has taken significant steps toward obtaining specialized equipment and tools to assist with improving citizen safety. The Corpus Christi Fire Department is set up in three (3) shift workforces utilizing a 24-hour on/48 hours off duty schedule. Fire Stations 3, 5, and 12 provide HMRT responsibilities as a collateral duty in addition to normal fire department operations. The HAZMAT vehicle at Station 12 is not staffed, but manned whenever there is need for HMRT response. On any given day, up to 17 of the 96 daily minimum staffing levels are Texas Commission on Fire Protection (TCFP) Certified HAZMAT Technicians. These technicians are trained to the National Fire Protection Association (NFPA) 472 Chapter 7 Competencies for Hazardous Materials Technician and 29 Code of Federal Regulations (CFR) 1910.120 (g)(6)(iii) for technician level personnel. All other members on duty are trained to the HAZMAT Operations level as a minimum. The HMRT is capable of preparing for, responding to, and mitigation hazardous materials incidents utilizing air monitoring, sampling, spill/leak control measures, research, identification, and classification involving hazardous materials in transport or fixed facilities. The team can provide Unmanned Aerial Vehicle (UAV) (drone) support for operations at hazardous materials emergencies as well as the ability to build plume models that can assist with taking public protective actions that safeguard the citizens of Corpus Christi and the surrounding areas. In addition, the HMRT members attend additional training throughout the year on specific hazards such as incidents involving crude oil, liquidities natural gas, or chemical/biological/radiological/nuclear and high yield explosive emergencies.

In Spring 2020, Station 5 and Station 12 were combined in order to strengthen the team. After the merger, HMRT is housed at Station 3 and Station 5. The HAZMAT vehicle is staffed full time out of Station 5 (3105 Leopard ST) allowing the assigned members to focus on HAZMAT response priorities.

The City of Corpus Christi has mutual aid agreements with the local Refinery Terminal Fire Control (RTFC) and Williams Fire Control in Houston, Texas in case of an emergency beyond the control of the municipal fire department. In addition, the City is a member of the Corpus Christi Area Oil Spill Association which helps in spill containment.

The Fire Department coordinates its activities with all governmental regulatory agencies, including Texas Commission on Environmental Quality; Texas Railroad Commission; Texas General Land Office; Texas Department of Public Safety; US Environmental Protection Agency; and the US Coast Guard. The Local Emergency Planning Committee (LEPC) Coordinator is an active participating member in the Corpus Christi Fire Department's HMRT program. As a liaison, the Coordinator shares information on local industry Tier II reports, operational updates, and helps coordinate training events with local industry. The Department also coordinates with other city departments, depending on the type and magnitude of a given incident, as outlined the City's Emergency Management Plan.

The City of Corpus Christi passed an ordinance requiring reimbursement from responsible parties for expenses incurred related to a hazardous material incident emergency response.

When the HMRT responds to a hazardous material spill, the responsible party is assessed a fee, under City Ordinance Chapter 18, Article 1, Sec. 18-3, of not less than \$100.00 and up to the actual cost of cleanup, whichever is greater. If a responsible party is not identified, the Department may attempt to recover costs from the U.S. Environmental Protection Agency under Title 40 Code of Federal Regulations, Part 310 [Reimbursement to Local Governments for Emergency Response to Hazardous Substance Releases].

e. Coordinated Spill Response Program

The Coordinated Spill Response Program (CSRP) is a coordinated effort between the Storm Water Environmental Quality Specialist (EQS) team, CCPD, and CCFD to respond to motor vehicle fluid spills post-accident. Post-accident CCPD will contact Metrocom or gas dispatch to notify the EQS team if there is absorbent that needs to be recovered from the city roadways. The EQS team will only respond to accidents that occur on city roadways, with TxDOT responding to accidents on the freeways and state highways that run through the city. The CSRP was implemented on July 27, 2017. The Effectiveness of the program is measured in the amount of liquid (gallons) and absorbent (pounds) removed and disposed of. The number of total spill responses prior to CSRP implementation averaged about 8 per year. From July 27, 2017, to March 8, 2018, the EQS team responded to 247 spills recovering an estimated 578 gallons of motor vehicle fluid and 14,890 pounds of absorbent material. From November 1st, 2019,

to October 19th, 2020, the EQS team responded to 339 accidents, recovering an estimated 531 gallons of automotive fluid and 26,560lbs of absorbent. From November 1st, 2020, to October 31st, 2021, the EQS team responded to 218 accidents, recovering an estimated 579.625 gallons of automotive fluids were captured and approximately 28,981.25 pounds of absorbent was recovered from roadways. From November 1st, 2021, to October 19th, 2022, the EQS team responded to 198 accidents, recovering an estimated 2685.38 gallons of automotive fluids and approximately 9,900 pounds of absorbent was recovered from roadways. From November 1st, 2022, to October 19th, 2023, the EQS team responded to 250 accidents, recovering an estimated 3,250 gallons of automotive fluids and approximately 6,250 pounds of absorbent was recovered from roadways.

Promote, Publicize, and Facilitate Public Reporting

A description of a program to promote, publicize, and facilitate public reporting of illicit discharges or water quality impacts associated with discharges from the MS4 (TDPES Permit Part III, Section B.2.c.i.E)

The City of Corpus Christi public awareness and education plan targets all segments of the community and consists of year-round programs and special projects. The program scope has been designed to create citizen awareness on pollutants and their prevention.

The City of Corpus Christi has established a call center and mobile app to enable citizens to report a variety of issues, including illegal dumping, illicit discharges, littering, sediment tracking, and spills. The call center number is printed on materials distributed by the City and is included on the City's website.

The City of Corpus Christi Stormwater Environmental division also maintains a phone number and email address so that citizens can contact the division directly to report stormwater issues.

Education and Public Information to Facilitate Proper Management of Used Oil and Toxic Materials

A description of educational activities, public information activities, and other appropriate activities to facilitate the proper management and disposal of used oil and toxic materials; (TDPES Permit Part III, Section B.2.c.i.F)

The City of Corpus Christi educates the public on the proper management and disposal of used oil and household hazardous waste through programs more fully described in MCM 4.

Limit of Overflows and Infiltration of Seepage from Municipal Sanitary Sewers

A description of controls to limit infiltration of seepage from municipal sanitary sewers to the MS4 where necessary. (TPDES Permit Part III, Section

a. Wastewater Pipelines

The City of Corpus Christi's Wastewater collection system includes approximately 1,274 miles of gravity and force mains and 97 lift stations. The Wastewater Department has the responsibility to maintain, inspect, and operate this publicly owned system, as well as respond to all customer calls and complaints concerning wastewater collection and treatment. The collection system's primary goals are to ensure public health, continuously transfer wastewater from private property through the collection system to the treatment plants, and to provide customers with uninterrupted sewer service.

The Plumbing Inspections Activity of the Development Services Department oversees and enforces the appropriate provisions of Codes and the City's Ordinances related to wastewater service connections at the private property line.

The Wastewater Collection Activity is funded through the Wastewater Department, an Enterprise Fund (revenues are generated by collecting monthly utility bills). Inspection, maintenance, and many recurring repairs are performed by in-house forces. Larger rehab/replacement/rerouting projects are funded through the City's Capital Improvement Program. Renovation of existing or installation of new collection lines, lift stations and/or force mains are inspected by the City Engineering Services Construction Inspection Activity.

The Wastewater Collection Activity maintains the system's integrity through dye testing, high-pressure cleaning, root killing/removal, televising, smoke testing, manhole rehabilitation and affecting City-owned collection line repairs. These methods identify problem areas with defective facilities, infiltration, and exfiltration. In addition, when in the field, crews make visual inspections at and around the job site when doing maintenance or repairs, and these additional inspections may generate reports of irregularities which are evaluated for subsequent maintenance or repair.

The Wastewater Collection Activity's main line televising crew is primarily used to identify and mark defective pipe locations for repair crews, and to identify and report locations of infiltration into collection lines. If requested, the Wastewater Collection televising crew follows up on third party line inspections, confirming that lines are to grade and new sewer manholes are acceptable, to ensure the City is accepting good, long-lived collection facilities.

Smoke testing is focused on isolated areas that are selected and investigated to check for deficiencies, based on reports of odors, suspected infiltration, or cross connections to storm water lines. Small areas in the City are also selected for manhole condition inspection. This includes a detailed inspection of each manhole; noting any defects,

repairs needed, and assessing the need for inflow inhibitors.

Combination Units and high -pressure cleaning units are the City's most active and thus far most effective means of identifying locations of defective pipe, thereby controlling exfiltration, and preventing overflows into the storm water system. Units operate 7 days per week, performing both preventive maintenance cleaning of lines, and responding to customer reports of line obstructions by washing out and vacuuming settled debris.

Locations with extensive inflow and infiltration (I&I) or exfiltration are evaluated and prioritized for repair, replacement, rehabilitation, or rerouting. Cross-connections between sanitary sewers and storm sewers are remedied upon detection.

Within the City's Capital Improvement Program, there continues to be a consistent record of cleaning and televising of the collection system components by contract, to identify severe problems with structure and/or capacity of lines. Through Sanitary Sewer Evaluation Surveys, I & I and exfiltration in six individual treatment plant service areas are assessed. As with in-house forces noted above, this is an excellent avenue to locate cross-connections with the storm water system, and to remove sources of exfiltration of wastewater into storm water facilities.

The Wastewater Department has developed and continuously updates the Geographic Information System infrastructure base map layers for the Wastewater collection system. Through overlaying these digital layers over other department layers, the proximity of wastewater lines to storm water facilities can be assessed during repair work planning and help minimize opportunities for damage. This, along with the use of a line locating service, helps to preclude exfiltration of wastewater into storm water lines.

b. Wastewater Pretreatment Program

The City of Corpus Christi has a Pretreatment Program, which was established by the Clean Water Act, and is implemented through the General Pretreatment Regulations and Categorical Pretreatment Standards in 40 CFR. It involves a joint effort with the State and Federal government to control pollutants from non-domestic (i.e. industrial and commercial) wastewater sources and prevent toxic pollutant pass through, interference, and sludge contamination at Wastewater Treatment Plants and the sanitary sewer collection system.

Some industrial dischargers are required to pretreat their wastewaters, prior to discharge to the sanitary sewer collection system, in accord with national pretreatment standards (consisting of Federal prohibited discharge standards, technology-based categorical standards, and technically based local discharge limits). In addition, industrial users must meet other obligations such as monitoring, reporting, and spill prevention. The City also monitors the users to ensure compliance.

The City of Corpus Christi Wastewater Department is the principal developer and enforcer of the Pretreatment Program. The EPA approved Program consists of narrative enforcement methodology including an Ordinance, Article XI. Commercial and Industrial Waste Disposal and Pretreatment Sec. 55-140 through 55-149, and an Enforcement Response Plan (ERP). The ERP contains procedures for the enforcement of pollution control measures and establishes who will be involved in enforcement actions.

The City's Pretreatment Program was first approved in 1984 and subsequently amended in 1992 and 2005. It has been very effective in regulating discharges from industrial and commercial users.

c. Private On-site Wastewater Systems

As a Texas Commission on Environmental Quality (TCEQ) Authorized Agent, the Corpus Christi- Nueces County Public Health District is responsible for the proper implementation of Texas Health and Safety Code, Chapter 366, and 30 TAC Chapter 285 which regulate On Site Sewage Facilities (OSSF). As the authorized agent, the Corpus Christi Nueces County Public Health District administers the OSSF program within Nueces County and Corpus Christi as approved by the Executive Director of the TCEQ.

Consent Decree

As part of a settlement with the Environmental Protection Agency, the U.S Department of Justice, and the Texas Commission on Environmental Quality, the City of Corpus Christi has agreed to reduce Sanitary Sewer Overflows (SSO) within its jurisdiction, formally entering a consent decree with all interested parties. The decree requires that the city clean 12% of small gravity mains by January 11, 2031. As SSO's present a threat to the MS4, the consent decree program shares any SSO's that discharge wastewater into the MS4 to the Stormwater Environmental Services division. In addition, the consent degree program also assesses the wastewater system to determine what, if any, remediation is required, with a timeline of January 11, 2025 to complete and submit remediation plans, and January 11, 2036 as a deadline for completing remediation.

Progress towards this goal is measured in miles of gravity mains inspected and number of SSOs remediated.

Categories of Permitted Miscellaneous, Non-Stormwater Discharges

The SWMP must identify all categories of miscellaneous, non-stormwater discharges that may be discharged into the MS4 and include a description of any local controls or conditions placed on discharges exempted from the prohibition on non-stormwater. (TPDES Permit Part III, Section B.2.c.iii)

MCM 4-Pollution Prevention and Good Housekeeping for Municipal Operations

a. Pollution Prevention and Good Housekeeping Program.

The permittees shall continue to implement a pollution prevention and good housekeeping program for municipal operations. The program must include MCMs that address:

A) Identification and implementation of good housekeeping and BMPs to reduce pollutant runoff from municipal operations such as street and highway maintenance, parks, municipal office buildings and water treatment plants.

B) Reduction of discharge of pollutants to the MEP from road repair, equipment yards, and material storage facilities, or maintenance facilities.

C) Training for all employees responsible for municipal operations which includes information on preventing and reducing stormwater pollution from all municipal operations subject to this MCM; and

D) Within one year from the date of permit issuance, implement a program for structural control maintenance. (TPDES Permit Part III, Section 2.B.d.i)

b. Identification and Implementation of Good Housekeeping and BMPs from Municipal Operations

Municipal Marina

Bilge Water and Wastewater Collection

The City of Corpus Christi Municipal Marina has invested in many improvements which have reduced the oil and wastewater discharges into the MS4 from the boating community. It is equipped with a bilge water reclamation system which pumps out oily bilge water for proper disposal. Bilge pumping activities are supervised by marina staff to prevent and mitigate spills. Spill response materials are kept next to the bilge pumping area. The Marina also has vacuum systems along the docks for wastewater discharges. In recent years, Texas General Land Office has evaluated adding other bilge water reclamation systems in Cover Harbor, Aransas Pass Harbor, and Port Aransas Municipal Marina to accommodate the many citizens with boats in that area. As the city grows, the number and placement of these systems are anticipated to increase.

Marina Operations

Municipal Marina Operations include minimal vegetation management, by contract, with no pesticide application. Sanitation activities include changing out trash cans/liners, collecting ground litter, and skimming floatable debris from adjacent waters. Marina employees remove trash from piers and park areas 24 hours, 7 days per week which helps reduce debris from entering into the bay and waterways. Collected trash is removed from the premise by a licensed contractor. Bilge water and engine lubricants are collected, separated, and removed from site by licensed contractor.

The City of Corpus Christi Parks & Recreation Department - Marina Division maintains a Stormwater Pollution Prevention Plan (SWP3).

The Corpus Christi Marina is also a member of the Clean Marina program which is a voluntary program that encourages environmental stewardship through guidance and incentives. Clean Marina Programs (which vary from state to state) offer marina operators and boaters guidance and technical assistance in fulfilling best management practices that can be used to reduce or prevent pollution.

The Corpus Christi Marina has voluntarily taken many measures to reduce pollution. The Marina offers free contaminated bilge water pump outs to interested boaters, regardless of whether they are personal boats or commercial fishing boats. The marina provides training on how to use the free pump out facilities and provides demonstrations when needed. The Corpus Christi Marina also provides details and printed information on environmental practices in the marina.

Airport Activities

The Corpus Christi International Airport (CCIA) currently maintains a TPDES Multi-Sector General Permit (MSGP) and Stormwater Pollution Prevention Plan (SWP3) as well as a Spill Prevention Control and Countermeasure (SPCC) Plan. A training program has been implemented that addresses elements of each plan as well as procedures to be followed to prevent and control spills. Facility inspections are performed regularly, and copies of inspection forms are maintained onsite. CCIA performs quarterly wet and dry inspections of the designated outfalls on Airport property in accordance with the SWP3. In addition, quarterly meetings with CCIA and tenant personnel are conducted along with yearly training. CCIA also conducts yearly inspections of all the CCIA and tenant facilities and materials on airport property.

Spill response equipment maintained on site consists of absorbent pads, granular absorbent material, waste containers, shovels, and brooms. The City of Corpus Christi Fire Department (CCFD) will provide additional resources when necessary.

Landfill Stormwater Discharge Monitoring Program

Solid Waste operates an active landfill and a waste transfer station. Cefe Valenzuela is an active landfill and contains above ground double wall fuel tanks and maintenance barn. Product and Used Oils are stored in their original packaging on secondary containment pallets. All contact water and leachate are drained or pumped to onsite evaporation ponds. JC Elliott Transfer Station operates as a collection drop off point for all solid waste in the city. All contact stormwater is drained to a detention pond that is pumped to Greenwood WWTP. In addition, household hazardous waste is stored under roofs and on secondary containment pads. Both sites operate under unique SWPPP on file with TCEQ.

The new landfill, Cefe Valenzuela, is located outside the city limits in Nueces County, 14 miles southwest of Corpus Christi's City Hall, at the intersection of Farm to Market 2444 and County Road 20. The Cefe Valenzuela Landfill opened in October 2007, under MSGP, TXR050002.

This Landfill is classified as a Type K Municipal Solid Waste Management Facility, which allows for the disposal of Municipal Solid Waste, class 1 Non-hazardous Industrial Waste, Class 2 Industrial Waste, Class 3 Industrial Waste, and Special Waste. The landfill property covers 2,273.59 acres.

A site-specific Stormwater Pollution Prevention Plan (SWP3) has been developed for the Cefe Valenzuela Landfill and the City has applied for a TPDES Multi-Sector General Permit. All monitoring will be conducted in accordance with this plan.

J.C. Elliot Transfer Station and Citizen Collection Center

The J.C. Elliott Landfill was a 258-acre permitted site for the disposal of municipal solid waste. It no longer accepts waste, but programs managed at this site include:

- Leachate & condensate management and disposal. Leachate and condensate are periodically released for direct disposal to the Greenwood Wastewater Treatment Plant. Records of releases are maintained onsite.
- Stormwater runoff management. Stormwater management is implemented per the Landfill's Site Operating Plan (SOP) and Stormwater Pollution Prevention Plan requirements. The Landfill uses hay bales at each stormwater letdown to act as a natural filter media for the control of suspended solids.
- Used Oil Disposal Program. The household hazardous waste collection facility, located at the J. C. Elliott Transfer Station, is open six days a week to the public as a convenient drop-off location for both lead acid batteries and used motor vehicle oil.
- Recycling Collection. The City of Corpus Christi collects recyclables daily except on Sundays and City Holidays. An outside vendor is used for the recycle drop offs located at several sites within the City. Heavy appliances may be dropped off at J. C. Elliot Transfer Station.

Wastewater Treatment Plants

The EPA, under the Clean Water Act, published final regulation on November 16, 1990, and requires permits for stormwater discharges from industrial activities. The industrial activities include wastewater treatment facilities with design capacity of 1.0 MGD or greater. The City of Corpus Christi has six wastewater treatment plants (WWTP), which each have a design capacity exceeding 1.0 MGD.

Each WWTP has its own unique TPDES permit and SWP3 in accordance with its facility's TPDES MSGP. Storm Water Environmental Quality gives each site an annual training on storm water pollution prevention.

Current procedures are reviewed in order to monitor and reduce any potential storm water discharges/runoff from these facilities. An inventory to identify potential sources of storm water contamination areas was conducted.

Best Management Practices (BMPs)

- a. A concrete pad with berm has been installed around the manholes where the liquid waste haulers discharge to the plant. These manholes with pads and berms, which drain to the plant lift station, will contain any spills resulting from liquid waste discharges.
- b. The pollution prevention team checks the mechanical bar screens regularly and will make certain that all debris is properly disposed. A bar screen high level alarm alerts plant operators when this equipment is not operating properly.
- c. The corbels of manholes have been raised to alleviate the problem of spills.
- d. All problem areas where spills had occurred in the past or where potential spills can occur have been modified either by berming or by draining the area back to the head works.
- e. The walls of aeration tanks have been raised to alleviate the problem of spills.

Sludge, grit, and screenings from the treatment plants are transported to the landfill either by containerized trucks or by dump trucks. The containers are made from sheet metal and do not have any drains; hence, the chance of discharging contaminated liquid from them is minimized. The dump trucks are parked at designated areas in the plants, under chutes on concrete pads which drain to the head works.

Site for Treating Sludge

Each plant has its own sludge treatment facility. All plants are furnished with belt filter presses which are installed indoors, and the sludge dewatering equipment does not come in contact with precipitation or storm water runoff. Sludge from the wastewater treatment plants is taken to the Cefe Valenzuela Landfill.

Chemical Storage

Each plant, except one, has outdoor storage tanks for disinfection chemicals. All disinfection chemical storage tanks are furnished with secondary containment facilities which prevent chemical spills due to tank or feed equipment failures from becoming exposed to storm water runoff.

O.N. Stevens Water Treatment Plant

The City of Corpus Christi operates the O.N. Stevens Filtration Plant and two river pump stations.

The following Best Management Practices are utilized at the O.N. Stevens Filtration Plant to protect stormwater from potential pollutants.

BMPs for Loading and Unloading of Materials

- Drum handling is conducted with approved equipment such as dollies, grapples, pallets, and drum containments.
- All chemical solution machines and rail car bulk storage are labeled with approved EPA NFAP/DOT placards.

BMPs for Liquid Storage in Above Ground Tanks

- All liquid chemical storage tanks are contained within concrete containment facilities. Drainage of containment facilities is routed to an internal plant drainage and recycling system.
- Oil absorbent socks/pads are stocked at the plant's warehouse.
- Chemical absorbent socks/pads are stocked at the plant's warehouse.
- Chlorine leak detection systems are located in the chlorine railcar unloading facility and in the chlorine evaporation and gas measurement building.
- The chlorine railcar unloading facility is equipped with a water deluge system that sprays water on top of the railcars and also forms water curtain walls at each end of the facility. The spent deluge water is routed to the Pre-Sedimentation Pond.
- Used oil is stored in barrels in a plastic lined containment area.
- Diesel fuel for the water treatment plant's auxiliary power is stored in double walled steel tanks. O.N. Stevens is subject to the EPA's Spill Prevention Control and Countermeasure (SPCC) rule, and as such operates under a SPCC Plan.

Discharges authorized by a Separate NPDES or TPDES Permit

a. Non-Stormwater Discharge Ordinance

City of Corpus Christi Code of Ordinance. Chapter 55, Article XVI, Sec. 55-203. Prohibited discharges into the MS4. The ordinance regulates the discharge of certain materials into the City of Corpus Christi MS4 providing a penalty for the violation of such provisions and directing publication of subject ordinance.

b. Firefighting Activities

Program descriptions must address discharges or flows from fire-fighting activities only where such discharges or flows are identified as significant sources of pollutants. (TPDES Permit Part III, Section B.2.c.v.)

Firefighting activities are not identified as significant sources of pollutants in the City of Corpus Christi.

c. Elimination of Illicit Discharges and Improper Disposal

The permittees shall continue to 1) keep a list of techniques (inspection procedures, frequencies, and methods) for detecting and preventing illicit discharges and revise the procedures as necessary; and 2) use appropriate actions and enforcement procedures for removing the source of an illicit discharge, and revise where necessary (TPDES Permit Part III, Section B.2.c.vii.B)

The illicit discharge and improper disposal program is discussed in MCM 2, and includes brief descriptions of goals associated with the program.

d. Household Hazardous Waste and Used Motor Vehicle Fluid.

The permittees shall prohibit the discharge or disposal of used motor vehicle fluids, household hazardous wastes, and the intentional disposal of collected quantities of grass clippings, leaf litter, and animal wastes into the MS4.

A) The permittees shall ensure the implementation of programs to collect used motor vehicle fluids (including, at a minimum, oil and antifreeze) and household hazardous waste materials (including paint, solvents, pesticides, herbicides, and other hazardous materials) for recycling, reuse, or proper disposal. Such programs shall be readily available to the residential sector within the MS4 and shall be publicized and promoted on a regular basis. (TPDES Permit Part III, Section B.2.c.ix)

The City of Corpus Christi has developed a disposal program for Household Hazardous Waste (HHW) from area residents. This program emphasizes the importance of proper disposal of such products that may be harmful to human health, the environment and groundwater. Program objectives are:

- 1) To make the public aware of consumer products classified as household hazardous wastes and educate them on the proper method of disposal.

- 2) To explain the environmental danger associated with the improper disposal of household hazardous waste and how the public can correct the situation.
- 4) To establish a permanent collection site to facilitate the disposal of household hazardous waste.

Used motor vehicle fluids are accepted at the household hazardous waste collection facility daily during normal business hours at the J. C. Elliot Citizen Collection Center. The following items are currently being accepted at the facility:

Automotive

- Anti-freeze
- Solvents
- Oil
- Brake fluid
- Batteries
- Transmission fluid

Paint

- Spray paint
- Paint thinners
- Paint strippers
- Wood preservatives
- Bruch cleaners

Cleaning supplies

- Drain cleaners
- Cleaner concentrates (powders, liquids)
- De-greasers, oven-cleaners
- Moth balls
- Cleaning solvents, spot removers, polishes
- Pool chemicals and household batteries

Gardening

- Pesticides
- Any sprays or dusts
- Weed killers
- Rat poison
- Insecticides

All collections are monitored by the site-trained employees. The collection site includes office buildings, equipment storage buildings, above-ground waste oil tanks, hazardous material storage buildings, permanent canopy area over a treated concrete foundation, and security gates and fencing.

The program operates under the jurisdiction of the City of Corpus Christi Solid Waste Department. A contract has been awarded with a solid waste disposal firm for material identification, sorting, packaging, transportation, and ultimate disposal of materials collected. The contractor is required to reuse paints and recycle materials as much as possible.

The J.C. Elliott Transfer Station and Citizen Collection Center are convenient to all sectors of the community for household hazardous waste drop-off. To provide a higher service to the community, household hazardous waste collection is available six days per week from 8:00am to 5:00pm instead of utilizing the well-publicized quarterly events. The City of Corpus Christi educates the public on the proper management and disposal of used oil and household hazardous waste through programs more fully described in the Stormwater Public Education and Outreach Plan.

Within one year from the date of permit issuance, the permittees shall develop a list of priority areas likely to have illicit discharges. The permittees shall continue to evaluate and update this list each year and report the results in the annual report. (TPDES Permit Part III, Section B.2.c.xi.)

Priority Areas List

Segment Name	Segment Description	Year Listed	Impairment (2020)	Category Description
Nueces Bay	Nueces Bay	2016	Copper in Water	Additional data or information will be collected and/or evaluated for one or more parameters before a management strategy is selected
Nueces Bay	Nueces Bay (Oyster Waters)	2010	Zinc in Edible Tissues	All TMDLs have been completed and approved by the EPA
Corpus Christi Inner Harbor	Corpus Christi Inner Harbor from US181 to Viola Turning Basin	2016	Copper in Water	Additional data or information will be collected and/or evaluated for one or more parameters before a management strategy is selected
Oso Bay	Lower Portion of bay Ocean Drive to State Park Road 22)	2004	Bacteria in water (Recreation)	All TMDLs have been completed and approved by the EPA
Oso Bay	Middle Bay (State Park Road 22 to Holly Road)	1996	Depressed dissolved oxygen	A review of standards for one or more parameters will be conducted before a management strategy is selecting, including a possible revision of TSWQSs
Oso Creek	From Oso Bay confluence in southern Corpus Christi to point 4.8 km upstream of SH44, west of Corpus Christi	2002	Bacteria in water (Recreation)	TMDLs are underway, scheduled, or will be scheduled for one or more parameters
Oso Bay	Oso Bay - Oyster Waters	2006	Bacteria in oyster waters	TMDLs are underway, scheduled, or will be scheduled for one or more parameters
Corpus Christi Bay - Recreational Beaches	Cole Park Beach ID TX259473	2010	Bacteria in water (Recreation)	TMDLs are underway, scheduled, or will be scheduled for one or more parameters
Corpus Christi Bay - Recreational Beaches	Ropes Park Beach ID TX821303;	2010	Bacteria in water (Recreation)	TMDLs are underway, scheduled, or will be scheduled for one or more parameters
Corpus Christi Bay - Recreational Beaches	Poenisch Park Beach ID TX682648	2020	Bacteria in water (Recreation)	TMDLs are underway, scheduled, or will be scheduled for one or more parameters
Laguna Madre	Upper portion of bay north of the Arroyo Colorado Confluence	1999	Depressed dissolved oxygen	A review of standards for one or more parameters will be conducted before a management strategy is selecting, including a possible revision of TSWQSs
Gulf of Mexico	Area between Port Aransas and Port Mansfield	2010	Mercury in edible tissue	Additional data or information will be collected and/or evaluated for one or more parameters before a management strategy is selected

NPDES and TPDES Permittee List

The permittees shall maintain an updated list of dischargers that discharge directly to the MS4 and that have been issued an NPDES or a TPDES permit. The list shall include the name, location, and permit number (if known) of the discharger. (TPDES Permit Part III, Section B.2.c.xii)

The Stormwater Department maintains a list of facilities that discharge directly to the MS4 and

that have been issued a NPDES or TPDES permit. The list is reviewed and updated regularly.

MS4 Map

A) The permittees shall maintain a current, accurate MS4 map of: the location of all MS4 outfalls; the names and locations of all waters of the U.S. that receives discharges from the outfalls; and any additional information needed by the permittees to implement their SWMP. Where possible, the permittees shall use the Global Positioning System (GPS) to locate outfalls and photographs for documenting baseline conditions.

B) The permittees shall document the source information used to develop the MS4 map, including how the outfalls are verified and how the map will be regularly updated.

C) New MS4 Areas: The permittees shall continue to develop and implement procedures to ensure that the above mapping requirements in Part III.B.2.c.xiii are met for any new additions of the MS4.



Figure 2 –Ultimate and intermediate outfalls in Corpus Christi, Texas.

D) Existing MS4 Areas: The permittees shall continue to evaluate all existing portions of the MS4 and that the mapping requirements have been implemented to the MEP. (TPDES Permit Part III, Section B.2.c.xiii)

GIS Updates

GIS receives proposed stormwater plans for subdivisions, but they wait until they see as built plans to ensure nothing has been changed from the proposal. However, if subdivision plat has been out more than three months and as-builts have not been added in the Engineering Sharepoint drive, the as-builts are added. GIS also locates the bond plans on Civcast as those take longer to go to as built. They will then draw them in once the road has opened up while they wait for the final plans.

Reduction of Pollutants from Road Repair, Equipment Yards, Material Storage Facilities, or Maintenance Facilities

Road repair

The City assesses the need for inlet protection on individual street projects depending on the size of the repair and the proximity of a storm water inlet. Inlet barriers will be placed in front of an inlet as needed to prevent the discharge of street repair materials and removed following the completion of the repair.

As needed, following street overlays or seal coating, street sweepers are contracted to remove excess rock from the streets, and curbs and gutters.

Municipal Maintenance Yard Activities

The City's fueling station consists of four underground storage tanks. Each tank has EPA approved spill and overfill devices. All piping is catholically protected. Logs are kept of fuel tank inspections. The Maintenance Facility is subject to the EPA's Spill Prevention, Control and Countermeasure (SPCC) rule, and as such, operates under a SPCC Plan.

The City's fueling station, covered by a canopy, has automatic shutoff nozzles, and is located on a concrete area. Fuel material spills are cleaned using absorbent materials. Used absorbent materials are disposed of by an outside vendor and hazwaste manifests are kept on site.

The cleaning of vehicle parts is performed inside a building, using a solvent bath. The solvent and residue collected within the bath/vat are collected by an outside vendor for recycling.

Oil/fluids removed from vehicles being serviced are collected in drain-pans and disposed of in an above ground holding tank which is spill protected. All containers/drums are protected from stormwater runoff and are properly labeled. The oil/fluids are recycled and disposed of by an outside vendor. Batteries detained for disposal are placed in an enclosed room until picked up by an outside vendor for recycling or disposal. A vendor also removes tires from the repair facility on a periodic basis. The Maintenance Yard has a Spill Prevention Control and Countermeasures Plan (SPCC) in which personnel receive training annually.

Training for Employees

Annual training will be done for all employees whose job is a risk of being a potential pollutant into the City's MS4 by the Storm Water Environmental Quality Team.

Program for Structural Control Maintenance

The program for structural control maintenance is described thoroughly in MCM 1. MS4 Maintenance Activities

Waste Handling

The permittees shall ensure that waste removed from the MS4 or from other municipal operations owned or controlled by the permittees is properly disposed. (TPDES Permit Part III, Section B.2.d.ii.)

The city of Corpus Christi contracts with Miller Environmental to dispose of hazardous materials after spills. Waste is typically disposed of at US Ecology in Robstown, Texas, and copies of the waste manifests provided to the city along with invoice. The CSRPs dispose of spilled automotive fluids post auto accident at the JC Elliot landfill through the Hazardous Waste Disposal Program.

Pesticide, Herbicide, and Fertilizer Application

The permittees shall continue to implement controls to reduce the discharge of pollutants related to the storage and application of pesticides, herbicides, and fertilizers, by the permittees' employees or contractors, to public rights of-way, parks, or other municipal property. If the permittees have jurisdiction over lands they do not directly own (e.g. incorporated city), they shall implement programs to reduce the discharge of pollutants related to the commercial application and distribution of pesticides, herbicides, and fertilizers on those lands. (TPDES Permit Part III, Section 2.B.d.iii.)

The Texas Department of Agriculture is the lead agency for pesticide use, regulation, applications, and licensing. Commercial, non-commercial, and private applicators of pesticides, herbicides and insecticides are required to obtain training and licensing under the Texas Pesticide Control Act (Texas Agricultural Code Chapter 76). There are various mandatory continuing education credits that must be earned for re-certification purposes.

The Texas AgriLife Extension Service, and other entities, provides training materials for testing and re-certification purposes. Minimum continuing education credit units must be earned toward re-certification purposes.

Currently, the City acquires its certification for municipal applicators from the Texas Department of Health and the Texas Structural Pest Control Board. All municipal applicators in the Vector

Control Division of the Health Department are currently certified or are presently training for non-commercial certification. Training is being provided in-house by a licensed municipal applicator. Course curriculum is being provided by the Texas AgriLife Extension Service, a division of the Texas A&M University System. Applicators are licensed according to the type of application used. For example, Texas Department of Health certifies those applicators of health-related pest control and sanitation control, (i.e. mosquitoes, fleas, rodents and ticks). Applicators licensed under the Structural Pest Control Board concentrate mostly on pesticides and rodenticides.

The City of Corpus Christi educates the public on the proper use, application, and disposal of pesticides, herbicides and fertilizers by public, commercial, and private applicators and distributors through programs more fully described in the Storm Water Public Education and Outreach Plan (SWPEOP), as amended.

Animal Care and Vector Control

Animal Control is responsible for the pesticide application activities, and vector control. See section iv. for description of pesticide activities.

Landscape Standard

Corpus Christi, Texas Unified Development Code. August 2017. Article 7: General Development Standards, §7.3 Landscaping

The City of Corpus Christi Unified Development Code, amended on August 15, 2017, requires new and existing public/private development to establish minimum landscape standards. The landscape standard emphasizes the use of Xeriscape type landscape which is a source of reducing non-point source pollution due to the reduced use of fertilizers and pesticides that may drain into the storm sewer drainage system.

The landscape standards require three basic elements: 1) minimum landscape area, 2) minimum landscape material, and 3) minimum parking area screening. The three elements are not separated from each other but overlap and interact in landscape development. For example, plants used to satisfy screening requirements also apply to satisfying landscape materials requirements, or the number of landscape material in excess of the minimum requirement can be used to reduce the landscape area requirement.

The landscape requirements are applicable in all zoning districts within the Corpus Christi city limits at the time a building permit or modification of an existing permit is requested. Single family or two-family dwelling units in any zoning district are exempt from the ordinance.

The landscape standards utilize a landscape area and point requirement based on the total street yard area. The percentage of area and number of points required for each property varies according to the zoning of the property. In the case of public and semi-public uses, required landscape area and points are calculated based on the number of parking spaces located in the street yard.

Xeriscape Landscape Program

The Xeriscape Corpus Christi Steering Committee, in partnership with the City, maintains a

Xeriscape demonstration garden with more than 100 plant varieties adjacent to the Corpus Christi Museum of Science and History. The garden is utilized to educate and motivate people to conserve water by modifying their landscaping using Xeriscape principles that beautify and enhance landscaping at their own homes. Attention is given to wise pesticide and herbicide use.

The City's Xeriscape demonstration garden serves as a free outdoor exhibit where visitors can enjoy interpretive exhibits. The garden features interpretive exhibits on the seven principles of Xeriscape gardening to provide visitors with the primary knowledge of how to develop efficient landscaping. The Learning Center gazebo features practical landscape ideas and photographs.

The following elements were incorporated into the garden.

- Display of various types of organic and inorganic mulches used to reduce evaporation and soil erosion.
- Illustration of the benefits of limited turf areas to reduce use of fertilizer and herbicides.
- Illustration of the benefits of rainwater harvesting by collecting rainwater from the gazebo roof to irrigate the garden.
- Display of native and drought tolerant plant material suitable to the region.

The Xeriscape demonstration garden has been actively maintained since its inception in 1993. A Xeriscape Symposium is presented annually and is free to the public. This event has increased awareness about conservation, integrated pest management, minimizing pesticide, herbicide and fertilizers and overall water quality issues. The free community garden serves to educate South Texans and visitors on our critical water supply resources and underscores the benefits of water conservation and energy.

List of Municipal Facilities

1. Airport – 1000 International Dr., Corpus Christi, TX 78406
2. J.C. Elliot Transfer Station – 7001 Ayers St., Corpus Christi, TX 78415
3. Solid Waste - 2525 Hygeia, Corpus Christi, TX 78415
4. Marina – 400A N. Shoreline Blvd, Corpus Christi, TX 78401
5. Animal/Vector Control – 2626 Holly Rd, Corpus Christi, TX 78415
6. Parks – 1406 Martin Luther King Dr, Corpus Christi, TX 78401
7. Public Works – 2525 Hygeia, Corpus Christi, TX 78415
8. O.N. Stevens Water Treatment Plant – 13101 Leopard St, Corpus Christi, TX 78410
9. Allison Wastewater Treatment Plant – 4101 Allison Rd, Corpus Christi, TX 78410
10. Greenwood Wastewater Treatment Plant–6541 Greenwood Dr, Corpus Christi, TX 78417
11. Broadway Wastewater Treatment Plant-1402 W Broadway St, Corpus Christi, TX 78401
12. Oso Wastewater Treatment Plant - 501 Nile Dr, Corpus Christi, TX 78412
13. Laguna Wastewater Treatment Plant – 201 Jester St, Corpus Christi, TX 78418
14. Whitecap Wastewater Treatment Plant –13409 Whitecap Blvd, Corpus Christi, TX 78418
15. Fleet Maintenance – 5352 Ayers St, Corpus Christi, TX 78415

MCM 5-Industrial and High-Risk Runoff

The permittees shall continue to improve their existing programs to identify and control pollutants in stormwater discharges to the MS4 from: municipal landfills; other treatment, storage, or disposal facilities for municipal waste (e.g. transfer stations, incinerators, etc.); hazardous waste treatment, storage, disposal and recovery facilities; facilities that are subject to Emergency Planning and Community Right-to-Know Act (EPCRA) Title III, Section 313; and any other industrial or commercial discharge the permittees determine are contributing a substantial pollutant loading to the MS4. This MCM must include:

A) priorities and procedures for inspections and for establishing and implementing control measures for such discharges.

B) an Industrial and High-Risk Monitoring Program as described in Part III, Section B.2.h.iii. of this permit; and

C) the permittees shall use ordinances, permits, contracts, orders, or similar means to control the contribution of pollutants to the MS4 by stormwater discharges associated with industrial activity.

Priorities and Procedures for Inspections and Establishing Control Measures

Facility inspections will be performed on all Type 1 and Type 2 facilities identified by the City of Corpus Christi at least once per permit term.

Type 1 facilities are identified as:

- Municipal landfills,
- Hazardous waste treatment, storage, disposal, and recovery facilities,
- EPCRA Title III, section 313 facilities,
- Industrial facilities the City determines are contributing a substantial pollutant load to the MS4.

Type 2 facilities are identified as:

- Other treatment, storage, or disposal facilities from municipal waste,
- Any other commercial or industrial facility that the City of Corpus Christi determines may be contributing to pollutant loading to the MS4,

These businesses shall be identified using the following mean:

- Casual observation.

- Target industry type using the phone book, business publications, etc.
- Complaint/Accident investigations.
- Specific industrial lists (Toxic Release Inventory)

Facility inspections may be performed on any facility identified to have one or more of the following parameters:

- The business has or needs a TPDES stormwater runoff permit.
- Complaints are received regarding that facility.
- Facility must report under the Toxic Release Inventory (Tier III).

Industrial and High-Risk Runoff Monitoring Program

The Storm Water division keeps and maintains a list of TPDES permit holders operating within the city limits. At least once in the five-year MSGP period permit holders are inspected for compliance with the conditions of their industrial permit. Inspection assignment is based on previous violations and likelihood of contribution to pollutant loading from the facility. This list is delineated into high and low risk facilities based on the potential to contribute pollutants to the MS4, and the danger that the pollutant may present to life, property, and the environment.

Ordinance or Other Regulatory Mechanisms to Control Pollutants to the MS4 from Stormwater Discharge Associated with Industrial Activity.

Sec.55-206 through 55-210 of the City of Corpus Christi Code of Ordinances lay out the parameters a holder of a TPDES or NPDES permit must adhere to. It mandates annual reporting of compliance status, and the entry of city personnel for the purpose of inspecting a facility. These ordinances also describe the penalties and possible enforcement actions that may be taken to ensure compliance with Stormwater discharge permits and local ordinances. These facilities are inspected in compliance with the City's MS4 Operator permit.

MCM 6-Construction Site Stormwater Runoff

The permittees shall continue to implement a program to reduce the discharge of pollutants into the MS4 from construction sites. This MCM must include an ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State or local law. The permittees shall continue to ensure that the existing program is revised as necessary to address construction projects that result in a land disturbance of one acre or more, including activities disturbing less than one acre that are part of a larger common plan of development or sale that would disturb one acre or more. (TPDES Permit Part III, Section B.2.f.i)

Ordinances

- Requirement to use and maintain appropriate erosion and sediment control (14-1006)
- Requirement to address control of site waste (14-901 to 14-907)

Inspections and Enforcement of Control Measures

The city of Corpus Christi Environmental Services Divisions employees five Environmental Quality Specialists that are trained and tasked with inspections of the MS4 and enforcement of various aspects of the Stormwater ordinances, including inspection of construction BMPs related to Stormwater and possible enforcement actions in relation to ordinances regulating them.

Education and Outreach to Construction Site Operators

Annual training is given to Contractors along with educational material dispersed throughout the year as needed.

Construction Site Runoff Program

Erosion during the construction phase of both public and private projects is a major cause of siltation of drainage channels and storm sewer conduits. The eroded soil not only clogs the drainage system and reduces its capacity, but also transports organic debris and chemical nutrients to the receiving waters. This leads to increased biological activity and reduced water quality.

The city has adopted a Construction Guidance Manual that includes criteria and technical guidance for development projects from the planning stage through the post-construction stage. Planning guidance and criteria shall also address water quality concerns after construction. The guidance manual incorporates special requirements for development that

may impact environmentally sensitive areas (i.e., wetlands, coastal zones). The manual meets local needs and includes local enforcement controls.

The City of Corpus Christi adopted Ordinance No. 022941 which requires that adequate erosion control measures are in place and maintained until final stabilization of construction projects. For construction sites greater than one acre, applicants are required to submit an executable NOI and acceptable storm water pollution prevention plan prior to receiving a permit. Development Services reviews storm water pollution prevention plans. Through the building inspection process, Development Services ensure that construction sites not only construct but verify the appropriate soil erosion control measures (BMPs) during the construction process until the final inspection.

The use and maintenance of structural and non-structural best management practices (BMPs) to reduce pollutants discharged to the City's MS4 from construction sites is achieved through inspections and enforcement. City staff are equipped with citation power to assist in enforcement.

Notification to Construction Site Operators of Responsibilities under Permitting Regulations

a. Notification to Building Permit Applicants

The Development Services department will continue to educate building permit applicants of their responsibilities under the TPDES permitting program. Development Services will continue to screen proposed developments to determine the appropriate compliance requirements and the associated storm water pollution prevention plans.

The Development Services department provides the responsible party of any construction site within the city information on the implementation measures necessary to control erosion, sedimentation, debris, and storm water pollution at the time of permit. These measures include temporary pollution control measures such as: structural control of soil erosion, waste controls, dust control, hazardous material storage, concrete truck wash out, and regularly scheduled street cleaning in the immediate vicinity of the construction site. The responsible party is responsible for the maintenance and performance of the temporary pollution control measures until permanent measures are in place. The pollution controls are designed to be selected by the developer based on the most cost effective and appropriate means to provide the required controls.

Site Plan Review Procedure Incorporating Water Quality Impacts

The City of Corpus Christi Development Services Department employs an engineer to review and approve Stormwater controls on building permits and public improvement plans based on city code and best management practices.

Procedure for Receiving and Considering Input from the Public

The Development Services Department engages with stakeholders regarding construction

activities through a variety of mediums including public meetings, e-mails, mail-outs, etc.

Procedure for Establishing Frequency of Inspections and Follow Up

The development services department performs an inspection for sites at the permittees request. The Stormwater Environmental Services Department inspects sites as they are discovered by an EQS. The EQS team is authorized to enforce city ordinances regarding construction site stormwater runoff.

Description of Program to Implement and Maintain Structural and Non-Structural BMPs to Reduce Pollutants from Construction Sites to the MS4

- Procedures for site planning
- Requirements for structural and non-structural BMPs
- Procedures for identifying priorities for inspecting sites
- Education and training for construction site operators

List of Sites

The permittees shall maintain a current list of construction sites that discharge directly to the MS4 and that have been issued an NPDES or TPDES permit. The list must include the name, location, and permit number of the discharges that have been authorized under an NPDES or TPDES stormwater discharge permit for construction activities (if known). (TPDES Permit Part III, Section 2.B.f.iii)

Development Services keeps and maintains a list of all construction activities that have applied for a permit. This list is publicly accessible from the Development Services website and is updated regularly.

Staff training.

The permittee shall ensure that all staff whose primary job duties are related to implementing the construction stormwater program (including permitting, plan review, construction site inspections, and enforcement) are informed or trained to conduct these activities. The training may be conducted by the permittee or by outside trainers. (TPDES Permit Part III, Section 2.B.f.iv.C)

Environmental Services staff are all Qualified Compliance Inspector of Stormwater (QCIS) certified and are required to be highly knowledgeable in the implementation and evaluation of construction BMPs. Staff making construction inspections are also licensed code enforcement officers in the state of Texas and are authorized to enforce construction Stormwater related ordinances. Development Services holds twice monthly trainings covering a variety of construction related topics, including Stormwater education.

MCM 7-Public Education, Outreach, Involvement, and Participation

Public Education and Outreach

A) The permittees shall document and ensure that the SWMP promotes, publicizes, and facilitates public education and outreach program to residents, visitors, public service employees, businesses, commercial and industrial facilities, and construction site personnel and provide justification for any group that is not addressed by the program. The permittees shall document the activities conducted and materials used to fulfill this program element and provide enough detail to demonstrate the amount of educational and outreach resources and materials used to address each group.

B) The permittees shall continue to implement a public education and outreach program component to promote, publicize, and facilitate:

1) public reporting of illicit discharges or improper disposal of materials, including Floatables, into the MS4.

2) the proper management and disposal of used oil and household hazardous wastes; and

3) the proper use, application, and disposal of pesticides, herbicides, and fertilizers by public, commercial, and private applicators, and distributors. (TPDES Permit Part III, Section 2.B.

The City of Corpus Christi public awareness and education plan targets all segments of the community and consists of year-round programs and special projects. The program scope has been designed to create citizen awareness on pollutants and their prevention.

Outreach is done throughout the year via Facebook, Twitter, Billboards, outreach events and educational materials.

Annual training is done for employees whose job is at risk of potentially releasing pollutants into the City's MS4 and receiving water bodies.

Reporting

The City of Corpus Christi has established a call center and mobile app to enable citizens to report a variety of issues, including illegal dumping, illicit discharges, littering, sediment tracking, and spills. The call center number is printed on materials distributed by the City and is included on the City's website.

The City of Corpus Christi Stormwater division also maintains a phone number and email address so that citizens can contact the division directly to report stormwater issues.

Management and Disposal of Oil and Household Hazardous Wastes

The City educates the public on the proper management and disposal of used oil and household hazardous wastes. The goals and methodology of this program are more fully described in the City's Stormwater Public Education and Outreach Plan (SWPEOP), as amended.

Pesticides, Herbicides, and Fertilizers

The City educates the public on the proper use, application, and disposal of pesticides, herbicides, and fertilizers by public, commercial, and private applicators, and distributors. The goals and methodology of this program are more fully described in the City's Stormwater Public Education and Outreach Plan (SWPEOP), as amended.

a. Public Involvement and Participation

The permittees shall continue to develop a public involvement and participation program which complies with State, Tribal, and local public notice requirements. This program element must include opportunities for a wide variety of constituents within the MS4 area to participate in the SWMP development and implementation. (TPDES Permit Part III, Section 2.B.g.ii.)

MCM 8-Monitoring, Evaluation, and Reporting

Wet Weather Screening Program

The permittees shall identify, investigate, and address areas within their jurisdiction that may be contributing excessive levels of pollutants to the MS4. The wet weather screening program shall: A) screen the MS4, as specified in the SWMP; and B) specify the sampling and non-sampling techniques to be used for current screening and for follow-up screening. (TPDES Permit Part III, Section 2.B.h.ii)

The city of Corpus Christi Stormwater-Environmental Services division maintains a wet weather screening program in order to seek out illicit connections and discharges, as well as inspect Stormwater lines for issues after qualifying rain events. This program is fully described in

Rain Event Monitoring

TPDES Permit WQ000420000 requires the City of Corpus Christi to collect representative grab and composite samples from three permit-specified monitoring locations:

- Outfall 001-Carmel Parkway – Located between Staples Street and Fort Worth Street along the Carmel Parkway Ditch, prior to discharge into Corpus Christi Bay (27.731807, -97.378029)
- Outfall 002- Rodd Field Road – Located between Saratoga and Woolridge in a box culvert under Rodd Field Road, prior to discharge into Oso Bay (27.6761918, -97.3524120)
- Outfall 003- Schanen Ditch – Located between Cedar Pass and Yorktown Boulevard, along Schanen Ditch, prior to discharge into Oso Creek (27.685035, -97.416935)

A grab sample is a single sample collected at a specific time and place that represents conditions at that time and place. A composite sample is a sample collected over time to represent the average characteristics of the water during the period that the sample was collected.

In addition to permit-required sampling locations the City of Corpus Christi also collects and analyzes stormwater samples on behalf of 2 co-permittees: Del Mar College and Texas A&M University-Corpus Christi (TAMUCC) at the following locations:

- Del Mar College East Campus (27.7623092, -97.4083337)
- Del Mar College West Campus (27.7744571, -97.4388013)
- TAMUCC Campus (27.7151551, -97.3295562)

At the Del Mar College East and West Campus sampling sites, only grab samples are collected. At the TAMUCC Campus sampling site both a grab sample and a time-weighted composite sample are collected.

Samples are collected twice during two seasonal monitoring periods:

1. Wet Season (April 1 through September 30)
2. Dry Season (October 1 through March 31)

Samples are collected during qualifying storm events. **A qualifying storm event is defined as an event that has greater than 0.1-inch rainfall and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch) rainfall event.**

During the first month of the wet and dry seasons (e.g., April and October), rain event grab samples will only be collected during regular work hours. If the required grab samples are not collected within the first month of the season, the team will be required to be on-call 24 hours for rain event grab sample collection when a qualifying rain event is expected to occur. The number of team members required to be on-call will vary based on the number of grab samples that need to be collected. If a sample is missed, it must be documented along with the following information:

Date:
Time:
Location:
Sample Type:
Reason for missed sample:
Corrective Actions Taken:

Additionally, maintenance is performed on a monthly basis at each city-maintained site, as well as after every sampling event. Site samplers are calibrated at least once between qualifying storm events. In addition to monthly calibrations and preventative maintenance, the stations must be calibrated at least once a year by a trained individual and certified in writing that the device is operating properly and giving precise and accurate results. Copies of the certification must be kept and be readily available for review by TCEQ for a period of 3 years. The Environmental Services Superintendent will schedule annual calibrations.

Receiving Water Body Sampling (RWBS)

The City of Corpus Christi Municipal Code of Ordinance prohibits pollution of the Municipal Storm Sewer System (MS4), including illicit discharges. However, a person may raise as a defense that the illicit discharge was uncontaminated if the quality of the water being discharged is equal to or better than the first natural body of water into which the portion of the MS4 flows. The results of the receiving water body sampling program are used as evidence of the quality of receiving waters.

Sampling is conducted by Environmental Quality personnel on a quarterly basis, as follows:

1st Quarter: January-March

2nd Quarter: April-June
 3rd Quarter: July-September
 4th Quarter: October-December

Receiving water body samples are usually collected in the morning, before 12:00 pm.

Samples are collected at 13 sample sites, as detailed in the following table.

Sample ID	Location	Latitude	Longitude	Receiving Segment	Segment Name
OB001	Yorktown Bridge	27.64068	-97.34367	2485 & 2485OW	Oso Bay
OB003	SPID Turnaround	27.67895	-97.30948	2485 & 2485OW	Oso Bay
LM001	End of Martha Dr.	27.61101	-97.2981	2491 & 2491OW	Laguna Madre
CCB001	Jester St. Municipal Fishing Pier	27.66965	-97.26946	2481 & 2481OW	Corpus Christi Bay
CCB002	4224 Ocean Dr. (rear); 1st steps on pier	27.74067	-97.36737	2482 & 2481OW	Corpus Christi Bay
CCB003	1102 S. Shoreline Blvd..	27.78099	-97.39213	2483 & 2481OW	Corpus Christi Bay
IH001	Under Harbor Bridge	27.81205	-97.39585	2484	Inner Harbor
OC001	JC Elliot Landfill	27.70196	-97.46141	2485A	Oso Creek
OC002	Yorktown and Sun Valley Road	27.686049	-97.42335	2485A	Oso Creek
NR001	13741 Smith Dr.	27.86725	-97.68369	2102	Nueces River
NRT001	Labonte Park IH37	27.89547	-97.62879	2101	Nueces River Tidal
NB001	5151 W. Causeway Blvd.	27.83742	-97.38133	2482 & 2482OW	Nueces Bay
GM001	Zahn Rd./Gulf Beach	27.61455	-97.19988	2501	Gulf of Mexico

These sample locations correspond to sample stations monitored by the Nueces River Authority as part of the Texas Clean Rivers Program administered by Texas Commission on Environmental Quality. See Appendix A “City of Corpus Christi Receiving Water Body Sampling Program Site Descriptions” for more details on site selection.

Samples are analyzed for Total Suspended Solids, Total Dissolved Solids, Nitrate, Nitrite, pH, and temperature. All sample results are reported in mg/L (analogous to Parts Per Million) excepting pH which is measured in standard units.

Industrial and High-Risk Runoff Monitoring Program

This program shall include monitoring for pollutants in stormwater discharges to the MS4 from Type 1 facilities and Type 2 facilities. (TPDES Permit Part III, Section 2.B.h.iii)

The City of Corpus Christi, in accordance with the Industrial & High-Risk Runoff Monitoring Program identified in 8.A, will implement a program to identify and control pollutants in stormwater discharges from Type 1 and Type 2 facilities.

Type 1 facilities include:

- Municipal landfills;
- Hazardous waste treatment, storage, disposal, and recovery facilities,
- EPCRA Title III, Section 313 (Toxic Release Inventory) facilities,
- Industrial facilities the City determines are contributing a substantial pollutant load to the MS4.

Type 2 facilities include:

- Other treatment, storage, and disposal facilities for municipal waste
- Other industrial or commercial facilities that the City believes are contributing pollutants to the MS4.

The City of Corpus Christi maintains a list of Type 1 and Type 2 facilities. All Type 1 and Type 2 facilities will be inspected by the City of Corpus Christi no less than once during the permit term.

Type 1 and Type 2 facility inspections will determine if a facility requires coverage under the TPDES Multi-Sector General Permit (MSGP) TXR050000 or an individual permit. If a facility requires coverage under the MSGP and the facility has authorization under the MSGP, the inspection will be conducted to determine if they are compliant with the MSGP and if found compliant, monitoring requirements for the facility will be waived. If the facility has Conditional No Exposure Exclusion under the MSGP, the inspection will be performed to verify the “no exposure” exemption. The “no exposure” verification inspection may be waived if a facility participates in the TCEQ’s all Business and Local Government Compliance Commitment program. If a Type 1 or Type 2 facility has authorization through the MSGP and is inspected and found non-compliant, results of monitoring performed by the facility required by the MSGP will be reviewed by the City of Corpus Christi.

If a Type 1 or Type 2 facility is required to have coverage through the MSGP but does not have authorization to discharge stormwater through the MSGP, the City of Corpus Christi will notify the facility of the requirement to obtain authorization under the MSGP or through an individual permit. It is a violation of the City of Corpus Christi Code of Ordinances (Chapter 55, Sec 55-206,) for a facility to operate without a NPDES permit when a permit is required.

If a Type 1 facility does not require authorization to discharge stormwater, or lacks required coverage, the City of Corpus Christi will determine if any quantitative data has been collected by the facility. If data are available, the methods of sample collection and analysis will be reviewed, and if samples have been collected and analyzed using EPA accepted methods, quantitative data will be reviewed by the City of Corpus Christi. If quantitative data are unavailable or collected and analyzed with unapproved methods, the City of Corpus Christi will determine pollutants of concern for the facility and set forth monitoring requirements at the facility. The City of Corpus Christi can require the owner or operator of a business facility to install monitoring equipment (City of Corpus Christi Municipal Code of Ordinances Chapter 55, Sec. 55-206). The City of Corpus Christi will then review quantitative data generated through monitoring.

In an effort to conform to TPDES MSGP the City may accept results from quarterly visual monitoring in lieu of analytical monitoring for Type 1 facilities.

If a Type 2 facility does not require authorization to discharge stormwater through the MGSP or individual permit, or lacks required coverage, the City of Corpus Christi will determine if results from visual monitoring are available. If results from visual monitoring are available, the City of Corpus Christi will review the results. If visual monitoring has not been conducted the City of Corpus Christi will determine necessary monitoring requirements for the facility.

The City of Corpus Christi may sample on an as needed basis to validate questionable facility monitoring.

SWMP - Port of Corpus Christi Authority

COPY



PORT CORPUS CHRISTI

STORM WATER
MANAGEMENT PROGRAM
FOR PORT OF CORPUS
CHRISTI AUTHORITY
MS4 AREA

Prepared By:	Environmental Compliance Manager
Approved By:	Executive Director
Date:	October 20,2021
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COPY

STORM WATER MANAGEMENT PROGRAM FOR PORT OF CORPUS CHRISTI AUTHORITY MS4 AREA

1.0 INTRODUCTION

This Storm Water Management Program (SWMP) has been developed in accordance with Part III of the TPDES Permit No. WQ0004200000 issued on October 21, 2020 to the City of Corpus Christi and to the Port of Corpus Christi Authority (PCCA), as one of several co-permittees. The permit was issued authorizing discharges from the City of Corpus Christi Municipal Separate Storm Sewer System (MS4) for which PCCA overlaps and is attached in Appendix A. Figures of the MS4 Area are provided in Appendix B documenting the location of MS4 in the port area for which PCCA has responsibility. This SWMP documents how PCCA will manage storm water discharge and prevent non-permitted non-storm water discharges in the area of the MS4 for which PCCA has responsibility.

Part III.A. of the permit calls for the development of measurable goals for each element of the plan to the maximum extent practicable. A discussion of the measurable goals developed for this SWMP is provided in Section 13.0.

2.0 STRUCTURAL CONTROLS

In accordance with Part V(A.-22) of the permit, a structural control is a pollution prevention practice that requires the construction of a device, or the use of a device, to capture or prevent pollution in storm water runoff. This section of the SWMP describes how PCCA will operate any storm water structural controls in place in a manner to reduce the discharge of pollutants to the maximum extent practicable.

At the time of this SWMP, PCCA has installed, operates and maintains three storm water structural controls within the MS4 area at its Southside Cargo Terminal, Cargo Dock 8, and Maintenance Facility. The Southside Cargo Terminal is drained by a series of underground storm sewers that drain into a collection sump prior to discharge into the drainage outfall leading to the ship channel. The collection sump serves as a mechanism to prevent the discharge of pollutants. In the event of a spill or release, a gate valve on the collection sump will be closed to prevent discharge and the collected material will be removed by vacuum truck.

Cargo Dock 8 is designed so that the storm water runs towards the rear of the dock, where a storm water conveyance trench is installed parallel to the dock. A section of the trench has a weir installed where sediments are captured. Accumulated sediments are removed on an as needed basis.

The other structural control installed, operated and maintained by PCCA is on the north side of the ship channel. PCCA installed a sediment filter for outfall #1 at the PCCA Maintenance

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STORM WATER MANAGEMENT PROGRAM FOR PORT OF CORPUS CHRISTI AUTHORITY MS4 AREA

Facility that drains the Maintenance Facility, roadway areas, and former tank farm area that is undeveloped at this time. In addition, a trough to capture sediments from storm water runoff was installed in front of Inlet 3 at the Maintenance Facility. Inlet 3 receives storm water runoff from a railroad track in front of the Maintenance Facility. The sediment filter and trough were installed as part of the Storm Water Pollution Prevention Program (SWP3) that PCCA implemented as per our TPDES Multi-Sector General Permit (MSGP) No. TXR05K365 and as per an objective and target for storm water established under the PCCA Environmental Management System (EMS). The sediment filter trap will be maintained in accordance with the procedures established under the SWP3.

No other structural control devices are currently warranted in the MS4 area.

3.0 AREAS OF NEW DEVELOPMENT AND SIGNIFICANT REDEVELOPMENT

Through the PCCA EMS program, a Construction Activities Environmental Checklist was created and is utilized as a tool to assist Project Engineers in considering environmental issues during the planning phase of projects. One of the components of the checklist is storm water consideration for the project, including pre- and post-construction considerations. PCCA will continue to utilize this checklist to ensure that the discharge of pollutants is minimized or prevented from areas of new development and significant redevelopment after construction is completed.

During planning of new facilities or modification of existing facilities, storm water control measures will be to a 10-year rain event and include safety end treatments when necessary. Exclusions to the 10-year rain event will be determined on a case-by-case basis when storm water conveyances are routed under railroads and elevations prevent 10-year design. However, other measures will be implemented as practical to allow for adequate facility drainage.

Additionally, the Construction Activities Environmental Checklist advises Project Engineers when planning for storm water runoff from construction activities is necessary. PCCA also has technical specifications to assist contractors in the planning of storm water pollution prevention and complying with requirements of the TPDES Permit TXR150000 when working on port property. These technical specifications will be provided in the contract documents and advise the contractor when a TPDES permit is required.

Through the EMS Program, PCCA also maintains a Best Management Practices Manual which is a reference manual containing the minimum BMP's that must be utilized by contractors, employees, and temporary employees when conducting work on port properties. These BMP's include measures for prevention of pollutants in storm water runoff. Additionally, Tariff 200, Section 2, Item No. 2.501 references Best Management Practices to Prevent Pollution of Harbor

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STORM WATER MANAGEMENT PROGRAM FOR PORT OF CORPUS CHRISTI AUTHORITY MS4 AREA

Waterways from Storm Water and Other Sources. This tariff references a memo to all port employees, port lessees, and all persons operating on or using port property that included 15 best management practices that are to be utilized in the port area. A copy of the memo is attached in Appendix C.

4.0 ROADWAYS

PCCA has the responsibility for maintenance of only one roadway within the Port's MS4 area. All other streets and roadways are owned by the City of Corpus Christi or Nueces County, who have responsibility for maintenance. PCCA owns and operates 2 street sweepers which are utilized (as necessary) to cleanup docks, facilities, and roadways following a cargo transfer and minimize pollutants in storm water discharges. PCCA or its customers also sweep docks, dock aprons, and warehouse aprons following bulk cargo movements. PCCA will ensure the proper disposal of litter and debris removed from the roadway. Materials removed during maintenance of roadway drainage ditches and structural controls will also be disposed of properly.

PCCA does not stockpile or conduct roadway sanding or salting. Sweeping activities will be conducted in accordance with the *Procedures for Street Sweeping Activities*.

5.0 FLOOD CONTROL PROJECTS

Port facilities are designed to an elevation of one foot above a 100-year flood. Otherwise, PCCA does not typically participate in flood management projects. However, the City of Corpus Christi operates and maintains flood control structures near the port area in the MS4 area.

6.0 PESTICIDE, HERBICIDE, AND FERTILIZER APPLICATIONS

PCCA operations include pesticide and herbicide applications. Maintenance personnel apply herbicide through the port area to maintain weeds. Herbicide application is managed through the EMS program where a Best Management Practice (BMP) is used and is aimed at reducing the impacts caused by herbicide application including the contribution of pollutants to storm water runoff. The herbicide is stored in a locked storage area with secondary containment. The BMP calls for the proper use of herbicides in accordance with the label and the MSDS. To assist with proper application, PCCA developed herbicide maps that identify the areas within the port that should be sprayed and the quantity of chemical that should be applied to the area per the label and MSDS. Proper herbicide application equipment is used and the herbicide sprayer is equipped with a flow meter to accurately measure the amount of herbicide solution applied.

COPY

STORM WATER MANAGEMENT PROGRAM FOR PORT OF CORPUS CHRISTI AUTHORITY MS4 AREA

Port personnel and contractors provide pest control in the port area using pesticides and bait stations. Pesticide use is also managed through the EMS program. A BMP for pest control was established and implemented which called for pest services to be provided by a licensed pesticide applicator to treat problem areas, utilizing the chemical in accordance with the label, treating the main nest to eliminate the problem at the source, and utilizing alternatives whenever possible.

Fertilizers are not regularly used in the MS4 area. Should the application of a fertilizer in the port area become necessary, applications would be in accordance with applicable regulations and a BMP for fertilizer application would be developed prior to use.

7.0 ILLICIT DISCHARGES AND IMPROPER DISPOSAL

This section describes the procedures that PCCA has implemented to prevent illicit discharges and improper disposal.

7.1 *Illicit Discharges*

PCCA regularly monitors storm water discharges through the SWP3 for our MSGP permit. PCCA outfalls under the MSGP are inspected on a monthly basis. Additionally, an automatic storm water sampler and flow meter are in operation at the Bulk Terminal and Maintenance Facility outfalls, which provide continuous monitoring of the flow from the outfalls. The flow is monitored daily during normal operating hours.

PCCA also maintains a formal tenant audit program. The program includes an annual inspection of tenant properties and is a mechanism to identify potential problems or issues before they arise. PCCA does not regulate its tenants but leaves regulation and enforcement up to agencies with this authority and personnel for ensuring compliance. The tenant audit program is intended to be a partnership to ensure that tenant operations will not leave an environmental issue that will place a financial burden on PCCA at some point in the future. Under our lease agreements, it is the tenant's responsibility to comply with all applicable rules and regulations. Part of the tenant audit includes a review of the tenant's storm water management program, which should also address illicit discharges and improper disposal.

Non-storm water discharges that are permitted or allowed under a TPDES permit will be allowed for discharge into the Port's MS4.

PCCA will also work with other port users to ensure that discharges to storm water are authorized discharges.

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STORM WATER MANAGEMENT PROGRAM FOR PORT OF CORPUS CHRISTI AUTHORITY MS4 AREA

7.2 *Overflows and Infiltration*

Within the port area where sanitary sewer systems exist, they are the responsibility of the City of Corpus Christi. PCCA works jointly with the City of Corpus Christi to identify and immediately report any problems. Within the MS4 area there are also some septic tank systems, which are operated in accordance with County requirements for on-site sewage systems. Maintenance and operation of the septic systems is also reviewed during annual tenant audits.

7.3 *Floatables*

PCCA has placed dumpsters and/or trash receptacles in all loading/unloading areas within the port area for disposal of trash from ships or operations conducted at the facilities. PCCA maintenance personnel that conduct grounds keeping activities carry out routine inspections of PCCA property and cleanup materials illegally or accidentally discharged onto port properties including:

1. Tires – Tires that are dumped or left in the port area are routinely collected and stored for recycling.
2. Construction Debris, Waste and Hazardous Wastes – Solid waste debris, trash and litter are collected prior to mowing activities. Hazardous wastes and potentially hazardous wastes are immediately reported to the Environmental Compliance Manager for proper handling and disposal. The wastes are relocated to a covered and contained waste storage area until disposal arrangements can be made.

7.4 *Household Hazardous Waste and Used Motor Vehicle Fluids*

Through the EMS program, PCCA promotes proper disposal of hazardous wastes and used motor vehicle fluids. For port operations, PCCA maintains the collection of hazardous wastes and used motor vehicle fluids in a covered and contained waste storage area that is closely monitored. The port area within the MS4 is industrial and commercial with no residential areas. However, PCCA through our recycling program promotes with employees proper management of household hazardous wastes and used motor vehicle fluids by allowing port employees to bring for recycling discarded materials from home where a City of Corpus Christi program for managing that material doesn't already exist. Through the EMS Newsletter, PCCA employees are regularly provide information on reducing, reusing, and recycling.

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STORM WATER MANAGEMENT PROGRAM FOR PORT OF CORPUS CHRISTI AUTHORITY MS4 AREA

PCCA has also developed a procedure for preventing the disposal of grass clippings and leaf litter in the storm drain system and outfalls. This procedure is outlined in the PCCA SWP3.

7.5 *MS4 Screening and Illicit Discharge Inspections*

MS4 screening and illicit discharge inspections are discussed in detail in Section 12.1 of this SWMP.

7.6 *Elimination of Illicit Discharges and Improper Disposal*

The elimination of illicit discharges and improper disposal will be immediately addressed upon discovery. Whenever possible, the responsible party will be identified and required to correct. Incidents will be addressed on a case-by-case basis to determine the time necessary to resolve the problem and when an immediate fix is not feasible, additional measures to reduce pollutants will be taken until a permanent fix can be made.

7.7 *Permitted Discharges*

When provided the information regarding a permitted discharge in the MS4 area within the port area, PCCA will maintain the information on file in our property database and GIS.

7.8 *Allowable Non-Storm Water Discharges*

Non-storm water discharges permitted under TCEQ's Construction General Permit TXG150000, Multi-Sector General Permit TXR050000, General Permit to Discharge Wastes TXG830000, and Hydrostatic Test Water Discharge TXG670000 will be allowed to be discharges to PCCA's MS4. In addition, other TPDES non-storm water discharges properly permitted will be allowed.

8.0 SPILL PREVENTION AND RESPONSE

PCCA maintains a spill notification program that ensures that interested parties potentially impacted by a spill in the port area are immediately notified. Through the Interlocal Cooperation Agreement with the City of Corpus Christi, PCCA will also notify the City of Corpus Christi of spills that occur in the port area that could impact the MS4 and vice versa.

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STORM WATER MANAGEMENT PROGRAM FOR PORT OF CORPUS CHRISTI AUTHORITY MS4 AREA

Under the EMS program, PCCA has instituted spill response kits in key operating areas to facilitate a quick response. PCCA also maintains a contract with Corpus Christi Area Oil Spill Association to respond to spills that PCCA personnel are not equipped to handle. Additionally, under the EMS program, training of employees on spill prevention measures and response activities is conducted annually.

Tariff 200, Section 2, Item No. 2.508, notifies port users that unauthorized releases, discharges, dumping, etc. are prohibited on port property. PCCA will also provide spill prevention, notification, and response to Port Contractors in the technical specifications of contract documents when appropriate.

PCCA expanded the fence line of the EMS program to include the public cargo docks and storage areas, all of which are in the MS4 area. With this expansion, PCCA worked with stakeholders including port users and their associated contractors to improve the environmental footprint of cargo dock operations. PCCA has a no spill tolerance for cargo docks and has alerted Port users and utilizes security guards to help enforce this policy when necessary. With the expanded EMS fence line, an outreach effort was undertaken to further promote this policy with port users.

9.0 INDUSTRIAL & HIGH-RISK RUNOFF

PCCA does not own or operate any industrial and high-risk runoff facilities as described in Part III.B.11.c of the permit. Discharges from port operations are permitted and managed under a TPDES Multi-Sector General Permit for industrial facilities. Non-storm water discharges from Port operations covered under the MSGP TXR05000 will be allowed. Further, tenant operations or activities are required per the lease agreement to be compliant with all applicable legal requirements. Storm water and non-storm water discharges from tenant operations that are permitted will be allowed. Tenant audits are completed annually and provide a review of tenant storm water management programs, but ultimate compliance and enforcement determinations are left to the TCEQ who has jurisdiction and authority over such matters.

10.0 CONSTRUCTION SITE RUNOFF

As mentioned in previous sections, PCCA utilizes a Construction Activities Environmental Checklist to determine compliance requirements including storm water runoff for construction projects. When stormwater requirements are applicable on a construction project, PCCA uses technical specifications that specify permit requirements and compliance. Non-storm water discharges from construction projects that are permitted will be allowed. Technical

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STORM WATER MANAGEMENT PROGRAM FOR PORT OF CORPUS CHRISTI AUTHORITY MS4 AREA

specifications meeting the requirements of the TPDES Permit TXR150000 for discharges from construction activities are provided to Port Contractors in the contract documents.

11.0 PUBLIC EDUCATION

PCCA provides regular training of the elements of this SWMP through the EMS program to port employees. Additionally, PCCA provides information to Port Contractors and Temporary Employees, as necessary, in the form of technical specifications and requirements sheets. This information helps those working in the port area understand how they can minimize pollutants from their operations. Additionally, PCCA has developed an Environmental Management System environmental awareness video that is used as a training tool to educate personnel on how to manage the environmental impacts of their operations.

Also, through the Interlocal Cooperation Agreement with the City of Corpus Christi, PCCA participates financially and within kind contributions with the City of Corpus Christi public outreach programs.

12.0 MONITORING AND SCREENING PROGRAMS

Under the previous storm water management program, the City of Corpus Christi had the responsibility for storm water monitoring and screening activities. With the application for the MS4 permit, the City of Corpus Christi proposed a watershed approach, which was approved by the TCEQ with issuance of this permit. As outlined in Part IV of the permit, the outfalls to be monitored and screened include Outfall 001 (“Carmel – Gollihar”), Outfall 002 (“Rodd Field Road”), and Outfall 003 (“Schanen”). The City of Corpus Christi maintains responsibility for storm water monitoring and this section describes how PCCA activities will complement the City of Corpus Christi monitoring activities.

An inventory of the storm water structures, outfalls and drainage areas in the port area including the MS4 area was conducted in 1993. The survey was added to the PCCA GIS and will be updated as features change.

12.1 Dry Weather Screening Program

Port property is broken into port operational areas and tenant lease areas. Port operational areas are those areas in which PCCA personnel are responsible for the operations of the facility. Dry weather screening will occur on a routine basis for the port operations through regular storm water inspections required under the SWP3 for the MSGP storm water permit. Additionally,

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STORM WATER MANAGEMENT PROGRAM FOR PORT OF CORPUS CHRISTI AUTHORITY MS4 AREA

annual tenant audits will be conducted and include tenant lease areas. Between these two programs, the entire MS4 will be screened at least once during the permit term.

Tenants and other Port users may approach the Port for approval to discharge non-storm water onto the Port's property. The Port will consider allowing only those non-storm water discharges that are covered under a TPDES permit. Unauthorized dry weather discharges identified during screening activities will be traced out to find the source and responsible party. Necessary actions to stop the discharge and/or permit it will be determined and immediately implemented. Where immediate implementation is not practical, a schedule for implementation will be developed and temporary preventative measures implement in the interim.

12.2 Wet Weather Screening Program

As mentioned previously, the City of Corpus Christi will maintain responsibility for wet weather monitoring and floatables monitoring per Part IV Section A and Section B, respectively. Under the PCCA SWP3 for the MSGP for industrial discharges, PCCA collects samples of storm water runoff from the Maintenance Facility (located within the MS4 area) on a quarterly basis for visual monitoring. PCCA also submits samples semi-annually for analysis of Total Aluminum, Total Iron, Total Lead, and Total Zinc. The results are compared to the Benchmark Levels in the permit and evaluated to determine if additional controls to minimize pollutant exposure to storm water runoff are warranted. Annually, samples are also analyzed for hazardous metals and compared against the discharge limits in the permit for tidal waters. Under the EMS program, PCCA set meeting the Benchmark Levels as an objective and target. Details of this program and the results are reported through the SWP3 for the MSGP permit.

Tenants on port property through the respective leases are responsible for complying with all environmental regulations, including storm water requirements. PCCA maintains information regarding storm water permits on file when received during the annual tenant audits. Other areas in the port such as public cargo docks are monitored on a case-by-case basis and the port user is made aware of their requirements to comply with all environmental regulations while operating on port property. PCCA staff also conducts routine inspections of port user activities. If a problem is discovered or potential problem identified, PCCA staff or the responsible party will conduct sampling as necessary to determine the extent of the problem or take necessary precautions to ensure pollutants are not contributed to storm water runoff.

Overall, as property use changes within the MS4 area, the environmental requirements will be reviewed including storm water to ensure proper permitting through a multi-sector general permit or through a wastewater discharge permit.

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STORM WATER MANAGEMENT PROGRAM FOR PORT OF CORPUS CHRISTI AUTHORITY MS4 AREA

12.3 Industrial and High-Risk Runoff Monitoring Program

As mentioned earlier in this section, discharges from the port operational areas are permitted under the MSGP TXR050000. Tenant lease properties are required to comply with all applicable legal requirements. A review of tenant lease properties within the MS4 will be conducted annually and where tenant properties are covered under the MSGP TXR050000, a review of the storm water management program will occur during the annual tenant inspection. For those areas not covered under the MSGP TXR050000 and discharging to the MS4, PCCA will request information regarding the management of storm water and maintain it on file. However, ultimate compliance and enforcement determinations are left to the TCEQ who has jurisdiction and authority over such matters and staff resources for enforcement.

12.4 Deadlines for SWMP Compliance

The elements of this SWMP are existing programs that have been previously implemented, therefore, no compliance schedule is provided for this SWMP.

12.5 Roles and Responsibilities

PCCA has entered an Interlocal Cooperation Agreement with the City of Corpus Christi and a copy is provided as an attachment in Appendix D.

12.6 Legal Authority

The PCCA legal authority is limited to that authorized under the Texas Water Code for water districts. The extent of PCCA legal authority in controlling discharges to and from the area of the MS4 in which PCCA has jurisdiction is to adopt tariffs for Port users' compliance and through lease agreements with tenants. Otherwise, PCCA will control discharges to and from the MS4 as described in this SWMP.

12.7 SWMP Resources

The resources needed for this SWMP are provided annually in the Port Budget under General Environmental Services. Out of scope or unexpected unbudgeted items are required to go for Port Commission approval prior to expending the funds.

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STORM WATER MANAGEMENT PROGRAM FOR PORT OF CORPUS CHRISTI AUTHORITY MS4 AREA

12.8 SWMP Review and Updates

The Annual Report will be provided to the City of Corpus Christi as required by the permit including a review of the current SWMP. If it is determined at any time that an update of the SWMP is required, it will be managed in accordance with the PCCA's Document Control and Record Management Procedure and the MS4 permit.

12.9 Retention of SWMP Records

All records pertaining to the MS4 will be maintained in the environmental files in accordance with the PCCA's Document Control and Record Management Procedure for a minimum of three years.

13.0 MEASURABLE GOALS

Measurable goals have been established for the elements of this plan in which setting a goal is practical. The established measurable goals will be managed as objectives and targets under the EMS program. Below is a table outlining the objective and target for each element where practical and discussion of the implementation.

Element of Plan	Objective	Target	Implementation
Structural Controls	Reduce amount of pollutants contributed to storm water runoff.	Inspect existing structural controls monthly and evaluate for maintenance needs.	Ongoing

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STORM WATER MANAGEMENT PROGRAM FOR PORT OF CORPUS CHRISTI AUTHORITY MS4 AREA

Element of Plan	Objective	Target	Implementation
Areas of New Development and Significant Redevelopment	Adequately manage storm water runoff in areas of new development or significant redevelopment to minimize runoff issues.	Utilize the Design Criteria Manual and checklists developed as part of the Stormwater Master Plan as tool during the review process for all Port construction activities	Ongoing
		Conduct monthly stormwater inspections	Ongoing
		Review tenant's construction drawings for incorporation of storm water planning.	Ongoing
Roadways	Work with Port users during bulk material cargo transfers to ensure material spilled or tracked on roadways is cleaned up.	Reduction in pollutants contributed to storm water from bulk material handling through communication and education.	Ongoing
		Reduction in pollutants contributed to storm water from construction activities through TPDES permit TXR150000 compliance by incorporation in specific action and subsequent monitoring.	Ongoing

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STORM WATER MANAGEMENT PROGRAM FOR PORT OF CORPUS CHRISTI AUTHORITY MS4 AREA

Element of Plan	Objective	Target	Implementation
		Conduct monthly storm water inspections and advise tenants and members when material is tracked on roadways.	Ongoing
Flood Control Projects	Not applicable. .	Not applicable.	Not applicable.
Pesticide, Herbicide, and Fertilizer Applications	Reduce the degradation of water, soil, air quality, and worker health that results from herbicide use.	Herbicide storage inspected monthly.	Ongoing
		Follow schedule for herbicide use to reduce total usage.	Ongoing
Illicit Discharges and Improper Disposal	Reduce improper disposal practices in port area.	Inspect MS4 area monthly.	Ongoing
		Conduct tenant audits annually.	Ongoing
		Annual inspection of entire Port area for improper disposal.	Ongoing
		Proper waste and disposal program for Port operations.	Ongoing
		Inspection of Port owned and operated sanitary lift stations annually.	Ongoing
		Annual verification of grease trap maintenance at Ortiz Center	Ongoing
Spill Prevention and Response	Work with port users to reduce the occurrence of spills on public cargo docks and storage areas.	Establish baseline for Port users.	Completed
		All stevedores must develop their own EMS.	Ongoing
		Inspect MS4 area monthly.	Ongoing

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STORM WATER MANAGEMENT PROGRAM FOR PORT OF CORPUS CHRISTI AUTHORITY MS4 AREA

Element of Plan	Objective	Target	Implementation
		All liquid products and waste must be stored in containment units.	Ongoing
		Train PCCA facility employees on spill response procedures annually.	Ongoing
Industrial and High-Risk Runoff	Inspect port properties to ensure storm water management programs in place at industrial facilities on port property.	Conduct annual tenant audits for each lease property within the MS4 area.	Ongoing
Construction Site Runoff	Reduce pollutants in storm water discharges from construction activities and during operation.	Obtain TXR150000 coverage whenever applicable for construction projects in port area and properly maintain BMP's and controls to minimize pollutants and add additional controls when inadequate.	Ongoing
		Utilize the Construction Activities Environmental checklist for all projects that occur in the Port.	Ongoing

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STORM WATER MANAGEMENT PROGRAM FOR PORT OF CORPUS CHRISTI AUTHORITY MS4 AREA

Element of Plan	Objective	Target	Implementation
		For PCCA construction projects with an SWP3, conduct regular inspections during construction project and train personnel on its requirements and implementation.	Ongoing
		Utilize the Design Criteria Manual and checklists developed as part of the Stormwater Master Plan as tool during the review process of construction activities.	Ongoing
		Utilize the Port GIS Platform to track and inform the need of incorporation of adequate BMP's elements into construction activities.	Ongoing
Public Education	Improve storm water awareness with employees and contractors in port area.	Conduct quarterly training including a storm water component with employees through EMS program and site-specific training as necessary.	Ongoing
		Provide technical specifications and/or requirement sheets to Port Contractors.	Ongoing

STORM WATER MANAGEMENT PROGRAM FOR PORT OF CORPUS CHRISTI AUTHORITY MS4 AREA

Element of Plan	Objective	Target	Implementation
		For PCCA construction projects with an SWP3, train construction personnel on its requirements and implementation.	Ongoing
Monitoring & Screening Programs	Reduce the contribution of pollutants contributed to storm water runoff at the Maintenance Facility.	Meet the benchmark levels of the Multi-Sector General Permit for Sector Q.	Ongoing
		Audit tenants for compliance benchmark levels for their permits, if they should have one.	Ongoing
		Implement a tenant audit scorecard program.	In development

14.0 CERTIFICATION

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



Sean C. Strawbridge
Chief Executive Officer

Oct 20, 2021

Date

APPENDIX A – TPDES PERMIT NO. WQ0004200000



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

PERMIT TO DISCHARGE UNDER THE TEXAS
POLLUTANT DISCHARGE ELIMINATION SYSTEM
under provisions of
Section 402 of the Clean Water Act
and Chapter 26 of the Texas Water Code

TPDES PERMIT NO.
WQ0004200000
*[For TCEQ office use only – EPA
I.D. No. TXS000601]*

This permit supersedes and
replaces TPDES Permit No.
WQ0004200000, issued on
December 1, 2009.

PART I: AUTHORIZATION

City of Corpus Christi
P.O. Box 9277
Corpus Christi, Texas 78469

Port of Corpus Christi Authority of Nueces County,
formerly known as Port of Corpus Christi Authority
P.O. Box 1541
Corpus Christi, Texas 78403

Del Mar College District
101 Baldwin
Corpus Christi, Texas 78404

Texas A&M University – Corpus Christi
6300 Ocean Drive
Corpus Christi, Texas 78412

are authorized to discharge from the City of Corpus Christi Municipal Separate Storm Sewer System (MS4) (SIC 9111)

including all areas, except for any agricultural lands and lands owned by the federal government that are under the jurisdiction of other stormwater permits, located within the corporate boundary of the City of Corpus Christi served by, or otherwise contributing to discharges to the MS4s owned or operated by the permittees, located in Nueces, San Patricio, Kleberg, and Aransas Counties, Texas 78368, 78370, 78373, 78380, 78401, 78402, and 78404 through 78419.

via the MS4 to Nueces River Tidal, Nueces River Below Lake Corpus Christi, Corpus Christi Bay, Nueces Bay, Corpus Christi Inner Harbor, Oso Bay, Oso Creek, Laguna Madre, and the Gulf of Mexico, Segments Nos. 2101 and 2102 of the Nueces River Basin, and Segments Nos. 2481, 2482, 2484, 2485, 2485A, 2491, and 2501 of the Bays and Estuaries, to various ditches and tributaries that eventually reach Nueces River Tidal, Nueces River Below Lake Corpus Christi, Corpus Christi Bay, Nueces Bay, Corpus Christi Inner Harbor, Oso Bay, Oso Creek, Laguna Madre, and the Gulf of Mexico

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

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

ISSUED DATE:

October 21, 2020

A handwritten signature in black ink, appearing to read "T. G. Baker", written over a horizontal line.
For the Commission

PART II: DISCHARGES AUTHORIZED BY THIS PERMIT AND PERMITTEE RESPONSIBILITIES

A. Authorized Discharges.

1. This permit authorizes existing or new stormwater point source discharges to surface water in the state from those portions of the Municipal Separate Storm Sewer System (MS4) owned or operated by the permittees.
2. The following discharges, whether discharged separately or commingled with municipal stormwater, are not authorized by this permit:
 - a. discharges of non-stormwater;
 - b. stormwater discharges associated with industrial activity;
 - c. stormwater discharges that must be authorized by a Texas Pollutant Discharge Elimination System (TPDES) permit; and
 - d. discharges of materials resulting from a spill, except when necessary to prevent loss of life, personal injury, or severe property damage.
3. This permit does not negate any person's ability to assert the *force majeure* (Act of God, war, strike, riot, or other catastrophe) defenses found in 30 Texas Administrative Code (TAC) § 70.7.
4. This permit does not transfer liability for discharging without, or in violation of, a National Pollutant Discharge Elimination System (NPDES) or a TPDES permit from the responsible party of the discharge to the permittees.
5. The requirements in this permit must provide compliance with the Texas Surface Water Quality Standards (TSWQS) as specified in 30 TAC §§ 307.1-307.10.

B. Responsibilities of the permittees. The permittees are individually responsible for:

1. compliance with permit conditions from portions of the MS4 for which they are the operator;
2. implementation of the Stormwater Management Program (SWMP);
3. compliance with annual reporting requirements;
4. collection of monitoring data, according to such agreements established between permittees;
5. a plan of action to assume responsibility for implementation of the stormwater management and monitoring programs on its portions of the MS4 should inter-jurisdictional agreements allocating responsibility between permittees be dissolved or in default; and

6. The permittees are jointly responsible for permit compliance on portions of the MS4 where operational or SWMP implementation authority over portions of the MS4 is shared or has been transferred from one permittee to another in accordance with legally binding agreements.

C. Impaired Water Bodies and Total Maximum Daily Load (TMDL) Requirements

If applicable, the permittees shall control the discharges of pollutant(s) of concern to impaired waters and waters with an approved TMDL as described in Part II.C.2.a. and b. below.

1. Discharges of the pollutant(s) of concern to impaired water bodies for which there is a TCEQ and EPA approved total maximum daily load (TMDL) are not eligible for this permit unless they are consistent with the approved TMDL. A water body is impaired for purposes of the permit if it has been identified, pursuant to the latest TCEQ and EPA-approved *Texas Integrated Report Index of Water Quality Impairment*, as not meeting TSWQS.
2. The permittees shall control the discharges of pollutant(s) of concern to impaired waters and waters with approved TMDLs as provided in sections a and b below and shall assess the progress in controlling those pollutants.

a. Discharges to Water Quality Impaired Water Bodies with an Approved TMDL

For any portion of the MS4 that discharges to a portion of a watershed with an approved TMDL, and because stormwater has the potential to cause or contribute to the impairment, the permittees shall include in the SWMP controls targeting the pollutant(s) of concern along with any additional or modified controls required in the TMDL and this section.

The SWMP and required annual reports must include information on implementing any targeted controls required to reduce the pollutant (s) of concern as described below:

i. Targeted Controls

The SWMP must include a detailed description of all targeted controls to be implemented, such as identifying areas of focused effort or implementing additional best management practices (BMPs) to reduce the pollutant(s) of concern in the impaired waters.

ii. Measurable Goals

For each targeted control, the SWMP must include a measurable goal and an implementation schedule describing BMPs to be implemented during each year of the permit term.

iii. Identification of Benchmarks

The SWMP must identify a benchmark for the pollutant(s) of concern. Benchmarks are designed to assist in determining if the BMPs established are effective in addressing the pollutant(s) of concern in stormwater discharge(s) from the MS4 to the maximum extent practicable (MEP). The BMPs addressing the pollutant of concern must be re-evaluated on an annual basis for progress towards the benchmarks and modified as necessary within an adaptive management framework. These benchmarks are not numeric effluent limitations or permit conditions but intended to be guidelines for evaluating progress towards reducing pollutant discharges consistent with the benchmarks. The exceedance of a benchmark is not a permit violation and does not in itself indicate a violation of instream water quality standards.

The benchmark must be determined based on one of the following options:

- A) If the MS4 or a portion thereof, is subject to a TMDL that identifies a Waste Load Allocation(s) (WLA) for permitted MS4 stormwater sources, then the SWMP may identify it as the benchmark. Where an aggregate allocation is used as a benchmark, all affected MS4 operators are jointly responsible for progress in meeting the benchmark and shall (jointly or individually) develop a monitoring/assessment plan as required in Part II.C.2.a.vi.
- B) Alternatively, if multiple MS4s are discharging into the same impaired watershed with an approved TMDL, with an aggregate WLA for all permitted stormwater MS4s, then the MS4s may combine or share efforts to determine an alternative sub-benchmark for the pollutant(s) of concern (e.g., bacteria) for their respective MS4. The SWMP must clearly define this alternative approach and must describe how the sub-benchmark would cumulatively support the aggregate WLA. Where an aggregate benchmark has been broken into sub-benchmarks for individual MS4s, each permittee is only responsible for progress in meeting its sub-benchmark.

iv. Annual Report

The annual report must include an analysis of how the selected BMPs will be effective in contributing to achieving the benchmark.

v. Impairment for Bacteria

If the pollutant of concern is bacteria, the permittees shall include focused BMPs addressing the below areas, as applicable, in the SWMP and implement as appropriate. If a TMDL Implementation Plan (I-Plan) is

available, the permittees may refer to the I-Plan for appropriate BMPs or provide appropriate alternative BMPs. The SWMP and annual report must include the selected BMPs. Permittees may not exclude BMPs associated with the minimum control measures required under 40 Code of Federal Regulations (CFR) §122.34 from their list of proposed BMPs.

The BMPs shall, as appropriate, address the following:

A) Sanitary Sewer Systems

1. Make improvements to sanitary sewers to reduce overflows;
2. Address lift station inadequacies;
3. Improve reporting of overflows; and
4. Strengthen sanitary sewer use requirements to reduce blockage from fats, oils, and grease.

B) On-site Sewage Facilities (for entities with appropriate jurisdiction)

1. Identify and address failing systems; and
2. Address inadequate maintenance of On-Site Sewage Facilities (OSSFs).

C) Illicit Discharges and Dumping

Place additional effort to reduce waste sources of bacteria; for example, from septic systems, grease traps, grit traps, or other sources.

D) Animal Sources

Expand existing management programs to identify and target animal sources such as zoos, pet waste, and horse stables.

E) Residential Education

Increase focus to educate residents on:

- (1) Bacteria discharging from a residential site either during runoff events or directly;
- (2) Fats, oils, and grease clogging sanitary sewer lines and resulting overflows;
- (3) Maintenance and operation of decorative ponds; and
- (4) Proper disposal of pet waste.

vi. Monitoring or Assessment of Progress

The permittees shall monitor or assess progress in achieving benchmarks and determine the effectiveness of BMPs, and shall include documentation of this monitoring or assessment in the SWMP and annual reports. In addition, the SWMP must include methods to be used.

A) The permittees may use either of the following methods to evaluate progress towards the benchmark and improvements in water quality:

1) Evaluating Program Implementation Measures

The permittees may evaluate and report progress towards the benchmark by describing the activities and BMPs implemented, by identifying the appropriateness of the identified BMPs, and by evaluating the success of implementing the measurable goals.

The permittees may assess progress by using program implementation indicators such as: (1) number of sources identified or eliminated; (2) decrease in number of illegal dumping; (3) increase in illegal dumping reporting; (4) number of educational opportunities conducted; (5) reductions in sanitary sewer overflows (SSOs); or, (6) increase in illegal discharge detection through dry screening, etc.; or

2) Assessing Improvements in Water Quality

The permittees may assess improvements in water quality by using available data for segment and assessment units of water bodies from other reliable sources, or by proposing and justifying a different approach such as collecting additional instream or outfall monitoring data, etc. Data may be acquired from TCEQ, local river authorities, partnerships, and/or other local efforts as appropriate.

B) Progress towards achieving the benchmark shall be reported in the annual report. Annual reports shall report the benchmark and the year(s) during the permit term that the MS4 conducted additional sampling or other assessment activities.

vii. Observing no Progress Towards the Benchmark

If, by the end of the third year from the effective date of the permit, the permittees observe no progress toward the benchmark either from program implementation or water quality assessments as described in

Part II.C.2.a.vi, the permittees shall identify alternative focused BMPs that address new or increased efforts towards the benchmark or, as appropriate, shall develop a new approach to identify the most significant sources of the pollutant(s) of concern and shall develop alternative focused BMPs for those (this may also include information that identifies issues beyond the MS4's control). These revised BMPs must be included in the SWMP and subsequent annual reports.

Where the permittees originally used a benchmark based on an aggregated WLA, the permittees may combine or share efforts with other MS4s discharging to the same watershed to determine an alternative sub-benchmark for the pollutant(s) of concern for their respective MS4s, as described in Part II.C.2.a.iii.B) above. The permittees must document, in their SWMP for the next permit term, the proposed schedule for the development and subsequent adoption of alternative sub benchmark for the pollutant(s) of concern for their respective MS4s and associated assessment of progress in meeting those individual benchmarks.

b. *Discharges Directly to Water Quality Impaired Water Bodies without an Approved TMDL*

The permittees shall also determine whether any portion of the MS4 discharges directly to one or more water quality-impaired water bodies where a TMDL has not yet been approved by TCEQ and EPA. If the MS4 discharges directly into an impaired water body without an approved TMDL, the permittees shall perform the following activities for the areas of the MS4 subject to these requirements:

i. Discharging a Pollutant of Concern

- A. Within the first year following the permit effective date, the permittees shall determine whether the MS4 may be a source of the pollutant(s) of concern by referring to the latest CWA §303(d) list and then determine if discharges from the MS4 would be likely to contain the pollutant(s) of concern at levels of concern.
- B. If the permittees determine that the MS4 may discharge the pollutant(s) of concern to an impaired water body without an approved TMDL, the permittees shall, no later than two years following the permit effective date, ensure that the SWMP includes focused BMPs, along with corresponding measurable goals, that the permittees will implement, to reduce, the discharge of pollutant(s) of concern that contribute to the impairment of the water body.

ii. Impairment of Bacteria

Where the impairment is for bacteria, the permittees shall identify

potential significant sources and develop and implement focused BMPs for those sources. The permittees shall at the minimum, address the bacteria sources listed in Part II.C.2.a.v. of this permit.

- iii. The annual report must include information on compliance with this section, including results of any sampling conducted by the permittees.

PART III: STORMWATER MANAGEMENT PROGRAM

A. Overview.

1. To control the quality of stormwater discharged from the MS4 that reach waters of the U.S., the permittees shall continue implementation of the comprehensive Stormwater Management Program (SWMP) by revising and modifying as needed. The SWMP document will include:
 - a. pollution prevention measures;
 - b. treatment or pollutant removal techniques;
 - c. stormwater monitoring;
 - d. use of legal authority; and
 - e. other appropriate measures (e.g., contracts or other legal mechanisms) to control the quality of stormwater discharged from the MS4.
2. New and existing elements of the SWMP must be modified or revised as needed to include measurable goals. The measurable goals must include, as appropriate, the months and years when the permittees will undertake required actions, including interim milestones and the frequency of the action of each minimum control measure (MCM) described in Part III.B. of this permit.
3. The SWMP, taken as a whole, must include controls necessary to effectively prohibit the discharge of non-stormwater into the MS4 (except as described in Part III. Section B.2.c. of this permit) and reduce the discharge of pollutants from the MS4 to the MEP.
4. The SWMP must cover the term of the permit and must be updated as necessary or as required by the TCEQ, to ensure compliance with Clean Water Act (CWA) Section 402, Texas Water Code (TWC) Chapter 26, applicable EPA and TCEQ regulations, and the requirements of this TPDES permit. Any modifications to the SWMP shall be made in accordance with Part III. Section G.2. of this permit. Compliance with the SWMP is defined as compliance with Section B. The SWMP and all approved updates are incorporated by reference.
5. The controls and BMPs included in the SWMP constitute effluent limitations for the purposes of compliance with the requirements of 30 TAC Chapter 319, Subchapter B, related to Hazardous Metals, unless otherwise limited in the permit.

B. SWMP Components.

1. The SWMP must contain the following MCMs for:
 - a. MS4 maintenance activities;
 - b. post-construction stormwater control measures;
 - c. detection and elimination of illicit discharges;
 - d. pollution prevention and good housekeeping for municipal operations;
 - e. limiting industrial and high-risk stormwater runoff;
 - f. limiting stormwater runoff from construction sites;
 - g. public education, outreach, involvement and participation; and
 - h. monitoring, evaluation and reporting.

The SWMP must describe a program or plan of compliance with Impaired Water Bodies and TMDL requirements, as provided in Part II, Section C. 2. a. and b. of the permit and any applicable TMDL I-Plans.

2. The permittees shall ensure that the following list of MCMs is implemented.
 - a. MCM 1, MS4 Maintenance Activities.
 - i. Structural Controls. To the MEP, the permittees shall continue to operate and maintain the MS4, including any stormwater structural controls in such a manner as to reduce erosion and the discharge of pollutants.
 - ii. Floatables. The permittees shall continue to implement a program to reduce the discharge of floatables (for example litter and other human generated solid refuse) into the MS4. The permittees shall include source controls at a minimum, and structural controls and other appropriate controls where necessary.
 - iii. Roadways. The permittees shall continue to operate and maintain public streets, roads, and highways (excluding public streets, roads, and highways under jurisdiction of the Texas Department of Transportation's MS4 permit) to minimize the discharge of pollutants, including pollutants related to deicing or sanding activities.
 - b. MCM 2, Post–Construction Stormwater Control Measures.
 - i. The permittees shall continue implementation and enforcement of the controls to minimize the discharge of pollutants from areas of new development and significant redevelopment, after construction is

completed. The goals of such controls must include:

- A) limiting increases in erosion and the discharge of pollutants in stormwater as a result of new development; and
 - B) reducing erosion and the discharge of pollutants in stormwater from areas of redevelopment.
- ii. The permittees shall continue to implement a comprehensive master planning process (or equivalent) to include all new development and redevelopment projects that disturb one acre or more of land, including projects less than one acre that are part of a larger common plan of development or sale that will result in disturbance of one acre or more.
 - iii. The permittees shall evaluate the existing SWMPs as necessary to ensure that this MCM includes a regulatory mechanism such as an ordinance to implement and enforce the new requirements of this program and shall ensure that the SWMP includes strategies for structural and/or non-structural controls (i.e., BMPs) appropriate for the community. In addition, the permittees shall provide for adequate long-term operation and maintenance of BMPs.
 - iv. The permittees shall assess the impacts on the receiving water(s) for all flood control projects. Where feasible, new flood control structures must be designed, constructed, and maintained to provide erosion prevention and pollutant removal from stormwater.
- c. MCM 3, Illicit Discharge Detection and Elimination.
 - i. The permittees shall prohibit illicit non-stormwater discharges from entering the MS4. The permittees shall continue to implement a program, including a schedule to detect and eliminate illicit discharges and improper disposal into the MS4. This program shall include:
 - A) A description of the program, including inspections procedures, frequencies, and methods for detecting and preventing illicit discharges, to implement and enforce an ordinance, orders or similar means to prevent illicit discharges to the MS4;

In addition, within one year from the date of permit issuance, the program must include items B) thru G):

- B) A description of procedures to conduct on-going field screening activities, including areas or locations that will be evaluated by such field screens;
- C) A description of procedures to be followed to investigate portions of the MS4 that indicate a reasonable potential of containing illicit discharges or other sources of non-stormwater;

- D) A description of procedures to prevent, contain, and respond to spills that may discharge into the MS4;
 - E) A description of a program to promote, publicize, and facilitate public reporting of illicit discharges or water quality impacts associated with discharges from the MS4;
 - F) A description of educational activities, public information activities, and other appropriate activities to facilitate the proper management and disposal of used oil and toxic materials; and
 - G) A description of controls to limit infiltration of seepage from municipal sanitary sewers to the MS4 where necessary.
- ii. For the purposes of this permit, the following discharges need not be addressed as illicit discharges by the permittees nor prohibited from entering the MS4:
- A) discharges regulated by a separate NPDES or TPDES permit;
 - B) discharges for which an NPDES or TPDES permit application has been submitted or neither an NPDES nor TPDES permit is required; and
 - C) miscellaneous non-stormwater discharges (see list in iv. below).
- iii. The SWMP must identify all categories of miscellaneous, non-stormwater discharges that may be discharged into the MS4, and include a description of any local controls or conditions placed on discharges exempted from the prohibition on non-stormwater.
- iv. Miscellaneous, non-stormwater discharges that are not significant contributors of pollutants to the MS4 and that may be authorized by the permittees include:
- A) water line flushing;
 - B) landscape irrigation;
 - C) diverted stream flows;
 - D) rising ground waters;
 - E) uncontaminated ground water infiltration;
 - F) uncontaminated pumped ground water;
 - G) discharges from potable water sources;

- H) foundation drains;
 - I) air conditioning condensation;
 - J) irrigation water;
 - K) springs;
 - L) water from crawl space pumps;
 - M) footing drains;
 - N) lawn watering;
 - O) street wash water;
 - P) individual residential vehicle washing;
 - Q) wash waters using only potable water, and which are similar in quality and character to street wash water or individual residential vehicle washing but without the use of detergents or surfactants;
 - R) flows from riparian habitats and wetlands;
 - S) dechlorinated swimming pool discharges;
 - T) charitable car washes;
 - U) other allowable non-stormwater discharges listed in 40 CFR §122.26(d)(2)(iv)(B)(1);
 - V) other allowable non-stormwater discharges as listed in the TPDES Construction General Permit No. TXR150000 and TPDES Multi-Sector General Permit No. TXR050000; and
 - W) other similar occasional incidental non-stormwater discharges (as determined in ii. above).
- v. Program descriptions must address discharges or flows from fire-fighting activities only where such discharges or flows are identified as significant sources of pollutants.
- vi. The permittees shall prohibit any individual non-stormwater discharge otherwise exempted under this paragraph from the prohibition on non-stormwater if it is determined by the permittees that the discharge is contributing significant amounts of pollutants to the MS4.

vii. Elimination of Illicit Discharges and Improper Disposal.

- A) The permittees shall continue to require the operator of an illicit discharge or improper disposal practice to eliminate the illicit discharge or stop the improper disposal practice as quickly as reasonably possible. If the elimination of an illicit discharge within 30 days is not possible, the permittees shall continue to require the operator of the illicit discharge to remove the discharge according to an expeditious schedule. Until the illicit discharge or improper disposal is eliminated the permittees shall continue to require the operator of the illicit discharge to take all reasonable measures to minimize the discharge of pollutants to the MS4.
- B) The permittees shall continue to:
 - 1) keep a list of techniques (inspection procedures, frequencies, and methods) for detecting and preventing illicit discharges and revise the procedures as necessary; and
 - 2) use appropriate actions and enforcement procedures for removing the source of an illicit discharge, and revise where necessary.

viii. Overflows and Infiltration. The permittees shall continue to implement controls where necessary and feasible to prevent dry weather and wet weather overflows from sanitary sewers into the MS4. The permittees shall continue to limit the infiltration of seepage from municipal sanitary sewers into the MS4.

ix. Household Hazardous Waste and Used Motor Vehicle Fluids. The permittees shall prohibit the discharge or disposal of used motor vehicle fluids, household hazardous wastes, and the intentional disposal of collected quantities of grass clippings, leaf litter, and animal wastes into the MS4.

- A) The permittees shall ensure the implementation of programs to collect used motor vehicle fluids (including, at a minimum, oil and antifreeze) and household hazardous waste materials (including paint, solvents, pesticides, herbicides, and other hazardous materials) for recycling, reuse, or proper disposal. Such programs shall be readily available to the residential sector within the MS4 and shall be publicized and promoted on a regular basis.
- B) Household hazardous waste collection centers which are operated by the permittees as a SWMP element are not an industrial activity requiring a separate TPDES authorization for the discharge of stormwater.

- x. MS4 Screening and Illicit Discharge Inspections. To locate portions of the MS4 with suspected illicit discharges and improper disposals, the permittees shall continue implementation of the Dry Weather Screening Program described in Part III, Section B.2.h.i. of this permit. Follow-up activities to eliminate illicit discharges and improper disposals may be prioritized on the basis of magnitude and the nature of the suspected discharge; sensitivity of the receiving water; or other relevant factors. The entire MS4, but not necessarily each individual outfall, shall continue to be screened at least once per five years.
- xi. Priority Areas. *Within one year from the date of permit issuance*, the permittees shall develop a list of priority areas likely to have illicit discharges. The permittees shall continue to evaluate and update this list each year and report the results in the annual report.
- xii. NPDES and TPDES Permittee List. The permittees shall maintain an updated list of dischargers that discharges directly to the MS4 and that have been issued an NPDES or a TPDES permit. The list shall include the name, location and permit number (if known) of the discharger.
- xiii. MS4 Map.
 - A) The permittees shall maintain a current, accurate MS4 map of: the location of all MS4 outfalls; the names and locations of all waters of the U.S. that receive discharges from the outfalls; and any additional information needed by the permittees to implement their SWMP. Where possible, the permittees shall use the Global Positioning System (GPS) to locate outfalls and photographs for documenting baseline conditions.
 - B) The permittees shall document the source information used to develop the MS4 map, including how the outfalls are verified and how the map will be regularly updated.
 - C) New MS4 Areas: The permittees shall continue to develop and implement procedures to ensure that the above mapping requirements in Part III.B.2.c.xiii are met for any new additions of the MS4.
 - D) Existing MS4 Areas: The permittees shall continue to evaluate all existing portions of the MS4 and that the mapping requirements have been implemented to the MEP.
- xiv. Spill Prevention and Response. The permittees shall continue to implement existing programs that prevent, contain, and respond to spills that may discharge into the MS4. The spill response programs may include:
 - A) a combination of spill response actions by the permittees or another

public or private entity, and

- B) legal requirements for private entities within the jurisdiction of the permittees.

d. MCM 4, Pollution Prevention and Good Housekeeping for Municipal Operations.

- i. Pollution Prevention and Good Housekeeping program. The permittees shall continue to implement a pollution prevention and good housekeeping program for municipal operations. The program must include MCMs that address:
 - A) identification and implementation of good housekeeping and BMPs to reduce pollutant runoff from municipal operations such as street and highway maintenance, parks, municipal office buildings and water treatment plants;
 - B) reduction of discharge of pollutants to the MEP from road repair, equipment yards, and material storage facilities, or maintenance facilities;
 - C) training for all employees responsible for municipal operations which includes information on preventing and reducing stormwater pollution from all municipal operations subject to this MCM; and
 - D) *within one year from the date of permit issuance*, implement a program for structural control maintenance.
- ii. Waste Handling. The permittees shall ensure that waste removed from the MS4 or from other municipal operations owned or controlled by the permittees is properly disposed.
- iii. Pesticide, Herbicide, and Fertilizer Application. The permittees shall continue to implement controls to reduce the discharge of pollutants related to the storage and application of pesticides, herbicides, and fertilizers, by the permittees' employees or contractors, to public rights-of-way, parks, or other municipal property. If the permittees have jurisdiction over lands they do not directly own (e.g. incorporated city), they shall implement programs to reduce the discharge of pollutants related to the commercial application and distribution of pesticides, herbicides, and fertilizers on those lands.
- iv. List of Municipal Facilities. The SWMP must include a list of all municipal operations subject to the municipal operation, maintenance, and training programs listed under this MCM and all municipally owned and operated industrial activities subject to TPDES or NPDES industrial stormwater regulations.

- e. MCM 5, Industrial and High-Risk Runoff.
 - i. The permittees shall continue to improve their existing programs to identify and control pollutants in stormwater discharges to the MS4 from: municipal landfills; other treatment, storage, or disposal facilities for municipal waste (e.g. transfer stations, incinerators, etc.); hazardous waste treatment, storage, disposal and recovery facilities; facilities that are subject to Emergency Planning and Community Right-to-Know Act (EPCRA) Title III, Section 313; and any other industrial or commercial discharge the permittees determine are contributing a substantial pollutant loading to the MS4.
 - ii. This MCM must include:
 - A) priorities and procedures for inspections and for establishing and implementing control measures for such discharges;
 - B) an Industrial and High-Risk Monitoring Program as described in Part III, Section B.2.h.iii. of this permit; and
 - C) the permittees shall use ordinances, permits, contracts, orders or similar means to control the contribution of pollutants to the MS4 by stormwater discharges associated with industrial activity.
- f. MCM 6, Construction Site Stormwater Runoff.
 - i. The permittees shall continue to implement a program to reduce the discharge of pollutants into the MS4 from construction sites. This MCM must include an ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State or local law. The permittees shall continue to ensure that the existing program is revised as necessary to address construction projects that result in a land disturbance of one acre or more, including activities disturbing less than one acre that are part of a larger common plan of development or sale that would disturb one acre or more.
 - ii. This MCM must include:
 - A) requirements to use and maintain appropriate erosion and sediment control BMPs to reduce pollutants discharged to the MS4 from construction sites;
 - B) requirements for construction site operators to address the control of site waste such as discarded building materials, concrete truck washout water, chemicals, litter, and sanitary waste;
 - C) requirements for inspections of construction sites and enforcement of control measure requirements;

- D) requirements for the permittees to provide appropriate education and training measures to construction site operators;
 - E) notifications to construction site operators of their potential responsibilities under the NPDES or TPDES permitting regulations and permits for construction site runoff;
 - F) procedures for site plan review which incorporate consideration of potential water quality impacts;
 - G) procedures for receiving and considering input received from the public;
 - H) procedures for site plan review of sediment and erosion plans;
 - I) procedures for establishing a frequency of inspections and follow-up from inspections; and
 - J) A description of a program to implement and maintain structural and non-structural BMPs to reduce pollutants in stormwater runoff from construction sites to the MS4, which must include a description of the following:
 - 1) procedures for site planning which incorporate consideration of potential water quality impacts;
 - 2) requirements for non-structural and structural BMPs;
 - 3) procedures for identifying priorities for inspecting sites and enforcing control measures which consider the nature of the construction activity, topography, and the characteristics of soils and receiving water quality; and
 - 4) appropriate educational and training measures for construction site operators.
- iii. Lists of Sites. The permittees shall maintain a current list of construction sites that discharge directly to the MS4 and that have been issued an NPDES or TPDES permit. The list must include the name, location, and permit number of the discharges that have been authorized under an NPDES or TPDES stormwater discharge permit for construction activities (if known).
- iv. The permittees shall ensure and demonstrate that this MCM includes the following elements, in addition to those listed above:
- A) The permittees shall require construction site contractors to implement appropriate erosion and sediment control BMPs and control waste (for example, discarded building materials, concrete

truck washout water, chemicals, litter, and sanitary waste) at the construction site, that may cause adverse impacts to water quality.

- B) For site plan reviews, the permittee shall continue to incorporate consideration of potential water quality impacts, receipt and consideration of information submitted by the public, and site inspections and enforcement of control measures to the extent allowable under state and local law.
- C) The permittee shall ensure that all staff whose primary job duties are related to implementing the construction stormwater program (including permitting, plan review, construction site inspections, and enforcement) are informed or trained to conduct these activities. The training may be conducted by the permittee or by outside trainers.

g. MCM 7, Public Education, Outreach, Involvement and Participation.

i. Public Education and Outreach

- A) The permittees shall document and ensure that the SWMP promotes, publicizes, and facilitates public education and outreach program to residents, visitors, public service employees, businesses, commercial and industrial facilities, and construction site personnel and provide justification for any group that is not addressed by the program. The permittees shall document the activities conducted and materials used to fulfill this program element and provide enough detail to demonstrate the amount of educational and outreach resources and materials used to address each group.
- B) The permittees shall continue to implement a public education and outreach program component to promote, publicize, and facilitate:
 - 1) public reporting of illicit discharges or improper disposal of materials, including floatables, into the MS4;
 - 2) the proper management and disposal of used oil and household hazardous wastes; and
 - 3) the proper use, application, and disposal of pesticides, herbicides, and fertilizers by public, commercial, and private applicators and distributors.

ii. Public Involvement and Participation. The permittees shall continue to develop a public involvement and participation program which complies with State, Tribal, and local public notice requirements. This program element must include opportunities for a wide variety of constituents within the MS4 area to participate in the SWMP development and implementation.

h. MCM 8, Monitoring, Evaluation and Reporting.

The permittees shall continue to implement, and modify as necessary, the following monitoring or screening programs for dry weather, wet weather, and industrial and high-risk runoff:

- i. Dry Weather Screening Program.** This program shall continue the permittees' efforts to detect the presence of illicit connections and improper discharges to the MS4. All areas of the MS4 must be screened at least once during the permit term. The permittees may utilize modified screening methods based on experience gained during previous field screening activities; the screening methods are not required to conform to the protocol in 40 CFR §122.26(d)(1)(iv)(D). Sample collection and analysis is not required to conform to the requirements of Part V, Section B.2. of this permit, "Test Procedures;" however, samples taken to confirm (e.g., in support of possible legal action) a particular illicit connection or improper disposal practice must conform to the requirements of Part V, Section B.2. of this permit, "Test Procedures."
- ii. Wet Weather Screening Program:** The permittees shall identify, investigate, and address areas within their jurisdiction that may be contributing excessive levels of pollutants to the MS4.

The wet weather screening program shall:

- A)** screen the MS4, as specified in the SWMP; and
- B)** specify the sampling and non-sampling techniques to be used for current screening and also for follow-up screening.

Sample collection and analysis for the Wet Weather Screening Program is not required to conform to the requirements of Part V, Section B.2. of this permit, "Test Procedures;" however, samples taken to confirm (e.g., in support of possible legal action) a particular illicit connection or improper disposal practice must conform to the requirements of Part V.B.2.

- iii. Industrial and High-Risk Runoff Monitoring Program:** This program shall include monitoring for pollutants in stormwater discharges to the MS4 from Type 1 facilities and Type 2 facilities.

- A)** This program must include monitoring for pollutants in stormwater discharges to the MS4 from:

Type 1 facilities include: municipal landfills; hazardous waste treatment, storage, disposal, and recovery facilities; facilities that are subject to EPCRA Title III, Section 313; and industrial facilities that the permittees determine are contributing a substantial pollutant loading to the MS4.

Type 2 facilities include: other treatment, storage, or disposal facilities for municipal waste (e.g., publicly owned treatment works, transfer stations, incinerators, etc.), and other industrial or commercial facilities that the permittees believe are contributing pollutants to the MS4.

- B) For Type 1 facilities, this program shall include the collection or review of available quantitative data on those parameters which have been identified by the permittees as a pollutant of concern for that facility, and shall either:
- 1) coincide with the corresponding industrial sector-specific requirements of the TPDES Multi-Sector General Permit or any applicable general permit issued after September 29, 1995, and is not contingent on whether a particular facility is actually covered by the general permit;
 - 2) coincide with the monitoring requirements of any individual permit for the stormwater discharges from that facility; or
 - 3) include pollutants of concern for the stormwater discharge from that facility as identified by the permittees.

To avoid the duplication of efforts, the permittees may review data collected by a facility as required by any individual or general permit for that facility rather than performing additional sample collection and analysis.

- C) For Type 2 facilities, appropriate monitoring shall be conducted as determined by the permittees to be necessary. This monitoring may include, but is not limited to, analytical monitoring and/or visual monitoring.
- D) In lieu of the monitoring discussed above, the permittees may accept a "no exposure" certification from a facility that raw and waste materials, final and intermediate products, by-products, material handling equipment or activities, industrial machinery or operations, or significant materials from past industrial activity are not presently exposed to stormwater and are not expected to be exposed to stormwater for the certification period. Where a permittee accepts a "no exposure" certification, the permittee shall conduct site inspections of the facility not less than once per permit term to verify the "no exposure" exemption.
- E) The permittees may also waive monitoring requirements under this permit for facilities that they determine are in compliance with the TPDES Multi-Sector General Permit No. TXR050000.

- iv. Storm Event Discharge Monitoring. The permittees shall comply with the monitoring requirements in Part IV of this permit to characterize the discharge from the MS4.
- v. Floatables Monitoring. The permittees shall implement a floatables program as described in Part IV. Section B of this permit.

C. Deadlines for SWMP Compliance: The permittees shall continue with existing programs, updating when necessary, to comply with the requirements of this permit. Full implementation of the SWMP is required upon permit issuance, except for the new requirements of the permit that include a specific compliance period.

- 1. The permittees shall demonstrate that they have fully implemented the new SWMP program elements and control measures *within one year from the date of permit issuance*, as described below in Part III, Section B. of this permit.
 - a. Part III, Section B.2.c.vii.B), relating to the detection and elimination of illicit discharges,
 - b. Part III, Section B.2.c.xi, relating to priority areas, and
 - c. Part III, Section B.2.d.i.D, relating to structural maintenance in the pollution prevention / good housekeeping program for municipal operations.
- 2. Compliance with any new SWMP requirements that do not include a compliance schedule in the permit is required *within one year from the date of permit issuance*.
- 3. Compliance Schedules: *During each permit year*, the permittees shall demonstrate, at a minimum, partial compliance with each new requirement.

D. Roles and Responsibilities of Permittees. For shared programs, the SWMP shall clearly identify the roles and responsibilities of each permittee.

E. Legal Authority. Each permittee shall ensure it has the legal authority to control discharges to and from those portions the MS4 over which it has jurisdiction. This legal authority may be a combination of statute, ordinance, permit, contract, order or inter-jurisdictional agreements with municipal entities with existing legal authority to:

- 1. control the contribution of pollutants to the MS4 by stormwater discharges associated with industrial activity and the quality of stormwater discharged from sites of industrial activity;
- 2. prohibit illicit discharges to the MS4;
- 3. control the discharge of spills and the dumping or disposal of materials other than stormwater (e.g. industrial and commercial wastes, trash, used motor vehicle fluids, leaf litter, grass clippings, animal wastes) into the MS4;

4. control through interagency agreements among permittees the contribution of pollutants from one portion of the MS4 to another;
5. require compliance with conditions in ordinances, permits, contracts, or orders; and
6. carry out all inspection, surveillance and monitoring procedures necessary to determine compliance with permit conditions.

F. SWMP Resources. The permittees shall provide adequate finances, staff, equipment, and support capabilities to implement their activities required by the SWMP.

G. SWMP Review and Updates.

1. **SWMP Review.** The permittees shall participate in the annual review of the current SWMP in conjunction with the preparation of the annual report required under this permit.
2. **SWMP Updates Requested by the Permittees.** No permittee shall revise the SWMP without the prior written approval of the TCEQ, unless the modification is to add controls or replace a less effective or infeasible BMP with an alternate BMP, and the permittees have requested prior authorization from TCEQ according to Part III.G.2.b.
 - a. The permittees may add components, controls, or requirements to the SWMP at any time upon written notification to the TCEQ.
 - b. The permittees, at any time, may request authorization to replace less effective or infeasible BMPs specifically identified in the SWMP with an alternate BMP. Unless denied in writing by the TCEQ, the change shall be considered approved and may be implemented by the permittees 60 days from submittal of the request. Such requests must include the following:
 - 1) an explanation of why the BMP was eliminated;
 - 2) an explanation on the effectiveness of the replacement BMP; and
 - 3) an explanation of why the replacement BMP is expected to achieve the goals of the replaced BMP.

If a request to make a change to a BMP(s) is denied, the TCEQ will send the permittee a written response to the request and state the reason given for denying the change.

- c. If the permittees determine that a component, control, or requirement is not effective in reducing or eliminating the impacts of pollutants on water quality, then the permittees may remove this BMP without replacement only after receiving written approval from the TCEQ's Stormwater Team. The permittees shall submit this request in writing to the TCEQ Stormwater Team (MC-148), and shall include an explanation as to why the BMP is considered ineffective, as

well as the method of review that was utilized to determine its ineffectiveness. The permittees shall also demonstrate that the permit discharges from the MS4 will continue to meet the MEP standard for reducing pollutants, as well as the water quality requirements, after the BMP is removed.

- d. Changes resulting from any compliance schedules contained in this permit may be requested following completion of an interim task or final deadline. Unless denied in writing by the TCEQ, proposed changes meeting the criteria contained in the applicable schedule shall be considered approved and may be implemented by the permittees 60 days from submittal date.
 - e. Change requests or notifications must be made in writing to the TCEQ's Stormwater Team (MC-148), signed by all directly affected permittees in accordance with Part V, Section B.8. of the permit, and must include a certification that all permittees were given an opportunity to comment on the proposed changes prior to submittal to the TCEQ.
3. SWMP Updates Required by the TCEQ.
- a. The TCEQ may require changes to the SWMP through a permit amendment or modification as needed to:
 - i. address impacts on receiving water quality either caused or contributed to by discharges from the MS4;
 - ii. include more stringent requirements necessary to comply with new state or federal statutory or regulatory requirements;
 - iii. include such other conditions deemed necessary to comply with the goals and requirements of the TWC or the CWA; or
 - iv. incorporate new program elements necessary to continue to meet the MEP standard.
 - b. If the TCEQ requires changes to the SWMP, the changes will be through a permit amendment, which will be conducted in accordance with 30 TAC §305.62. Prior to making any changes to the SWMP, the TCEQ will:
 - i. notify the permittees in writing of the required changes;
 - ii. provide an explanation of the required changes;
 - iii. set forth the time schedule for the permittees to develop these changes; and;
 - iv. allow the permittees an opportunity to propose alternative program changes to meet the objective of the request.

4. **Transfer of Ownership, Operational Authority, or Responsibility for SWMP Implementation.**
 - a. The permittees shall implement the SWMP on all new areas added to their portion of the MS4 (or for areas where they become responsible for implementation of stormwater quality controls) as expeditiously as practicable, but not later than three years from addition of the new areas. Implementation may be accomplished in a phased manner to allow additional time for controls that cannot be implemented immediately.
 - b. *Within 90 days of a transfer of ownership, operational authority, or responsibility for SWMP implementation, the permittees shall have a plan for implementing the SWMP on all affected areas. The plan may include schedules for implementation. Information on all new annexed areas and any resulting updates required to the SWMP shall be included in the annual report.*
5. **Retention of Records.** The permittee shall retain the SWMP and all associated records for at least three years after coverage under this permit terminates.

PART IV. MONITORING AND REPORTING REQUIREMENTS

- A. Storm Event Discharge Monitoring:** Beginning upon permit issuance (unless stated otherwise), the permittees shall implement a Wet Weather Characterization sampling program in accordance with Option 1 or 2; Part IV, Section A.1 and Section A.2.
 1. **Option 1: Representative Monitoring.** The permittees may either conduct representative monitoring as described in this section or conduct rapid bioassessment as described in the next section (A.2). To characterize the quality of stormwater discharges from the MS4 monitoring shall be collected from representative outfalls, internal sampling stations, or instream monitoring locations.
 - a. **Monitoring Requirements and Locations.** During the period beginning upon date of issuance and lasting through date of expiration, the permittees are authorized to discharge from the MS4 subject to the following requirements.
 - b. **Pollutants.** The permittees shall analyze each collected monitoring sample for the following parameters, and shall report the daily maximum concentration in milligrams per liter (mg/L) except as indicated:

<u>Parameters</u>	<u>Daily Maximum, mg/L</u>	<u>Frequency</u>	<u>Sample Type</u>
Biochemical Oxygen Demand, 5-day	Report	2/Season (*1)	Composite
Chemical Oxygen Demand (COD)	Report	2/Season (*1)	Composite
Oil and Grease	Report	2/Season (*1)	Grab
Total Suspended Solids (TSS)	Report	2/Season (*1)	Composite
Total Dissolved Solids (TDS)	Report	2/Season (*1)	Composite
Total Nitrogen	Report	2/Season (*1)	Composite
Total Kjeldahl Nitrogen (TKN)	Report	2/Season (*1)	Composite
Nitrate-Nitrogen	Report	2/Season (*1)	Composite
Ammonia-Nitrogen	Report	2/Season (*1)	Composite
Total Phosphorus	Report	2/Season (*1)	Composite
Dissolved Phosphorus	Report	2/Season (*1)	Composite
Total Cadmium (µg/l)	Report	2/Season (*1)	Composite
Total Chromium (µg/l)	Report	2/Season (*1)	Composite
Total Copper (µg/l)	Report	2/Season (*1)	Composite
Total Cyanide (µg/l)	Report	2/Season (*1)	Grab
Total Lead (µg /l)	Report	2/Season (*1)	Composite
Total Nickel (µg /l)	Report	2/Season (*1)	Composite
Total Zinc (µg /l)	Report	2/Season (*1)	Composite
<i>E. coli</i> (MPN/100 ml) (*2)	Report	2/Season (*1)	Grab
Enterococci (MPN/100 ml) (*2)	Report	2/Season (*1)	Grab
Hardness (as CaCO ₃)	Report	2/Season (*1)	Grab
Temperature (°C)	Report	2/Season (*1)	Grab
Atrazine (µg /l)	Report	2/Season (*1)	Composite

(*1) See Part IV A.5.

(*2) Beginning upon permit issuance and lasting for a period of up to one year, the permittees may substitute sampling for *E. Coli* and *Enterococci* with sampling for fecal coliform. Beginning no later than one year from permit issuance and lasting until permit expiration, sampling for *E. Coli* and *Enterococci* is required.

- c. Monitoring frequency for each pollutant is twice per season (2/season) during each year of permit term unless monitoring under the representative Rapid Bioassessment Monitoring Option (See Part IV, Section A.2.).

The pH shall be monitored twice per season (2/Season) by grab sample, and the permittees shall report the minimum and maximum values in standard units.

Seasonal monitoring periods are:

- i. April 1 through September 3 (wet); and
- ii. October 1 through March 31 (dry);

d. Sample Locations.

- i. Discharge monitoring samples shall be collected at the following locations:

Outfall 001 ("Carmel - Gollihar"), located between Staples Street and Forth Worth Street along the Carmel Parkway ditch, prior to discharge into Corpus Christi Bay;

Outfall 002 ("Rodd Field Road"), located between Saratoga and Wooldridge in a box culvert under Rodd Field Road, prior to discharge into Oso Bay; and

Outfall 003 ("Schanen"), located between Cedar Pass and Yorktown Boulevard, along Schanen ditch, prior to discharge into Oso Creek.

- ii. Alternate representative monitoring locations may be substituted for just cause during the term of the permit.
- iii. Requests for permanent approval of alternate monitoring locations must be made as minor amendment application and must be submitted to the TCEQ's Application Review and Processing Team (MC-148). The application must include the rationale for the requested monitoring station relocation.
- iv. Requests for temporary approval to substitute monitoring locations (because of things such as safety concerns or repairing an outfall) may be made at any time in writing to the TCEQ's Stormwater Team (MC-148). Unless disapproved by the TCEQ, or unless the outfall contains numeric effluent limitations, temporary (i.e., for one year or less) use of an alternate monitoring location may commence 30 days from the date of the request. For outfalls where numeric effluent limitations have been established, and for permanent changes to locations, the permit must be modified prior to substitution of alternate monitoring locations.

2. **Option 2: Representative Rapid Bioassessment Monitoring.** The permittees have the option of developing and implementing a rapid bioassessment monitoring program.

- a. If the permittees implement a rapid bioassessment monitoring program, they shall submit the rapid bioassessment monitoring program to the TCEQ Stormwater Team (MC-148) for approval no later than one year from the effective date of this permit. The proposal must include an appropriate bioassessment monitoring protocol (e.g., based on EPA published protocol) and the permittees shall provide written notification to the TCEQ's Stormwater Team at least 14 days prior to commencing a rapid bioassessment monitoring program.
- b. The permittees may implement the alternate rapid bioassessment program,

unless it is contacted in writing by the TCEQ within 60 days of the date the written notification was provided to the TCEQ.

- c. The permittees shall obtain all necessary aquatic wildlife permits from appropriate State or Federal agencies.
 - d. Monitoring of the MS4 must be conducted as described in Part IV, Section A.1 of this permit, except that monitoring for Years Two, Three, and Five are no longer required. All other requirements of Part IV, Section A of this permit remain unchanged.
 - e. An alternate rapid bioassessment monitoring program must include requirements for the permittees to monitor:
 - i. a station in at least two water bodies receiving stormwater discharges from the MS4 and a reference station located within the same ecological region as the MS4, that does not receive discharges from the MS4;
 - ii. each monitoring station at least twice per year, with monitoring conducted at essentially the same time periods each year; and
 - iii. the reference station within a day or two each time a station located in the receiving waters of the MS4 is monitored.
3. Storm Event Data. For sampling conducted for Part IV, Section A.1 of this permit and any additional sampling conducted for Part IV, Section A.4., quantitative data shall be collected to estimate pollutant loadings and event mean concentrations for each parameter sampled. In addition to the parameters listed in Part IV, Section A.1 of this permit, the permittees shall maintain records of the storm events which generated the sampled runoff. The records must include:
- a. date and duration (in hours);
 - b. rainfall measurements or estimates (in inches);
 - c. the duration (in hours) between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and
 - d. an estimate of the total volume (in gallons) of the discharge sampled.
4. Seasonal Pollutant Loadings and Event Mean Concentrations. All necessary sampling data must be collected to provide estimates for each of the selected monitoring locations (Outfalls 001, Outfall 002, and Outfall 003) in this permit of seasonal pollutant loadings and event mean concentrations for a representative storm event for the parameters listed in Part IV, Section A.1 of this permit. This information may be estimated from the representative monitoring locations and must take into consideration land uses and drainage areas for the outfall. The estimates of seasonal loadings and event mean concentrations must be included in the Annual Report for Reporting Year 4 of this permit term.

5. **Sample Type, Collection, and Analysis.** Requirements a. – c. below apply only to samples collected for Part IV, Sections A.1 or A.4 of this permit.
 - a. For discharges from holding ponds or other impoundments with a retention period greater than 24 hours, (estimated by dividing the volume of the detention pond by the estimated volume of water discharged during the 24 hours previous to the time that the sample is collected) a minimum of one grab sample must be taken.
 - b. Grab samples taken during the first two hours of discharge shall be used for the analyses (if required) of pH, temperature, hardness, cyanide, oil & grease, *E. coli*, and Enterococci. For all other parameters, data must be reported for flow-weighted composite samples of the entire event or, at a minimum, the first three hours of discharge.
 - c. Samples of a discharge from the outfalls listed in Part IV, Section A.1 of this permit must be the result of a storm event that is greater than 0.1 inch and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Composite samples may be taken:
 - i. with a continuous sampler; or
 - ii. by combining a minimum of three sample aliquots taken:
 - A) in each hour of discharge for the entire discharge; or
 - B) for the first three hours of the discharge, with each aliquot being separated by at least fifteen minutes.
 - d. Samples of a discharge from the outfalls listed in Part IV, Section A.1 of this permit do not have to be taken if the preceding 72-hour storm event did not result in a measurable discharge. The required 72-hour storm event interval is also waived if the permittees document that less than a 72-hour interval is representative for local storm events during the season when sampling is being conducted.
6. **Temporary Suspension and Waivers.**
 - a. Requirements to conduct representative monitoring as described in Part IV, Section A.1.a. within a prescribed monitoring period may be temporarily suspended for adverse weather conditions. Adverse weather conditions are conditions that are either dangerous to personnel (for example high wind, excessive lightning) or weather conditions that prohibit access to a discharge (for example flooding, freezing conditions, extended period of drought). Adverse weather conditions that result in the temporary suspension of a permit requirement to conduct seasonal monitoring must be documented and included as part of the Annual Report. Documentation shall include the date, time, names of personnel that witnessed the adverse condition, and the nature of the adverse condition.

- b. When seasonal monitoring is temporarily suspended, that monitoring must be conducted in the same season of the following year, in addition to any monitoring required for that season. If the temporarily suspended monitoring requirement cannot be fulfilled during the same season of the following year, then it is permanently waived.

B. Floatables Monitoring

The permittees shall maintain two locations where floatable material can be removed before the stormwater is discharged to or from the MS4. Floatable material shall be collected at the frequency necessary for maintenance of the removal devices, but not less than twice per year. The amount of material collected shall be estimated by weight, volume, or by other practical means. Results shall be included in the Annual Report required in this permit.

C. Annual System-Wide Report

1. Each permittee shall contribute to the preparation of an annual system-wide report to be submitted to the Stormwater Team, MC-148, P.O. Box 13087, Austin, Texas, 78711-3087 no later March 1 of each year. The report must cover the previous reporting year as defined as in Part VI E of this permit.
2. The annual report must contain the following sections or chapters to describe the status of implementing the SWMP, or must cross-reference the items in this list so that the following topics may be easily located in the order provided in Part III, Section B.2. The report must be provided in either the following format or a format approved in writing by the Stormwater Team:
 - a. MS4 Maintenance Activities
 - (1) Structural Controls
 - (2) Floatables
 - (3) Roadways
 - b. Post-Construction Stormwater Control Measures
 - (1) Areas of New Development and Significant Redevelopment, including the status of complying with new requirements
 - (2) Evaluation of the existing SWMP to ensure implementation and enforcement of a regulatory mechanism
 - (3) Flood Control Projects
 - c. Illicit Discharge Detection and Elimination
 - (1) Illicit and Allowable Discharges
 - (2) Detection and Elimination of Illicit Discharges, including the status of complying with new requirements
 - (3) Evaluate and update the list of priority areas
 - (4) Overflows and Infiltration

- (5) Household Hazardous Waste and Used Motor Vehicle Fluids
 - (6) MS4 Screening and Illicit Discharge Inspections
 - (7) NPDES and TPDES Permittee List
 - (8) MS4 Map, including the status of complying with new requirements
 - (9) Spill Prevention and Response
- d. Pollution Prevention/Good Housekeeping for Municipal Operations
 - (1) Pollution Prevention/Good Housekeeping Program, including the status of complying with new requirements
 - (2) Structural Control Maintenance
 - (3) Waste Handling
 - (4) Pesticide, Herbicide, and Fertilizer Application
 - (5) List of Municipal Facilities
- e. Industrial & High-Risk Runoff
 - (1) Priorities and Procedures for Inspections and Implementing Control Measures
 - (2) Industrial and High-Risk Monitoring Program (alternatively, this may be referenced in the Monitoring section of the annual report)
- f. Construction Site Stormwater Runoff
 - (1) Requirements for Structural and Non-Structural BMPs
 - (2) Inspection of Construction Sites and Enforcement Requirements
 - (3) Education and Training for Construction Site Operators;
 - (4) Notification of Requirements to Construction Site Operators
 - (5) List of Construction Sites
 - (6) Status of complying with new requirements (e.g., site plan review of projects that are one or more acres in size)
- g. Public Education and Outreach/Public Involvement and Participation
 - (1) Public Education, including the status of complying with new requirements
 - (2) Public Involvement and Participation, including the status of complying with new conditions
 - (3) Evaluation of the effectiveness of this MCM
- h. Monitoring, Evaluation and Reporting
 - (1) Dry Weather Screening Program
 - (2) Wet Weather Screening Program
 - (3) Industrial and High-Risk Runoff Monitoring Program
 - (4) Floatables Monitoring
- 3. For each program element listed above, the permittees shall include the following separate sections, with an overview for the entire MS4:
 - a. For shared programs, a description of the portion of the current program that

- the permittee has implemented for each SWMP element;
 - b. the status of implementing the SWMP (status of compliance with any schedules established under this permit);
 - c. any proposed changes to the SWMP for the next reporting year; and
 - d. a summary describing the number and nature of enforcement actions and inspections, where applicable.
4. The report must include the following appendices after the program/MCM descriptions:
- a. identification of any water quality improvements, degradations, and progress toward any measurable goals or measured reduction in pollutants;
 - b. annual expenditures for the reporting period, with a breakdown for the major elements of the SWMP,
 - c. the proposed budget for the upcoming reporting year;
 - d. revisions, if necessary, to the assessments of controls and the fiscal analysis reported in the permit application or the most recent annual report;
 - e. a summary of the number of NPDES and TPDES notices of intent received for each general permit and the number of site notices received from construction site operators seeking coverage for stormwater discharges,
 - f. the number of inspections conducted at industrial and construction sites; and
 - g. representative monitoring data and a summary of any additional data that was collected during the reporting year and the status of complying with the new SWMP elements in Part III, Section B of the permit.
5. The report must also include the following:
- a. A summary of any activities taken to address the discharge to impaired waterbodies, including any sampling results and a summary of the BMPs currently used by the permittee(s) to address the pollutant of concern. The permittee should also document progress toward reducing the discharge of the pollutant of concern to impaired waterbodies as the reporting requirements included in Part II. (Impaired Water Bodies and Total Maximum Daily Load Requirements);
 - b. A description and schedule for the implementation of any additional BMP's that may be necessary, based on monitoring results, to ensure compliance with applicable TMDLs and implementations plans.

6. Preparation and submittal of a system-wide annual report shall be coordinated by the City of Corpus Christi. The report shall indicate which, if any, permittees have failed to provide required information on the portions of the MS4 for which they are responsible to the City of Corpus Christi no later than 45 days prior to report due date. Joint responsibility for report submission shall be limited to participation in preparation of the overview for the entire system and inclusion of the identity of any permittee who failed to provide input to the annual report.

Each individual permittee shall be individually responsible for content of the report relating to the portions of the MS4 for which they are responsible and for failure to provide information for the system-wide annual report in a timely manner. Each permittee shall sign and certify the annual report in accordance with Part V, Section B.8 of this permit and include a statement or resolution that the permittee's governing body or agency (or delegated representative) has reviewed or been apprised of the content in the annual report.

E. Certification and Signature of Reports

All reports required by the permit and other information requested by the TCEQ shall be signed and certified in accordance with Part V, Section B.8 of this permit.

F. Reporting, Where and When to Submit

1. Representative monitoring results (Part IV, Section A.1) obtained during the reporting period running from October 1 to September 30 must be submitted online using the NetDMR reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. Permittees that are issued an electronic reporting waiver shall submit analytical results to the TCEQ Enforcement Division (MC-224) on an approved DMR form (EPA No. 3320-1). Effluent sampling shall be conducted in accordance with the monitoring frequencies specified in this permit. Monitoring results must be signed and certified as required by Part IV, Section D. along with the Annual Report required by Part IV, Section C. of this permit.

Effective December 21, 2025, annual reports must be submitted using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

Separate reporting is required for each monitoring period (season) specified in Part IV.A.1.c.

2. Signed copies of the annual report required by Part IV, Section C, and all other reports required by this permit, shall be submitted to the TCEQ's Wastewater Permitting Section, Stormwater Team (MC-148) and the TCEQ Region 14 Office.

PART V: DEFINITIONS AND STANDARD PERMIT CONDITIONS

A. Definitions:

As required by 30 TAC Chapter 305, certain regulations appear as standard conditions in waste discharge permits. 30 TAC §§ 305.121 - 305.129, Subchapter F, "Permit Characteristics and Conditions" as promulgated under the TWC §§ 5.103 and 5.105, and the Texas Health and Safety Code §§ 361.017 and 361.024(a), establish the characteristics and standards for discharge permits, including sewage sludge, and those sections of 40 CFR Part 122 adopted by reference by the Commission. The following text includes these conditions and incorporates them into this permit.

All definitions contained in Section 26.001 of the TWC and 30 TAC Chapter 305 shall apply to this permit and are incorporated herein by reference. Unless otherwise specified, additional definitions of words or phrases used in this permit are as follows:

1. **Best Management Practices (BMPs)** - schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution in discharges that reach waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control facility site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.
2. **CWA** - the Clean Water Act or Federal Water Pollution Control Act Amendments of 1972) Pub. L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. (6-483 and Pub. L. 97-117, 33 U.S.C. 1251 et. seq.).
3. **Co-permittee** - one of several entities authorized under a single individual permit that is only responsible for permit conditions relating to the discharge for which it is the operator.
4. **Daily maximum concentration** - the maximum concentration measured on a single day, by composite sample unless otherwise specified elsewhere in this permit, within a period of one calendar month.
5. **Discharge** - unless indicated otherwise, refers to discharges from the MS4.
6. **Flow-weighted composite sample** - a composite sample consisting of a mixture of aliquots collected at either:
 - a. a constant time interval, where the volume of each aliquot is proportional to the flow rate of the discharge; or
 - b. a constant volume at varying time intervals, proportional to the discharge flow rate.
7. **Grab sample** - an individual sample collected in less than 15 minutes.
8. **Illicit connection** - any man-made conveyance connecting an illicit discharge

directly to a municipal separate storm sewer.

9. **Illicit discharge** - any discharge to a municipal separate storm sewer that is not composed entirely of stormwater except discharges pursuant to a NPDES or TPDES permit (other than the NPDES or TPDES permit for certain discharges from the municipal separate storm sewer), discharges resulting from fire-fighting activities, and other allowable non-stormwater discharges described in Part III, Section B.2.c. of this permit.
10. **Landfill** - an area of land or an excavation in which wastes are placed for permanent disposal, and which is not a land application unit, surface impoundment, injection well, or waste pile.
11. **Large or medium municipal separate storm sewer system (MS4)** - all MS4s that are either:
 - a. located in an incorporated place (city) with a population of 100,000 or more as determined by the 1990 Decennial Census by the Bureau of Census (these cities are listed in Appendices F and G of 40 CFR Part 122); or
 - b. located in the counties with unincorporated urbanized populations of 100,000 or more, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties (these counties are listed in Appendices H and I of 40 CFR Part 122); or
 - c. owned or operated by a municipality other than those described in paragraph (a) or (b) and that are designated by the EPA as part of the large or medium municipal separate storm sewer system.
12. **Major Outfall** - an outfall that discharges from a single pipe with an inside diameter of 36 inches or more or its equivalent (discharge from a single conveyance other than circular pipe which is associated with a drainage area of more than 50 acres); or for municipal separate storm sewers that receive stormwater from lands zoned for industrial activity (based on comprehensive zoning plans or the equivalent), an outfall that discharges from a single pipe with an inside diameter of 12 inches or more or from its equivalent (discharge from other than a circular pipe associated with a drainage area of 2 acres or more).
13. **Maximum Extent Practicable (MEP)** - the technology-based discharge standard for MS4 established by Section 402(p) of the federal CWA.
14. **Municipal separate storm sewer system (MS4)** - a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):
 - (i) owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State Law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State Law such as a sewer district,

flood control district or drainage district, or similar entity, or an Indian Tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;

- (ii) designed or used for collecting or conveying stormwater;
 - (iii) which is not a combined sewer; and
 - (iv) which is not part of a Publicly Owned Treatment Works (POTW) as defined at 30 TAC § 305.2.
- 15. **Outfall** – for the purpose of this permit, an outfall is a point or location where an MS4 discharges to waters of the U.S., and does not include a conveyance that connects two municipal separate storm sewers.
 - 16. **Permittee** - any entity authorized by this permit to discharge to surface water in the state.
 - 17. **Point source** – for the purpose of this permit, any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.
 - 18. **Storm sewer** - unless otherwise indicated, a municipal separate storm sewer (MS4).
 - 19. **Stormwater** - stormwater runoff, snow melt runoff, and surface runoff and drainage.
 - 20. **Stormwater discharges associated with industrial activity** - defined in TPDES General Permit No. TXR050000, Industrial Stormwater Multi-Sector General Permit (MSGP).
 - 21. **Stormwater Management Program, or SWMP** - a comprehensive program to manage the quality of discharges from the municipal separate storm sewer system. For the purposes of this permit, the SWMP is considered a single document, but may actually consist of separate components (e.g. "chapters") for each permittee.
 - 22. **Structural Control (or Practice)** - A pollution prevention practice that requires the construction of a device, or the use of a device, to capture or prevent pollution in stormwater runoff. Structural controls and practices may include but are not limited to: silt fences, earthen dikes, drainage swales, sediment traps, check dams, subsurface drains, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins.
 - 23. **Surface Water in the State** - Lakes, bays, ponds, impounding reservoirs, springs,

rivers, streams, creeks, estuaries, wetlands, marshes, inlets, canals, the Gulf of Mexico inside the territorial limits of the state (from the mean high water mark (MHW) out 10.36 miles into the Gulf), and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or non-navigable, and including the beds and banks of all water-courses and bodies of surface water, that are wholly or partially inside or bordering the state or subject to the jurisdiction of the state; except that waters in treatment systems which are authorized by state or federal law, regulation, or permit, and which are created for the purpose of waste treatment are not considered to be water in the state.

24. Waters of the United States - For the purposes of this permit, waters of the United States or waters of the U.S. means:

- a. all waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- b. all interstate waters, including interstate wetlands;
- c. all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
 - 1) which are or could be used by interstate or foreign travelers for recreational or other purposes;
 - 2) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - 3) which are used or could be used for industrial purposes by industries in interstate commerce;
- d. all impoundments of waters otherwise defined as waters of the United States under this definition;
- e. tributaries of waters identified in paragraphs (a) through (d) of this definition;
- f. the territorial sea; and
- g. wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA are not waters of the United States. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States. Waters of the United States do not

include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with the EPA.

B. Monitoring And Reporting Requirements

1. Self-Reporting

- a. Monitoring results shall be provided at the intervals specified in the permit.
- b. As provided by state law, the permittees are subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the CWA, the Chapters 26, 27, and 28 of the TWC, and Texas Health and Safety Code, Chapter 361, including but not limited to knowingly making any false statement, representation, or certification on any report, record, or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, or falsifying, tampering with or knowingly rendering inaccurate any monitoring device or method required by this permit or violating any other requirement imposed by state or federal regulations.

2. Test Procedures

- a. Unless otherwise specified in this permit, analytical procedures shall comply with procedures specified in 30 TAC §§ 319.11 - 319.12. Measurements, tests and calculations shall be accurately accomplished in a representative manner.
- b. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification.
- c. Analysis must be performed using sufficiently sensitive methods for analysis that comply with the rules located in 40 CFR §136.1(c) and 40 CFR §122.44(i)(I)(iv).

3. Records of Results

- a. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.
- b. Monitoring and reporting records, including the SWMP, requests for SWMP changes, reports, strip charts and records of calibration and maintenance, copies of all records required by this permit, and records of all data used to complete the application for this permit shall be retained by the permittees or shall be readily available for review by a TCEQ representative for a period of three years from the date of the original record or sample, measurement, report, application, or the latest revisions, whichever is later. This period shall be extended at the request of the Executive Director.

- c. Records of monitoring activities shall include the following:
 - 1) date, time and place of sample or measurement;
 - 2) identity of individual who collected the sample or made the measurement.
 - 3) date and time of analysis;
 - 4) identity of the individual and laboratory who performed the analysis;
 - 5) the technique or method of analysis; and
 - 6) the results of the analysis or measurement and quality assurance/quality control records.
- d. The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that maybe instituted against a permittee.

4. Additional Monitoring by Permittees

If the permittees performs additional monitoring for any parameter at the outfalls included in Part IV of this permit using approved analytical methods as specified above, then all results of such monitoring shall be included in the calculation and reporting of the values submitted in the annual or other reports describing these discharges. Increased frequency of sampling shall be indicated on the reports.

5. Calibration of Instruments

All automatic flow measuring, flow recording devices or totalizing meters for measuring flows shall be accurately calibrated by a trained person prior to use and as often as necessary to ensure accuracy, but not less often than annually. Such person shall verify in writing that the device is operating properly and giving accurate results. Copies of the verification shall be retained by the permittees and shall be readily available for review by a TCEQ representative for a period of three years.

6. Compliance Schedule Reports

If a compliance schedule is included in this permit, reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in the compliance schedule shall be submitted no later than 14 days following each schedule date to the TCEQ Regional Office and to the Enforcement Division (MC-224).

7. Noncompliance Notification

- a. In accordance with 30 TAC § 305.125(9), any noncompliance which may endanger human health or safety, or the environment shall be reported by the permittees to the TCEQ. Report of such information shall be provided orally or

by facsimile transmission (FAX) to the TCEQ Regional Office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittees to the TCEQ Regional Office and to the Enforcement Division (MC-224) within five working days of becoming aware of the noncompliance. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.

- b. Unauthorized discharges of wastewater or any other waste from the MS4 which results from noncompliance with the SWMP shall be reported under Part V, Section B 7.a above.
- c. In addition to 7.a and b above, and if the permit contains numeric limitations, any violation which deviates from a permitted numeric limitation by more than 40% shall be reported by the permittees in writing to the TCEQ Regional Office and to the Enforcement Division (MC-224) within 5 working days of becoming aware of the noncompliance.
- d. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the Enforcement Division (MC-224) as promptly as possible.
- e. Duty to Mitigate

The permittees shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

8. Signatories to Reports

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

C. PERMIT CONDITIONS

1. General

- a. When a permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.
- b. This permit is granted on the basis of the information supplied and representations made by the permittees during action on an application in

accordance with 30 TAC Chapter 50 and the application process in accordance with 30 TAC Chapter 281, and relying upon the accuracy and completeness of that information and those representations in accordance with 30 TAC Chapter 305. After notice in accordance with 30 TAC Chapter 39 and opportunity for a hearing in accordance with 30 TAC §§ 55.21 - 55.31, Subchapter B, "Hearing Requests, Public Comment," this permit may be modified, suspended, or revoked, in whole or in part in accordance with 30 TAC Chapter 305 Subchapter D, during its term for cause; including, but not limited to, the following:

- 1) violation of any terms or conditions of this permit, or
 - 2) obtaining this permit by misrepresentation or failure to disclose fully all relevant facts.
- c. The permittees shall furnish to the Executive Director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending or terminating the permit. The permittees shall also furnish to the Executive Director, upon request, copies of records required to be maintained as a provision of the permit.
2. Compliance
- a. Acceptance of the permit by a permittee to whom it is issued constitutes acknowledgment and agreement that the permittee will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.
 - b. The permittees have a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment, revocation or suspension, or for denial of a permit renewal application or of an application for a permit for another facility.
 - c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
 - d. Before beginning any change in the permitted activity that may result in noncompliance with any permit requirements, authorization from the Commission must be obtained.
 - e. A permit may be amended, suspended and reissued, or revoked for cause in accordance with 30 TAC §§ 305.62 and 305.66 and the TWC § 7.302. The filing of a request by a permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

- f. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under TWC §§7.051 - 7.075 (relating to Administrative Penalties), 7.101 - 7.111 (relating to Civil Penalties), and 7.141 - 7.202 (relating to Criminal Offenses and Penalties) for violations including, but not limited to, negligently or knowingly violating the federal CWA §§ 301, 302, 306, 307, or 308, or any condition or limitation implementing any sections in a permit issued under the CWA § 402, or any requirement imposed in a pretreatment program approved under the CWA §§ 402 (a)(3) or 402 (b)(8).
- 3. Inspections and Entry
 - a. Inspection and entry shall be allowed as prescribed in Chapters 26, 27, and 28 of the TWC, and Texas Health and Safety Code Chapter 361.
 - b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit or other order of the Commission. Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to public health or the environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in TWC § 7.002.
- 4. Permit Amendment or Renewal
 - a. The permittees shall give notice to the Executive Director as soon as possible of any planned revisions to the SWMP that would require amendment of the permit.
 - b. The permittees shall apply for an amendment or renewal at least 180 days prior to expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. Authorization to continue such activity will terminate upon the Commission's denial of the application.
 - c. In accordance with the TWC § 26.029(b), after a public hearing, notice of which shall be given to the permittees, the Commission may require the permittees, from time to time, for good cause, in accordance with applicable laws, to conform to new or additional conditions.

- d. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the CWA for a toxic pollutant which is present in the discharge, and that standard or prohibition is more stringent than a numeric limitation that was established for that pollutant in this permit, then this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition. The permittees shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
5. Permit Transfer
 - a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of a system authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC-148) of the Water Quality Division.
 - b. A permit may be transferred only according to the provisions of 30 TAC § 305.64 (relating to Transfer of Permits) and 30 TAC § 50.133 (relating to Executive Director Action on Application for Transfer).
6. Relationship to Hazardous Waste Activities

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

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

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

D. OPERATIONAL REQUIREMENTS

1. Upon request by the Executive Director, the permittees shall take appropriate samples and provide proper analysis in order to demonstrate compliance with Commission rules.
2. The permittees shall provide a readily accessible sampling point and, where required by the permit, a flow measuring device or other acceptable means by which discharge

flow may be determined, at point sources and outfalls with discharge monitoring requirements.

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

For all written notifications to the Commission required of the permittees by this permit, the permittees shall keep and make available a copy of each such notification under the same conditions as self-monitoring data are required to be kept and made available. Except for applications, effluent data, permits, and other data specified in 30 TAC § 1.5(d), any information submitted pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted in the manner prescribed in the application form or by stamping the words “confidential business information” on each page containing such information. If no claim is made at the time of submission, information may be made available to the public without further notice.

5. Facilities which generate industrial solid waste as defined in 30 TAC § 335.1 shall comply with provisions of 30 TAC Chapter 335, relating to Industrial Solid Waste Management.
6. Proper Operation and Maintenance

The permittees shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by a permittee to achieve compliance with the conditions of this permit and with the requirements of stormwater management programs. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the conditions of the permit.

Revised 3/2016

PART VI: OTHER REQUIREMENTS

- A.** The Executive Director has reviewed this action for consistency with the goals and policies of the Texas Coastal Management Program (CMP) in accordance with the regulations of the General Land office (GLO) and has determined that the action is consistent with the applicable CMP goals and policies.
- B.** Within one year from the date of permit issuance, the permittees shall submit a revised SWMP to the TCEQ Stormwater Team (MC-148) and the TCEQ Enforcement Division (MC-224), that includes all of the requirements listed in Part III, Section B of this permit, including a proposed compliance schedule to meet the deadlines for implementing new requirements listed in Part III, Section C of this permit.
- C.** Test methods utilized shall be sensitive enough to detect the following parameters at the minimum analytical level (MAL) specified below:

<u>POLLUTANTS</u>	<u>MAL (mg/L)</u>
Cadmium, total	0.001
Chromium, total	0.003
Copper, total	0.002
Cyanide, amenable	0.010
Lead, total	0.0005
Nickel, total	0.002
Zinc, total	0.005
Atrazine	0.0005

When an analysis of a discharge sample for any of the parameters listed above indicates no detectable levels above the MAL and the test method detection level is as sensitive as the specified MAL, a value of zero (0) shall be used for that measurement when making calculations for the self-reporting form. This applies to determinations of daily maximum concentration, calculations of loading and daily averages, and other reportable results.

When an analysis of an discharge sample for a parameter indicates no detectable levels and the test method detection level is not as sensitive as the MAL specified in the permit, or an MAL is not specified in the permit for that parameter, the level of detection achieved shall be used for that measurement when making calculations for the self-reporting form. A zero (0) may not be used.

- D.** Monitoring results shall be provided at the intervals specified in the permit.
- E.** For the purposes of this permit, the following definitions apply to this permit term:

Reporting Year – The period beginning October 1 and ending on September 30.

Year One: The period beginning upon date of issuance and lasting until September 30, 2021.

Year Two: The period beginning October 1, 2021, and lasting until September 30, 2022.

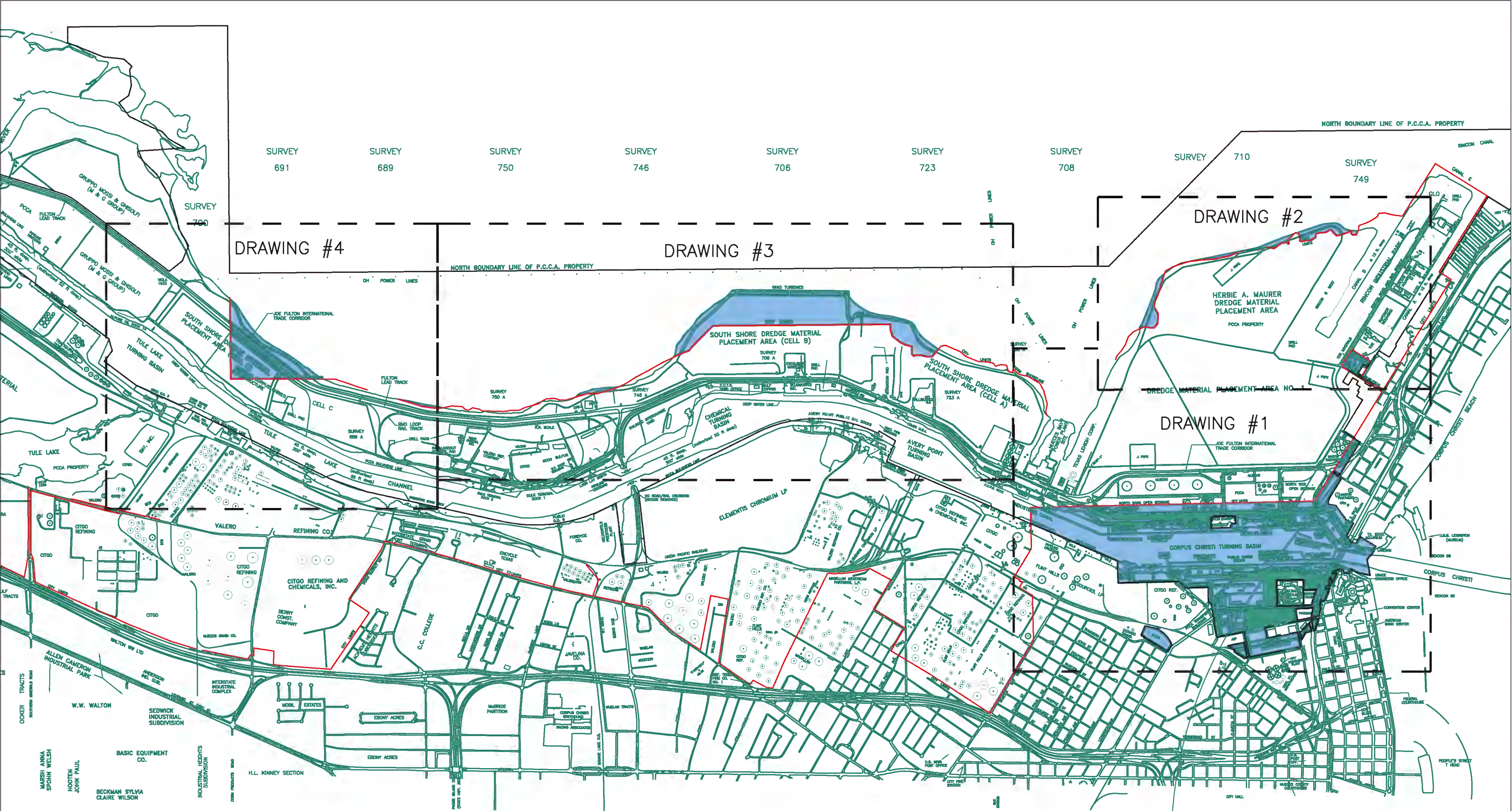
Year Three: The period beginning October 1, 2022, and lasting until September 30, 2023.

Year Four: The period beginning October 1, 2023, and lasting until September 30, 2024.

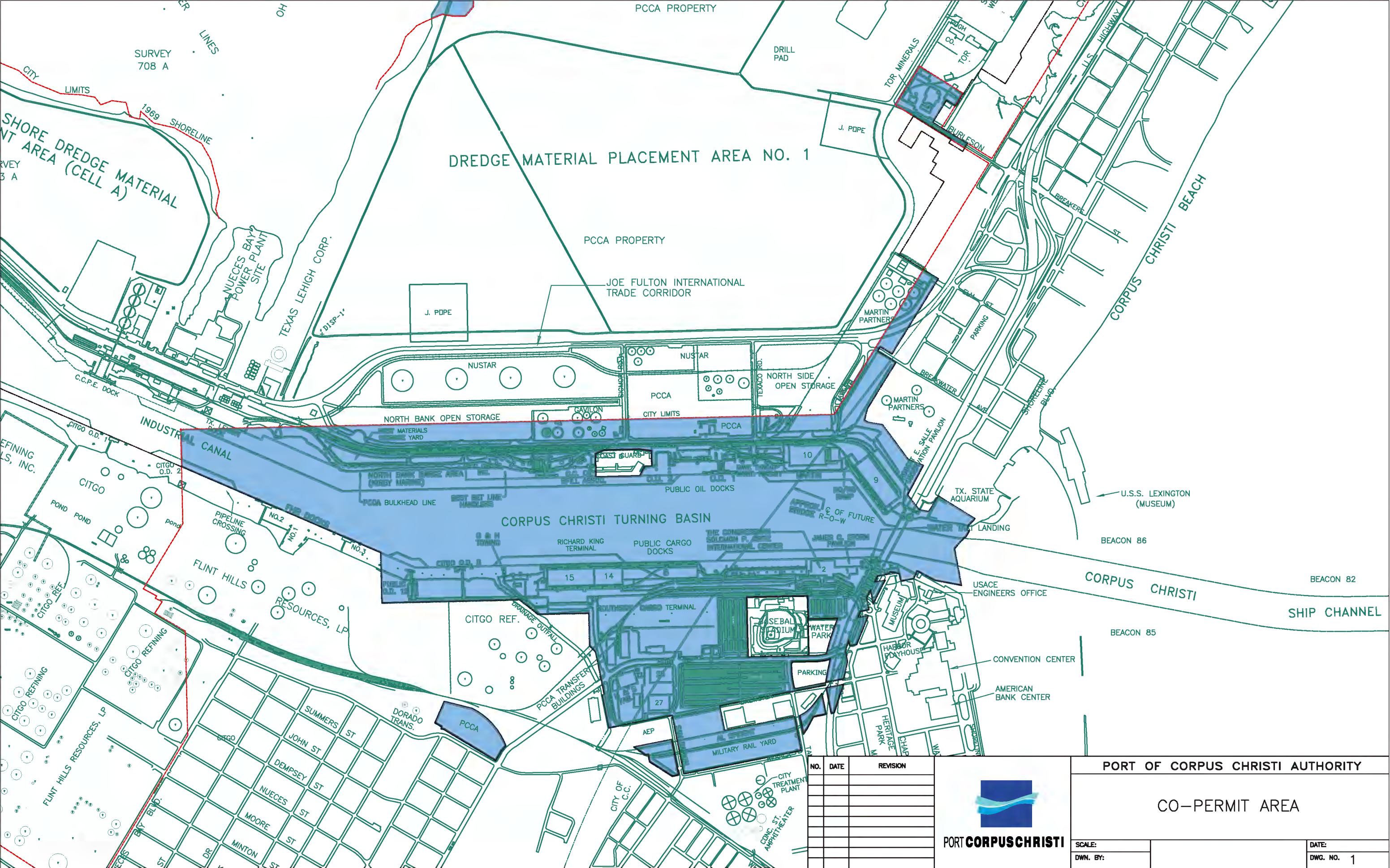
Year Five: The period beginning October 1, 2024, and lasting until September 30, 2025.

- F.** For the purpose of this permit, “ground water infiltration” means uncontaminated ground water that enters an MS4 (including sewer service connection and foundation drains) from the ground through such means as defective pipes, pipe joints, connections, or manholes. This does not include, and is distinguished from, “inflow.” For the purpose of this permit, “inflow” is defined as water that enters the MS4 (including sewer service connections) from sources such as, but not limited to, roof leaders, cellar drains, yard drains, area drains, drains from springs and swampy areas, manhole covers, cross connections between storm sewers and sanitary sewers, catch basins, cooling towers, stormwaters, surface runoff, street wash waters, or drainage.
- G.** Permit coverage may be terminated for a single permittee, in accordance with TCEQ rules, without terminating coverage for other permittees. If a co-permittee applies for its own separate individual permit with the same terms and conditions as the current permit, then a renewal application is required for the separate permit and an application for a new permit or major amendment is not required. If a co-permittee applies for an individual permit along with different permittees, then a major amendment application is required.

APPENDIX B – FIGURE 1 – MS4 AREA



NO. DATE REVISION			PORT OF CORPUS CHRISTI AUTHORITY		
			CO-PERMIT AREA		
			SCALE:		DATE:
			DWN. BY:		DWG. NO.
			DRAWING INDEX		



NO.	DATE	REVISION



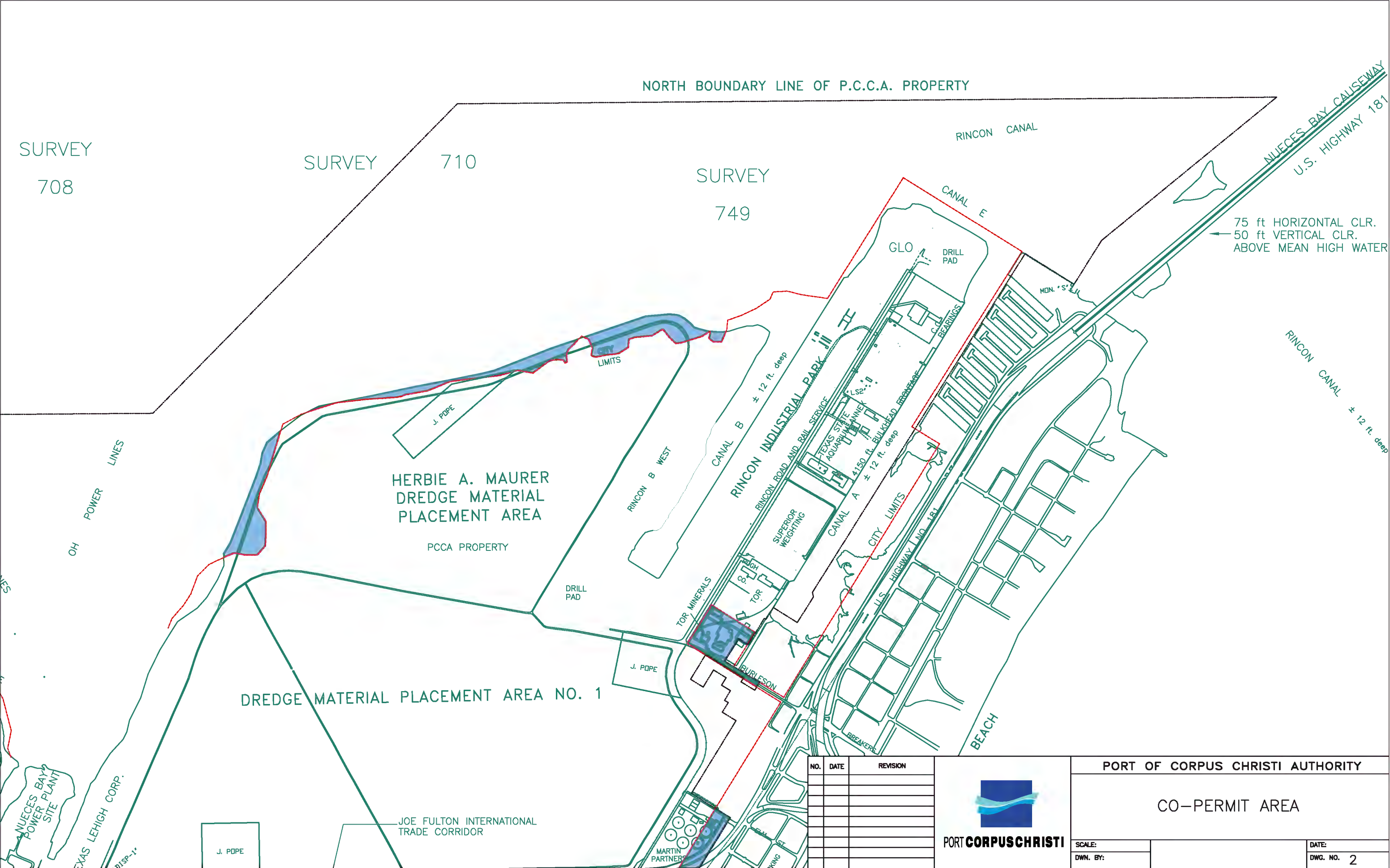
PORT CORPUS CHRISTI

PORT OF CORPUS CHRISTI AUTHORITY

CO-PERMIT AREA

SCALE:
DWN. BY:

DATE:
DWG. NO. 1

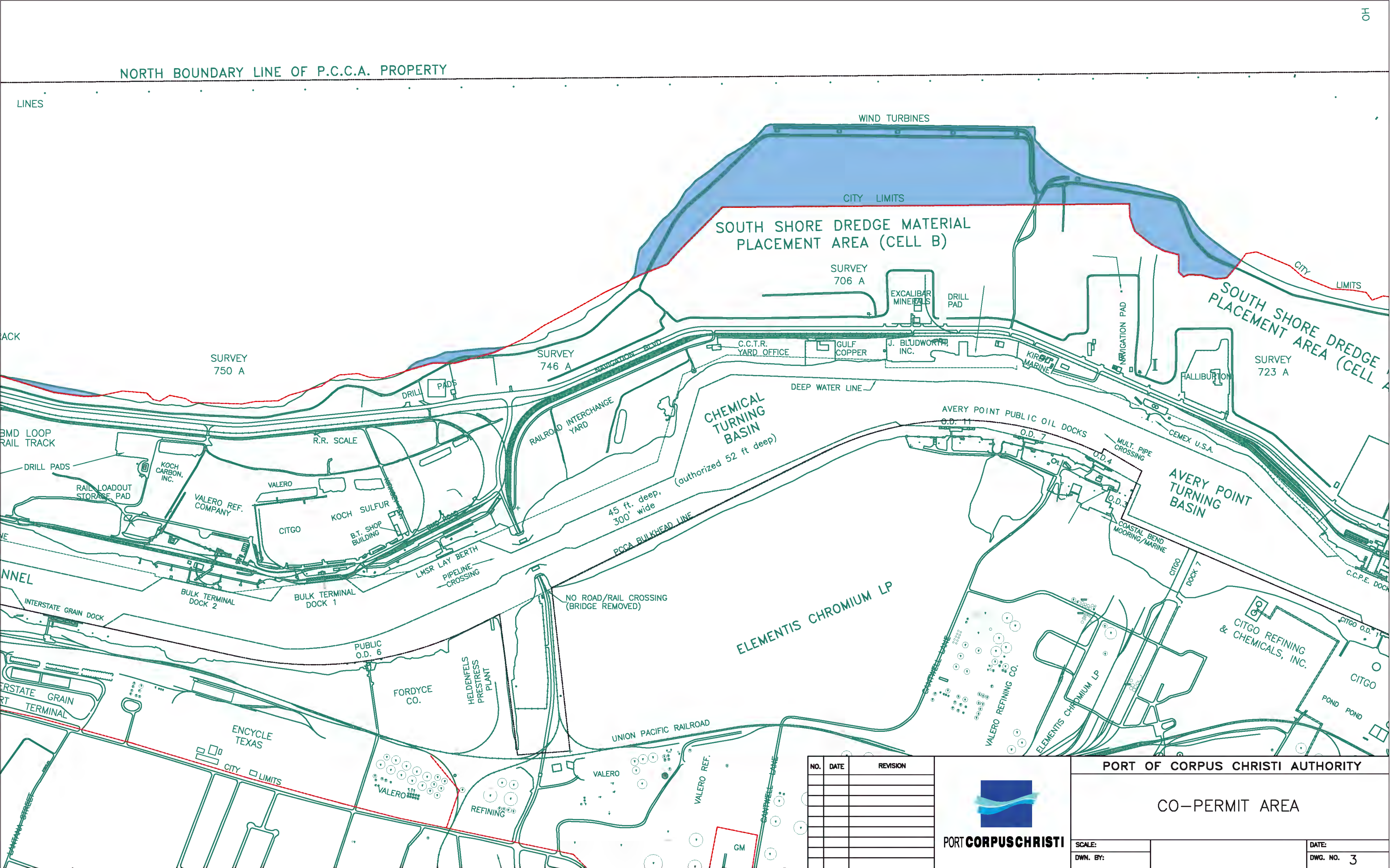


NO.	DATE	REVISION



PORT **CORPUSCHRISTI**

PORT OF CORPUS CHRISTI AUTHORITY		
CO-PERMIT AREA		
SCALE:		DATE:
DWN. BY:		DWG. NO. 2



NO.	DATE	REVISION

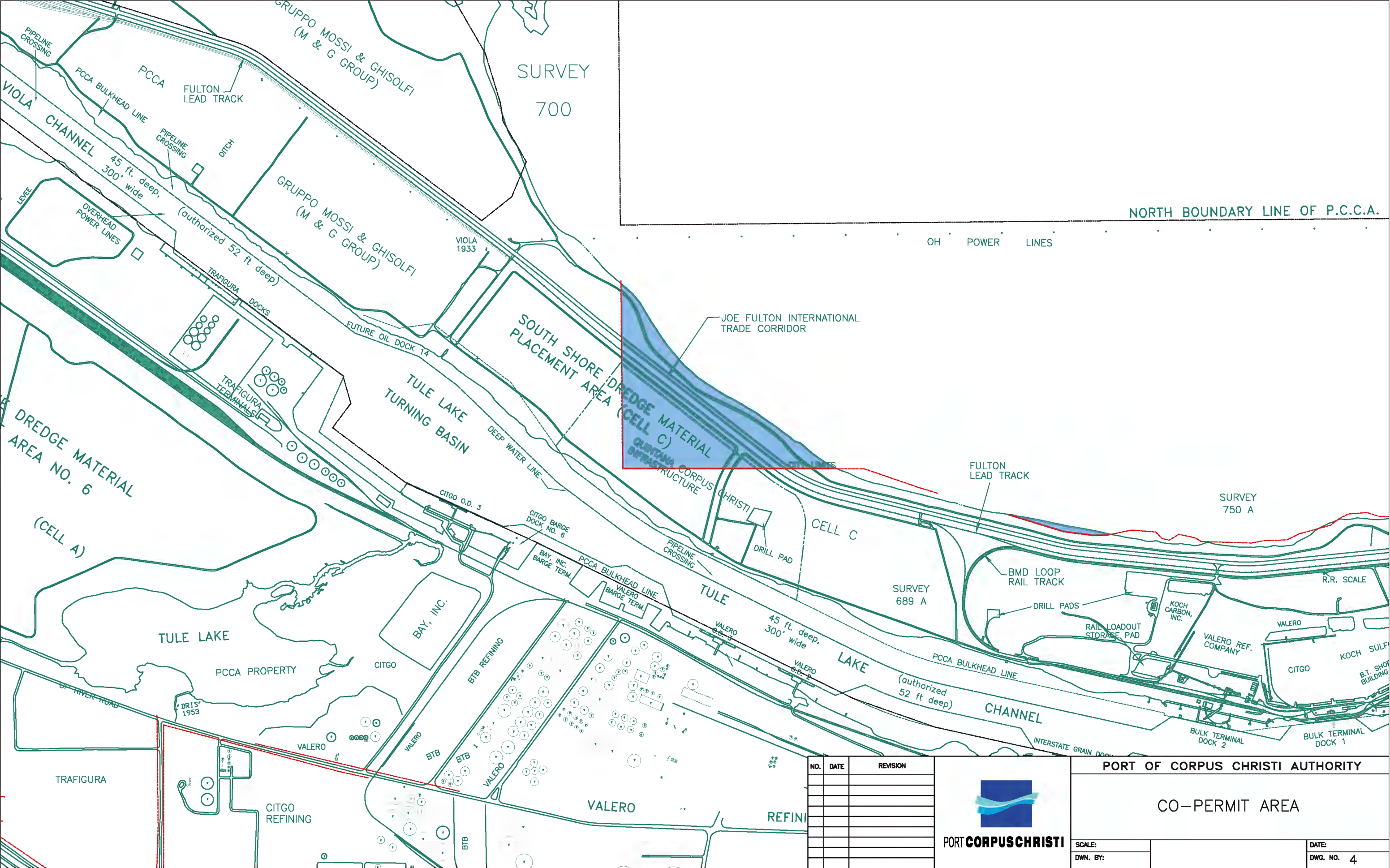


PORT **CORPUSCHRISTI**

PORT OF CORPUS CHRISTI AUTHORITY

CO-PERMIT AREA

SCALE:	DATE:
DWN. BY:	DWG. NO. 3



NO.	DATE	REVISION



PORT **CORPUSCHRISTI**

PORT OF CORPUS CHRISTI AUTHORITY		
CO-PERMIT AREA		
SCALE:	DATE:	
DWN. BY:	DWG. NO. 4	

APPENDIX C – SEPTEMBER 22, 1999 MEMO REGARDING BMP'S

EXHIBIT 2

PORT OF CORPUS CHRISTI AUTHORITY EXECUTIVE DIRECTOR'S MEMORANDUM

TO: All Port Employees, All Port Lessees, And All Persons Operating On Or Using Port Property

RE: Port of Corpus Christi Authority Tariff 1-K § 6, Item No. 654, Best Management Practices to Prevent Pollution of Harbor Waterways from Storm Water and Other Sources

Pursuant to the Port of Corpus Christi Authority (PCCA)'s Tariff 1-K § 6, Item No. 654, every precaution shall be taken to prevent pollution of harbor waterways through storm water and other sources. Accordingly, all PCCA employees, all lessees of PCCA property, and all persons who operate on or using PCCA property shall observe the following Best Management Practices (BMPs):

1. Loading/Unloading Vessels.

During the loading or unloading of vessels at any public or private port facility, every possible precaution should be taken to prevent pollution. At port facilities designated as oil docks, hoses shall be drained and plugged after use and pipelines on the dock and vessel pipes shall be flanged when not in use. At port facilities designated for bulk solids handling, ship-to-dock drapes or other suitable devices shall be used when possible and practicable. The dockman and/or vessel personnel shall notify the Harbormaster immediately of any pollution either on the dock or vessel or spillage into the waterway.

2. Pollution Prevention Plans.

The PCCA, its lessees, and all persons who operate on or use PCCA property shall have facility, or activity, specific pollution prevention plans to avoid possible storm water contamination. Such facility, or activity, specific pollution prevention plans shall include: prevention of illicit connections and discharges, appropriate handling of used oil and filters, used antifreeze, stockpiles of materials, underground and above ground storage tanks, other solid or hazardous waste management practices, spent solvent management, proper disposal of spent abrasives, spill prevention and control, spill response, secondary containment, drum storage and maintenance, general good housekeeping practices, and used battery management.

3. Fencing and Security.

The PCCA, its lessees, and all persons who operate on or use PCCA property shall ensure their operations are secure, including, where necessary, the use of fences in order to restrict access to third parties and to prevent illegal dumping of pollutants.

4. Fill Materials Related to Construction.

No fill materials will be brought on PCCA property without appropriate testing and documentation establishing the source of such materials and confirming the absence of contamination of such materials.

5. Connections to Sanitary Sewers.

The PCCA, its lessees, and all persons who operate on or use PCCA property shall install or connect into sanitary sewers tied to facilities operated by the City of Corpus Christi or the PCCA. Where such sanitary sewers are available, discharges to drain fields and seepage to the municipal storm sewer system shall be prohibited.

6. Sweeping.

The PCCA, its lessees, and all persons who operate on or use PCCA property shall sweep docks, cargo sheds, paved access ways, curbs and gutters, roads, and parking areas to minimize pollution which may come in contact with storm water.

7. Spill Response.

The PCCA, its lessees, and all persons who operate on or use PCCA property shall be appropriately trained in the use of initial response activities and the use of spill response contractors.

8. Mowing and Drainage Maintenance.

The PCCA, its lessees, and all persons who operate on or use PCCA property shall maintain grass on drainage ways, where practical, and shall prevent erosion by proper design of slopes and gradients. This will include regular mowing of vegetation or clean out of dirt and debris in concrete drains.

9. Waste Management Practices.

The PCCA, its lessees, and all persons who operate on or use PCCA property shall control litter, prevent illegal dumping or spillage, and properly dispose of any drums and drum contents. Such persons are encouraged to use waste minimization procedures, where possible, to recycle, where possible, and to train

and educate employees appropriately in such management practices, including solid and hazardous waste management and disposal.

10. Consolidation of Maintenance of Port Activities.

Where possible, PCCA maintenance functions shall be centralized under the operations/maintenance warehouse.

11. Consolidation of Users' Facilities.

Where possible, stevedores or any other users of PCCA property shall be transferred to, or confine operations to, facilities which have a hard, impervious surface and which are easier to maintain and inspect. Persons leasing or operating on PCCA property shall conduct all vehicular or equipment maintenance activities in a centralized location designated by the PCCA.

12. Construction Compliance with Storm Water Regulations Promulgated by the Environmental Protection Agency (EPA).

For construction activities that will involve disturbing more than one acre of land, strict compliance with the EPA storm water regulations shall be required. Where construction activities will disturb less than one acre, case specific requirements shall be in place for sediment and/or pollution control.

13. Port Planning and Development Related to Construction Activities.

The PCCA periodically will evaluate the siting and location of new facilities or redevelopment and use of existing space by the PCCA, its lessees, and persons operating on or using PCCA property. Such review shall ensure that structural and nonstructural sources of storm water contamination are adequately accounted for in design, collection, and control practices. Such designations shall encourage, at a minimum, removal of solids and floatable materials.

14. Advisories/Public Education.

The PCCA, its lessees, and all persons who operate on or use PCCA property shall be provided with a memorandum, which advises such persons of the PCCA's BMPs, as well as the availability of current storm water regulations as promulgated by the EPA, and of their need to comply with these BMPs and EPA storm water regulations. Periodically, such memorandum shall be updated.

15. Inspections.

The PCCA shall designate an individual to conduct compliance inspections of PCCA operations on a periodic basis. Such inspections shall be conducted for the sole purpose of ensuring that PCCA operations are in compliance with the storm

water regulations of any finally issued National Pollutant Discharge Elimination System (NPDES) permit. Storm water Pollution Prevention Plans and related records, if any, for the specific facility or activity being inspected shall be made available at the time the inspection is conducted. PCCA lessees and all persons who operate on or use PCCA property shall conduct inspections, as required by regulations, on a periodic basis. These inspections shall be conducted to ensure PCCA lessees and all persons who operate on or use PCCA property are in compliance with the storm water regulations of any finally issued NPDES permit.

DATED:

10-5-99

By:

John P. LaRue

Executive Director

Port of Corpus Christi Authority

APPENDIX D – INTERLOCAL COOPERATION AGREEMENT

**INTERLOCAL COOPERATION AGREEMENT
BETWEEN
THE CITY OF CORPUS CHRISTI & THE PORT OF CORPUS CHRISTI AUTHORITY
CONCERNING THE
CITY OF CORPUS CHRISTI MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)
TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM (TPDES)
PERMIT No. WQ0004200000**

This Agreement is entered into the 13 day of Jan, ²⁰⁰⁹~~2008~~, by and between THE CITY OF CORPUS CHRISTI, a Texas home-rule municipal corporation ("City") and political subdivision of the state, and PORT OF CORPUS CHRISTI AUTHORITY OF NUECES COUNTY, TEXAS ("PORT"), sometimes collectively referred to herein as the "Parties," "co-permittees," or "permittees."

WHEREAS, on August 11, 2008, the Texas Commission on Environmental Quality (TCEQ) issued TPDES Permit No. WQ0004200000 (the "Permit"); and

WHEREAS, the Permit contemplates that the co-permittees will enter into an agreement that sets forth their respective rights, responsibilities, and obligations as co-permittees, the subsequent operation of their respective MS4, and the implementation of their respective storm water management programs pursuant to said TPDES Permit; and

WHEREAS, the Interlocal Cooperation Act, Chapter 791, Texas Government Code authorizes local governments to contract to the greatest possible extent, with one another and with agencies of the state; and

WHEREAS, the support contemplated by this agreement is of mutual interest and benefit to PORT and City; it will further the Permit objectives, in a manner consistent with their status as co-permittees;

NOW, THEREFORE, the Parties agree as follows:

1. **RESPONSIBILITIES OF THE PERMITTEES.** Each permittee is individually responsible for:
 - a. Compliance with permit conditions relating to discharges from portions of the MS4 for which they are the operator;
 - b. Storm Water Management Program (SWMP) implementation on portions of the MS4 for which they are operator;
 - c. Compliance with annual reporting requirements;
 - d. Collection of representative wet weather monitoring data, according to such agreements established between Permittees; and
 - e. A plan of action to assume responsibility for implementation of the storm water management and monitoring programs on their portions of the MS4 should inter-jurisdictional agreements allocating responsibility between Permittees be dissolved or in default.
2. **SHARED RESPONSIBILITIES.**
 - a. **Spill Prevention and Response.** If either the City or PORT becomes aware of a spill, disposal, leak, discharge, or other release of oil, pollutant or any hazardous substance in an amount that may be harmful, and that may flow, leak, enter, or otherwise be introduced, or threaten to be released, into the MS4 operated by the other (an "Incident"), the City or PORT, as the case may be, shall promptly notify the other party of the Incident, describing the location and source of the release, the type of substance, the concentration and the volume (if known), and any corrective action known to have been taken.
 - *PORT shall notify City of any Incident by calling the City's Customer Service Call Center at (361) 826-2489.*
 - *City shall notify PORT of any Incident by calling PORT at (361) 885-6163.*

- b. In exchange for any goods or services provided by the City, the PORT shall reimburse the City for costs incurred by providing meeting space and/or training opportunities, as funding allows.
- 3. **TERM.** This Agreement becomes effective upon approval of the Corpus Christi City Council and final signatures of the City and PORT and will renew annually unless terminated by either Party under the terms of this Agreement.
- 4. **TERMINATION.** This Agreement may be terminated by any of the following methods:
 - a. By mutual consent of the signatories or their designees, with the approval of the TCEQ.
 - b. By either party, upon failure of the other party to fulfill its responsibilities and obligations as set forth in this Agreement, and with the approval of the TCEQ.
 - c. If termination is due to the failure of either party to fulfill its obligations under this Agreement, the other party shall be notified in writing that a possible breach of contract has occurred. The noncomplying party shall then have 30 days after such notice to respond and/or cure such alleged breach of contract before this Agreement may be terminated. If 30 days elapses after notice without a cure of such alleged breach, the TCEQ shall be notified that a possible termination may occur.
- 5. **NOTICES.** Except for the calls required under the Spill Prevention and Response Notification under § 2A of this Agreement, all notices to parties under this Agreement shall be in writing and sent to the names and address stated below. Either party to the Agreement may change the name and address by notice to the other in accordance herewith, and any change shall take effect immediately upon receipt of the notice.

TO PORT:

Port of Corpus Christi Authority
Attn: Environmental Compliance Manager
222 Power Street (78401)
P.O. Box 1541 (78403)
Corpus Christi, Texas

TO CITY:

City of Corpus Christi
Attn:—Environmental Services Superintendent
Storm Water Department
P.O. Box 9277
Corpus Christi, TX, 78469-9277

- 6. **LIABILITY.** It is understood that City shall not be liable for any claims against PORT, its officers, agents, representatives, employees, contractors, subcontractors, or other third persons, for damage resulting from or arising out of the activities of PORT officers, agents, representatives, employees, contractors, subcontractors, or other third persons under this Agreement, and PORT agrees, to the extent permitted by the Constitution of the State of Texas, to hold City harmless from any and all claims. It is also understood that PORT shall not be held liable for any claims against City, its officers, agents, representatives, employees, contractors, subcontractors, or other third persons, for damage resulting from or arising out of activities of the City officers, agents, representatives, employees, contractors, subcontractors, or other third persons, and City agrees, to the extent permitted by the Constitution of the State of Texas, to hold PORT harmless from any and all claims.
- 7. **TCEQ.** All references herein to the TCEQ shall be deemed to mean any successor agency to it, if its successor is delegated authority to administer the TDPS permit program.

8. **SUCCESSORS AND ASSIGNS.** This Agreement shall be binding on and inure to the benefit of the Parties and their respective successors and assigns, but this provision shall not be considered to permit any assignment by a party of any of its rights or obligations under this Agreement as expressly provided in this Agreement.
9. **SEVERABILITY.** Each provision of this Agreement shall be considered to be severable, and if any one or more of the provisions herein are for any reason held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision hereof, and this Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein.
10. **VENUE.** This agreement shall be construed in accordance with the laws of the State of Texas.

SIGNATORIES:

CITY

By: Angel R. Escobar

Angel R. Escobar, P.E.
City Manager
City of Corpus Christi

PORT OF CORPUS CHRISTI AUTHORITY

By: John P. LaRue

John P. LaRue
Executive Director
Port of Corpus Christi Authority

By: Armando Chapa

Armando Chapa
City Secretary



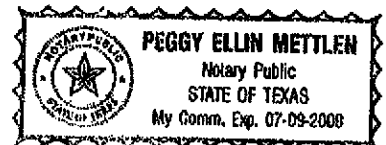
Acknowledgement

Sworn and subscribed before me, the undersigned authority, on this the 9th day of Dec. 2008, by JOHN P. LARUE (printed name) whose title is EXECUTIVE DIRECTOR, Port of Corpus Christi Authority, who on his oath depose that he did make the foregoing instrument on behalf of the Port and that he has the legal capacity to do so.

Approved as to form this 7th day of December, 2008:
Mary Kay Fischer, City Attorney

By: Veronica Ocanas

Veronica Ocanas
Assistant City Attorney
for City Attorney



Peggy E Mettlen

Res.

028009

AUTHORIZED

BY COUNCIL

1/13/09

AC
SECRETARY M

SWMP - Del Mar College



DEL MAR COLLEGE

TPDES # WQ0004200000

**STORM WATER MANAGEMENT PLAN
(SWMP)**

DEL MAR COLLEGE (CO-PERMITTEE)

101 Baldwin Blvd.

Corpus Christi, TX 78404

Revised
August 2022

1.0 INTRODUCTION

Storm water is water that accumulates on land as a result of storms and can include runoff from urban areas such as roads and roofs. The November 16, 1990 regulations established requirements of a two-part permit application designed to facilitate development of site-specific permit conditions for municipalities with a population of 100,000 or more. Hence, the City of Corpus Christi was required by the Clean Water Act (CWA) to submit an application to the U.S. EPA for a National Pollution Discharge Elimination System Permit (NPDES) for discharges from a Municipal Separate Storm Sewer System (MS4).

The CWA also requires NPDES Permits for discharges to include controls to reduce the discharge of pollutants to the maximum extent practicable by implementation of management practices, control techniques, engineering methods and other provisions appropriate for the control of such pollutants.

The City of Corpus Christi (City), Port of Corpus Christi Authority of Nueces Count, Del Mar College District (Del Mar College), and Texas A&M University – Corpus Christi (TAMUCC) [collectively referred to as Co-applicants] was issued Texas Pollutant Discharge Elimination System (TPDES) Municipal Separate Storm Sewer System (MS4) permit (No. WQ0004200000) to discharge storm water from the MS4 boundaries. The existing permit was issued October 21, 2020 and will expire October 21, 2025. The Environmental Health & Safety Office (EHS Office) for Del Mar College is responsible for the development and maintenance of the College's SWMP.

Del Mar College is comprised of six developed sites within the Corpus Christi Storm water district (See Appendix for Campus maps):

- The Heritage Campus (owned and operated by Del Mar College) is located at the intersection of Baldwin Blvd., and Ayers Street.
- The Windward Campus (owned and operated by Del Mar College) is located at the intersection of Old Brownsville Road and Airport Road.
- The Oso Creek Campus is located at the junction of Yorktown Blvd. and Rodd Field Road and is currently being developed and is under operating control of the General Contractor. The operational control for this property will be the responsibility of Fulton Construction Corporation and all storm water activities will be addressed in the site specific SWPPP.
- The Center for Economic Development (owned and operated by Del Mar College) is located at the intersection of Kostoryz Road and Staples Street.
- The Northwest Center (leased by Del Mar College) is adjacent to the Northwest Regional Hospital and Del Mar College does not have operating control of the property.

- The Aviation Technician Training Facility (leased by Del Mar College) is located at the Corpus Christi International Airport and the College does not have operating control of the property.

Del Mar College also owns an additional location within the MS4 boundaries which is approximately 4 acres of non-developed and non-occupied land located at 1502 Tarlton Street. Del Mar College maintains proper vegetation growth on this property.

Each of the co-permittees developed and implemented a site-specific Stormwater Management Program (SWMP). As well as compliance with the Clean Water Act, the SWMP must comply with the Resource Conservation and Recovery Act, the EPA's Spill Prevention Control and Counter Measures Plan and the Texas Oil Spill Prevention and Response Act to prevent spills of hazardous chemicals and hydrocarbons from entering into the navigable waters of the United States.

Annually the co-permittees must submit a Stormwater report to the City of Corpus Christi's Stormwater Division. The City of Corpus Christi includes these reports into their annual report to the EPA.

2.0 MAINTENANCE OF STRUCTURAL CONTROLS

Both the College and the Corpus Christi Storm Water Department operates and maintains structural flood controls and subsurface storm water pipes on College properties. The City is responsible for maintaining those controls belonging to the City, and Del Mar College is responsible for maintaining the controls and subsurface storm water pipes belonging to the College.

Del Mar College Physical Facilities Department will repair and clean the structural flood controls and subsurface storm water pipes as needed. The Physical Facilities Department with assistance from the EHS Office will prioritize the need for maintenance and repair based on the following criteria:

1. Risk to Public Health and Safety (i.e. potential flooding)
2. Water Quality
3. Aesthetics

2.1 Risk to Public Safety

It is important that storm water flows smoothly away from the campus. If the storm water drainage system is not adequate, large amounts of rainwater will back up and cause flooding of the college's streets, parking lots and buildings.

Additionally, high water resulting from poor drainage provides a breeding ground for mosquitoes.

2.2 Water Quality

In order to maintain water quality and to reduce the pollutants entering the storm water system, personnel from the Physical Facilities Department and the Environmental Health & Safety Office will conduct the following activities:

1. Perform routine inspections, debris removal and clearing of vegetation on the storm water drainage ditch identified as the Driscoll Ditch located on the Windward Campus.
2. Perform routine inspections, debris removal and clearing of vegetation on concrete drainage structures at all College properties.
3. Perform grass/vegetation cutting and trimming activities in a manner which prevents the clippings from entering curb and surface storm water inlets.

2.3 Aesthetics

Proper housekeeping practices minimize the potential for trash, litter and debris to buildup in the storm water system. The Physical Facilities Department has a daily litter control plan to minimize unsightly litter and debris from accumulating on or near storm water inlets.

3.0 SUBSURFACE STORM SEWER AND PLANNING PROCEDURES FOR NEW DEVELOPMENT

The Del Mar College storm water system is comprised of reinforced concrete pipe (RCP) and high density polyethylene pipe (HDP) ranging in diameter from 48 inches to 12 inches. The College's storm water systems discharge into the City's storm water system.

Del Mar College's construction storm water management program emphasizes engineering controls, pollution prevention and good housekeeping to ensure the quality of storm water runoff.

Del Mar College requires the architect and general contractor to incorporate the applicable storm water management practices from the City of Corpus Christi's Guidance for Development Planning and Construction Activities into the planning, design and construction of the facility. It is the responsibility of the general contractor to submit the Notice of Intent and to maintain and inspect all storm water controls during the duration of the construction project.

The architect or general contractor must provide the following information to the City of Corpus Christi's Director of Development Services for the development of one (1) acre or more:

- Copy of NPDES or TPDES Storm Water Pollution Prevention Plan;
- Copy of any notice of intent (NOI) provided to EPA or TCEQ;

- Copy of Construction Site Notice that was posted;
- Copy of Notice of Termination (NOT) submitted to EPA or TCEQ;
- Copy of any Small Construction Site Notice that was removed.

The requirements for the development of sites less than one (1) acre and more than one-quarter (1/4) acre include:

- A pollution control plan is required onsite;
- Submission of a site-specific pollution control plan is not required for a single-lot, single-family residential construction, unless it is part of a larger development that requires an NPDES or TPDES permit;
- Pollution control plan must be submitted to the building official for review before issuance of a building permit or approval to begin development;
- Implementation of the pollution control measures detailed in the plan is required;
- A certificate of occupancy will not be issued until the building official is satisfied that all temporary and permanent pollution control measures specified by the plan are complete.

The requirements for the development of sites one-quarter acre or less include:

- In order to obtain a building permit, a responsible party shall provide a written acknowledgement that the responsible party is aware of the pollution control measures of the city and that the responsible party will comply with these measures during the development of the property;
- In order to obtain a certificate of occupancy, a responsible party must certify that all necessary temporary or permanent pollution control measures specified in section 14-1006, pollution control measures, are in place;
- Prior to requesting acceptance of any improvements required by Section V of the platting ordinance, a responsible party must certify that all necessary permanent pollution control measures specified in Section 14-1006, pollution control measures, other than the required stabilization, are in place.

All Notices and Plans must be submitted to:

City of Corpus Christi
Development Services
2406 Leopard St.
Corpus Christi, TX 78408
(361) 826-3240

4.0 OPERATION OF STREET AND PARKING AREAS

Storm water run-off from non-point sources are comprised primarily of Del Mar College streets and parking lots along with City of Corpus Christi and Texas Department of Transportation streets which carry the storm water to the nearest subsurface storm water inlet. Storm water is also transferred to the Corpus Christi Bay via surface drainage ditches.

The street and parking areas owned or operated by Del Mar College will be routinely cleaned by contracting with a street sweeping contractor. The Physical Facilities Department visually inspects these street and parking areas on a daily basis.

5.0 ASSESSMENT OF FLOOD MANAGEMENT PROJECTS

Del Mar College does not engage in flood management projects, per se. However, the design and construction of Del Mar College facilities are at elevations within the Federal Emergency Management Agency (FEMA) design flood heights for the location. Because some of Del Mar College facilities are within the 500-year floodplain, a permit application for these projects has been submitted to the Nueces County Engineer to assure compliance with Nueces County Floodplain Management regulations.

6.0 EROSION PREVENTION OR STABILIZATION OF DRAINAGE, SOILS OR SLOPES

Most of land owned or leased by Del Mar College in the co-permit area is covered with vegetation or is stabilized with impervious surfaces. The land within the co-permit area is of low slope; thus, storm water runoff velocities typically do not result in erosion of soils with a resultant high-suspended load.

Erosion control measures are implemented during new construction projects or renovation projects to existing facilities. The general contractor is held responsible for maintaining such controls.

The structural control devices that Del Mar College has installed include the following items:

- Driscoll Ditch – The Driscoll Ditch is an engineered structural control device that was installed on the Windward Campus. The ditch is seeded with tall prairie grass and is comprised of a detention pond and an earthen ditch that flows from Del Mar College property into a concrete structural control ditch owned by the City of Corpus Christi and eventually flows into the Oso Creek. A concrete retention gate was installed where the ditch intersects with the existing storm water ditch owned by the City of Corpus Christi, located on the property owned by the Driscoll Foundation. The Driscoll Ditch is routinely inspected and maintained to ensure adequate drainage.

- Health Science Swale – This is an earthen swale that runs between the Health Science building and the Emerging Technology building. The runoff enters the swale and is diverted into the Driscoll Ditch.
- Health Science Velocity Dissipater – The velocity dissipater is a component of the Health Science Swale to slow the water prior to entering the Driscoll Ditch.

7.0 CONTROLS FOR PESTICIDE, HERBICIDE AND FERTILIZER APPLICATION

Del Mar College Physical Facilities Department contracts with commercial firms for the application of herbicides and pesticides on campus. The commercial applicators are regulated and licensed by the Texas Department of Agriculture and the Texas Structural Pest Control Board. The selected pest control company is contractually obligated to comply with all the state regulations and local recommendations when using, storing or transporting such materials on the campuses of Del Mar College campus.

The grounds of Del Mar College are maintained by the Physical Facilities Department, which employs a professional staff supplemented by contractors and expert consultants when required. Based on best management practices, fertilizer application rates and frequency will be determined by this professional staff to promote healthy plants and to control the growth of weeds. In order to prevent over spray, the application of herbicides and fertilizers is discouraged on extremely windy days. Organic and non-toxic materials will be substituted for toxic herbicides when possible.

Del Mar College properties are covered by the City of Corpus Christi's Vector Control programs. These programs include mosquito control and Del Mar College cooperates with the City program.

8.0 POLLUTION PREVENTION AND GOOD HOUSEKEEPING PROCEDURES

8.1 Corpus Christi City Ordinance (Article II, Sec. 21-12) states yard waste may not remain on the street pavement, in the gutter, on a sidewalk or in a drainage ditch.

8.2 Corpus Christi City Ordinance (Article XVI, Sec. 55-203) prohibits grass clippings and leaves from being blown or swept into the street, gutters, or into a storm drain. Intentionally blowing or sweeping grass clippings into the streets or gutters can result in fines of up to \$2,000 per violation per day.

8.3 Corpus Christi City Ordinance (Article I, Sec. 49-10) states the property owner, lessee or tenant is responsible for keeping the street curbs and gutters clean.

The definition of “clean” is that it is clear of sand, leaves, or dirt. Additionally, you cannot allow grass or weeds to grow on or extend over curbs and gutters.

8.4 Corpus Christi City ordinance 22.11 requires the owner or person in control of an animal to remove any feces deposited by the animal on public or private property immediately. Animal feces deposited upon on the owner’s private property must be collected and removed daily.

8.5 Litter Control

As part of their daily routine, Physical Facilities Grounds personnel will remove trash and debris from the grounds and parking lots at all Del Mar College properties. Trash cans and dumpsters shall be strategically positioned to handle the trash removed from buildings and also to accommodate the pedestrian trash on campus. Del Mar College grounds personnel also shall be trained and instructed to take precautions to prevent grass/vegetation clippings from entering into the storm water inlets.

During construction projects, contractors working on Del Mar College properties shall be required to provide construction dumpsters for the removal of construction debris. Construction debris or drummed material abandoned on Del Mar College properties by a third party without the approval of Del Mar College will be retrieved and disposed of in accordance with applicable environmental regulations by the EHS Office.

9.0 PUBLIC EDUCATION

The EHS Office has developed employee training programs related to storm water management practices. The EHS Office will conduct employee training to Del Mar College employees which promote the protection of the storm water discharge.

The EHS Office will also coordinate with the City of Corpus Christi and other community agencies to organize community storm water training opportunities. This may include making Del Mar College facilities available for meetings and training sessions.

10.0 PROGRAM TO LIMIT POLLUTANTS FROM ILLICIT DISCHARGES

Del Mar College standard procedures, management practices and contract documents prohibit illicit discharge to the storm water system.

10.1 Spill Prevention – Spill Response

An education and evaluation program is continually conducted by the EHS Office, Physical Facilities Department, and the Purchasing Department which addresses the proper handling, storage, transportation and disposal of hazardous materials. This program affects all areas of the College campuses.

In most cases, Del Mar College will contract with outside automotive services to perform automotive maintenance, such as oil and lube jobs. Some such maintenance is also performed by College classes with appropriate disposal controls and provisions.

In the event of significant oil or hazardous material spills on Del Mar College property, the EHS Office will call for support of the Corpus Christi Fire Department HAZMAT Team for initial containment and remediation procedures will be conducted by an environmental contractor. Small spills of low hazard or non-hazardous materials will be cleaned up promptly by personnel from either the EHS Office or the Physical Facilities Department.

Del Mar College maintains an adequate inventory of absorbing supplies to contain and remove hydrocarbon spills. Acid and caustic spills are controlled by applying commercial liquid or solid neutralizing agents. All recovered spilled materials are disposed of in accordance to federal, state and local requirements.

10.2 Hazardous Waste Disposal

Del Mar College is classified as a Conditionally Exempt Small Quantity Generator of hazardous waste. Del Mar College contracts with environmental contractors for the disposal of all hazardous wastes generated by the College. The following are examples of waste streams in which disposed of via contract services:

- RCRA classified hazardous waste
- Universal hazardous waste
- Used Oil / Coolant
- Florescent lamps / ballasts
- Spent Cooking Grease
- Grease Trap debris

Special requirements placed on environmental contractors working on Del Mar College properties include but are not limited to the following:

1. Contractor must conduct all procedures and operations exercising standards of care regarding personnel safety and environmental preservation. The contractor shall comply with all requirements of the disposal sites and shall maintain current in effect, all permits, licenses and any other documentation required by Federal and State of Texas rules, laws, standards and regulations.
2. The contractor shall comply with the OSHA standards, requirements and State of Texas laws and rules, regulations, standards and requirements pertaining to safety that are or subsequently become applicable to the contractor in the performance of the work.

10.3 Limit Pollutants from Construction Sites

In accordance with the regulations governing the application process for MS4 permits, the City of Corpus Christi developed the Guidance Document for Developmental Planning & Construction Activities. This document addresses water quality issues associated with storm water runoff from construction sites within the City limits. Del Mar College requires all contractors involved with construction projects on Del Mar College properties to follow the requirements established by this document.

10.4 Overflows and Infiltration

Del Mar College will continue to take measures to prevent overflows of sanitary sewage to the MS4. These measures include:

- Regular maintenance of sanitary sewer lines including visual inspection and cleaning of grease traps and know problem areas as needed to prevent overflows.
- Respond to emergencies using appropriate equipment and materials to control overflows.
- Conduct proper disposal of waste materials.
- Implement necessary repairs to existing storm water lines immediately.

10.5 Investigative Procedures for Illicit Discharges

Upon discovering a potential illicit discharge into the MS4 on property owned by Del Mar College, personnel from the EHS Office will investigate to determine the origin of the discharge.

Discovery of Illicit discharges could be the result of, but not limited to, one of the following established protocols:

- Del Mar College utilizes security officers who patrol college property 24-hour a day and 365 days per year. If a security officer observes a potential discharge into the MS4 (i.e., vehicles leaking fluids; individuals dumping liquids into storm drain inlets; etc.) an incident report will be submitted to the EHS Office for further investigation.
- Del Mar College Grounds personnel conduct litter/debris removal on a daily basis removing floatable items from the curbs preventing them from entering the MS4. Grounds personnel who observe a potential illicit discharge will report it to his/her supervisor who will in turn report the discharge to the EHS Office for an investigation.
- EHS personnel conduct routine MS4 inspections to assess storm drain conditions. Potential illicit discharges discovered by EHS personnel will initiate further investigation.

If a potential MS4 illicit discharge is discovered, EHS personnel remove the upstream manhole lids and inspect the lines in order to determine the extent of water flow and possible origin of the discharge. If water flow is observed, EHS personnel will remove the next upstream manhole lid to observe for flow. This process will be repeated until a manhole is observed to be dry or does not have flowing water. If an upstream manhole is discovered to be dry the investigation will focus on the last manhole having water flow.

If the water flow in the MS4 is determined to have originated from an upstream source not on Del Mar College property, EHS personnel will contact the City of Corpus Christi Storm Water Division to further investigate the potential illicit discharge.

11.0 MONITORING PROGRAMS

11.1 Dry Weather Screening

Del Mar College will conduct dry weather screening of selected storm water lines on an annual basis. This screening must be conducted during a period in which rain water would not be expected to be present in the storm water lines. Personnel from the EHS Office will perform non-sampling inspections of storm water lines by using flashlights or by removing the manhole lids and inspecting the contents of the manhole. The non-sampling techniques include visual and olfactory monitoring for the following:

- Color
- Turbidity
- Odor
- Scum
- Algae
- Oil sheen
- Trash and debris

During the screening process, if any water is discovered in the storm water lines, EHS personnel will conduct the investigative procedures as identified in Section 10.5 of this Plan to identify any potential illicit discharges.

The Dry Weather Screening locations are identified on a campus map and records will be maintained in EHS Office.

11.2 Wet Weather Screening

The City of Corpus Christi will perform visual assessment, sample collection and analytical monitoring for the wet weather screening program on behalf of Del Mar College.

12.0 SUMMARY OF ENFORCEMENT ACTIONS

The Del Mar College EHS Office will maintain a record of all enforcement actions and Notices of Violations related to the SWMP. Any enforcement actions and the measures taken to correct the deficiencies will be discussed in the SWMP annual summary report.

13.0 ASSESSMENT OF CONTROLS

As a co-permittee, Del Mar College will cooperate and coordinate with the other co-permittees' annual reports evaluating the process of the management programs in fulfillment of CFR 122.42 to be submitted to the EPS each year before the anniversary of the issuance of the NPDES permit. It is anticipated that these annual reports will include the following items:

- The status of implementing the components of the SWMP as required by the permit.
- Changes to the SWMP proposed by the co-permittees that would revise the existing permit conditions, if applicable.
- Revisions to the estimates or methodology used to obtain the estimates included in the original permit application for the assessment of controls and the fiscal analysis of the management programs, if applicable.
- A summary of data, including storm water monitoring data, which are accumulated throughout the reporting year.
- A projection of annual expenditures and budget for the implementation of the management program for the year following each annual report.
- A summary describing the number and nature of any enforcement actions, inspections, and public education programs.

14.0 CONCLUSION

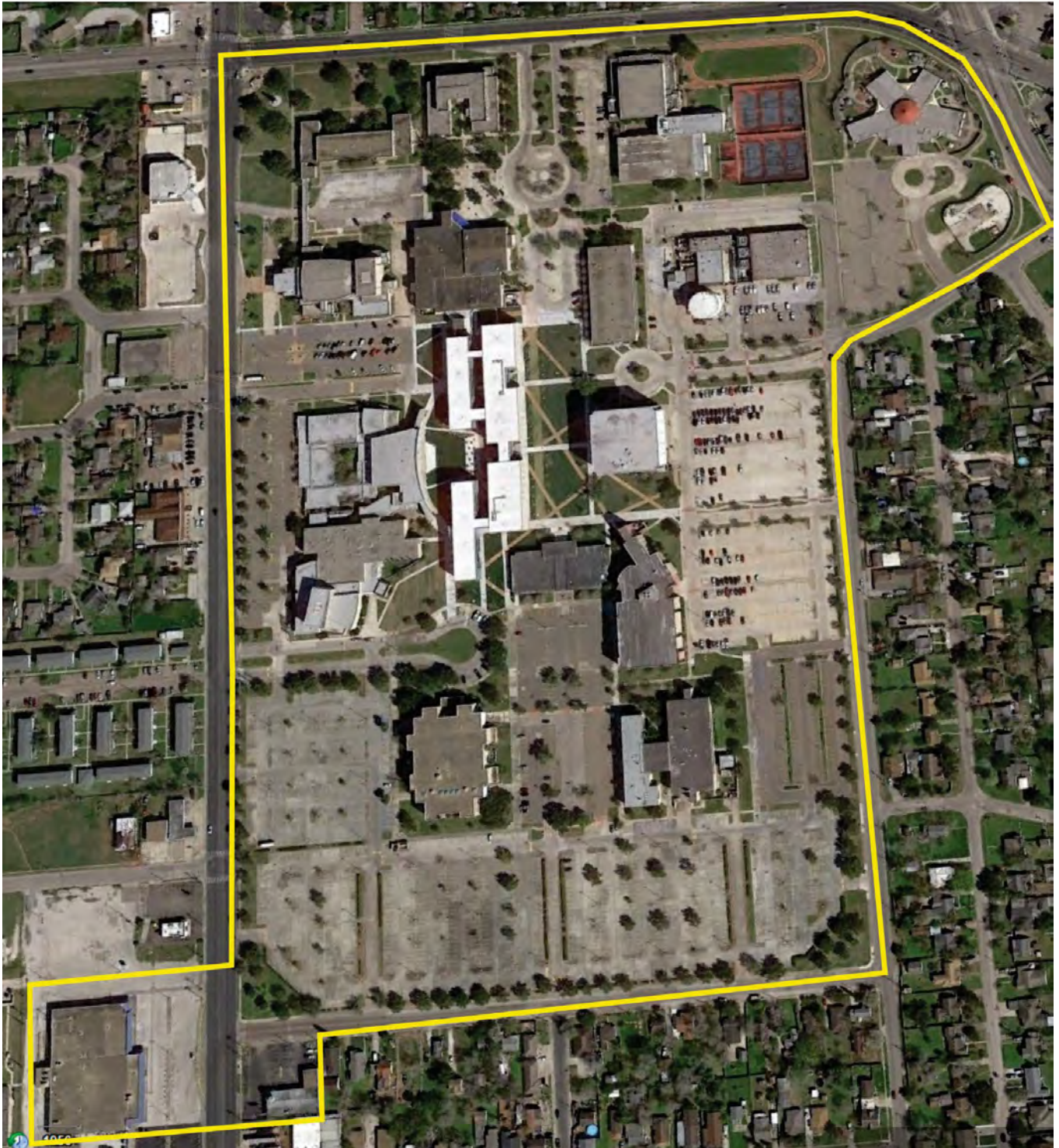
The historical water quality data provided annually to the College by the City of Corpus Christi has not identified any specific area of water quality concern resulting from storm water runoff at Del Mar College.

Del Mar College remains committed to meeting the storm water quality standards as set forth by the U.S. Environmental Protection Agency and the Texas Commission on Environmental Quality. The basis for meeting our commitment to water quality relies on a strict adherence to this Storm Water Management Plan in coordination with the City of Corpus Christi Storm Water Department.

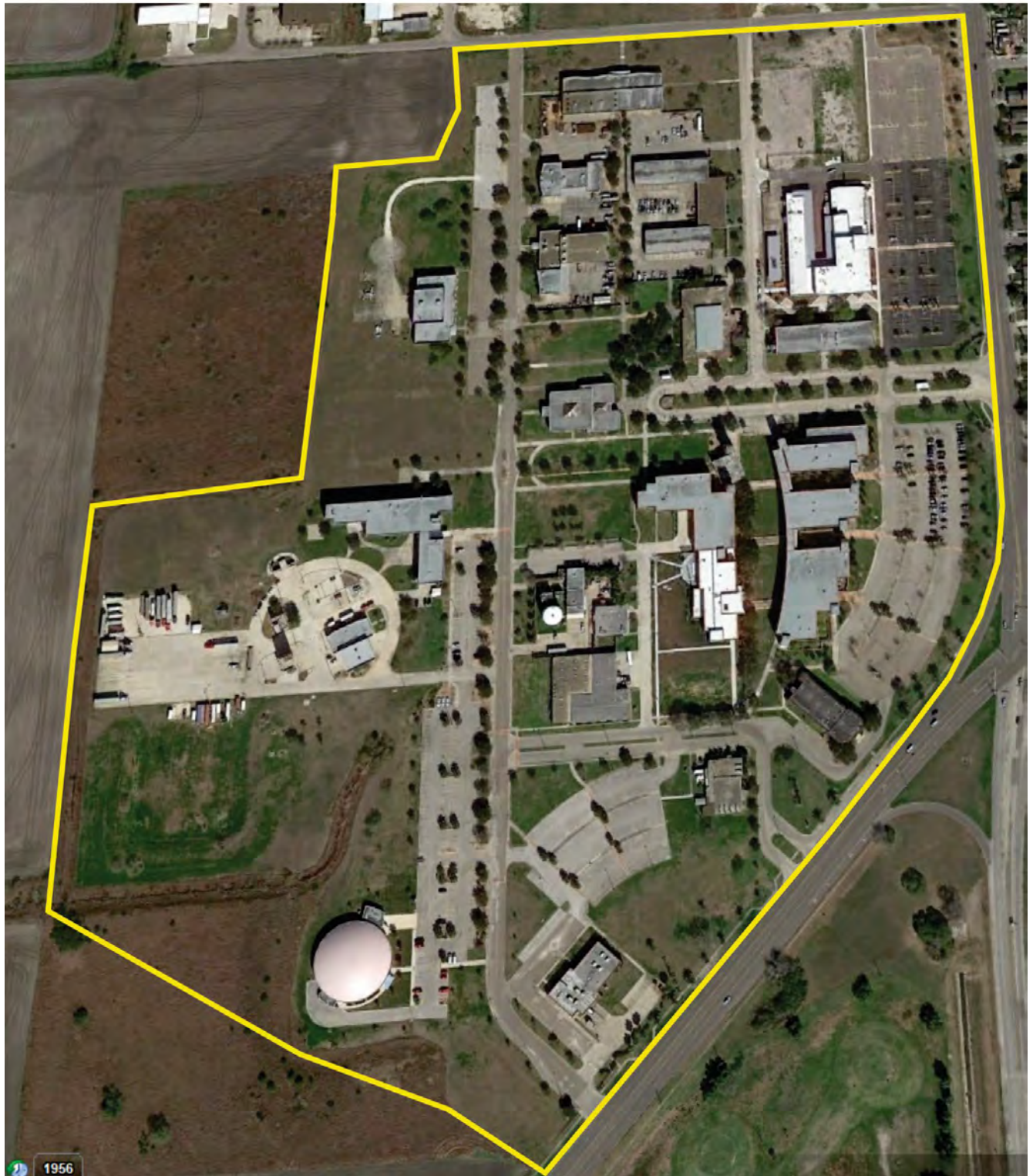
APPENDIX

DEL MAR COLLEGE HERITAGE CAMPUS

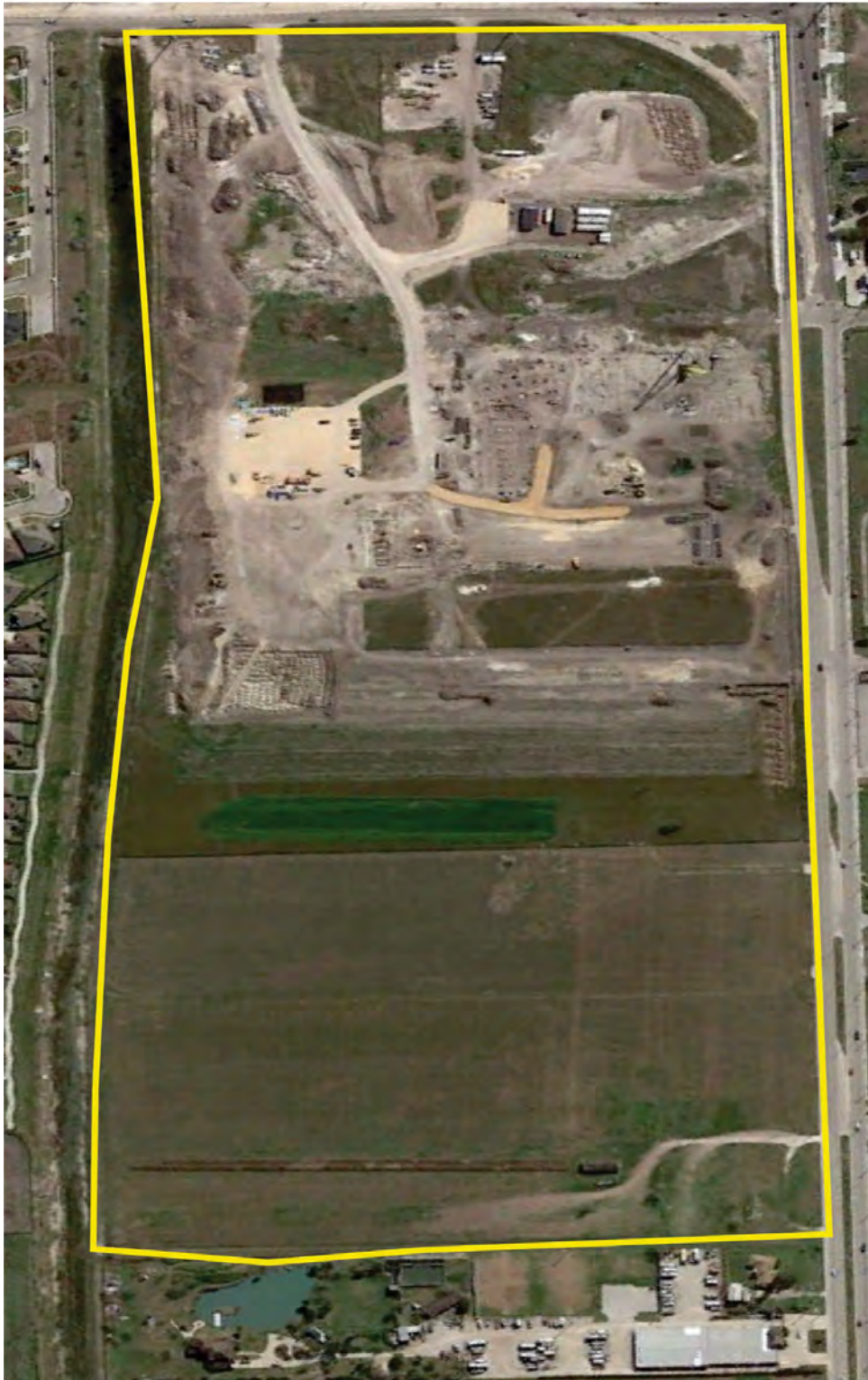
OCTOBER, 2021



DEL MAR COLLEGE WINDWARD CAMPUS
OCTOBER, 2021



DEL MAR COLLEGE OSO CREEK CAMPUS
OCTOBER, 2021



DEL MAR COLLEGE CENTER FOR ECONOMIC DEVELOPMENT
OCTOBER, 2021



DEL MAR COLLEGE CENTER FOR TARLTON PROPERTY
OCTOBER, 2021



SWMP - Texas A&M University, Corpus Christi

TEXAS A&M UNIVERSITY-CORPUS CHRISTI

STORM WATER MANAGEMENT PLAN

Prepared by the Environmental, Health and Safety Department

6300 Ocean Drive, Unit 5876

Corpus Christi, TX 78412-5876

361-825-5555 (o) | 361-825-5556 (f)

<http://safety.tamucc.edu>

ehs@tamucc.edu

STORM WATER MANAGEMENT PLAN

MS4 TPDES Permit No. WQ0004200000

ABSTRACT

Storm water is water that accumulates on land because of storms and can include runoff from urban areas such as roads and roofs. The November 16, 1990, regulations established requirements of a two-part permit application designed to facilitate development of site-specific permit conditions for municipalities with a population of 100,000 or more. Hence, the City of Corpus Christi was required by the Clean Water Act (CWA) to apply to the U.S. EPA for a National Pollution Discharge Elimination System Permit (NPDES) for discharges from a Municipal Separate Storm Sewer System (MS4). The state of Texas assumed the authority to administer the National Pollutant Discharge Elimination System (NPDES) program in Texas on Sept. 14, 1998. NPDES is a federal regulatory program to control discharges of pollutants to surface waters of the United States. The Texas Commission on Environmental Quality (TCEQ) Texas Pollutant Discharge Elimination System (TPDES) program now has federal regulatory authority over discharges of pollutants to Texas surface water, except for discharges associated with oil, gas, and geothermal exploration and development activities, which are regulated by the Railroad Commission of Texas.

The CWA also requires NPDES Permits for discharges to include controls to reduce the discharge of pollutants to the maximum extent practicable by implementation of management practices, control techniques, engineering methods and other provisions appropriate for the control of such pollutants.

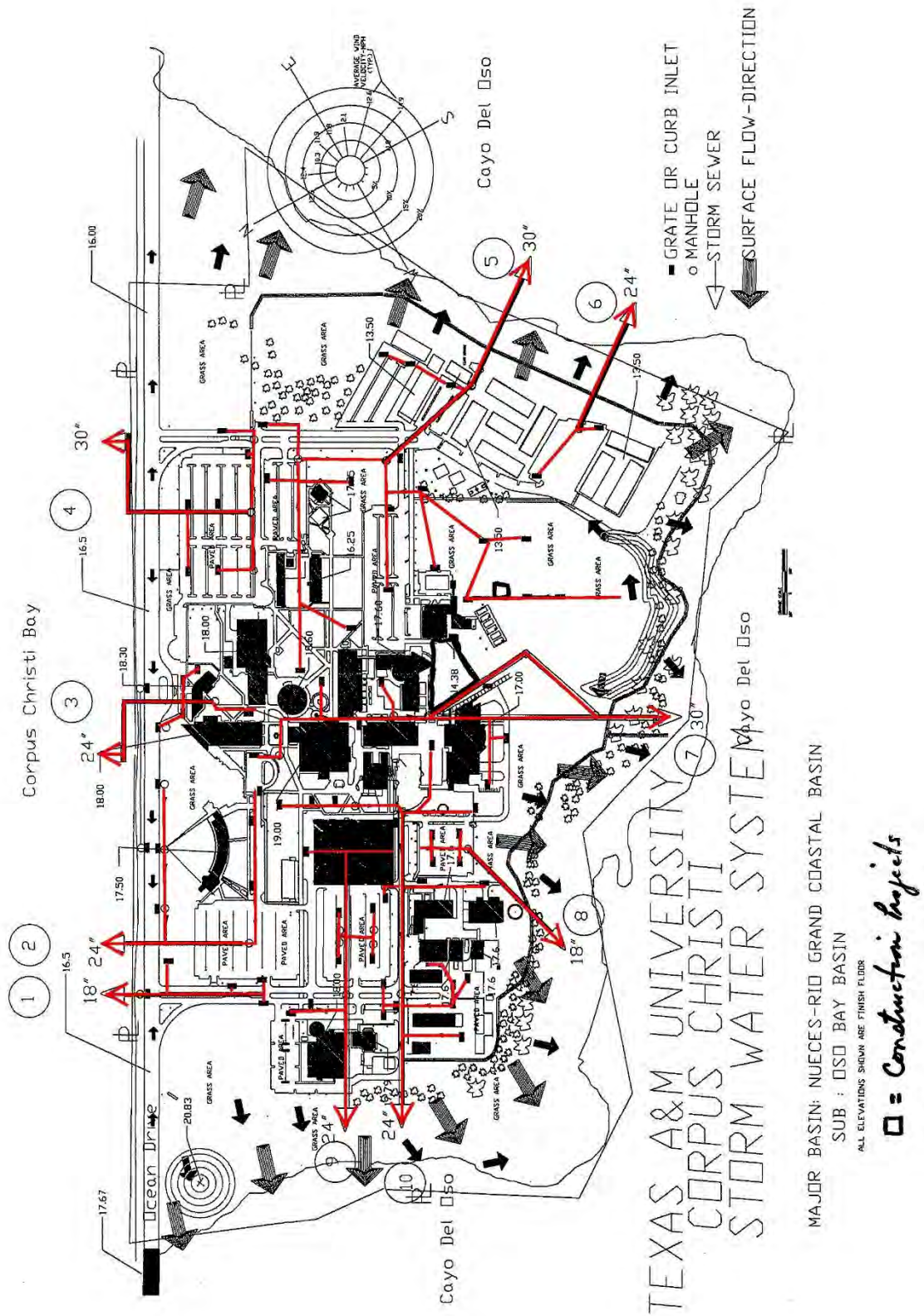
In response to EPA municipal storm water permit requirements, the City of Corpus Christi, Texas Department of Transportation-Corpus Christi District, Corpus Christi Junior College District (Del Mar College), Port of Corpus Christi and Texas A&M University-Corpus Christi submitted a Joint Part 1 permit application to the U.S. EPA in May 1992 and a Joint Part 2 application in May 1993. Additionally, the City and TAMUCC entered into an inter-governmental agreement whereas the two entities agreed to participate in a co-application to obtain the NPDES Permit. The City, along with its co-permittees, were issued the NPDES permit number TXS000601 in April 1995. In August 2008, TCEQ issued the TPDES Permit NO. WQ0004200000 and renewed in December 2014. In October 2020, the TPDES Permit was renewed without the Texas Department of Transportation-Corpus Christi District.

Each of the co-permittees developed and implemented a site-specific Stormwater Management Program. Elements of the plan required TAMUCC to operate and maintain structural flood controls, including subsurface storm sewer pipes that underlie TAMUCC properties. As well as compliance with the Clean Water Act, the Stormwater Management Plan must comply with the Resource Conservation and Recovery Act, the EPA's Spill Prevention Control and Counter Measures Plan and the Texas Oil Spill Prevention and Response Act to prevent spills of hazardous chemicals and hydrocarbons from entering the navigable waters of the United States.

MS4 Map

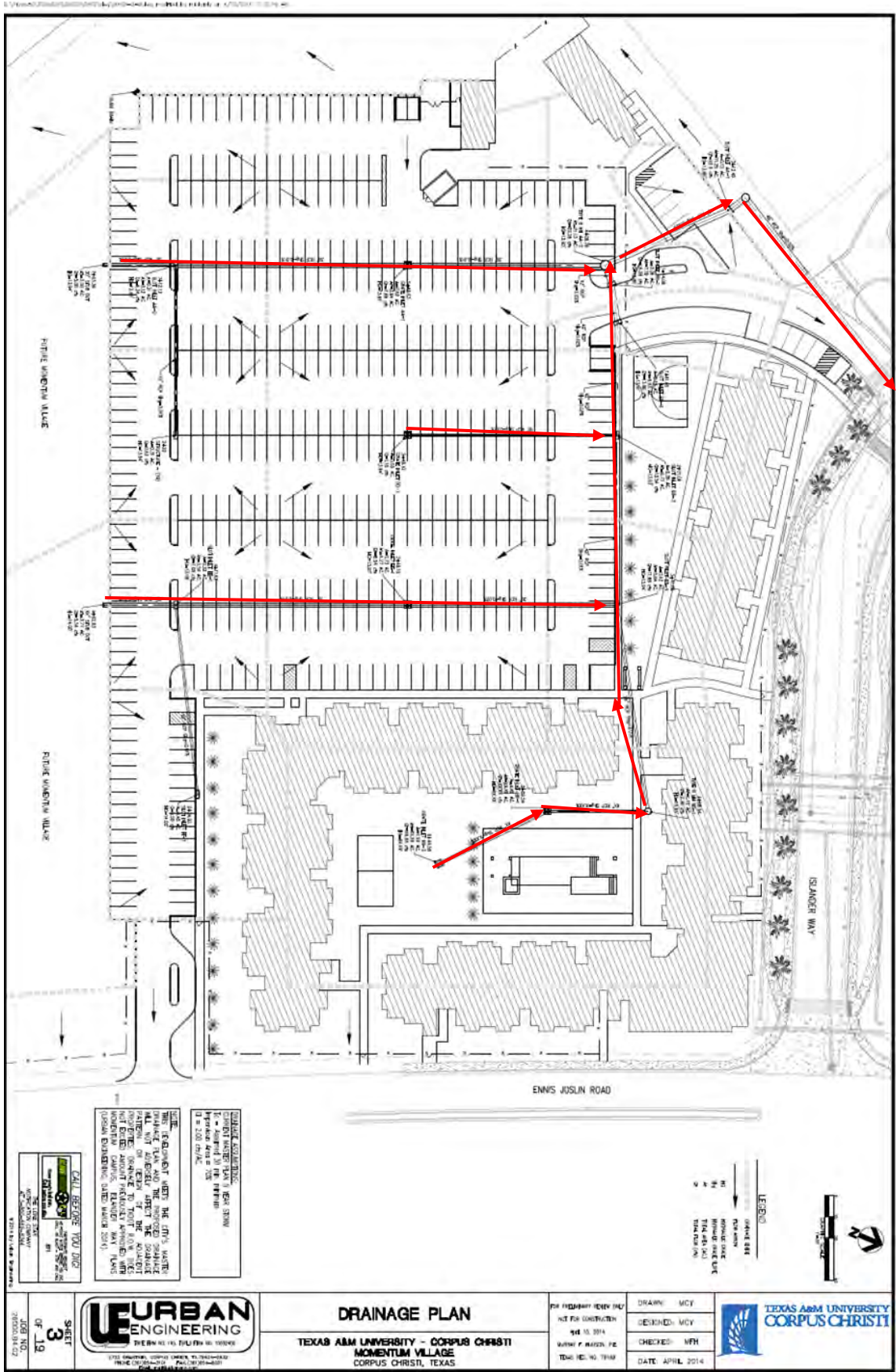
TAMUCC's permitted MS4 area includes the 240-acre Island Campus, and the 140-acre Momentum Campus.





1AMU PROJ. NO. 15-3087 FBK PROJ. NO. 1128E DATE 1/25/12 DRAWN BY/TZ CHECKED REVISIONS	EROSION + SEDIMENT CONTROL PLAN
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INTRODUCTION

TAMUCC Island Campus is located on the 240-acre Ward Island. Ward Island is bounded on the north by Corpus Christi Bay and on the south, west, and east by Oso Bay. The storm water that flows into Corpus Christi Bay is dispersed by the concrete rip rap laid out east to west along the shoreline. The northern end of Ward Island (Bay Front Zone) is characterized by large open grassy areas as well as grassy swales which curtail rapid water runoff from Ward Island.

The “hike and bike trail,” meandering along the varied and beautiful shoreline of the Oso Bay estuary, mostly defines the two-mile-long Oso Perimeter Zone. This “do-not-disturb” area is made up entirely of native and naturalized plant species. These plants stabilize the gentle slopes that control much of the storm water runoff from the Island. Grassy swales are located at the terminal ends of the storm water pipes that outfall to Oso Bay. Natural wetland areas along the edge of Oso Bay buffer the storm water runoff.

The Storm Water System for the Island Campus is comprised of a thirty (30) inch, a twenty-four (24) inch and an eighteen (18) inch drainage system flowing through ten (10) outfalls into Corpus Christi Bay and Oso Bay.

TAMUCC also maintains 140 acres of land at Ennis Joslin Road and Nile Drive, otherwise known as the university’s Momentum Campus. Currently, approximately one hundred acres of developed drainage area exists just southwest of the Oso Wastewater Treatment Plant. These drainage areas, the roadways, parking lots, buildings, and Sports Complex, drain into a preexisting channel South-Southwest of the campus and drains into Oso Bay.

MS4 MAINTENANCE ACTIVITIES

TAMUCC operates and maintains structural flood controls, including subsurface storm sewer pipes that underlie TAMUCC properties. TAMUCC contracts SSC Service Solutions for Facilities Services, including Custodial, Grounds, and Maintenance. SSC Facilities Services maintains the subsurface storm sewer pipes for the university. TAMUCC’s Environmental, Health & Safety Department (E,H&S) conducts visual inspections of the major outfalls to determine the condition and to prioritize maintenance and repairs. SSC Facilities Services sets priorities for maintenance and repair based on the following criteria:

1. Risk to Public Health and Safety (i.e., potential flooding)
2. Water Quality
3. Complaints (aesthetics)

Risk to public safety

It is important that storm water flows smoothly away from the campus. If the storm water drainage system is not adequate, large amounts of rainwater will back up and cause flooding of the University streets, parking lots, and buildings. Additionally, high water resulting from poor drainage provides a breeding ground for mosquitoes.

Water quality

Storm water effluent from campus flows into Corpus Christi Bay and Oso Bay.

The identified potential point sources of pollutants on the TAMUCC campus are for hydrocarbon pollutants to enter the storm water system.

These potential pollutant sources include:

- fueling facility with gasoline and diesel
- hazardous waste storage building for a Small Quantity Generator (SQG) of Hazardous Waste
- emergency generators with diesel storage
- electrical transformers containing oil
- used oil storage tanks at the motor pool

To control point source pollution sources on the campus, TAMUCC has developed, in accordance with the Clean Water Act, a Spill Prevention, Control, and Countermeasures Plan. Additionally, pursuant to the State of Texas Oil Spill Prevention and Response Act, the TAMUCC's Facility Response Plan for oil spills was recertified in June 2020, expires June 2025, by the Texas General Land Office, Oil Spill Division.

Aesthetics

Good housekeeping practices minimize the potential for trash, litter, and debris to buildup in the storm water system. SSC Facilities Services maintains the campus grounds to minimize unsightly litter and debris from accumulating on campus. Several large grassy swales located on the southwest side of the campus tend to have large areas of cattail and weed growth.

Preventative maintenance is scheduled by SSC Facilities Services to control the plant growth and collect litter and debris. These methods are to ensure continuous unobstructed flow of storm water away from the parking lots, streets, and buildings. Maintenance of the storm water system is extremely important for campus flood control during the Atlantic/Gulf of Mexico Hurricane/Tropical Storm season.

Measurable Goal

Storm Sewer Inlets, Catch Basins, Grates, Ditches, Conveyance Swales, and Bioswales are major components of the TAMUCC MS4 area. These serve an important function in safely conveying storm water off campus. SSC Grounds Services maintains the structural controls to prevent erosion and potential degradation of the system.

TAMUCC will track and report structural controls that required maintenance or repairs during the annual reporting periods.

POST-CONSTRUCTION CONTROL MEASURES

TAMUCC's storm water management for construction emphasizes engineering controls, pollution prevention, and good housekeeping to ensure the quality of storm water runoff. During new construction, to maintain water quality and minimize turbidity in the bay waters from storm water runoff, the placement of silt fences, hay bales or concrete rip rap at various discharge points minimizes erosion of the soil from the construction site.

Measurable Goal

TAMUCC will track and report areas of new development to the storm sewer system during the annual reporting periods.

ILICIT DISCHARGE DETECTION AND ELIMINATION

Discharges of non-stormwater are prohibited within the MS4 permitted area for TAMUCC.

TAMUCC's E,H&S performs Dry and Wet Weather Screenings for the MS4 on campus. At least one (1) screening of the MS4 will be performed for each seasonal monitoring periods. At least two (2) visual inspections will be performed for each major outfall on campus during each seasonal monitoring period. These visual inspections look for: flowing water, turbidity , odor, scum or algae, oil sheen, soil or debris, signs of erosion, and a source point for any discharge.

To responded to discharges of potential pollutants from the MS4 on campus, TAMUCC has developed, in accordance with the Clean Water Act, an EPA Spill Prevention Control and Countermeasures Plan. Additionally, pursuant to the State of Texas Oil Spill Prevention and Response Act, the TAMUCC's Facility Response Plan for oil spills was recertified in June 2020, expires June 2025, by the Texas General Land Office, Oil Spill Division.

Miscellaneous, non-stormwater discharges that are authorized to be discharged for the TAMUCC MS4 include:

- water line flushing
- landscape irrigation
- rising ground waters
- uncontaminated ground water infiltration
- uncontaminated pumped ground water
- discharges from potable water sources
- foundation drains
- air conditioning condensation
- irrigation water
- springs
- water from crawl space pumps.
- footing drains
- lawn watering
- street wash water
- wash waters using only potable water
- flows from riparian habitats and wetlands

Overflows and Infiltration

Texas A&M University-Corpus Christi will continue to take measures to prevent overflows of sanitary sewage to the MS4. These measures include:

- Regular maintenance of sanitary sewer lines including visual inspection and cleaning of grease traps and known problem areas as needed to prevent overflows.
- Upgrade, modernize, and/or replace aging sanitary sewer line infrastructure, as needed.
- Respond to emergencies using appropriate equipment and materials to control overflows.
- Proper disposal of waste materials.
- Implement necessary repairs immediately or as soon as practicable.

Emergency Response Procedures

Texas A&M University-Corpus Christi has emergency response plans for chemical and oil spills that occur on campus. Environmental, Health and Safety personnel respond to oil and hazardous material spills on campus. SSC Facilities Services and the University Police Department provide support for emergency response operations. The University's Facilities Services provides response resources and logistical support. The University's Police Department assigns personnel to manage site security that prevents unauthorized personnel from entering the contaminated area.

The Texas A&M University-Corpus Christi personnel designated to respond to hazardous material incidents have received 40 Hour OSHA/RCRA Hazardous Waste Operations & Emergency Response (HAZWOPER) Safety training, pursuant to the Occupational Safety and Health Administration's 29 CFR 1910.120 Hazardous Waste Operators Emergency Response Standard.

The TAMUCC National Spill Control School provides HAZWOPER training for the University personnel. The Texas A&M University-Corpus Christi E,H&S maintains an inventory of sorbent socks, pads, and absorbents to remove hydrocarbon spills from the premises. Response personnel apply a commercial liquid neutralizing agent to control acid and caustic spills.

Hazardous Waste Disposal

Texas A&M University Corpus Christi operates as a Small Quantity Generator (SQG) of hazardous waste and must comply with the State and Federal regulations on waste disposal associated with that classification.

The hazardous waste generated on the Campus is placed in an 18'X 20' metal building specifically constructed for the storage of hazardous waste. Secondary containment designed into the building minimizes the probability of a spill reaching the environment. Safety features of the building include an audible/strobe fire and vapor alarm system and a safety shower/eye wash station.

The University's contracted Motor Pool personnel change motor oil on university vehicles. The used motor oil is stored in a 100-gallon oil tank inside secondary containment. Safety Kleen Systems transport the used oil to their facility. The oil filters are drained, crushed, and removed by Safety Kleen Systems.

Special requirements are placed on the selected hazardous waste contractors by the Texas A&M University System. These include, but are not limited to, the following:

1. Contractor must conduct all procedures and operations exercising standards of care regarding personnel safety and environmental preservation. The contractor shall comply with all requirements of the disposal sites and shall maintain current, in effect all permits, licenses, and any other documentation required by Federal and State of Texas rules, laws, standards, and regulations.
2. The contractor shall comply with the OSHA standards, requirements and State of Texas laws and rules, regulations, standards, and requirements pertaining to safety that are or subsequently become applicable to the contractor in the performance of the work.

The University contracts the disposal of Resource Conservation and Recovery Act (RCRA) wastes to:

SET Environmental, Incorporated, 14010 Interdrive West, Houston TX 77032, U.S.EPA ID# TXD055135388

Safety Kleen Systems, 3820 Bratton, Corpus Christi, Texas 78413, US EPA ID# ILD 984908202

SET Environmental, Incorporated and Safety-Kleen Systems manifest and transport the waste to a permitted Treatment, Storage and Disposal Facility.

Measurable Goal

TAMUCC and SSC Facilities Services track financial expenditures for major elements of the SWMP.

These elements include:

- Street, Parking lot, and sidewalk cleaning
- Wastewater Sewer Line Upgrades and Repairs
- Litter Control
- Solid Waste Disposal
- Recycling services for Solid Waste
- Hazardous Waste Disposal

TAMUCC will report the annual expenditures for the reporting period and an estimated budget for the following reporting period.

POLLUTION PREVENTION AND GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

Texas A&M University-Corpus Christi, through training and employee awareness, strives to prevent illicit discharges. Good grounds keeping practices minimize the potential for trash, litter, and debris to buildup in the storm water system. SSC Facilities Services Grounds maintains the landscape to minimize unsightly litter and debris from accumulating on campus. Several large grassy swales located on the southwest side of the campus tend to have large areas of cattail and weed growth. Scheduled preventative maintenance by our Facilities Services to control the plant growth, collect litter and debris are methods to ensure continuous unobstructed flow of storm water away from the parking lots, streets, and buildings. Maintenance of the storm water system is extremely important for campus flood control during the Atlantic/Gulf of Mexico Hurricane/Tropical Storm season.

Storm water run-off from non-point sources is comprised primarily of TAMUCC streets and parking lots. SSC Facilities Services is responsible for the maintenance of approximately three (3) miles of public roadway, twenty (20) parking lots, and a four-level parking garage. The storm water flows to the nearest drainage swale and/or directly into Corpus Christi Bay and Oso Bay via the storm water pipe system. One street sweeper and a work order system are utilized to perform and schedule the cleaning of roadways and parking lots.

Pesticide, Herbicide and Fertilizer Application

TAMUCC's Facilities Services contracts with a licensed commercial pesticide company for the application of pesticides on campus. The commercial applicators are regulated and licensed by the Texas Department of Agriculture and the Texas Structural Pest Control Board. The selected pest control company is contractually obligated to comply with all the state regulations and local recommendations when using, storing, or transporting such materials on the TAMUCC campus.

Seldom are pesticides applied to landscaped areas of the campus. Fire ant control does require the application of conservative amounts of pesticide to areas where numerous people participate in outside activities. TAMUCC's pesticide control is contracted with a licensed commercial applicator.

The City of Corpus Christi is primarily responsible for mosquito control, Facilities Services Grounds treats areas of standing water to prevent mosquitos. Fertilizer and herbicide application schedules and rates are based on contemporary resource management practices.

The University implements maximum controls to reduce the discharge of pollutants related to the application of herbicides and fertilizers. To prevent over spray, the application of herbicides and fertilizers is discouraged on extremely windy days. Best management practices dictate that the optimum amount of material be applied to promote healthy plants and control weeds.

Measurable Goal

TAMUCC and SSC Facilities Services track financial expenditures for major elements of the SWMP.

These elements include:

- Street, Parking lot, and sidewalk cleaning
- Wastewater Sewer Line Upgrades and Repairs
- Litter Control
- Solid Waste Disposal
- Recycling services for Solid Waste
- Hazardous Waste Disposal

TAMUCC will report the annual expenditures for the reporting period and an estimated budget for the following reporting period.

INDUSTIAL AND HIGH-RISK RUNOFF

TAMUCC's permitted ms4 area does not include Industrial or High-Risk Runoff.

CONSTRUCTION SITE RUNOFF

TAMUCC's storm water management for construction emphasizes engineering controls, pollution prevention, and good housekeeping to ensure the quality of storm water runoff. During new construction, to maintain water quality and minimize turbidity in the bay waters from storm water runoff, the placement of silt fences, hay bales or concrete rip rap at various discharge points minimizes erosion of the soil from the construction site.

All contractors are required to comply with the TCEQ and TPDES regulations and the City of Corpus Christi's Guidance Document for Developmental Planning and Construction Activities.

Measurable Goal

TAMUCC will track and report structural changes to the university's storm sewer system and status of any current Stormwater Permit for Construction Sites during the reporting period.

PUBLIC EDUCATION

The Pollution Prevention Partnership (P3) is operated by Texas A&M University Corpus Christi's Office of Research Engagement and supported by the Port of Corpus Christi Authority. The Pollution Prevention Partnership delivers a broad range of environmental assistance programs and services, including environmental education, pollution prevention, and environmental compliance assistance to citizens, schools, businesses, industry, and governments throughout the Coastal Bend.

The P3 Program includes:

- Public Education (community events and public workshops)
- AutoCheck Program
- CleanFleet Program

The AutoCheck Program is a Supplemental Environmental Program (SEP) for the public to measure vehicle emissions and fix vehicular high emission problems.

Vehicle repairs are funded from penalty monies collected by the Texas Commission on Environmental Quality (TCEQ) enforcement actions.

The CleanFleet Program is a free emission testing service for any Nueces or San Patricio County business' fleet vehicles, gasoline or propane. The CleanFleet Program is an affiliate with EPA's SmartWay Program, a voluntary, public-private partnership with the freight industry that the Environmental Protection Agency started to focus on reducing emissions, improving fuel economy, and increasing energy efficiency.

Measurable Goal

TAMUCC E,H&S provides various trainings dealing with major elements of the SWMP. TAMUCC and SSC Facilities Services staff, whose job functions impact the MS4 permitted area, will receive applicable training at least once per the MS4 Permit Term.

TAMUCC will track and report the number of employees and contractors who receive training during the reporting period.

MONITORING, EVALUATING, AND REPORTING

Texas A&M University-Corpus Christi is committed to meeting the storm water quality standards. Programs have been developed to monitor TAMUCC's MS4 area.

Dry & Wet Weather Screening Program

Texas A&M University-Corpus Christi performs annual visual surveys of all areas of the MS4 on campus during the dry and wet weather monitoring periods. During each seasonal monitoring period, at least two (2) visual inspections will be performed for each major out fall.

These visual inspections will look for:

- flowing water
- turbidity
- odor
- scum or algae
- oil sheen
- soil or debris
- signs of erosion
- a source point for any discharge.

Dry and Wet Weather Site Selection

The screening site locations are set based on the following criteria:

- Within TAMUCC's permit area
- Distribution within permit area
- Ability for staff to access site safely
- Ability to determine the area discharging upstream of the site.

Storm Event Monitoring Program

The City of Corpus Christi will perform visual assessment, sample collection, and analytical monitoring on the behalf of TAMUCC. Texas A&M University-Corpus Christi anticipates that the storm event monitoring program will accomplish the following objectives:

- Provide a tool to detect excessive levels of pollutants in waterways after storm events.
- Provide information related to the type of pollutants present in waterways after storm events.
- Provide a tool for investigating the origin of pollutants.
- Provide a limited assessment of storm water impact on aquatic life.
- Provide a tool to detect acute pollution events.

Storm Event Monitor Site Location

The City of Corpus Christi will complete visual assessments, sample collection, and analytical monitoring of storm water flow at the major outfall number 9, northwest side of the Natural Resources Center (NRC) building.

Measurable Goal

TAMUCC will track and report the following findings and corrective actions for each reporting period:

- Dry & Wet Weather Screenings
- Analytical Data from the City of Corpus Christi's Storm Event Monitoring

CONCLUSION

Texas A&M University-Corpus Christi remains committed to meeting the storm water quality standards as set forth by the U.S. Environmental Protection Agency and the Texas Commission on Environmental Quality. The basis for meeting our commitment to water quality relies on adherence to the University Storm Water Management Plan and Best Management Practices in coordination with the City of Corpus Christi Storm Water Department.

MS4 Annual Report - WQ0004200000



November 1, 2023 – October 20, 2024

**MUNICIPAL SEPARATE STORM SEWER SYSTEM
ANNUAL REPORT**

TPDES PERMIT NO. WQ0004200000

*City of Corpus Christi
Port of Corpus Christi Authority of Nueces County
Del Mar College District
Texas A&M University – Corpus Christi*

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CITY OF CORPUS CHRISTI, TEXAS
MS4 TPDES PERMIT NO. WQ0004200000
System Overview

As required by *Part IV.C Annual Report* of TPDES MS4 Permit WQ0004200000 (EPA I.D. No. TXS000601), the City of Corpus Christi (City) and its co-permittees: Port of Corpus Christi Authority (PCCA), Del Mar Junior College District (Del Mar), and Texas A&M University – Corpus Christi (TAMU-CC), submit the attached annual system-wide report for your review.

During the November 1, 2023, to October 20, 2024 reporting period, the City of Corpus Christi and its co-permittees continued their respective Stormwater Management Programs. A new TPDES Stormwater Permit was issued by the TCEQ on October 21, 2020, thus ending the permit period on the date of issuance. All co-permittees worked on administering their Stormwater Management Programs including documentation of the measurable goals.

Prior to the 2016/17 reporting period, Texas Department of Transportation – Corpus Christi (TXDOT-CC) was a co-permittee to TPDES MS4 Permit WQ0004200000. As of November 30, 2016, TXDOT-CC has received authority to withdraw from the City of Corpus Christi's MS4 permit and has been issued Permit WX0005011000. The 2019/20 Annual Report excludes TXDOT-CC as a co-permittee; however, it is not on the 2020/2021 Annual Report.

The City and its co-permittees, excluding TXDOT-CC, submitted an application for renewal of TPDES MS4 Permit WQ0004200000 to TCEQ on February 11, 2013. The executive director declared the above referenced application administratively complete on April 10, 2013. Notice of Receipt of Application and Intent to Obtain a Municipal Separate Storm Sewer System Permit Renewal (NORI) was published in the *Corpus Christi Caller Times* on May 6, 2013. The Proof of Publication and Publisher's Affidavit was submitted to TCEQ May 15, 2013. The Spanish-language NORI was published in *Tejano y Gruperio* news on May 15, 2013. The proof of publication and a revised Alternative Language Publisher's Affidavit were submitted to TCEQ on June 5, 2013.

The City and co-permittees received the TCEQ Executive Director's Notice of Application and Preliminary Decision (NAPD) dated July 8, 2020 for the renewal of the permit. The permittees published the NAPD within the required deadline in the *Corpus Christi Caller-Times* on August 11, 2020, and in the alternative language newspaper, *Tejano Y Gruperio News*, on August 15, 2020. Publisher's Affidavits for the NAPD were transmitted to the TCEQ on August 26, 2020. The TPDES permit was signed by the Executive Director and became effective on October 21, 2020.

Attached is the City of Corpus Christi and co-permittees' system wide Annual Report. All co-permittees: Del Mar College District, the Port of Corpus Christi Authority, and Texas A&M University – Corpus Christi provided information for this system-wide annual report in a timely manner as required by *Part IV.C. Annual Report*.

CITY OF CORPUS CHRISTI
ANNUAL REPORT FOR THE PERIOD COVERING
November 2023 – October 2024

I. Status of implementing the Stormwater Management Plan

All Stormwater Management Plan (SWMP) sections have been fully implemented as required by TPDES Permit WQ0004200000 (EPA I.D. No. TXS000601).

II. Proposed changes to the Stormwater Management Plan (SWMP)

During the 2023-24 reporting year, there was a review of all sections of the SWMP for consistency and accuracy with current policies, practices, and employee positions among the various departments that contribute to the document. Measurable goals were evaluated and changed as appropriate based on new permit requirements, including targeted controls for bacteria to satisfy the requirements related to the Total Maximum Daily Load (TMDL) requirements of Part II and the SWMP requirements of Part III of the permit. The SWMP includes implementation schedules for all measurable goals. The SWMP was reviewed and revised within the specified compliance period.

III. Revisions to the assessments of controls and the fiscal analysis

No revisions to the assessment of controls and fiscal analysis as reported in the permit application are requested at this time.

IV. Total Maximum Daily Loads (TMDLs)

The city of Corpus Christi is currently subject to bacteria TMDL's in certain segments of its receiving waters. These impaired areas are: Cole, Ropes, and Poenisch Parks (2481CB_03, 04, and 06 respectively), and segment 2485A of Oso Creek. There is a wasteload allocation for Stormwater (WLASW) in the Oso creek, but a 2012 study indicated that Stormwater discharges are responsible for <10% of the loading, and will be difficult to address. There is a TMDL for segment 2485 of Oso Bay, but it has been determined that Stormwater discharge is not a significant source of bacterial loading to the segment.

The city has implemented targeted controls in the TMDL areas by focusing existing programs in these sections. The city has a Stormwater Environmental Quality team that focuses on illicit connection and discharge detection and elimination through an MS4 screening program. This team also enforces local ordinances related to Storm Water pollution and has citation power.

The city is in the process of upgrading the sanitary sewer system in order to address capacity, sanitary sewer overflow issues, and pump station inadequacies. The progress of this program is monitored by the Utilities Consent Decree Compliance program.

Education is done by multiple departments to address the causes of bacterial loading to the impaired waters. This education includes information on how fats oils and greases (FOGs) can cause sanitary sewer overflows (SSO) through clogging sanitary sewer lines, the contribution of residential sites to bacterial loading, proper disposal of pet waste, and the proper maintenance and operation of decorative ponds. The spike in levels of E. coli has brought about more non-point source sampling, education and random industrial inspections in those areas.

V. Consent Decree-Wastewater

As part of a settlement with the Environmental Protection Agency, the U.S. Department of Justice, and the Texas Commission on Environmental Quality (TCEQ), the City of Corpus Christi has agreed to reduce Sanitary Sewer Overflows (SSO) within its jurisdiction, formally entering a consent decree with all interested parties. The decree requires that the city clean a minimum of 12% of small gravity mains annually and the entire collection system by January 11, 2031. As SSO's present a threat to the MS4 the consent decree program shares any SSO's that discharge wastewater into the MS4 to the Storm Water Environmental Quality division. In addition, the consent decree program also assesses the wastewater system to determine what, if any, remediation is required, with a timeline of January 11, 2025 to complete and submit remediation plans, and January 11, 2036 as a deadline for completing remediation. This program is overseen by the Utilities Consent Decree Compliance Program. Wastewater reported 84 SSO's, 281,152 gallons spilled and 77,462 gallons recovered for 2023-2024 reporting period. Linear feet (LF) Repaired - 219,617, two major upgrades to lift stations, and 3,225 wastewater manholes were inspected. 929,233 LF of gravity mains were cleared, and 647,001 LF of gravity mains were inspected.

VI. Summary of the data during the reporting year

During this reporting period, storm water samples have been collected, analyzed, and reported on Discharge Monitoring Reports (DMRs) to fulfill a part of the Representative Storm Event Monitoring Program as prescribed by *Part IV.A.1* of the Permit. The other programs: Illicit & Improper Discharge Elimination Inspections, Wet Weather Field Screening, Dry Weather Field Screening, Compliance Inspections, Industrial & High-Risk Inspections, and Construction Site Inspections, were all completed as required by the permit and have been summarized in Section IX of this report as part of the measurable goals results.

The City Marina is involved in a recycling program which manages materials that could directly enter the bays. The Marina recycled approximately 3,000 gallons of bilge water, 400 gallons of engine oil, one 55-gallon drum of used oil filters and one 55-gallon drum of oily cloths during the permit year.

A partnership between the City of Corpus Christi, Texas Parks and Wildlife, and the Texas General Land Office is aimed at properly disposing of boats. The Vessel Turn-In Program (VTIP) is free and offers boat owners a voluntary method of disposing of their run-down vessels in a safe, environmentally conscious way. During this permit year 81 vessels totaling 1001 ft were turned over to Solid Waste for disposal.

Household Hazardous Waste (HHW) Program Data

The Household Hazardous Waste Disposal Program continued to operate during this reporting period. Used oil and oil filters are collected daily, six days a week at the J.C. Elliott Transfer Station and Citizen Collection Center, as are lead batteries and tires. Lead batteries and tires are also collected daily by some local vendors. Other household hazardous waste is also received Monday through Saturday at the Transfer Station. Through the HHW program, the City prevented the following amounts of materials from entering its MS4:

Flammables	27,215 lbs
Corrosives	4,028 lbs
Oxidizers	3,309 lbs
Pesticides	15,266 lbs
Batteries	31,884 lbs
Automotive Fluids	15,266 lbs
Paint/Paint Related	30,000 lbs
CFLs/Mercury Containing Equipment	5,145 lbs
Other (Aerosols, Cylinders, Non-Regulated, Reactive)	25,645 lbs
Used Electronics	25,245 lbs

TOTAL 183,003 lbs

Citywide Recycling Program

In January 2011, the City of Corpus Christi converted to single-stream recycling. The citywide recycling program provides collection service 26 times per year to residents in the City of Corpus Christi. Commodities collected in this program include newspaper, mixed paper (cardboard, magazines, cereal boxes, etc.), plastic, aluminum and steel/tin cans. The citywide curbside recycling program is administered by Solid Waste Services.

In 2023/24 Solid Waste Services collected a total of 6,875.05 tons of recyclable materials. The total average monthly curbside recyclable material collected is 573 tons. The following is a breakdown by type of recyclable materials collected during this permit period:

Cardboard	3,606.38 tons
Mixed Paper	2,103.67 tons
Plastic	769.48 tons
Aluminum	239.06 tons
Tin	156.46 tons

TOTAL 6,875.05 tons

VII. Summary of NOIs, small construction site notices, and inspections conducted at industrial facilities and construction sites.

Notices of Intent

The City's industrial permit holder list was updated as a result of sending out letters during the previous permit year to businesses that had Standard Industrial Classification (SIC) codes regulated through the TPDES Multi Sector General Permit (TXR050000). During this reporting period, the City received 164 new Notices of Intent (NOIs) for TPDES Multi Sector General Permit (TXR050000) for a total of 526 active NOIs. 60 new No Exposure Certifications for Multi Sector General Permit (TXR050000) were received for a total of 316 active No Exposure Certifications. There was 4 new NOI for a Concrete Production Facility (TXG1) during this permit year bringing the total to 21 active facilities.

Construction Site Notices

One hundred and four (113) new NOI's for TPDES Construction General Permit (TXR150000) were received this permit year for a total of 2186 active NOIs.

Industrial Inspections

During the 2023-2024 Permit Year, Stormwater staff inspected 260 facilities through the Industrial & High-Risk program, which included 38 high risk, 197 low risk, 13 random facility inspections, and 12 no exposure facilities. Of the facilities that were inspected, 280 were found non-compliant, with deficiencies corrected after written notification of violation(s) except for two facilities. Eight industrial facilities required enforcement action that resulted in filing 4 court referrals for possible litigation. Seven of those facilities are now in compliance with the stormwater ordinances, one remains out of compliance and continues to be monitored.

Construction Site Inspections

Stormwater staff conducted 659 and found 242 sites that were found non-compliant, deficiencies corrected after notification of the violations. The number of violations from Development Services inspections were not available. Three construction sites were referred to Environmental Court for prosecution.

VIII. Annual estimated expenditures for prior fiscal year and budget for current fiscal year.

Program	2022-23 Expenditures	2023-24 Budget
STORMWATER OPERATIONS PROGRAMS		
Stormwater Admin – Equipment Replacement	\$400,000	\$323,039
Stormwater Vegetation Management	\$4,485,692.23	\$ 3,329,948.96
Stormwater Concrete Maintenance	\$3,953,323.20	\$ 2,614,415.30
Stormwater Street Sweeping Program	\$1,946,951.78	\$ 4,065,744.00
Stormwater Channel Maintenance	\$9,121,128.38	\$ 11,344,283.09
Stormwater Treatment Operating Budget	\$1,580,843.66	\$ 1,266,882.10
Stormwater Flood Control Management	\$1,923,991.13	\$ 2,137,094.42
Subtotal for All Stormwater Operations	\$23,411,930.38	\$25,081,407.75
SUPPORT PROGRAMS		
Recycling Program	\$3,899,848.00	\$4,534,048.00
Dead Animal Pick Up	\$94,859.42	\$95,000.00
Code Enforcement	\$ 3,822,397.99	\$ 3,544,649.00
Curbside Heavy Brush Collection	\$3,500,587.00	\$3,925,821.00
Hazardous Material Spill Response Team	\$5,291,264.91	\$5,663,780.79

Municipal Landfills	\$8,006,566.00	\$8,744,465.00
Education & Outreach	\$322,580.00	\$ 360,038.00
Education Outreach Supplies & Events - Parks	\$ 14,677	\$ 12,000
Water Conservation Education & Outreach	\$221,855.77	\$212,251.00
Household Hazardous Waste	\$100,000.00	\$100,000.00
Municipal Maintenance Yard Activities	\$76,467.67	\$83,468.00
Subtotal of All Support Programs	\$ 25,351,103.76	\$ 27,275,520.79
Total for all Stormwater Programs	\$ 48,763,034.14	\$ 52,356,928.54

*Please note that the City of Corpus Christi Fiscal Year is from October 1, 2023 – September 31, 2024. The expenditures and budget are based on fiscal year, not permit year.

IX. Summary of Enforcement Actions, Inspections and Public Education Programs

Litter and Cleanliness Enforcement

Along with the inspections described above, various City departments are involved in enforcing ordinances which address preventing pollutants from entering the MS4. When violations are found, citations may be issued, and the charges processed through the City's Municipal Court.

During the reporting period, 617 violations occurred regarding unauthorized set out and carts left in the right-of-way. Violations with brush and bulky items that were set out in unauthorized periods accounted for 5,054 compliance violations. There were 519 violations written for other various compliance issues regarding litter, cleanliness and illegal dumping during the reporting period. 105 violations were issued to haulers for their lost trash/litter.

Compliance Investigations

During this reporting period 17,194 compliance investigations were conducted by Code Enforcement following reports, complaints, or observations of spills and 12,486 inspections resulted in violations. Of the inspections resulting in violations, 1,649 violations were clean-ups and abatements.

Compliance investigations reported for the Illicit Discharge Detection and Elimination Program include illegal dumping of liquids and/or spills, illegal dumping of solids, grass and leaves in streets or curbs, mud, or sediment tracking, and other non-environmental MS4 related complaints. The total number of investigations completed for illicit discharge detection was 121, with 12 of those investigations resulting in violations.

Investigation	Violations	No Violations	Total Count
Dumping Liquids	150	149	299
Dumping Solids	26	32	58
Grass/Leaves	208	47	255
Sediment/Mud	12	7	19
Non-Environmental	0	287	287
Odor	3	7	10
Spills	30	234	264
Totals	35	931	966

X. Public Education and Outreach

During the reporting period of November 1, 2023, through October 20, 2024, the City Stormwater Department participated in 444 events, gave 132 presentations, and reached 294,528 citizens during presentations, events, billboards, social media, and with educational brochures. These events were offered to the general public as well as builders, developers, inspectors, construction workers, at the City New Employee Orientation Training, and during compliance investigations related to complaints and pro-active investigations. Additionally, the City of Corpus Christi Parks & Recreation Department maintained the Oso Bay Wetlands Preserve. The preserve is a 162-acre nature preserve with 4 miles of nature viewing trails and a Learning Center. The Learning Center has an interactive watershed which allows the public to learn how terrain relates to runoff and how rain flows into various watersheds. Another display explains how wetlands help filter stormwater and shows the major drainage basins in the City of Corpus Christi. Through guided nature walks and educational field trips, 5231 people were reached.

The Stormwater Division developed a training program for all new city employees as part of the New Employee Training. This training is held every Monday or Tuesday if Monday is a holiday. This program began on March 2, 2020. A total of 613 new employees received the training that focuses on ways to prevent stormwater pollution not only on the job, but also in the home during the reporting period 2023-2024.

Partnerships

During the reporting period, the City continued to participate in the Coastal Bend Bays and Estuaries Program (CBBEP), Coastal Bend Bays Foundation (CBBF), and the Local Emergency Planning Committee.

Billboards

Billboard advertisement for the reporting period included the display of three large billboards throughout the city. The billboards included messages about trash on the ground will be washed into the bays, unsecured trash in pickup beds blows out creating litter, and a message that clean bays are everyone's responsibility. During this period, a total of \$16,800 was spent on billboard advertising. The billboard images are below.



Community Involvement and Engagement:

Through coordinated efforts of multiple City departments, regulatory agencies, community volunteers, and organizations, numerous clean up and beautification projects have occurred throughout the reporting year. The Parks and Recreation Department for the City of Corpus Christi held 172 neighborhood cleanups and activities. The Texas Adopt-A-Beach program held 18 cleanup events and 2184 volunteers picked up 17,444 pounds of litter over 66 miles of parks and beaches within the City of Corpus Christi MS4 area.

Additionally, the City of Corpus Christi Stormwater Environmental team adopted Ropes Park as part of the City Adopt-a-Park program that is near stormwater outfalls and is also on the Texas Beach Watch list. Every quarter, a voluntary cleanup event was organized at Ropes Park to pick up trash and debris, weather permitting. During the 2023/24 permit year, 200 pounds of trash was picked up during the Adopt-A-Park cleanup events. There were two cleanup events held this permit period.

The City of Corpus Christi Stormwater Maintenance of Lines team usually provides heavy equipment and manpower for a cleanup.

Adopt-A-Park Cleanup		
Sites	Volunteers	Pounds
Ropes Park	6	200
Rookery Islands	0	0
Total	6	200

As part of the Community Involvement effort, the City has offered events to mark stormwater inlets with markers to ensure residents understand that stormwater inlets drain directly to waterways and bays. During the 2023/24 permit year, 28 inlet markers were placed on stormwater drains as part of public education and outreach.

The City increasingly uses social media to engage the public for input and education. The City Public Information Office, as well as the Stormwater Department, actively use Facebook. The Stormwater Environmental Department Facebook account had 24 stormwater related posts that had over 5,500 total impressions (views) that resulted in 294 engagements from posts. The Stormwater Environmental Department Twitter account has received around 300 impressions.

The City also has a website with sections dedicated to stormwater pollution prevention. The website was updated in 2023. The website since that time is updated as necessary with current information, additional content, and links to direct the reader to other resources.

There are various communication avenues that the public can participate in to help with stormwater pollution prevention. The City maintains a call center for residents to report stormwater violations and illegal dumping by calling 311, or the stormwater department general number at 361-826-1863. Residents' concerns can also be sent by email to pollutionprevention@cctexas.com and direct messaging on Facebook. The City also has a mobile phone app that residents can report illegal dumping, debris in stormwater catch basins/inlets, flooding or slow drainage, grass clippings in the gutters/storm drains, mud in the streets, sewer backups, spills, or other code violations.

XI. Identification of water quality improvements, degradations, and progress toward any measurable goals or measured reductions in pollutants.

During the recent reporting period, the City of Corpus Christi has initiated significant steps under the Bay Water Quality Improvement Project, aimed at enhancing the health and cleanliness of our water bodies. A key element of this initiative involves the acquisition of specialized equipment, scheduled for installation in the 2023/2024 permit year. This equipment is designed to intercept and remove trash and other debris, preventing it from entering the waters of Corpus Christi Bay. These improvements, part of a strategic overhaul of the existing storm water system, are focused on the efficient collection and elimination of pollutants before they reach the bay.

Implementation sites are strategically selected along the Corpus Christi Bayfront, extending from Cole Park to the American Bank Center, ensuring comprehensive coverage and maximum impact. In addition to these infrastructural advancements, the City remains steadfast in its commitment to reducing stormwater pollution through a multifaceted approach. Educational and outreach programs are being reinforced to foster community awareness and engagement in pollution prevention. Furthermore, we are amplifying our message through a robust communication strategy that includes public service announcements, billboards, and print advertising.

Progress Towards Measurable Goals for SWMP

Section 1 (E). Structural Controls, Litter Removal – Measurable goal: Amount of debris removed via street sweeping, inlet cleaning and trash rakes at pump stations. The City of Corpus Christi removed a total of 3,655.35 tons of debris during the Permit Year via street sweeping, 3118 inlets cleaned, 65.69 tons removed by the vegetation maintenance crews from open ditches, and 2.27 tons from trash rakes at the pumping stations. The total amount of debris/litter recovered from the MS4 was 3,723.31 tons.

Section 2 (C). Areas of New Development & Redevelopment (Stormwater Quality Management Plans) – Measurable goal: Number of accepted and approved Stormwater Quality Management Plans with total acreage encompassed. The City accepted and approved 65 Stormwater Quality Management Plans encompassing 1640.32 acres.

Section 3. Roadways – Measurable goal: Automotive fluids removed from roadways due to vehicle accidents. A Coordinated Spill Response Program (CSRP) was implemented during the Permit Year. Utilizing

coordination from multiple departments and vendors, 94 vehicle accidents with automotive fluid spilled were responded to. A total of 1,780 gallons of automotive fluids were captured and approximately 8,460 pounds of absorbent was used to absorb the automotive fluids that were recovered from roadways.

Section 3 (C). Roadways (Street Sweeping) – Measurable goal: Number of curb miles of streets swept in a year. During the Permit Year, November 1, 2023, through October 20, 2024, the City of Corpus Christi and its contractors swept 21,316.37 curb miles of streets. Public Works has in house street sweepers as well as a street sweeping contract that services operations in the downtown/north beach area and arterial streets of Corpus Christi.

Section 4 (C). Flood Control Projects (Guidance Document for Flood Control) – Measurable goal: Number of flood control projects reviewed and assessed for water quality impacts. The City reviewed and assessed 120 flood control projects for water quality impacts in this reporting period.

Section 5. Pesticide, Herbicide & Fertilizer Application – The Stormwater departments public outreach about Pesticide, Herbicide & Fertilizer application has included presentations to the public, educational literature, face to face engagement, social media, and public service announcements.

Section 6 (A.2). Illicit Discharges & Improper Disposal – Measurable goal: Number of compliance inspections performed and number of locations with violations. During the Permit Year November 1, 2023 through October 20, 2024, 121 compliance investigations were conducted following reports, complaints, or observations of spills or prohibited discharges to the MS4 with 12 investigations resulting in violations. There were 12 Environmental Court referral for Illicit Discharge issued during the permit year.

Section 7 (A). Spill Prevention & Response (Hazardous Material Spill Response Team)

– **Measurable goal: Annual expenditures for the Hazardous Materials Response Team.** During the Fiscal Year ending September 30, 2022, the City of Corpus Christi's HAZMAT team expended \$5,291,264.91 as a result of responding to hazardous waste spills. The budget for the subsequent Fiscal Year (October 1, 2023, through September 30, 2024) is \$5,659,780.79

Section 8 (A.4). Industrial & High-Risk Runoff (Industrial & High-Risk Runoff Program) – Measurable goal: Number of inspections performed and number of locations with violations. During the Permit Year November 1, 2023, through October 20, 2024, staff conducted 260 Industrial & High-Risk inspections, including one random facility inspections and nine no exposure certification inspections. Of these inspections, 4 Industrial & High-Risk facilities were found non-compliant, with deficiencies corrected after written notification of violation.

Section 9 (B). Construction Site Runoff (Inspection & Enforcement) – Measurable goal: Number of inspections, number of notices written, and number of events referred to Environmental Court. During the Permit Year November 1, 2023, through October 20, 2024, 894 site visits under the Construction Site Inspection Program were conducted, with multiple follow-ups to some sites. Of these inspections, 242 sites were found non-compliant at time of inspection and deficiencies corrected after notification of violation(s). The number of violations from inspections conducted by Development Services was not available. Stormwater found Three (3) construction sites were referred to Environmental Court for prosecution for failure to correct violations.

Section 10 (C). Public Education – Measurable goal: Number of resources expended in furtherance of the goals and objectives described in the Stormwater Public Education and Outreach Plan. The City of Corpus Christi Stormwater Environmental Department expended \$2,137,094.42 in operations during the Fiscal Year ending September 30, 2024.

These expenditures included \$16,800 spent on billboard education and \$137,242 spent on education and outreach supplies and events. Additionally, the Solid Waste Department spent \$322,580 in anti-littering education and outreach efforts and reached 632,408 people at events.

Section 11 (A). Monitoring & Screening Programs (Dry Weather Screening Program) – Measurable goal: Number of inspections performed and number of locations with flow. During the Permit Year November 1, 2023, through October 20, 2024, 1233 Dry Weather Field Screening inspections were conducted, finding 95 locations with flow.

Section 11 (B). Monitoring & Screening Programs (Wet Weather Screening Program) – Measurable goal: Number of inspections performed and number of locations with flow. During the Permit Year November 1, 2023, through October 21, 2024, 45 Wet Weather Field Screening inspections were conducted, finding 20 locations with flow.

Appendices

Appendix A: Discharge Monitoring Reports

Appendix B: Co-Permittee Annual Reports

Appendix A: Discharge Monitoring Reports

Appendix B-1: Port of Corpus Christi

Authority ReportAppendix B-2: Del Mar

College District Report

Appendix B-3: Texas A&M University – Corpus Christi Report



Discharge Monitoring



City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info	City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469	Report# /Lab ID#: AC23840 Sample Name: Carmel Date Received: 12/14/2023 Date Sampled: 12/14/2023	Report Date: 7/8/24 Time: 14:57 Time: 13:30
Phone:	EMAIL: roberta3@cctexas.com		

Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli (MPN)	141360.0	MPN	D	1.0	12/14/23 16:06	SM 9223 B - Coli	MONICAS	
Enterococci	206400.0	MPN	D	1.0	12/15/23 16:03	Enterolert	MONICAS	
Oil and Grease	7.5	mg/l		3	12/27/23 07:45	EPA 1664 B	CF	
pH (Field)	6.4	S.U.			12/14/23 13:30	SM 4500H+ B	FIELD	
Total Cyanide	-	µg/l	LE	5	7/6/24 11:58	EPA 335.4	MICHAELM10	
Total Hardness as CaCO3	140	mg/L		10	12/20/23 15:02	SM 2340 C	CF	
Water Temperature (in °C)	20.3	°C			12/14/23 13:30	SM 2550 B	FIELD	

Sample Comments: LE - Samples were not sent out for analysis (Cyanide)

This analytical report is respectfully submitted by the Water Utilities Laboratory. The enclosed results reflect only the sample(s) identified above. The results have been carefully reviewed and, unless otherwise indicated, meet the NELAC requirements as described by the Water Utilities Lab's QA/QC program. No part of this report shall be reproduced or transmitted in any form or by any means without the written consent of the City of Corpus Christi-Water Utilities Lab.

Respectfully Submitted,

Technical Director (or designee)

-
1. Quality assurance data for the sample batch which included this sample.
 2. Precision (PREC) is the absolute value of the relative percent difference between duplicate results .
 3. Recovery (RECOV) is the percent of analyte recovered from a spiked sample.
 4. Laboratory Control Sample (LCS) results are expressed as the percent recovery of analyte.
 5. Reporting Limit (RL), typically at or above the Limit of Quantitation (LOQ) of the analytical method.
 6. Data Qualifiers:

N=Analysis not performed as per client request. **H**=Sample exceeded holding time. **P**=Analysis is from an unpreserved sample. **J**=Value reported is less than the RL but greater than the MDL .

X=MS/MSD recovery or duplicates analysis exceeded the acceptance limit or Standard failed. **LA**=Lab accident. **LE**=Lab error. **OA**=Outside the scope of the lab's NELAC accreditation.

U=Unsuitable; sample turned turbid after incubation. **T**=Sample below temp requirement; not on ice. **EQ**=Equipment failure. **I**=Information on sample bottle and COC does not match.

S=Slow to filter; sample contains floc and/or large amount of residue on filter. **O**=Analysis performed by an outside NELAC accredited lab; **O^**=Analysis flagged by outside laboratory.

Z=Too many colonies present to provide a result (TNTC). **A**=Value reported is the mean of two or more determinations. **R**=Reagent water contamination suspected. **B**=Sample broken in transit.

NI=Not analyzed due to interferences. **K**=BOD result estimated due to blank exceeding the allowable oxygen depletion. **D**=Sample dilution required for analysis/ quality control.

SC=BOD/CBOD calculated using a seed correction factor not within acceptable range. **QB**=No QC data assigned to sample; sample result not affected.

EL=Oxygen usage is less than 2mg/L for all dilutions analyzed. The reported value is an estimated less than value and is calculated for the dilution containing the greatest concentration of sample.

EG=Less than 1mg/L DO remained for all dilutions analyzed. The reported value is an estimated greater than value and is calculated for the dilution containing the least concentration of sample.

E= The data exceed the upper calibration limit; therefore the concentration is reported as an estimate.



CHAIN OF CUSTODY RECORD

CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

AC23840

Carmel Parkway
SAMPLE LOCATION

Oscar Gonzalez
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
E. Coli/Enterococci	05-330	1330	G	Plastic	1	Na2S2O3
Total Hardness	12-14-23		G	Plastic	1	HNO3
Cyanide (T)			G	Plastic	1	NaOH
Oil & Grease	✓	✓	G	Glass	1	H2SO4

pH (SU)

6.4

Temperature (C)

20.3

Remarks

Relinquished by: <i>[Signature]</i>	Date/Time: 12/14/23 1457	Received by: <i>[Signature]</i>	Date/Time: 12/14/23 1457
Relinquished by:	Date/Time:	Received by:	Date/Time:

COMPOSITE PARAMETERS

- ANALYSIS
- Biochemical Oxygen Demand (BOD)
 - Chemical Oxygen Demand (COD)
 - Total Suspended Solids (TSS)
 - Total Dissolved Solids (TDS)
 - Total Nitrogen
 - Total Kjeldahl Nitrogen (TKN)
 - Nitrate-Nitrogen
 - Ammonia-Nitrogen
 - Total Phosphorus
 - Dissolved Phosphorus
 - Total Cadmium
 - Total Chromium
 - Total Copper
 - Total Lead
 - Total Nickel
 - Total Zinc
 - Total Atrazine

Units
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L

GRAB PARAMETERS

- ANALYSIS
- ☒ Oil and Grease
 - ☒ Total Cyanide
 - ☒ Hardness
 - ☒ E. coli
 - ☒ Enterococci
- Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL

Temp: 5.2
Gun: A



City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info	City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469	Report# /Lab ID#: AC33251 Sample Name: Carmel Date Received: 05/17/2024 Date Sampled: 05/17/2024	Report Date: 6/5/24 Time: 15:09 Time: 11:22
Phone:	EMAIL: roberta3@cctexas.com		

Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli (MPN)	77.5	MPN	D	25	5/17/24 15:37	SM 9223 B - Coli	MONICAS	
Enterococci	25.0	MPN	D	1.0	5/17/24 15:42	Enterolert	MS/CF	
Oil and Grease	18.5	mg/l	K, X	5.0	6/3/24 11:00	EPA 1664 B	VM	
pH (Field)	8.2	S.U.			5/17/24 11:22	SM 4500H+ B	FIELD	
Total Cyanide	< 2.0	µg/l	O	5.0	5/29/24 23:04	EPA 335.4	EUROFINS	
Total Hardness as CaCO3	2934.78	mg/L		10	5/22/24 09:00	SM 2340 C	CF	
Water Temperature (in °C)	23.5	°C			5/17/24 11:22	SM 2550 B	FIELD	

Sample Comments:

This analytical report is respectfully submitted by the Water Utilities Laboratory. The enclosed results reflect only the sample(s) identified above. The results have been carefully reviewed and, unless otherwise indicated, meet the NELAC requirements as described by the Water Utilities Lab's QA/QC program. No part of this report shall be reproduced or transmitted in any form or by any means without the written consent of the City of Corpus Christi-Water Utilities Lab.

Respectfully Submitted,

Technical Director (or designee)

-
1. Quality assurance data for the sample batch which included this sample.
 2. Precision (PREC) is the absolute value of the relative percent difference between duplicate results .
 3. Recovery (RECOV) is the percent of analyte recovered from a spiked sample.
 4. Laboratory Control Sample (LCS) results are expressed as the percent recovery of analyte.
 5. Reporting Limit (RL), typically at or above the Limit of Quantitation (LOQ) of the analytical method.
 6. Data Qualifiers:

N=Analysis not performed as per client request. **H**=Sample exceeded holding time. **P**=Analysis is from an unpreserved sample. **J**=Value reported is less than the RL but greater than the MDL .

X=MS/MSD recovery or duplicates analysis exceeded the acceptance limit or Standard failed. **LA**=Lab accident. **LE**=Lab error. **OA**=Outside the scope of the lab's NELAC accreditation.

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S=Slow to filter; sample contains floc and/or large amount of residue on filter. **O**=Analysis performed by an outside NELAC accredited lab; **O^**=Analysis flagged by outside laboratory.

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EG=Less than 1mg/L DO remained for all dilutions analyzed. The reported value is an estimated greater than value and is calculated for the dilution containing the least concentration of sample.

E= The data exceed the upper calibration limit; therefore the concentration is reported as an estimate.



CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

CHAIN OF CUSTODY RECORD



Carmel Parkway
SAMPLE LOCATION

AC33251

COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
Total Hardness	5-17-24	11:22 am	G	Plastic	1	HNO3
Oil & Grease			G	Glass	1	H2SO4
Cyanide (T)			G	Plastic	1	NaOH
E. Coli/Enterococci			G	Plastic	1	Na2S2O3

pH (SU)

8.2

Temperature (C)

23.5

Remarks

Temp: 6.3 (A)

pH: >14 (w2676)

All samples are stored on ice through laboratory receipt.

Relinquished by:	Date/Time	Received by:	Date/Time
<i>[Signature]</i>	5-17-24 1509	<i>[Signature]</i>	5-17-24 1509
Relinquished by:	Date/Time	Received by:	Date/Time

COMPOSITE PARAMETERS

☒ GRAB PARAMETERS

ANALYSIS

- ☐ Biochemical Oxygen Demand (BOD)
- ☐ Chemical Oxygen Demand (COD)
- ☐ Total Suspended Solids (TSS)
- ☐ Total Dissolved Solids (TDS)
- ☐ Total Nitrogen
- ☐ Total Kjeldahl Nitrogen (TKN)
- ☐ Nitrate-Nitrogen
- ☐ Ammonia-Nitrogen
- ☐ Total Phosphorus
- ☐ Dissolved Phosphorus
- ☐ Total Cadmium
- ☐ Total Chromium
- ☐ Total Copper
- ☐ Total Lead
- ☐ Total Nickel
- ☐ Total Zinc
- ☐ Total Atrazine

Units

- mg/L
- mg/L
- mg/L
- mg/L
- mg/L
- mg/L
- mg/L
- mg/L
- mg/L
- mg/L
- ug/L
- ug/L
- ug/L
- ug/L
- ug/L
- ug/L

ANALYSIS

- ☒ Oil and Grease
- ☒ Total Cyanide
- ☒ Hardness
- ☒ E. coli
- ☒ Enterococci

Units

- mg/L
- ug/L
- mg/L
- MPN/100 mL
- MPN/100 mL



City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469						Report# /Lab ID#: AC33250 Sample Name: Carmel Date Received: 05/17/2024 Date Sampled: 05/17/2024			Report Date: 6/3/24 Time: 15:09 Time: 14:27		
Phone:						EMAIL: roberta3@cctexas.com					
Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments			
Ammonia by Probe	0.25	mg/L		0.1	5/24/24 10:20	SM 4500 NH3 D -2	VM				
Atrazine	< 0.60	µg/l	O, H	10	5/28/24 09:16	EPA 625.1	EUROFINS				
Biochemical Oxygen Demand	8.4	mg/L	H	4.6	5/20/24 12:19	SM 5210 B	VP				
Cadmium in µg/L	< 0.26	µg/L	O	2.0	5/29/24 14:00	EPA 200.8	EUROFINS				
Chemical Oxygen Demand	34	mg/l		10	5/22/24 10:00	SM 5220 D	VM				
Chromium reported in µg/L	5.4	µg/l	O	4.0	5/29/24 14:00	EPA 200.8	EUROFINS				
Copper reported in µg/L	8.0	µg/l	O	4.0	5/29/24 14:00	EPA 200.8	EUROFINS				
Dissolved Phosphorous	0.20	mg/l	O	0.020	5/25/24 19:34	EPA 365.1	EUROFINS				
Lead Reported in µg/L	4.5	µg/l	O	2.0	5/29/24 14:00	EPA 200.8	EUROFINS				
Nickel Reported in µg/L	7.2	µg/L	O	2.0	5/29/24 14:00	EPA 200.8	EUROFINS				
Nitrate by IC	0.65	mg/L		0.016	5/18/24 00:14	EPA 300.0	CF/MS				
Total Dissolved Solids	2150	mg/L			5/23/24 10:05	SM 2540 C	VM				
Total Kjeldahl Nitrogen	1.12	mg/L		0.20	5/30/24 10:33	EPA 351.4	VP				
Total Nitrogen by IC	1.77	mg/L			6/1/24 08:52	Calculated	MICHAELM10				
Total Phosphorus	0.21	mg/L	O	0.020	5/25/24 19:31	EPA 365.1	EUROFINS				
Total Suspended Solids	124.5	mg/L		12.5	5/20/24 13:44	SM 2540 D	VP				
Zinc Reported in µg/L	41	µg/l	O	4.0	5/29/24 14:00	EPA 200.8	EUROFINS				
Sample Comments: B - Analyte found in both blank and sample											

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Respectfully Submitted,



Technical Director (or designee)

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CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

CHAIN OF CUSTODY RECORD



Carmel Parkway
SAMPLE LOCATION

AC33250

OGUNZALEZ
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
Composite	5-17-24	1427	C	Glass	1	Ice

pH (SU)

Temperature (C)

Remarks

Temp 6.3 (10)

All samples are stored on ice through laboratory receipt.

Relinquished by: <i>[Signature]</i>	Date/Time: 5-17-24 1509	Received by: <i>[Signature]</i>	Date/Time: 5-17-24 1509
Relinquished by:	Date/Time:	Received by:	Date/Time:

☒ COMPOSITE PARAMETERS

- ANALYSIS
- ☒ Biochemical Oxygen Demand (BOD)
 - ☒ Chemical Oxygen Demand (COD)
 - ☒ Total Suspended Solids (TSS)
 - ☒ Total Dissolved Solids (TDS)
 - ☒ Total Nitrogen
 - ☒ Total Kjeldahl Nitrogen (TKN)
 - ☒ Nitrate-Nitrogen
 - ☒ Ammonia-Nitrogen
 - ☒ Total Phosphorus
 - ☒ Dissolved Phosphorus
 - ☒ Total Cadmium
 - ☒ Total Chromium
 - ☒ Total Copper
 - ☒ Total Lead
 - ☒ Total Nickel
 - ☒ Total Zinc
 - ☒ Total Atrazine

Units
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L

☐ GRAB PARAMETERS

- ANALYSIS
- Oil and Grease
 - Total Cyanide
 - Hardness
 - E. coli
 - Enterococci

Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL



City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info	City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469	Report# /Lab ID#: AC32877 Sample Name: Carmel Date Received: 05/13/2024 Date Sampled: 05/13/2024	Report Date: 5/31/24 Time: 20:53 Time: 19:57
Phone:	EMAIL: roberta3@cctexas.com		

Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli (MPN)	2780	MPN		1.0	5/13/24 22:00	SM 9223 B - Coli	CF	
Enterococci	180	MPN	D	1.0	5/13/24 21:48	Enterolert	CF	
Oil and Grease	48.9	mg/l	K, X	5.0	5/20/24 09:00	EPA 1664 B	VM	
pH (Field)	8.1	S.U.			5/13/24 19:57	SM 4500H+ B	FIELD	
Total Cyanide	2.3	µg/l	O, J	5.0	5/21/24 21:34	EPA 335.4	EUROFINS	
Total Hardness as CaCO3	2782.61	mg/L		10	5/22/24 09:00	SM 2340 C	CF	
Water Temperature (in °C)	24.4	°C			5/13/24 19:57	SM 2550 B	FIELD	

Sample Comments:

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Respectfully Submitted,

Technical Director (or designee)

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CHAIN OF CUSTODY RECORD

CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

Carmel Parkway
SAMPLE LOCATION

COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
E. Coli/Enterococci	5-13-24	7:57 pm	G	Plastic	1	Na2S2O3
Total Hardness	5-13-24	7:57 pm	G	Plastic	1	HNO3
Cyanide (T)	5-13-24	7:57 pm	G	Plastic	1	NaOH
Oil & Grease	5-13-24	7:57 pm	G	Glass	1	H2SO4

pH (SU)

8.1

Temperature (C)

24.4

Remarks

All samples are stored on ice through laboratory receipt.

Relinquished by:	Date/Time	Received by:	Date/Time
<i>[Signature]</i>	5-17-24 2053	<i>[Signature]</i>	5-13-24 8053
Relinquished by:	Date/Time	Received by:	Date/Time

COMPOSITE PARAMETERS

ANALYSIS
— Biochemical Oxygen Demand (BOD)
— Chemical Oxygen Demand (COD)
— Total Suspended Solids (TSS)
— Total Dissolved Solids (TDS)
— Total Nitrogen
— Total Kjeldahl Nitrogen (TKN)
— Nitrate-Nitrogen
— Ammonia-Nitrogen
— Total Phosphorus
— Dissolved Phosphorus
— Total Cadmium
— Total Chromium
— Total Copper
— Total Lead
— Total Nickel
— Total Zinc
— Total Atrazine

Units
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L

GRAB PARAMETERS

ANALYSIS
☒ Oil and Grease
☒ Total Cyanide
☒ Hardness
☒ E. coli
☒ Enterococci

Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL



City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469						Report# /Lab ID#: AC32915 Sample Name: Carmel Date Received: 05/14/2024 Date Sampled: 05/14/2024			Report Date: 5/28/24 Time: 11:03 Time: 09:47	
Phone:						EMAIL: roberta3@cctexas.com				
Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments		
Ammonia by Probe	<0.1	mg/L		0.1	5/24/24 10:20	SM 4500 NH3 D -2	VM			
Atrazine	< 0.60	µg/l	O	10	5/20/24 08:23	EPA 625.1	EUROFINS			
Biochemical Oxygen Demand	6.4	mg/L	X		5/14/24 13:43	SM 5210 B	VP/FK/MS			
Cadmium in µg/L	< 2.6	µg/L	O, D	20	5/21/24 20:01	EPA 200.8	EUROFINS			
Chemical Oxygen Demand	35	mg/l		10	5/21/24 10:05	SM 5220 D	VM			
Chromium reported in µg/L	6.5	µg/l	O, D,	40	5/21/24 20:01	EPA 200.8	EUROFINS			
Copper reported in µg/L	51	µg/l	O, D	40	5/21/24 20:01	EPA 200.8	EUROFINS			
Dissolved Phosphorous	0.030	mg/l	O	0.020	5/23/24 16:08	EPA 365.1	EUROFINS			
Lead Reported in µg/L	11	µg/l	O, D,	20	5/21/24 20:01	EPA 200.8	EUROFINS			
Nickel Reported in µg/L	94	µg/L	O, D	20	5/21/24 20:01	EPA 200.8	EUROFINS			
Nitrate by IC	4.57	mg/L		0.016	5/14/24 23:32	EPA 300.0	MS/CF			
Total Dissolved Solids	8030	mg/L			5/16/24 08:52	SM 2540 C	VM			
Total Kjeldahl Nitrogen	0.81	mg/L		0.20	5/22/24 08:13	EPA 351.4	VM			
Total Nitrogen by IC	5.38	mg/L			5/25/24 09:26	Calculated	MICHAELM10			
Total Phosphorus	0.029	mg/L	O	0.20	5/23/24 16:05	EPA 365.1	EUROFINS			
Total Suspended Solids	334.7	mg/L		8.3	5/15/24 14:34	SM 2540 D	VP			
Zinc Reported in µg/L	88	µg/l	O, D	40	5/21/24 20:01	EPA 200.8	EUROFINS			
Sample Comments:										

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CHAIN OF CUSTODY RECORD



CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

Carmel Parkway
SAMPLE LOCATION

O. GONZALEZ
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
Composite	5-14-24	0947	C	Glass	1	Ice

pH (SU) _____

Temperature (C) _____

Remarks

All samples are stored on ice through laboratory receipt.

Relinquished by: _____	Date/Time: 5-14-24 1103	Received by: _____	Date/Time: 5/14/24 1103
Relinquished by: _____	Date/Time: _____	Received by: _____	Date/Time: _____

☒ COMPOSITE PARAMETERS

☐ GRAB PARAMETERS

- ANALYSIS
- ☒ Biochemical Oxygen Demand (BOD)
 - ☒ Chemical Oxygen Demand (COD)
 - ☒ Total Suspended Solids (TSS)
 - ☒ Total Dissolved Solids (TDS)
 - ☒ Total Nitrogen
 - ☒ Total Kjeldahl Nitrogen (TKN)
 - ☒ Nitrate-Nitrogen
 - ☒ Ammonia-Nitrogen
 - ☒ Total Phosphorus
 - ☒ Dissolved Phosphorus
 - ☒ Total Cadmium
 - ☒ Total Chromium
 - ☒ Total Copper
 - ☒ Total Lead
 - ☒ Total Nickel
 - ☒ Total Zinc
 - ☒ Total Atrazine

Units
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L

- ANALYSIS
- Oil and Grease
 - Total Cyanide
 - Hardness
 - E. coli
 - Enterococci
- Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL

Temp. 11.6 Gun: A



City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469						Report# /Lab ID#: AC21837 Sample Name: Carmel Date Received: 11/10/2023 Date Sampled: 11/10/2023		Report Date: 2/28/24 Time: 09:29 Time: 08:30
Phone:						EMAIL: roberta3@cctexas.com		
Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments
Ammonia by Probe	<0.2	mg/L			11/22/23 08:55	SM 4500 NH3 D -2	VM	
Atrazine	< 0.60	µg/l	O	10	11/17/23 06:16	EPA 625.1	EUROFINS	
Biochemical Oxygen Demand	12.0	mg/L	K, X		11/10/23 12:30	SM 5210 B	FM/VM	
Cadmium in µg/L	< 1.3	µg/L	O, D	10	11/21/23 13:30	EPA 200.8	EUROFINS	
Chemical Oxygen Demand	42	mg/l		10	11/17/23 12:10	SM 5220 D	VM	
Chromium reported in µg/L	3.6	µg/l	O, J,	0	11/21/23 13:30	EPA 200.8	EUROFINS	
Copper reported in µg/L	8.2	µg/l	O, J,	0	11/21/23 13:30	EPA 200.8	EUROFINS	
Dissolved Phosphorous	0.25	mg/l	O	0.020	11/28/23 15:14	EPA 365.1	EUROFINS	
Lead Reported in µg/L	3.7	µg/l	O, J,	10	11/21/23 13:30	EPA 200.8	EUROFINS	
Nickel Reported in µg/L	3.6	µg/L	O, J,	10	11/21/23 13:30	EPA 200.8	EUROFINS	
Nitrate by IC	0.32	mg/L			11/10/23 13:27	EPA 300.0	MONICAS	
Total Dissolved Solids	444	mg/L			11/13/23 08:50	SM 2540 C	VP	
Total Kjeldahl Nitrogen	0.64	mg/L		0.20	11/21/23 10:48	EPA 351.4	FM/VM	
Total Nitrogen by IC	0.96	mg/L			2/27/24 17:09	Calculated	MICHAELM10	
Total Phosphorus	0.24	mg/L	O	0.020	11/28/23 15:14	EPA 365.1	EUROFINS	
Total Suspended Solids	186.5	mg/L		2.5	11/10/23 14:16	SM 2540 D	VM	
Zinc Reported in µg/L	52	µg/l	O, D	20	11/21/23 13:30	EPA 200.8	EUROFINS	
Sample Comments:								

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CHAIN OF CUSTODY RECORD

CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

AC24837

Carmel Parkway
SAMPLE LOCATION

Howard / Graham
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
Composite	11/9/23	0830	C	Glass	1	Ice
	11/10/23					

pH (SU)

Temperature (C)

12.0

Remarks

Gunn A

All samples are stored on ice through laboratory receipt.

Relinquished by:	Date/Time	Received by:	Date/Time
11-10-23 929	11-10-23 929	11-10-23 929	11-10-23 929
Relinquished by:	Date/Time	Received by:	Date/Time

☒ COMPOSITE PARAMETERS

☐ GRAB PARAMETERS

- ANALYSIS
- ☒ Biochemical Oxygen Demand (BOD)
 - ☒ Chemical Oxygen Demand (COD)
 - ☒ Total Suspended Solids (TSS)
 - ☒ Total Dissolved Solids (TDS)
 - ☒ Total Nitrogen
 - ☒ Total Kjeldahl Nitrogen (TKN)
 - ☒ Nitrate-Nitrogen
 - ☒ Ammonia-Nitrogen
 - ☒ Total Phosphorus
 - ☒ Dissolved Phosphorus
 - ☒ Total Cadmium
 - ☒ Total Chromium
 - ☒ Total Copper
 - ☒ Total Lead
 - ☒ Total Nickel
 - ☒ Total Zinc
 - ☒ Total Atrazine

Units
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L

- ANALYSIS
- Oil and Grease
 - Total Cyanide
 - Hardness
 - E. coli
 - Enterococci

Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL



City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469	Report# /Lab ID#: AC19971	Report Date: 1/23/24
	Sample Name: Carmel Date Received: 10/11/2023 Date Sampled: 10/11/2023	Time: 13:59 Time: 13:10
Phone: EMAIL: roberta3@cctexas.com		

Parameter	Result	Unit	Flag	RL	Date/Time Analyzed	Method	Analyst	Analysis Comments
Ammonia (ISE)	<0.2	mg/l		0.20	10/13/23 15:53	SM 4500 NH3 D -2	VP	
Atrazine	<0.60	µg/l	O	2	10/18/23 15:53	EPA 625.1	EUROFINS	
Biochemical Oxygen Demand	3.5	mg/L			10/12/23 11:50	SM 5210 B	VP	
Cadmium	<0.00085	mg/L	O	1	10/26/23 09:45	EPA 200.8	EUROFINS	
Chemical Oxygen Demand	57	mg/l		10	10/31/23 10:50	SM 5220 D	FM	
Chromium	0.0057	mg/l	O, J	2	10/26/23 09:45	EPA 200.8	EUROFINS	
Copper	<0.0069	mg/l	O	2	10/26/23 09:45	EPA 200.8	EUROFINS	
Dissolved Phosphorous	0.17	mg/l	O		10/30/23 16:14	EPA 365.1	EUROFINS	
Lead	<0.0014	ug/l	O	2	10/26/23 09:45	EPA 200.8	EUROFINS	
Nickel	0.0051	µg/l	O, J	2	10/26/23 09:45	EPA 200.8	EUROFINS	
Nitrate	0.79	mg/l		0.02	10/11/23 11:49	EPA 300.0	VM	
Nitrite	<0.025	mg/l		0.02	10/11/23 11:49	EPA 300.0	VM	
Ortho-Phosphorus	0.52	mg/l		0.10	10/15/23 17:45	EPA 300.0	FM/MS	
Total Dissolved Solids	1452	mg/l			10/16/23 11:10	SM 2540 C	FM, VM	
Total Kjeldahl Nitrogen	0.73	mg/l		0.20	10/13/23 09:54	EPA 351.4	VP	
Total Suspended Solids	21.8	mg/l		2.5	10/12/23 14:26	SM 2540 D	FM, VM	
Zinc	0.010	µg/l	O, J	5	10/26/23 09:45	EPA 200.8	EUROFINS	

Sample Comments: J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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Respectfully Submitted,



Technical Director (or designee)

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 2. Precision (PREC) is the absolute value of the relative percent difference between duplicate results .
 3. Recovery (RECOV) is the percent of analyte recovered from a spiked sample.
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E= The data exceed the upper calibration limit; therefore the concentration is reported as an estimate.



CHAIN OF CUSTODY RECORD

CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

AC19971

Carmel Parkway
SAMPLE LOCATION

C. Rodriguez, A. Landers
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
Composite	10/11/23	1310	C	Glass	1	Ice

pH (SU) _____

Temperature (C) _____

Remarks _____

All samples are stored on ice through laboratory receipt.

Relinquished by: <u>A. Landers</u>	Date/Time: <u>10/11/23 1359</u>	Received by: <u>[Signature]</u>	Date/Time: <u>10/11/23 1359</u>
Relinquished by: _____	Date/Time: _____	Received by: _____	Date/Time: _____

☒ COMPOSITE PARAMETERS

- ANALYSIS
- ☒ Biochemical Oxygen Demand (BOD)
 - ☒ Chemical Oxygen Demand (COD)
 - ☒ Total Suspended Solids (TSS)
 - ☒ Total Dissolved Solids (TDS)
 - ☒ Total Nitrogen
 - ☒ Total Kjeldahl Nitrogen (TKN)
 - ☒ Nitrate-Nitrogen
 - ☒ Ammonia-Nitrogen
 - ☒ Total Phosphorus
 - ☒ Dissolved Phosphorus
 - ☒ Total Cadmium
 - ☒ Total Chromium
 - ☒ Total Copper
 - ☒ Total Lead
 - ☒ Total Nickel
 - ☒ Total Zinc
 - ☒ Total Atrazine

Units
mg/L
mg/L
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mg/L
mg/L
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mg/L
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mg/L
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ug/L
ug/L
ug/L
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☐ GRAB PARAMETERS

- ANALYSIS
- Oil and Grease
 - Total Cyanide
 - Hardness
 - E. coli
 - Enterococci
- Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL

Temp 21.8 CT 21.8
Gur. A



City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469						Report# /Lab ID#: AC20626 Sample Name: Carmel Date Received: 10/23/2023 Date Sampled: 10/23/2023		Report Date: 1/23/24 Time: 10:28 Time: 09:29
Phone:						EMAIL: roberta3@cctexas.com		
Parameter	Result	Unit	Flag	RL	Date/Time Analyzed	Method	Analyst	Analysis Comments
Ammonia (ISE)	<0.2	mg/l		0.20	10/24/23 10:35	SM 4500 NH3 D -2	VM	
Atrazine	<0.60	µg/l	O	2	10/26/23 07:13	EPA 625.1	EUROFINS	
Biochemical Oxygen Demand	16.4	mg/L			10/23/23 11:56	SM 5210 B	VP	
Cadmium	<0.00026	mg/L	O	1	10/31/23 11:58	EPA 200.8	EUROFINS	
Chemical Oxygen Demand	80	mg/l	X	10	10/24/23 09:06	SM 5220 D	VM	
Chromium	0.0032	mg/l	O, J	2	10/31/23 11:58	EPA 200.8	EUROFINS	
Copper	0.012	mg/l	O	2	10/31/23 11:58	EPA 200.8	EUROFINS	
Dissolved Phosphorous	0.20	mg/l	O		11/3/23 15:54	EPA 365.1	EUROFINS	
Lead	0.0034	mg/l	O	2	10/31/23 11:58	EPA 200.8	EUROFINS	
Nickel	0.0057	mg/L	O	2	10/31/23 11:58	EPA 200.8	EUROFINS	
Nitrate	0.55	mg/l		0.02	10/23/23 10:59	EPA 300.0	MONICAS	
Nitrite	<0.025	mg/l		0.02	10/23/23 10:59	EPA 300.0	MONICAS	
Total Dissolved Solids	1060	mg/l			10/25/23 14:08	SM 2540 C	FM/VM	
Total Kjeldahl Nitrogen	1.1	mg/l		0.20	10/26/23 12:07	EPA 351.4	FM	
Total Nitrogen by IC	Not detected	mg/L			11/10/23 11:29	Calculated	LDP	
Total Phosphorus	0.28	mg/L	O		11/6/23 16:40	EPA 365.1	EUROFINS	
Total Suspended Solids	78	mg/l		2.5	10/23/23 13:15	SM 2540 D	VM	
Zinc	0.057	mg/l	O	5	10/31/23 11:58	EPA 200.8	EUROFINS	
Sample Comments: J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.								

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Respectfully Submitted,



Technical Director (or designee)

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CHAIN OF CUSTODY RECORD



CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

AC20626

Carmel Parkway
SAMPLE LOCATION

Amber Landers
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
Composite	10/23/23	9:29	C	Glass	1	Ice

pH (SU)

Temperature (C)

19.1

Remarks

Receiving Water Body Sampling (RWBS)

All samples are stored on ice through laboratory receipt.

Relinquished by:	Date/Time	Received by:	Date/Time
Amber Landers	10/23/23 10:28	[Signature]	10/23/23 10:28
Relinquished by:	Date/Time	Received by:	Date/Time

☒ COMPOSITE PARAMETERS

- ANALYSIS
- ☒ Biochemical Oxygen Demand (BOD)
 - ☒ Chemical Oxygen Demand (COD)
 - ☒ Total Suspended Solids (TSS)
 - ☒ Total Dissolved Solids (TDS)
 - ☒ Total Nitrogen
 - ☒ Total Kjeldahl Nitrogen (TKN)
 - ☒ Nitrate-Nitrogen
 - ☒ Ammonia-Nitrogen
 - ☒ Total Phosphorus
 - ☒ Dissolved Phosphorus
 - ☒ Total Cadmium
 - ☒ Total Chromium
 - ☒ Total Copper
 - ☒ Total Lead
 - ☒ Total Nickel
 - ☒ Total Zinc
 - ☒ Total Atrazine

Units
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ug/L
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☐ GRAB PARAMETERS

- ANALYSIS
- Oil and Grease
 - Total Cyanide
 - Hardness
 - E. coli
 - Enterococci

Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL



City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info	City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469	Report# /Lab ID#: AC21825 Sample Name: Carmel Date Received: 11/09/2023 Date Sampled: 11/09/2023	Report Date: 11/27/23 Time: 22:45 Time: 21:20
Phone:	EMAIL: roberta3@cctexas.com		

Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli (MPN)	141360.0	MPN	D		11/9/23 23:39	SM 9223 B - Coli	CRYSTALY	
Enterococci	141360.0	MPN	D		11/9/23 23:11	Enterolert	CRYSTALY	
Oil and Grease	5.9	mg/l		3	11/15/23 09:18	EPA 1664 B	CF, VM, FM	
pH (Field)	6.56	S.U.			11/9/23 21:20	SM 4500H+ B	FIELD	
Total Cyanide	3.7	µg/l	O,J	5	11/22/23 16:42	EPA 335.4	EUROFINS	
Total Hardness as CaCO3	268	mg/L		10	11/22/23 08:44	SM 2340 C	CF	
Water Temperature (in °C)	25.4	°C			11/9/23 21:20	SM 2550 B	FIELD	

Sample Comments:

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E= The data exceed the upper calibration limit; therefore the concentration is reported as an estimate.



CHAIN OF CUSTODY RECORD



CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

Carmel Parkway
SAMPLE LOCATION

J. Guerra, A. Landers
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
E. Coli/Enterococci	11/9/23	9:20	G	Plastic	1	Na2S2O3
Total Hardness		2:20	G	Plastic	1	HNO3
Cyanide (T)		2:20	G	Plastic	1	NaOH
Oil & Grease		2:20	G	Glass	1	H2SO4

pH (SU) 6.56

Temperature (C) 25.4

Remarks

All samples are stored on ice through laboratory receipt.

Relinquished by:	Date/Time	Received by:	Date/Time
	11-9-23 1045	Capital Ybarra	11-9-23 2245
Relinquished by:	Date/Time	Received by:	Date/Time

COMPOSITE PARAMETERS

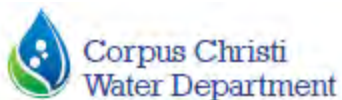
- ANALYSIS
- ___ Biochemical Oxygen Demand (BOD)
- ___ Chemical Oxygen Demand (COD)
- ___ Total Suspended Solids (TSS)
- ___ Total Dissolved Solids (TDS)
- ___ Total Nitrogen
- ___ Total Kjeldahl Nitrogen (TKN)
- ___ Nitrate-Nitrogen
- ___ Ammonia-Nitrogen
- ___ Total Phosphorus
- ___ Dissolved Phosphorus
- ___ Total Cadmium
- ___ Total Chromium
- ___ Total Copper
- ___ Total Lead
- ___ Total Nickel
- ___ Total Zinc
- ___ Total Atrazine

Units
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ug/L

☒ GRAB PARAMETERS

- ANALYSIS
- ☒ Oil and Grease
- ☒ Total Cyanide
- ☒ Hardness
- ☒ E. coli
- ☒ Enterococci

Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL



City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469						Report# /Lab ID#: AC20626 Sample Name: Carmel Date Received: 10/23/2023 Date Sampled: 10/23/2023		Report Date: 11/10/23 Time: 10:28 Time: 09:29
Phone:						EMAIL: roberta3@cctexas.com		
Parameter	Result	Unit	Flag	RL	Date/Time Analyzed	Method	Analyst	Analysis Comments
Ammonia (ISE)	<0.2	mg/l		0.20	10/24/23 10:35	SM 4500 NH3 D -2	VM	
Atrazine	<0.60	µg/l	O	2	10/26/23 07:13	EPA 625.1	EUROFINS	
Biochemical Oxygen Demand	16.4	mg/L			10/23/23 11:56	SM 5210 B	VP	
Cadmium	<0.00026	mg/L	O	1	10/31/23 11:58	EPA 200.8	EUROFINS	
Chemical Oxygen Demand	80	mg/l	X	10	10/24/23 09:06	SM 5220 D	VM	
Chromium	0.0032	mg/l	O, J	2	10/31/23 11:58	EPA 200.8	EUROFINS	
Copper	0.012	mg/l	O	2	10/31/23 11:58	EPA 200.8	EUROFINS	
Dissolved Phosphorous	0.20	mg/l	O		11/3/23 15:54	EPA 365.1	EUROFINS	
Lead	0.0034	mg/l	O	2	10/31/23 11:58	EPA 200.8	EUROFINS	
Nickel	0.0057	mg/L	O	2	10/31/23 11:58	EPA 200.8	EUROFINS	
Nitrate	0.55	mg/l		0.02	10/23/23 10:59	EPA 300.0	MONICAS	
Nitrite	<0.025	mg/l		0.02	10/23/23 10:59	EPA 300.0	MONICAS	
Total Dissolved Solids	1060	mg/l			10/25/23 14:08	SM 2540 C	FM/VM	
Total Kjeldahl Nitrogen	1.1	mg/l		0.20	10/26/23 12:07	EPA 351.4	FM	
Total Nitrogen by IC	Not detected	mg/L			11/10/23 11:29	Calculated	LDP	
Total Phosphorus	0.28	mg/L	O		11/6/23 16:40	EPA 365.1	EUROFINS	
Total Suspended Solids	78	mg/l		2.5	10/23/23 13:15	SM 2540 D	VM	
Zinc	0.057	mg/l	O	5	10/31/23 11:58	EPA 200.8	EUROFINS	
Sample Comments: J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.								

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Technical Director (or designee)

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CHAIN OF CUSTODY RECORD



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STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

AC20626

Carmel Parkway
SAMPLE LOCATION

Amber Landers
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
Composite	10/23/23	9:29	C	Glass	1	Ice

pH (SU)

Temperature (C)

19.1

Remarks

Receiving Water Body Sampling (RWBS)

All samples are stored on ice through laboratory receipt.

Relinquished by:	Date/Time	Received by:	Date/Time
Amber Landers	10/23/23 10:28	[Signature]	10/23/23 10:28
Relinquished by:	Date/Time	Received by:	Date/Time

☒ COMPOSITE PARAMETERS

- ANALYSIS
- ☒ Biochemical Oxygen Demand (BOD)
 - ☒ Chemical Oxygen Demand (COD)
 - ☒ Total Suspended Solids (TSS)
 - ☒ Total Dissolved Solids (TDS)
 - ☒ Total Nitrogen
 - ☒ Total Kjeldahl Nitrogen (TKN)
 - ☒ Nitrate-Nitrogen
 - ☒ Ammonia-Nitrogen
 - ☒ Total Phosphorus
 - ☒ Dissolved Phosphorus
 - ☒ Total Cadmium
 - ☒ Total Chromium
 - ☒ Total Copper
 - ☒ Total Lead
 - ☒ Total Nickel
 - ☒ Total Zinc
 - ☒ Total Atrazine

Units
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☐ GRAB PARAMETERS

- ANALYSIS
- Oil and Grease
 - Total Cyanide
 - Hardness
 - E. coli
 - Enterococci

Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL



City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469						Report# /Lab ID#: AC19971 Sample Name: Carmel Date Received: 10/11/2023 Date Sampled: 10/11/2023		Report Date: 11/2/23 Time: 13:59 Time: 13:10
Phone:						EMAIL: roberta3@cctexas.com		
Parameter	Result	Unit	Flag	RL	Date/Time Analyzed	Method	Analyst	Analysis Comments
Ammonia (ISE)	<0.2	mg/l		0.20	10/13/23 15:53	SM 4500 NH3 D -2	VP	
Atrazine	<0.60	µg/l	O	2	10/18/23 15:53	EPA 625.1	EUROFINS	
Biochemical Oxygen Demand	3.5	mg/L			10/12/23 11:50	SM 5210 B	VP	
Cadmium	<0.00085	mg/L	O	1	10/26/23 09:45	EPA 200.8	EUROFINS	
Chemical Oxygen Demand	57	mg/l		10	10/31/23 10:50	SM 5220 D	FM	
Chromium	0.0057	mg/l	O, J	2	10/26/23 09:45	EPA 200.8	EUROFINS	
Copper	<0.0069	mg/l	O	2	10/26/23 09:45	EPA 200.8	EUROFINS	
Dissolved Phosphorous	0.17	mg/l	O		10/30/23 16:14	EPA 365.1	EUROFINS	
Lead	<0.0014	ug/l	O	2	10/26/23 09:45	EPA 200.8	EUROFINS	
Nickel	0.0051	µg/l	O, J	2	10/26/23 09:45	EPA 200.8	EUROFINS	
Nitrate	0.79	mg/l		0.02	10/11/23 11:49	EPA 300.0	VM	
Nitrite	<0.025	mg/l		0.02	10/11/23 11:49	EPA 300.0	VM	
Ortho-Phosphorus	0.52	mg/l		0.10	10/15/23 17:45	EPA 300.0	FM/MS	
Total Dissolved Solids	1452	mg/l			10/16/23 11:10	SM 2540C	FM, VM	
Total Kjeldahl Nitrogen	0.73	mg/l		0.20	10/13/23 09:54	EPA 351.4	VP	
Total Suspended Solids	21.8	mg/l		2.5	10/12/23 14:26	SM2540D	FM, VM	
Zinc	0.010	µg/l	O, J	5	10/26/23 09:45	EPA 200.8	EUROFINS	
Sample Comments: J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.								

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Respectfully Submitted,



Technical Director (or designee)

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E= The data exceed the upper calibration limit; therefore the concentration is reported as an estimate.



CHAIN OF CUSTODY RECORD

CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

AC19971

Carmel Parkway
SAMPLE LOCATION

C. Rodriguez, A. Landers
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
Composite	10/11/23	1310	C	Glass	1	Ice

pH (SU) _____

Temperature (C) _____

Remarks _____

All samples are stored on ice through laboratory receipt.

Relinquished by: <u>A. Landers</u>	Date/Time: <u>10/11/23 1359</u>	Received by: <u>[Signature]</u>	Date/Time: <u>10/11/23 1359</u>
Relinquished by: _____	Date/Time: _____	Received by: _____	Date/Time: _____

☒ COMPOSITE PARAMETERS

- ANALYSIS
- ☒ Biochemical Oxygen Demand (BOD)
 - ☒ Chemical Oxygen Demand (COD)
 - ☒ Total Suspended Solids (TSS)
 - ☒ Total Dissolved Solids (TDS)
 - ☒ Total Nitrogen
 - ☒ Total Kjeldahl Nitrogen (TKN)
 - ☒ Nitrate-Nitrogen
 - ☒ Ammonia-Nitrogen
 - ☒ Total Phosphorus
 - ☒ Dissolved Phosphorus
 - ☒ Total Cadmium
 - ☒ Total Chromium
 - ☒ Total Copper
 - ☒ Total Lead
 - ☒ Total Nickel
 - ☒ Total Zinc
 - ☒ Total Atrazine

Units
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L

☐ GRAB PARAMETERS

- ANALYSIS
- Oil and Grease
 - Total Cyanide
 - Hardness
 - E. coli
 - Enterococci
- Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL

Temp 21.8 CT 21.8
Gur. A



City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info	City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469	Report# /Lab ID#: AC23838 Sample Name: Roddfield Date Received: 12/14/2023 Date Sampled: 12/14/2023	Report Date: 7/8/24 Time: 14:57 Time: 13:00
Phone:	EMAIL: roberta3@cctexas.com		

Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli (MPN)	12997.0	MPN	D	1.0	12/14/23 16:06	SM 9223 B - Coli	MONICAS	
Enterococci	19863.0	MPN	D	1.0	12/15/23 16:03	Enterolert	MONICAS	
Oil and Grease	35.4	mg/l		3	12/27/23 07:45	EPA 1664 B	CF	
pH (Field)	5.96	S.U.			12/14/23 13:00	SM 4500H+ B	FIELD	
Total Cyanide	-	µg/l	LE	5	7/6/24 12:08	EPA 335.4	MICHAELM10	
Total Hardness as CaCO3	1612	mg/L		10	12/20/23 15:02	SM 2340 C	CF	
Water Temperature (in °C)	19.1	°C			12/14/23 13:00	SM 2550 B	FIELD	

Sample Comments: LE - Samples were not sent out for analysis (Cyanide)

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Technical Director (or designee)

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CHAIN OF CUSTODY RECORD

CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

AC23838

Roddfield
SAMPLE LOCATION

DSCAR GARDIA
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
E. Coli/Enterococci	12-14-25	1500	G	Plastic	1	Na2S2O3
Total Hardness			G	Plastic	1	HNO3
Cyanide (T)			G	Plastic	1	NaOH
Oil & Grease			G	Glass	1	H2SO4

pH (SU)

5.96

Temperature (C)

19.1

Remarks

All samples are stored on ice through laboratory receipt.			
Relinquished by: <i>[Signature]</i>	Date/Time: 12/14/25 1457	Received by: <i>[Signature]</i>	Date/Time: 12/14/25 1457
Relinquished by:	Date/Time:	Received by:	Date/Time:

COMPOSITE PARAMETERS

ANALYSIS

- ___ Biochemical Oxygen Demand (BOD)
- ___ Chemical Oxygen Demand (COD)
- ___ Total Suspended Solids (TSS)
- ___ Total Dissolved Solids (TDS)
- ___ Total Nitrogen
- ___ Total Kjeldahl Nitrogen (TKN)
- ___ Nitrate-Nitrogen
- ___ Ammonia-Nitrogen
- ___ Total Phosphorus
- ___ Dissolved Phosphorus
- ___ Total Cadmium
- ___ Total Chromium
- ___ Total Copper
- ___ Total Lead
- ___ Total Nickel
- ___ Total Zinc
- ___ Total Atrazine

Units
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L

GRAB PARAMETERS

ANALYSIS

- ☒ Oil and Grease
- ☒ Total Cyanide
- ☒ Hardness
- ☒ E. coli
- ☒ Enterococci

Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL

Temp. 5.2
Guan. A



City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
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Analytical Report



Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469						Report# /Lab ID#: AC31851 Sample Name: Roddfield Date Received: 04/26/2024 Date Sampled: 04/26/2024		Report Date: 6/28/24 Time: 16:18 Time: 15:02
Phone:						EMAIL: roberta3@cctexas.com		
Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments
Ammonia by Probe	<0.2	mg/L		0.1	4/29/24 14:42	SM 4500 NH3 D -2	VP	
Atrazine	< 0.60	µg/l	O	10	5/2/24 14:46	EPA 625.1	EUROFINS	
Biochemical Oxygen Demand	5.5	mg/L		7.7	4/27/24 12:14	SM 5210 B	VP/CF	
Cadmium in µg/L	< 2.6	µg/L	O, D	20	5/8/24 09:00	EPA 200.8	EUROFINS	
Chemical Oxygen Demand	51	mg/l		10	4/30/24 09:33	SM 5220 D	VM	
Chromium reported in µg/L	< 3.3	µg/l	O, D	0	5/8/24 09:00	EPA 200.8	EUROFINS	
Copper reported in µg/L	11	µg/l	O, D,	40	5/8/24 09:00	EPA 200.8	EUROFINS	
Dissolved Phosphorous	0.060	mg/l	O	0.020	5/9/24 21:27	EPA 365.1	EUROFINS	
Lead Reported in µg/L	1.4	µg/l	O, D,	20	5/8/24 09:00	EPA 200.8	EUROFINS	
Nickel Reported in µg/L	14	µg/L	O, D,	20	5/8/24 09:00	EPA 200.8	EUROFINS	
Nitrate by IC	<0.025	mg/L		0.016	4/27/24 10:03	EPA 300.0	MONICAS	
TKN - Simplified	1.1	mg/L	X	0.20	5/6/24 10:18	HACH 10242	VP	
Total Dissolved Solids	5856	mg/L			4/29/24 14:52	SM 2540 C	CF, VM	
Total Nitrogen by IC	1.1	mg/L			5/6/24 10:18	Calculated	VP	
Total Phosphorus	-	mg/L	LE	0.020	5/9/24 21:27	EPA 365.1	EUROFINS	
Total Suspended Solids	66.9	mg/L		2.5	4/29/24 15:15	SM 2540 D	CF, VM	
Zinc Reported in µg/L	13	µg/l	O, D,	100	5/8/24 09:00	EPA 200.8	EUROFINS	
Sample Comments: Only one Phosphorus analysis was requested. The dissolved PO4 was submitted, so I think D-PO4 was run.								

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STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

Roddfield
SAMPLE LOCATION

OSCAR GONZALEZ
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
Composite	4-26-24	1502	C	Glass	1	Ice

pH (SU) _____

Temperature (C) _____

Remarks _____

All samples are stored on ice through laboratory receipt.

Relinquished by: <u>Oscar Gonzalez</u>	Date/Time: <u>4-26-24 / 4:18</u>	Received by: <u>[Signature]</u>	Date/Time: <u>4-26-24 / 6:18</u>
Relinquished by: _____	Date/Time: _____	Received by: _____	Date/Time: _____

☒ COMPOSITE PARAMETERS

- ANALYSIS
- ☒ Biochemical Oxygen Demand (BOD)
 - ☒ Chemical Oxygen Demand (COD)
 - ☒ Total Suspended Solids (TSS)
 - ☒ Total Dissolved Solids (TDS)
 - ☒ Total Nitrogen
 - ☒ Total Kjeldahl Nitrogen (TKN)
 - ☒ Nitrate-Nitrogen
 - ☒ Ammonia-Nitrogen
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 - ☒ Dissolved Phosphorus
 - ☒ Total Cadmium
 - ☒ Total Chromium
 - ☒ Total Copper
 - ☒ Total Lead
 - ☒ Total Nickel
 - ☒ Total Zinc
 - ☒ Total Atrazine

Units
mg/L
mg/L
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mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L

☐ GRAB PARAMETERS

- ANALYSIS
- _____ Oil and Grease
 - _____ Total Cyanide
 - _____ Hardness
 - _____ E. coli
 - _____ Enterococci

Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL



City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info	City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469	Report# /Lab ID#: AC32874 Sample Name: Roddfield Date Received: 05/13/2024 Date Sampled: 05/13/2024	Report Date: 5/31/24 Time: 20:53 Time: 19:25
Phone:	EMAIL: roberta3@cctexas.com		

Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli (MPN)	2535	MPN	D	1.0	5/13/24 22:00	SM 9223 B - Coli	CF	
Enterococci	50	MPN	D	1.0	5/13/24 21:48	Enterolert	CF	
Oil and Grease	42.1	mg/l	K, X	5.0	5/20/24 09:00	EPA 1664 B	VM	
pH (Field)	6.5	S.U.			5/13/24 19:25	SM 4500H+ B	FIELD	
Total Cyanide	3.4	µg/l	O, J	5.0	5/21/24 21:34	EPA 335.4	EUROFINS	
Total Hardness as CaCO3	1989.13	mg/L		10	5/22/24 09:00	SM 2340 C	CF	
Water Temperature (in °C)	24.3	°C			5/13/24 19:25	SM 2550 B	FIELD	

Sample Comments:

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Roddfield
SAMPLE LOCATION

OSCAR GONZALEZ
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
E. Coli/Enterococci	5/13/24	7:25 AM	G	Plastic	1	Na2S2O3
Total Hardness			G	Plastic	1	HNO3
Cyanide (T)			G	Plastic	1	NaOH
Oil & Grease			G	Glass	1	H2SO4

pH (SU) 6.5

Temperature (C) 24.3

Remarks

All samples are stored on ice through laboratory receipt.

Relinquished by: <u>[Signature]</u>	Date/Time: <u>5-13-24 2053</u>	Received by: <u>[Signature]</u>	Date/Time: <u>5-13-24 2053</u>
Relinquished by:	Date/Time:	Received by:	Date/Time:

COMPOSITE PARAMETERS

- ANALYSIS
- ☐ Biochemical Oxygen Demand (BOD)
- ☐ Chemical Oxygen Demand (COD)
- ☐ Total Suspended Solids (TSS)
- ☐ Total Dissolved Solids (TDS)
- ☐ Total Nitrogen
- ☐ Total Kjeldahl Nitrogen (TKN)
- ☐ Nitrate-Nitrogen
- ☐ Ammonia-Nitrogen
- ☐ Total Phosphorus
- ☐ Dissolved Phosphorus
- ☐ Total Cadmium
- ☐ Total Chromium
- ☐ Total Copper
- ☐ Total Lead
- ☐ Total Nickel
- ☐ Total Zinc
- ☐ Total Atrazine

Units
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L

☒ GRAB PARAMETERS

- ANALYSIS
- ☒ Oil and Grease
- ☒ Total Cyanide
- ☒ Hardness
- ☒ E. coli
- ☒ Enterococci

Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL



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361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469						Report# /Lab ID#: AC32917 Sample Name: Roddfield Date Received: 05/14/2024 Date Sampled: 05/14/2024		Report Date: 5/27/24 Time: 11:03 Time: 10:07
Phone:						EMAIL: roberta3@cctexas.com		
Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments
Ammonia by Probe	<0.2	mg/L		0.1	5/17/24 08:00	SM 4500 NH3 D -2	VM	
Atrazine	< 0.60	µg/l	O	10	5/20/24 08:23	EPA 625.1	EUROFINS	
Biochemical Oxygen Demand	6.6	mg/L	X		5/14/24 13:43	SM 5210 B	VP/FK/MS	
Cadmium in µg/L	< 0.26	µg/L	O	2.0	5/21/24 20:41	EPA 200.8	EUROFINS	
Chemical Oxygen Demand	46	mg/l		10	5/21/24 10:05	SM 5220 D	VM	
Chromium reported in µg/L	2.8	µg/l	O, J	4.0	5/21/24 20:41	EPA 200.8	EUROFINS	
Copper reported in µg/L	16	µg/l	O	4.0	5/21/24 20:41	EPA 200.8	EUROFINS	
Dissolved Phosphorous	0.029	mg/l	O	0.020	5/24/24 00:45	EPA 365.1	EUROFINS	
Lead Reported in µg/L	1.7	µg/l	O, J	2.0	5/21/24 20:41	EPA 200.8	EUROFINS	
Nickel Reported in µg/L	39	µg/L	O^	2.0	5/21/24 20:41	EPA 200.8	EUROFINS	
Nitrate by IC	0.38	mg/L		0.016	5/15/24 00:35	EPA 300.0	MS/CF	
Total Dissolved Solids	6400	mg/L			5/16/24 08:52	SM 2540 C	VM	
Total Kjeldahl Nitrogen	1.3	mg/L		0.20	5/22/24 08:13	EPA 351.4	VM	
Total Nitrogen by IC	1.68	mg/L			5/25/24 09:26	Calculated	MICHAELM10	
Total Phosphorus	0.057	mg/L	O	0.020	5/24/24 00:45	EPA 365.1	EUROFINS	
Total Suspended Solids	144.0	mg/L		10.0	5/15/24 14:34	SM 2540 D	VP	
Zinc Reported in µg/L	13	µg/l	O	4.0	5/21/24 20:41	EPA 200.8	EUROFINS	
Sample Comments: Calibration Standard recovery was outside limit (Nickel)								

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Respectfully Submitted,



Technical Director (or designee)

-
1. Quality assurance data for the sample batch which included this sample.
 2. Precision (PREC) is the absolute value of the relative percent difference between duplicate results .
 3. Recovery (RECOV) is the percent of analyte recovered from a spiked sample.
 4. Laboratory Control Sample (LCS) results are expressed as the percent recovery of analyte.
 5. Reporting Limit (RL), typically at or above the Limit of Quantitation (LOQ) of the analytical method.
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CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

CHAIN OF CUSTODY RECORD



Roddfield
SAMPLE LOCATION

C. Rodriguez
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
Composite	5/14/24	1007 AM	C	Glass	1	Ice

pH (SU) _____

Temperature (C) _____

Remarks

All samples are stored on ice through laboratory receipt.

Relinquished by:	Date/Time	Received by:	Date/Time
<i>[Signature]</i>	5/14-24 1103	<i>[Signature]</i>	5/14/24 1103
Relinquished by:	Date/Time	Received by:	Date/Time

☒ COMPOSITE PARAMETERS

☐ GRAB PARAMETERS

- ANALYSIS
- ☒ Biochemical Oxygen Demand (BOD)
 - ☒ Chemical Oxygen Demand (COD)
 - ☒ Total Suspended Solids (TSS)
 - ☒ Total Dissolved Solids (TDS)
 - ☒ Total Nitrogen
 - ☒ Total Kjeldahl Nitrogen (TKN)
 - ☒ Nitrate-Nitrogen
 - ☒ Ammonia-Nitrogen
 - ☒ Total Phosphorus
 - ☒ Dissolved Phosphorus
 - ☒ Total Cadmium
 - ☒ Total Chromium
 - ☒ Total Copper
 - ☒ Total Lead
 - ☒ Total Nickel
 - ☒ Total Zinc
 - ☒ Total Atrazine

Units
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L

- ANALYSIS
- Oil and Grease
 - Total Cyanide
 - Hardness
 - E. coli
 - Enterococci

Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL

Temp 11.6 Gun. A
AC32917



City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info	City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469	Report# /Lab ID#: AC31833 Sample Name: Roddfield Date Received: 04/26/2024 Date Sampled: 04/26/2024	Report Date: 5/20/24 Time: 13:54 Time: 12:15
Phone:	EMAIL: roberta3@cctexas.com		

Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli (MPN)	12033.0	MPN	D		4/26/24 14:24	SM 9223 B - Coli	VP	
Enterococci	315.0	MPN	D		4/26/24 14:04	Enterolert	MS / FK /CY	
Oil and Grease	<3.0	mg/l	X	3	4/29/24 11:43	EPA 1664 B	VM	
pH (Field)	7.3	S.U.			4/26/24 12:15	SM 4500H+ B	FIELD	
Total Cyanide	< 2.0	µg/l	O, H	5.0	5/14/24 22:11	EPA 335.4	EUROFINS	
Total Hardness as CaCO3	1780	mg/L		10	5/3/24 13:15	SM 2340 C	VM	
Water Temperature (in °C)	24.7	°C			4/26/24 12:15	SM 2550 B	FIELD	

Sample Comments:

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Technical Director (or designee)

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CHAIN OF CUSTODY RECORD

CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

Roddfield
SAMPLE LOCATION

Oscar Gonzalez
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
E. Coli/Enterococci	4-26-24	1215	G	Plastic	1	Na2S2O3
Total Hardness			G	Plastic	1	HNO3
Cyanide (T)			G	Plastic	1	NaOH
Oil & Grease			G	Glass	1	H2SO4

pH (SU)

7.3

Temperature (C)

24.7

Remarks

All samples are stored on ice through laboratory receipt.

Relinquished by:	Date/Time	Received by:	Date/Time
<u>[Signature]</u>	4-26-24/1354	<u>[Signature]</u>	4-26-24/1354
Relinquished by:	Date/Time	Received by:	Date/Time

COMPOSITE PARAMETERS

- ANALYSIS
- Biochemical Oxygen Demand (BOD)
- Chemical Oxygen Demand (COD)
- Total Suspended Solids (TSS)
- Total Dissolved Solids (TDS)
- Total Nitrogen
- Total Kjeldahl Nitrogen (TKN)
- Nitrate-Nitrogen
- Ammonia-Nitrogen
- Total Phosphorus
- Dissolved Phosphorus
- Total Cadmium
- Total Chromium
- Total Copper
- Total Lead
- Total Nickel
- Total Zinc
- Total Atrazine

Units
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L

GRAB PARAMETERS

- ANALYSIS
- ☒ Oil and Grease
- ☒ Total Cyanide
- ☒ Hardness
- ☒ E. coli
- ☒ Enterococci

Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL

Temp 33 Gun A

ARZIKER



City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469						Report# /Lab ID#: AC21836 Sample Name: Roddfield Date Received: 11/10/2023 Date Sampled: 11/10/2023		Report Date: 2/28/24 Time: 09:29 Time: 08:20	
Phone:						EMAIL: roberta3@cctexas.com			
Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments	
Ammonia by Probe	<0.2	mg/L			11/16/23 09:00	SM 4500 NH3 D -2	VP		
Atrazine	< 0.60	µg/l	O	10	11/17/23 06:16	EPA 625.1	EUROFINS		
Biochemical Oxygen Demand	7.6	mg/L	K, X		11/10/23 12:30	SM 5210 B	FM/VM		
Cadmium in µg/L	< 1.3	µg/L	O, D	5.0	11/21/23 13:30	EPA 200.8	EUROFINS		
Chemical Oxygen Demand	42	mg/l		10	11/15/23 09:04	SM 5220 D	CF		
Chromium reported in µg/L	<1.6	µg/l	O, D	20	11/21/23 13:30	EPA 200.8	EUROFINS		
Copper reported in µg/L	< 3.5	µg/l	O, D	10	11/21/23 13:30	EPA 200.8	EUROFINS		
Dissolved Phosphorous	0.22	mg/l	O	0.020	11/28/23 15:17	EPA 365.1	EUROFINS		
Lead Reported in µg/L	< 0.70	µg/l	O, D	10	11/21/23 13:30	EPA 200.8	EUROFINS		
Nickel Reported in µg/L	7.0	µg/L	O, J,	10	11/21/23 13:30	EPA 200.8	EUROFINS		
Nitrate by IC	<0.025	mg/L			11/10/23 13:27	EPA 300.0	MONICAS		
Total Dissolved Solids	2458	mg/L			11/13/23 08:50	SM 2540 C	VP		
Total Kjeldahl Nitrogen	1.1	mg/L		0.20	11/21/23 10:48	EPA 351.4	FM/VM		
Total Nitrogen by IC	1.1	mg/L			2/27/24 17:09	Calculated	MICHAELM10		
Total Phosphorus	0.21	mg/L	O	0.020	11/28/23 15:14	EPA 365.1	EUROFINS		
Total Suspended Solids	34.3	mg/L		2.5	11/10/23 14:16	SM 2540 D	VM		
Zinc Reported in µg/L	4.6	µg/l	O, J,	20	11/21/23 13:30	EPA 200.8	EUROFINS		
Sample Comments:									

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Technical Director (or designee)

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PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

CHAIN OF CUSTODY RECORD

AC 21836

Roddfield
SAMPLE LOCATION

Guerero / Agala
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
Composite	11-10-23	8:20 AM	C	Glass	1	Ice

pH (SU)

Temperature (C)

12.0
Gunn A

Remarks

All samples are stored on ice through laboratory receipt.

Relinquished by:	Date/Time	Received by:	Date/Time
<i>[Signature]</i>	11-10-23 9:25	<i>[Signature]</i>	11/10/23 9:29
Relinquished by:	Date/Time	Received by:	Date/Time

☒ COMPOSITE PARAMETERS

- ANALYSIS
- ☒ Biochemical Oxygen Demand (BOD)
 - ☒ Chemical Oxygen Demand (COD)
 - ☒ Total Suspended Solids (TSS)
 - ☒ Total Dissolved Solids (TDS)
 - ☒ Total Nitrogen
 - ☒ Total Kjeldahl Nitrogen (TKN)
 - ☒ Nitrate-Nitrogen
 - ☒ Ammonia-Nitrogen
 - ☒ Total Phosphorus
 - ☒ Dissolved Phosphorus
 - ☒ Total Cadmium
 - ☒ Total Chromium
 - ☒ Total Copper
 - ☒ Total Lead
 - ☒ Total Nickel
 - ☒ Total Zinc
 - ☒ Total Atrazine

Units
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L

☐ GRAB PARAMETERS

- ANALYSIS
- Oil and Grease
 - Total Cyanide
 - Hardness
 - E. coli
 - Enterococci

Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL



City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469						Report# /Lab ID#: AC20621 Sample Name: Roddfield Date Received: 10/23/2023 Date Sampled: 10/23/2023		Report Date: 1/23/24 Time: 08:22 Time: 09:15
Phone:						EMAIL: roberta3@cctexas.com		
Parameter	Result	Unit	Flag	RL	Date/Time Analyzed	Method	Analyst	Analysis Comments
Ammonia (ISE)	<0.2	mg/l		0.20	10/24/23 10:35	SM 4500 NH3 D -2	VM	
Atrazine	<0.60	µg/l	O	2	10/26/23 07:13	EPA 625.1	EUROFINS	
Biochemical Oxygen Demand	6.8	mg/L			10/23/23 11:56	SM 5210 B	VP	
Cadmium	<0.00026	mg/L	O	1	10/31/23 11:58	EPA 200.8	EUROFINS	
Chemical Oxygen Demand	28	mg/l	X	10	10/24/23 09:06	SM 5220 D	VM	
Chromium	0.0016	mg/l	O, J	2	10/31/23 11:58	EPA 200.8	EUROFINS	
Copper	0.0040	mg/l	O	2	10/31/23 11:58	EPA 200.8	EUROFINS	
Dissolved Phosphorous	0.12	mg/l	O		11/3/23 15:54	EPA 365.1	EUROFINS	
Lead	0.00084	mg/l	O, J	2	10/31/23 11:58	EPA 200.8	EUROFINS	
Nickel	0.0063	mg/L	O	2	10/31/23 11:58	EPA 200.8	EUROFINS	
Nitrate	0.18	mg/l		0.02	10/23/23 10:59	EPA 300.0	MONICAS	
Nitrite	<0.025	mg/l		0.02	10/23/23 10:59	EPA 300.0	MONICAS	
Total Dissolved Solids	2064	mg/l			10/25/23 14:08	SM 2540 C	FM/VM	
Total Kjeldahl Nitrogen	0.85	mg/l		0.20	10/26/23 12:07	EPA 351.4	FM	
Total Nitrogen by IC	Not detected	mg/L			11/10/23 11:29	Calculated	LDP	
Total Phosphorus	0.30	mg/L	O, F1		11/8/23 16:40	EPA 365.1	EUROFINS	
Total Suspended Solids	51.5	mg/l		2.5	10/23/23 13:15	SM 2540 D	VM	
Zinc	0.015	µg/l	O	5	10/31/23 11:58	EPA 200.8	EUROFINS	
Sample Comments: J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. F1: MS and/or MSD recovery limits exceeds control limits.								

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CHAIN OF CUSTODY RECORD

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STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

AC 25621

Roddfield
SAMPLE LOCATION

Oscar GONZALEZ
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
Composite	10/23/23	0915	C	Glass	1	Ice

pH (SU)

Temperature (C)

Remarks

Temp: 9.8
Gunn: A

All samples are stored on ice through laboratory receipt.

Relinquished by:	Date/Time	Received by:	Date/Time
Oscar Gonzales	10/23/23-1022	[Signature]	10/23/23 1022
Relinquished by:	Date/Time	Received by:	Date/Time

☒ COMPOSITE PARAMETERS

ANALYSIS

- ☒ Biochemical Oxygen Demand (BOD)
- ☒ Chemical Oxygen Demand (COD)
- ☒ Total Suspended Solids (TSS)
- ☒ Total Dissolved Solids (TDS)
- ☒ Total Nitrogen
- ☒ Total Kjeldahl Nitrogen (TKN)
- ☒ Nitrate-Nitrogen
- ☒ Ammonia-Nitrogen
- ☒ Total Phosphorus
- ☒ Dissolved Phosphorus
- ☒ Total Cadmium
- ☒ Total Chromium
- ☒ Total Copper
- ☒ Total Lead
- ☒ Total Nickel
- ☒ Total Zinc
- ☒ Total Atrazine

Units
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L

☐ GRAB PARAMETERS

ANALYSIS

- Oil and Grease
- Total Cyanide
- Hardness
- E. coli
- Enterococci

Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL



City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info	City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469	Report# /Lab ID#: AC21826 Sample Name: Roddfield Date Received: 11/09/2023 Date Sampled: 11/09/2023	Report Date: 11/27/23 Time: 22:38 Time: 21:47
Phone:	EMAIL: roberta3@cctexas.com		

Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli (MPN)	20.0	MPN	D		11/9/23 23:39	SM 9223 B - Coli	CRYSTALY	
Enterococci	538.0	MPN	D		11/9/23 23:11	Enterolert	CRYSTALY	
Oil and Grease	5.0	mg/l		3	11/15/23 09:18	EPA 1664 B	CF, VM, FM	
pH (Field)	7.02	S.U.			11/9/23 21:47	SM 4500H+ B	FIELD	
Total Cyanide	< 2.0	µg/l	O	5	11/22/23 16:42	EPA 335.4	EUROFINS	
Total Hardness as CaCO3	672	mg/L		10	11/22/23 08:44	SM 2340 C	CF	
Water Temperature (in °C)	24.6	°C			11/9/23 21:47	SM 2550 B	FIELD	

Sample Comments:

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Respectfully Submitted,

Technical Director (or designee)

-
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CHAIN OF CUSTODY RECORD



CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

Roddfield
SAMPLE LOCATION

J. Gerro, A. Landers
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
E. Coli/Enterococci	11/9/23	2147	G	Plastic	1	Na2S2O3
Total Hardness		2147	G	Plastic	1	HNO3
Cyanide (T)		2147	G	Plastic	1	NaOH
Oil & Grease		2147	G	Glass	1	H2SO4

pH (SU) 7.02 Temperature (C) 24.6

Remarks

All samples are stored on ice through laboratory receipt.

Relinquished by: <u>[Signature]</u>	Date/Time <u>11-9-23 1045pm</u>	Received by: <u>Cristal Ybanez</u>	Date/Time <u>11-9-23 2245</u>
Relinquished by:	Date/Time	Received by:	Date/Time

COMPOSITE PARAMETERS

ANALYSIS
— Biochemical Oxygen Demand (BOD)
— Chemical Oxygen Demand (COD)
— Total Suspended Solids (TSS)
— Total Dissolved Solids (TDS)
— Total Nitrogen
— Total Kjeldahl Nitrogen (TKN)
— Nitrate-Nitrogen
— Ammonia-Nitrogen
— Total Phosphorus
— Dissolved Phosphorus
— Total Cadmium
— Total Chromium
— Total Copper
— Total Lead
— Total Nickel
— Total Zinc
— Total Atrazine

Units
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L

☒ GRAB PARAMETERS

ANALYSIS
☒ Oil and Grease
☒ Total Cyanide
☒ Hardness
☒ E. coli
☒ Enterococci

Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL



City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469						Report# /Lab ID#: AC20621 Sample Name: Roddfield Date Received: 10/23/2023 Date Sampled: 10/23/2023		Report Date: 11/10/23 Time: 08:22 Time: 09:15
Phone:						EMAIL: roberta3@cctexas.com		
Parameter	Result	Unit	Flag	RL	Date/Time Analyzed	Method	Analyst	Analysis Comments
Ammonia (ISE)	<0.2	mg/l		0.20	10/24/23 10:35	SM 4500 NH3 D -2	VM	
Atrazine	<0.60	µg/l	O	2	10/26/23 07:13	EPA 625.1	EUROFINS	
Biochemical Oxygen Demand	6.8	mg/L			10/23/23 11:56	SM 5210 B	VP	
Cadmium	<0.00026	mg/L	O	1	10/31/23 11:58	EPA 200.8	EUROFINS	
Chemical Oxygen Demand	28	mg/l	X	10	10/24/23 09:06	SM 5220 D	VM	
Chromium	0.0016	mg/l	O, J	2	10/31/23 11:58	EPA 200.8	EUROFINS	
Copper	0.0040	mg/l	O	2	10/31/23 11:58	EPA 200.8	EUROFINS	
Dissolved Phosphorous	0.12	mg/l	O		11/3/23 15:54	EPA 365.1	EUROFINS	
Lead	0.00084	mg/l	O, J	2	10/31/23 11:58	EPA 200.8	EUROFINS	
Nickel	0.0063	mg/L	O	2	10/31/23 11:58	EPA 200.8	EUROFINS	
Nitrate	0.18	mg/l		0.02	10/23/23 10:59	EPA 300.0	MONICAS	
Nitrite	<0.025	mg/l		0.02	10/23/23 10:59	EPA 300.0	MONICAS	
Total Dissolved Solids	2064	mg/l			10/25/23 14:08	SM 2540 C	FM/VM	
Total Kjeldahl Nitrogen	0.85	mg/l		0.20	10/26/23 12:07	EPA 351.4	FM	
Total Nitrogen by IC	Not detected	mg/L			11/10/23 11:29	Calculated	LDP	
Total Phosphorus	0.30	mg/L	O, F1		11/8/23 16:40	EPA 365.1	EUROFINS	
Total Suspended Solids	51.5	mg/l		2.5	10/23/23 13:15	SM 2540 D	VM	
Zinc	0.015	µg/l	O	5	10/31/23 11:58	EPA 200.8	EUROFINS	
Sample Comments: J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. F1: MS and/or MSD recovery limits exceeds control limits.								

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Respectfully Submitted,



Technical Director (or designee)

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CHAIN OF CUSTODY RECORD

CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

AC 25621

Roddfield
SAMPLE LOCATION

Oscar GONZALEZ
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
Composite	10/23/23	0915	C	Glass	1	Ice

pH (SU)

Temperature (C)

Remarks

Temp: 9.8
Gunn: A

All samples are stored on ice through laboratory receipt.

Relinquished by:	Date/Time	Received by:	Date/Time
Oscar Gonzales	10/23/23-1022	[Signature]	10/23/23 1022
Relinquished by:	Date/Time	Received by:	Date/Time

☒ COMPOSITE PARAMETERS

- ANALYSIS
- ☒ Biochemical Oxygen Demand (BOD)
 - ☒ Chemical Oxygen Demand (COD)
 - ☒ Total Suspended Solids (TSS)
 - ☒ Total Dissolved Solids (TDS)
 - ☒ Total Nitrogen
 - ☒ Total Kjeldahl Nitrogen (TKN)
 - ☒ Nitrate-Nitrogen
 - ☒ Ammonia-Nitrogen
 - ☒ Total Phosphorus
 - ☒ Dissolved Phosphorus
 - ☒ Total Cadmium
 - ☒ Total Chromium
 - ☒ Total Copper
 - ☒ Total Lead
 - ☒ Total Nickel
 - ☒ Total Zinc
 - ☒ Total Atrazine

Units
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L

☐ GRAB PARAMETERS

- ANALYSIS
- Oil and Grease
 - Total Cyanide
 - Hardness
 - E. coli
 - Enterococci

Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL



City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469						Report# /Lab ID#: AC31852 Sample Name: Schannen Date Received: 04/26/2024 Date Sampled: 04/26/2024		Report Date: 6/28/24 Time: 16:18 Time: 15:00
Phone:						EMAIL: roberta3@cctexas.com		
Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments
Ammonia by Probe	<0.2	mg/L		0.1	4/29/24 14:42	SM 4500 NH3 D -2	VP	
Atrazine	< 0.60	µg/l	O	10	5/2/24 14:46	EPA 625.1	EUROFINS	
Biochemical Oxygen Demand	5.1	mg/L		3.3	4/27/24 12:14	SM 5210 B	VP/CF	
Cadmium in µg/L	< 1.3	µg/L	O, D	10	5/8/24 09:00	EPA 200.8	EUROFINS	
Chemical Oxygen Demand	68	mg/l		10	4/30/24 12:40	SM 5220 D	VM	
Chromium reported in µg/L	7.9	µg/l	O, D,	20	5/8/24 09:00	EPA 200.8	EUROFINS	
Copper reported in µg/L	14	µg/l	O, D,	20	5/8/24 09:00	EPA 200.8	EUROFINS	
Dissolved Phosphorous	0.16	mg/l	O	0.020	5/9/24 21:31	EPA 365.1	EUROFINS	
Lead Reported in µg/L	< 0.70	µg/l	O, D	10	5/8/24 09:00	EPA 200.8	EUROFINS	
Nickel Reported in µg/L	20.	µg/L	O, D	10	5/8/24 09:00	EPA 200.8	EUROFINS	
Nitrate by IC	<0.025	mg/L		0.016	4/27/24 10:35	EPA 300.0	MONICAS	
TKN - Simplified	1.3	mg/L	X	0.20	5/6/24 10:18	HACH 10242	VP	
Total Dissolved Solids	6738	mg/L			4/29/24 14:52	SM 2540 C	CF, VM	
Total Nitrogen by IC	1.3	mg/L			5/6/24 10:18	Calculated	VP	
Total Phosphorus	-	mg/L	LE	0.020	5/9/24 21:31	EPA 365.1	EUROFINS	
Total Suspended Solids	42.2	mg/L		2.5	4/29/24 15:15	SM 2540 D	CF, VM	
Zinc Reported in µg/L	7.0	µg/l	O, D,	20	5/8/24 09:00	EPA 200.8	EUROFINS	
Sample Comments: Only one Phosphorus analysis was requested. The dissolved PO4 was submitted, so I think D-PO4 was run.								

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Respectfully Submitted,



Technical Director (or designee)

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CHAIN OF CUSTODY RECORD



CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

Schannen
SAMPLE LOCATION

COLLECTOR

C. Roebig

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
Composite	4/24/24	1500	C	Glass	1	Ice

pH (SU) _____

Temperature (C) _____

Remarks

All samples are stored on ice through laboratory receipt.

Relinquished by: <i>On DH</i>	Date/Time: 4-26-24 / 4:18	Received by: <i>Walpfermann</i>	Date/Time: 4-26-24 / 14:18
Relinquished by: _____	Date/Time: _____	Received by: _____	Date/Time: _____

☒ COMPOSITE PARAMETERS

☐ GRAB PARAMETERS

ANALYSIS

- ☒ Biochemical Oxygen Demand (BOD)
- ☒ Chemical Oxygen Demand (COD)
- ☒ Total Suspended Solids (TSS)
- ☒ Total Dissolved Solids (TDS)
- ☒ Total Nitrogen
- ☒ Total Kjeldahl Nitrogen (TKN)
- ☒ Nitrate-Nitrogen
- ☒ Ammonia-Nitrogen
- ☒ Total Phosphorus
- ☒ Dissolved Phosphorus
- ☒ Total Cadmium
- ☒ Total Chromium
- ☒ Total Copper
- ☒ Total Lead
- ☒ Total Nickel
- ☒ Total Zinc
- ☒ Total Atrazine

Units

mg/L
mg/L
mg/L
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ug/L
ug/L
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ug/L

ANALYSIS

- Oil and Grease
- Total Cyanide
- Hardness
- E. coli
- Enterococci

Units

mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL



City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info	City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469	Report# /Lab ID#: AC32875 Sample Name: Schanen Date Received: 05/13/2024 Date Sampled: 05/13/2024	Report Date: 5/31/24 Time: 20:53 Time: 19:33
Phone:	EMAIL: roberta3@cctexas.com		

Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli (MPN)	38827.5	MPN	D	1.0	5/13/24 22:00	SM 9223 B - Coli	CF	
Enterococci	49657.5	MPN	D	1.0	5/13/24 21:48	Enterolert	CF	
Oil and Grease	53.5	mg/l	K, X	5.0	5/20/24 09:00	EPA 1664 B	VM	
pH (Field)	8.4	S.U.			5/13/24 19:33	SM 4500H+ B	FIELD	
Total Cyanide	3.7	µg/l	O, J	5.0	5/21/24 21:34	EPA 335.4	EUROFINS	
Total Hardness as CaCO3	382.61	mg/L		10	5/22/24 09:00	SM 2340 C	CF	
Water Temperature (in °C)	26.4	°C			5/13/24 19:33	SM 2550 B	FIELD	

Sample Comments:

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Technical Director (or designee)

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CHAIN OF CUSTODY RECORD

CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

Schannen
SAMPLE LOCATION

COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
E. Coli/Enterococci	5-13-24	7:33 PM	G	Plastic	1	Na2S2O3
Total Hardness		7:37 PM	G	Plastic	1	HNO3
Cyanide (T)		7:33 PM	G	Plastic	1	NaOH
Oil & Grease		7:33 PM	G	Glass	1	H2SO4

pH (SU)

8.4

Temperature (C)

26.4

Remarks

All samples are stored on ice through laboratory receipt.

Relinquished by:	Date/Time	Received by:	Date/Time
<i>[Signature]</i>	5-13-24 2053	<i>[Signature]</i>	5-13-24 2053
Relinquished by:	Date/Time	Received by:	Date/Time

COMPOSITE PARAMETERS

- ANALYSIS
- ___ Biochemical Oxygen Demand (BOD)
 - ___ Chemical Oxygen Demand (COD)
 - ___ Total Suspended Solids (TSS)
 - ___ Total Dissolved Solids (TDS)
 - ___ Total Nitrogen
 - ___ Total Kjeldahl Nitrogen (TKN)
 - ___ Nitrate-Nitrogen
 - ___ Ammonia-Nitrogen
 - ___ Total Phosphorus
 - ___ Dissolved Phosphorus
 - ___ Total Cadmium
 - ___ Total Chromium
 - ___ Total Copper
 - ___ Total Lead
 - ___ Total Nickel
 - ___ Total Zinc
 - ___ Total Atrazine

Units
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L

GRAB PARAMETERS

- ANALYSIS
- ☒ Oil and Grease
 - ☒ Total Cyanide
 - ☒ Hardness
 - ☒ E. coli
 - ☒ Enterococci

Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL



City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469						Report# /Lab ID#: AC32916 Sample Name: Schanen Date Received: 05/14/2024 Date Sampled: 05/14/2024		Report Date: 5/27/24 Time: 11:03 Time: 09:50
Phone:						EMAIL: roberta3@cctexas.com		
Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments
Ammonia by Probe	<0.2	mg/L		0.1	5/17/24 08:00	SM 4500 NH3 D -2	VM	
Atrazine	< 0.60	µg/l	O	10	5/20/24 08:23	EPA 625.1	EUROFINS	
Biochemical Oxygen Demand	8.8	mg/L	X		5/14/24 13:43	SM 5210 B	VP/FK/MS	
Cadmium in µg/L	< 0.26	µg/L	O	2.0	5/21/24 20:41	EPA 200.8	EUROFINS	
Chemical Oxygen Demand	61	mg/l		10	5/21/24 10:05	SM 5220 D	VM	
Chromium reported in µg/L	9.2	µg/l	O	4.0	5/21/24 20:41	EPA 200.8	EUROFINS	
Copper reported in µg/L	21	µg/l	O	4.0	5/21/24 20:41	EPA 200.8	EUROFINS	
Dissolved Phosphorous	0.40	mg/l	O	0.020	5/23/24 16:15	EPA 365.1	EUROFINS	
Lead Reported in µg/L	1.9	µg/l	O, J	2.0	5/21/24 20:41	EPA 200.8	EUROFINS	
Nickel Reported in µg/L	44	µg/L	O^	2.0	5/21/24 20:41	EPA 200.8	EUROFINS	
Nitrate by IC	0.49	mg/L		0.016	5/15/24 00:04	EPA 300.0	MS/CF	
Total Dissolved Solids	8780	mg/L			5/16/24 08:52	SM 2540 C	VM	
Total Kjeldahl Nitrogen	0.96	mg/L		0.20	5/22/24 08:13	EPA 351.4	VM	
Total Nitrogen by IC	1.45	mg/L			5/25/24 09:26	Calculated	MICHAELM10	
Total Phosphorus	0.055	mg/L	O	0.020	5/23/24 16:11	EPA 365.1	EUROFINS	
Total Suspended Solids	49.3	mg/L		8.3	5/15/24 14:34	SM 2540 D	VP	
Zinc Reported in µg/L	14	µg/l	O	4.0	5/21/24 20:41	EPA 200.8	EUROFINS	
Sample Comments: Calibration Blank recovery was outside limits (Nickel)								

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Respectfully Submitted,



Technical Director (or designee)

-
1. Quality assurance data for the sample batch which included this sample.
 2. Precision (PREC) is the absolute value of the relative percent difference between duplicate results .
 3. Recovery (RECOV) is the percent of analyte recovered from a spiked sample.
 4. Laboratory Control Sample (LCS) results are expressed as the percent recovery of analyte.
 5. Reporting Limit (RL), typically at or above the Limit of Quantitation (LOQ) of the analytical method.
 6. Data Qualifiers:

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S=Slow to filter; sample contains floc and/or large amount of residue on filter. **O**=Analysis performed by an outside NELAC accredited lab; **O^**=Analysis flagged by outside laboratory.

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CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

CHAIN OF CUSTODY RECORD



Schannen
SAMPLE LOCATION

COLLECTOR

C. Rodriguez

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
Composite	5/14/24	930 AM	C	Glass	1	Ice

pH (SU)

Temperature (C)

Remarks

All samples are stored on ice through laboratory receipt.

Relinquished by: <i>[Signature]</i>	Date/Time: 5-14-24 1103	Received by: <i>[Signature]</i>	Date/Time: 5/14/24 1103
Relinquished by: <i>[Signature]</i>	Date/Time: 5-14-24 1103	Received by: <i>[Signature]</i>	Date/Time: 5/14/24 1103

☒ COMPOSITE PARAMETERS

☐ GRAB PARAMETERS

- ANALYSIS
- ☒ Biochemical Oxygen Demand (BOD)
 - ☒ Chemical Oxygen Demand (COD)
 - ☒ Total Suspended Solids (TSS)
 - ☒ Total Dissolved Solids (TDS)
 - ☒ Total Nitrogen
 - ☒ Total Kjeldahl Nitrogen (TKN)
 - ☒ Nitrate-Nitrogen
 - ☒ Ammonia-Nitrogen
 - ☒ Total Phosphorus
 - ☒ Dissolved Phosphorus
 - ☒ Total Cadmium
 - ☒ Total Chromium
 - ☒ Total Copper
 - ☒ Total Lead
 - ☒ Total Nickel
 - ☒ Total Zinc
 - ☒ Total Atrazine

Units
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L

- ANALYSIS
- ☐ Oil and Grease
 - ☐ Total Cyanide
 - ☐ Hardness
 - ☐ E. coli
 - ☐ Enterococci

Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL

Temp: 11.6 Gun: A
AC32916



City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info	City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469	Report# /Lab ID#: AC31832 Sample Name: Schannen Date Received: 04/26/2024 Date Sampled: 04/26/2024	Report Date: 5/20/24 Time: 13:54 Time: 11:50
Phone:	EMAIL: roberta3@cctexas.com		

Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli (MPN)	>24196.0	MPN	D		4/26/24 14:24	SM 9223 B - Coli	VP	
Enterococci	>24196.0	MPN	D		4/26/24 14:04	Enterolert	MS / FK /CY	
Oil and Grease	2.6	mg/l	X	3	4/29/24 11:43	EPA 1664 B	VM	
pH (Field)	8.4	S.U.			4/26/24 11:50	SM 4500H+ B	FIELD	
Total Cyanide	3.2	µg/l	O, J,	5.0	5/14/24 22:11	EPA 335.4	EUROFINS	
Total Hardness as CaCO3	714	mg/L		10	5/3/24 13:15	SM 2340 C	VM	
Water Temperature (in °C)	24.7	°C			4/26/24 11:50	SM 2550 B	FIELD	

Sample Comments:

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Technical Director (or designee)

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CHAIN OF CUSTODY RECORD

CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

Schannen
SAMPLE LOCATION

COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
E. Coli/Enterococci	4/26/24	7:50	G	Plastic	1	Na2S2O3
Total Hardness			G	Plastic	1	HNO3
Cyanide (T)			G	Plastic	1	NaOH
Oil & Grease			G	Glass	1	H2SO4

pH (SU)

8.4

Temperature (C)

24.7

Remarks

All samples are stored on ice through laboratory receipt.

Relinquished by:	Date/Time	Received by:	Date/Time
<i>[Signature]</i>	4-26-24 / 1354	<i>[Signature]</i>	4-26-24 / 1354
Relinquished by:	Date/Time	Received by:	Date/Time

COMPOSITE PARAMETERS

- ANALYSIS
- ___ Biochemical Oxygen Demand (BOD)
 - ___ Chemical Oxygen Demand (COD)
 - ___ Total Suspended Solids (TSS)
 - ___ Total Dissolved Solids (TDS)
 - ___ Total Nitrogen
 - ___ Total Kjeldahl Nitrogen (TKN)
 - ___ Nitrate-Nitrogen
 - ___ Ammonia-Nitrogen
 - ___ Total Phosphorus
 - ___ Dissolved Phosphorus
 - ___ Total Cadmium
 - ___ Total Chromium
 - ___ Total Copper
 - ___ Total Lead
 - ___ Total Nickel
 - ___ Total Zinc
 - ___ Total Atrazine

Units
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L

GRAB PARAMETERS

- ANALYSIS
- ☒ Oil and Grease
 - ☒ Total Cyanide
 - ☒ Hardness
 - ☒ E. coli
 - ☒ Enterococci

Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL

Temp: 3.3

Gun: A

AC31832



City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469	Report# /Lab ID#: AC21835		Report Date: 2/28/24	
	Sample Name: Schanen			
	Date Received: 11/10/2023		Time: 09:29	
	Date Sampled: 11/10/2023		Time: 08:05	
Phone:	EMAIL: roberta3@cctexas.com			

Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments
Ammonia by Probe	<0.2	mg/L			11/13/23 09:30	SM 4500 NH3 D -2	FM/VM	
Atrazine	<0.60	µg/l	O	10	11/21/23 13:30	EPA 625.1	EUROFINS	
Biochemical Oxygen Demand	3.9	mg/L	K, X		11/10/23 12:30	SM 5210 B	FM/VM	
Cadmium in µg/L	< 1.3	µg/L	O	5.0	11/21/23 13:30	EPA 200.8	EUROFINS	
Chemical Oxygen Demand	58	mg/l		10	11/15/23 09:04	SM 5220 D	CF	
Chromium reported in µg/L	3.3	µg/l	O, J,	10	11/21/23 13:30	EPA 200.8	EUROFINS	
Copper reported in µg/L	5.9	µg/l	O, J,	10	11/21/23 13:30	EPA 200.8	EUROFINS	
Dissolved Phosphorous	0.060	mg/l	O	0.020	12/4/23 16:11	EPA 365.1	EUROFINS	
Lead Reported in µg/L	< 0.70	µg/l	O, D	0	11/21/23 13:30	EPA 200.8	EUROFINS	
Nickel Reported in µg/L	16	µg/L	O, D	10	11/21/23 13:30	EPA 200.8	EUROFINS	
Nitrate by IC	<0.025	mg/L			11/10/23 13:27	EPA 300.0	MONICAS	
Total Dissolved Solids	6580	mg/L			11/13/23 08:50	SM 2540 C	VP	
Total Kjeldahl Nitrogen	1.1	mg/L		0.20	11/21/23 10:48	EPA 351.4	FM/VM	
Total Nitrogen by IC	1.1	mg/L			2/27/24 17:09	Calculated	MICHAELM10	
Total Phosphorus	0.10	mg/L	O	0.020	11/28/23 17:09	EPA 365.1	EUROFINS	
Total Suspended Solids	10.0	mg/L		2.5	11/10/23 14:16	SM 2540 D	VM	
Zinc Reported in µg/L	7.4	µg/l	O, J,	20	11/21/23 13:30	EPA 200.8	EUROFINS	

Sample Comments:

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Technical Director (or designee)

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CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

CHAIN OF CUSTODY RECORD

AC21835

Schannen

SAMPLE LOCATION

COLLECTOR



Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
Composite	11/10/23	0805	C	Glass	1	Ice

pH (SU)

Temperature (C)

12.0

Remarks

Gun: A

All samples are stored on ice through laboratory receipt.

Relinquished by:	Date/Time	Received by:	Date/Time
<i>[Signature]</i>	11-10-23 929	<i>[Signature]</i>	11/10/23 929
Relinquished by:	Date/Time	Received by:	Date/Time

☒ COMPOSITE PARAMETERS

ANALYSIS

- ☒ Biochemical Oxygen Demand (BOD)
- ☒ Chemical Oxygen Demand (COD)
- ☒ Total Suspended Solids (TSS)
- ☒ Total Dissolved Solids (TDS)
- ☒ Total Nitrogen
- ☒ Total Kjeldahl Nitrogen (TKN)
- ☒ Nitrate-Nitrogen
- ☒ Ammonia-Nitrogen
- ☒ Total Phosphorus
- ☒ Dissolved Phosphorus
- ☒ Total Cadmium
- ☒ Total Chromium
- ☒ Total Copper
- ☒ Total Lead
- ☒ Total Nickel
- ☒ Total Zinc
- ☒ Total Atrazine

Units
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L

☐ GRAB PARAMETERS

ANALYSIS

- Oil and Grease
- Total Cyanide
- Hardness
- E. coli
- Enterococci

Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL



City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469						Report# /Lab ID#: AC24716 Sample Name: Schanen Date Received: 01/03/2024 Date Sampled: 01/03/2024		Report Date: 2/5/24 Time: 08:30 Time: 07:44
Phone:						EMAIL: roberta3@cctexas.com		
Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments
Ammonia by Probe	<0.2	mg/L			1/8/24 09:35	SM 4500 NH3 D -2	VM	
Atrazine	< 0.60	µg/l	O	10	1/9/24 09:05	EPA 625.1	EUROFINS	
Biochemical Oxygen Demand	4	mg/L			1/3/24 11:54	SM 5210 B	VP/CF	
Cadmium in µg/L	< 2.6	µg/L	O, D	10	1/15/24 13:00	EPA 200.8	EUROFINS	
Chemical Oxygen Demand	52	mg/l		10	1/24/24 08:41	SM 5220 D	VP	
Chromium reported in µg/L	3.8	µg/l	O, D	0	1/15/24 13:00	EPA 200.8	EUROFINS	
Copper reported in µg/L	< 6.9	µg/l	O, D	40	1/15/24 13:00	EPA 200.8	EUROFINS	
Dissolved Phosphorous	0.083	mg/l	O	0.020	1/30/24 17:08	EPA 365.1	EUROFINS	
Lead Reported in µg/L	< 1.4	µg/l	O, D	0	1/15/24 13:00	EPA 200.8	EUROFINS	
Nickel Reported in µg/L	7.7	µg/L	O, D	0	1/15/24 13:00	EPA 200.8	EUROFINS	
Nitrate by IC	0.04	mg/L			1/3/24 15:08	EPA 300.0	MONICAS	
Total Dissolved Solids	5480	mg/L			1/4/24 14:27	SM 2540 C	VM	
Total Kjeldahl Nitrogen	1.02	mg/L		0.20	1/18/24 09:01	EPA 351.4	VP	
Total Nitrogen by IC	1.04	mg/L			2/5/24 10:00	Calculated	CALCULATED	
Total Phosphorus	0.10	mg/L	O	0.10	1/12/24 15:42	EPA 365.1	EUROFINS	
Total Suspended Solids	21.6	mg/L	X	2.5	1/3/24 17:04	SM 2540 D	VP, VM	
Zinc Reported in µg/L	< 8.9	µg/l	O, D	100	1/15/24 13:00	EPA 200.8	EUROFINS	
Sample Comments:								

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CHAIN OF CUSTODY RECORD



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PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

AC24716

Schannen
SAMPLE LOCATION

Patrick Howard
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
Composite	01/03/24	0744	C	Glass	1	Ice

pH (SU)

7.73

Temperature (C)

12.9

Remarks

All samples are stored on ice through laboratory receipt.

Relinquished by:	Date/Time	Received by:	Date/Time
Patrick Howard	01/03/24 8:50	[Signature]	1/3/24 8:30
Relinquished by:	Date/Time	Received by:	Date/Time

☒ COMPOSITE PARAMETERS

☐ GRAB PARAMETERS

- ANALYSIS
- ☒ Biochemical Oxygen Demand (BOD)
 - ☒ Chemical Oxygen Demand (COD)
 - ☒ Total Suspended Solids (TSS)
 - ☒ Total Dissolved Solids (TDS)
 - ☒ Total Nitrogen
 - ☒ Total Kjeldahl Nitrogen (TKN)
 - ☒ Nitrate-Nitrogen
 - ☒ Ammonia-Nitrogen
 - ☒ Total Phosphorus
 - ☒ Dissolved Phosphorus
 - ☒ Total Cadmium
 - ☒ Total Chromium
 - ☒ Total Copper
 - ☒ Total Lead
 - ☒ Total Nickel
 - ☒ Total Zinc
 - ☒ Total Atrazine

Units
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L

- ANALYSIS
- Oil and Grease
 - Total Cyanide
 - Hardness
 - E. coli
 - Enterococci

Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL

Temp: 12.7
Gun: B



City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info City of Corpus Christi Utilities Department-Stormwater P.O. Box 9277 Corpus Christi, TX 78469						Report# /Lab ID#: AC20669 Sample Name: SHANNEN-COMP Date Received: 10/23/2023 Time: 16:52 Date Sampled: 10/23/2023 Time: 16:00		
Phone:						EMAIL: roberta3@cctexas.com		
Parameter	Result	Unit	Flag	RL	Date/Time Analyzed	Method	Analyst	Analysis Comments
Ammonia by Probe	<0.2	mg/L			10/27/23 13:41	SM 4500 NH3 D -2	FM	
Atrazine	< 0.60	µg/l	O, H	2	11/10/23 10:25	EPA 625.1	EUROFINS	
Biochemical Oxygen Demand	7.1	mg/L			10/24/23 12:02	SM 5210 B	VP	
Cadmium	<0.00026	mg/L	O	1	10/31/23 11:58	EPA 200.8	EUROFINS	
Chemical Oxygen Demand	65	mg/l	X	10	10/24/23 09:06	SM 5220 D	VM	
Chromium	0.0028	mg/l	O, J	2	10/31/23 11:58	EPA 200.8	EUROFINS	
Copper	0.0040	mg/l	O	2	10/31/23 11:58	EPA 200.8	EUROFINS	
Dissolved Phosphorous	0.022	mg/l	O		11/3/23 15:54	EPA 365.1	EUROFINS	
Lead	0.00052	mg/l	O, J	2	10/31/23 11:58	EPA 200.8	EUROFINS	
Nickel	0.0078	mg/L	O	2	10/31/23 11:58	EPA 200.8	EUROFINS	
Nitrate	<0.025	mg/l		0.02	10/25/23 11:27	EPA 300.0	MONICAS	
Nitrite	<0.025	mg/l		0.02	10/25/23 11:27	EPA 300.0	MONICAS	
Total Dissolved Solids	3464	mg/l			10/25/23 14:08	SM 2540 C	FM/VM	
Total Kjeldahl Nitrogen	1.0	mg/l		0.20	10/26/23 12:07	EPA 351.4	FM	
Total Nitrogen by IC	Not detected	mg/L			11/10/23 11:30	Calculated	LDP	
Total Phosphorus	0.091	mg/L	O		11/8/23 16:40	EPA 365.1	EUROFINS	
Total Suspended Solids	25	mg/l		2.5	10/24/23 14:20	SM 2540 D	VP	
Zinc	0.013	µg/l	O	5	10/31/23 11:58	EPA 200.8	EUROFINS	
Sample Comments: J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.								

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Respectfully Submitted,



Technical Director (or designee)

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2. Precision (PREC) is the absolute value of the relative percent difference between duplicate results .
3. Recovery (RECOV) is the percent of analyte recovered from a spiked sample.
4. Laboratory Control Sample (LCS) results are expressed as the percent recovery of analyte.
5. Reporting Limit (RL), typically at or above the Limit of Quantitation (LOQ) of the analytical method.
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N=Analysis not performed as per client request. **H**=Sample exceeded holding time. **P**=Analysis is from an unpreserved sample. **J**=Value reported is less than the RL but greater than the MDL .

X=MS/MSD recovery or duplicates analysis exceeded the acceptance limit or Standard failed. **LA**=Lab accident. **LE**=Lab error. **OA**=Outside the scope of the lab's NELAC accreditation .

U=Unsuitable; sample turned turbid after incubation. **T**=Sample below temp requirement; not on ice. **EQ**=Equipment failure. **I**=Information on sample bottle and COC does not match.

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NI=Not analyzed due to interferences. **K**=BOD result estimated due to blank exceeding the allowable oxygen depletion. **D**=Sample dilution required for analysis/ quality control.

SC=BOD/CBOD calculated using a seed correction factor not within acceptable range. **QB**=No QC data assigned to sample; sample result not affected.

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E= The data exceed the upper calibration limit; therefore the concentration is reported as an estimate.



CHAIN OF CUSTODY RECORD



CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

AC 20671

Schannen
SAMPLE LOCATION

C. Rodriguez
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
Composite	10/23/23	4:00 PM	C	Glass	1	Ice

pH (SU)

Temperature (C)

20.1 °C G₄ A
20.1 °C CT

Remarks

Rain Event / Receiving Water Body Sampling (RWBS)

All samples are stored on ice through laboratory receipt.

Relinquished by: <u>M. Lando</u>	Date/Time: <u>10/23/23 4:52p</u>	Received by: <u>[Signature]</u>	Date/Time: <u>10/23/23 11:52</u>
Relinquished by:	Date/Time:	Received by:	Date/Time:

☒ COMPOSITE PARAMETERS

☐ GRAB PARAMETERS

ANALYSIS

- ☒ Biochemical Oxygen Demand (BOD)
- ☒ Chemical Oxygen Demand (COD)
- ☒ Total Suspended Solids (TSS)
- ☒ Total Dissolved Solids (TDS)
- ☒ Total Nitrogen
- ☒ Total Kjeldahl Nitrogen (TKN)
- ☒ Nitrate-Nitrogen
- ☒ Ammonia-Nitrogen
- ☒ Total Phosphorus
- ☒ Dissolved Phosphorus
- ☒ Total Cadmium
- ☒ Total Chromium
- ☒ Total Copper
- ☒ Total Lead
- ☒ Total Nickel
- ☒ Total Zinc
- ☒ Total Atrazine

Units

mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L

ANALYSIS

Oil and Grease
Total Cyanide
Hardness
E. coli
Enterococci

Units

mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL



City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info	City of Corpus Christi Utilities Department-Stormwater P.O. Box 9277 Corpus Christi, TX 78469	Report# /Lab ID#: AC20668 Sample Name: SNANNEN-GRAB Date Received: 10/23/2023 Time: 16:48 Date Sampled: 10/23/2023 Time: 12:40	Report Date: 11/16/23
Phone:	EMAIL: roberta3@cctexas.com		

Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli	141360	MPN	D		10/23/23 18:54	SM 9223 B - Coli	CF	
Enterococci	3810	MPN	D	1	10/23/23 18:49	Enterolert	CF	
Oil and Grease	<3.0	mg/l		3	10/26/23 09:00	EPA 1664 B	CF	
pH (Field)	6.8	S.U.			10/12/23 14:35	SM 4500H+ B	FIELD	
Total Cyanide	<2.0	µg/l	O	5	11/2/23 12:50	EPA 335.4	EUROFINS	
Total Hardness as CaCO3	740	mg/L		10	11/7/23 09:18	SM 2340 C	CF	
Water Temperature (in °C)	27.6	°C			10/12/23 14:35	SM 2550 B	FIELD	

Sample Comments:

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Respectfully Submitted,

Technical Director (or designee)

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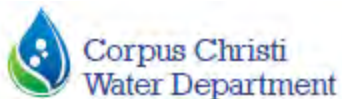
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City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info City of Corpus Christi Utilities Department-Stormwater P.O. Box 9277 Corpus Christi, TX 78469						Report# /Lab ID#: AC20669 Sample Name: SHANNEN-COMP Date Received: 10/23/2023 Time: 16:52 Date Sampled: 10/23/2023 Time: 16:00			Report Date: 11/14/23
Phone:						EMAIL: roberta3@cctexas.com			
Parameter	Result	Unit	Flag	RL	Date/Time Analyzed	Method	Analyst	Analysis Comments	
Ammonia by Probe	<0.2	mg/L			10/27/23 13:41	SM 4500 NH3 D -2	FM		
Atrazine	< 0.60	µg/l	O, H	2	11/10/23 10:25	EPA 625.1	EUROFINS		
Biochemical Oxygen Demand	7.1	mg/L			10/24/23 12:02	SM 5210 B	VP		
Cadmium	<0.00026	mg/L	O	1	10/31/23 11:58	EPA 200.8	EUROFINS		
Chemical Oxygen Demand	65	mg/l	X	10	10/24/23 09:06	SM 5220 D	VM		
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Copper	0.0040	mg/l	O	2	10/31/23 11:58	EPA 200.8	EUROFINS		
Dissolved Phosphorous	0.022	mg/l	O		11/3/23 15:54	EPA 365.1	EUROFINS		
Lead	0.00052	mg/l	O, J	2	10/31/23 11:58	EPA 200.8	EUROFINS		
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Nitrate	<0.025	mg/l		0.02	10/25/23 11:27	EPA 300.0	MONICAS		
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Total Nitrogen by IC	Not detected	mg/L			11/10/23 11:30	Calculated	LDP		
Total Phosphorus	0.091	mg/L	O		11/8/23 16:40	EPA 365.1	EUROFINS		
Total Suspended Solids	25	mg/l		2.5	10/24/23 14:20	SM 2540 D	VP		
Zinc	0.013	µg/l	O	5	10/31/23 11:58	EPA 200.8	EUROFINS		
Sample Comments: J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.									

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Technical Director (or designee)

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CHAIN OF CUSTODY RECORD



CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

AC 20671

Schannen
SAMPLE LOCATION

C. Rodriguez
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
Composite	10/23/23	4:00 PM	C	Glass	1	Ice

pH (SU)

Temperature (C)

20.1 °C G₄ A
20.1 °C CT

Remarks

Rain Event / Receiving Water Body Sampling (RWBS)

All samples are stored on ice through laboratory receipt.

Relinquished by: <u>M. Lando</u>	Date/Time: <u>10/23/23 4:52p</u>	Received by: <u>[Signature]</u>	Date/Time: <u>10/23/23 11:52</u>
Relinquished by:	Date/Time:	Received by:	Date/Time:

☒ COMPOSITE PARAMETERS

☐ GRAB PARAMETERS

ANALYSIS

- ☒ Biochemical Oxygen Demand (BOD)
- ☒ Chemical Oxygen Demand (COD)
- ☒ Total Suspended Solids (TSS)
- ☒ Total Dissolved Solids (TDS)
- ☒ Total Nitrogen
- ☒ Total Kjeldahl Nitrogen (TKN)
- ☒ Nitrate-Nitrogen
- ☒ Ammonia-Nitrogen
- ☒ Total Phosphorus
- ☒ Dissolved Phosphorus
- ☒ Total Cadmium
- ☒ Total Chromium
- ☒ Total Copper
- ☒ Total Lead
- ☒ Total Nickel
- ☒ Total Zinc
- ☒ Total Atrazine

Units

mg/L
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ug/L
ug/L
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ug/L
ug/L

ANALYSIS

Oil and Grease
Total Cyanide
Hardness
E. coli
Enterococci

Units

mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL



Co-Permittee Port of Corpus Christi

Municipal Separate Storm Sewer System (MS4) 2023/24 Co-Permittee Annual Report

DEPARTMENT OF ENVIRONMENTAL PLANNING AND
COMPLIANCE



AUTHOR: MCKENZIE WARD
DATE: DECEMBER 2024
REPORT

Executive Overview

Municipal Separate Storm Sewer System (MS4) 2023/24 Co-Permittee Annual Report

Date: December 2024

Author: McKenzie Ward

Port of Corpus Christi Authority

Department of Environmental Planning and Compliance

This report summarizes the Port of Corpus Christi Authority's (PCCA) compliance with MS4 Permit No. WQ0004200000 during the 2023–2024 reporting period. The PCCA Environmental Compliance Team prepared this report for submission to the City of Corpus Christi, which will compile all co-permittee reports for submission to TCEQ.

Key achievements during this reporting period include the completion of 75 routine environmental inspections, and the collection of 4 stormwater samples within the co-permittee area. The environmental training program provided all staff with best practices for pollution prevention and updates on environmental procedures and continued to provide operations specific training at PCCA facilities.

This report highlights specific actions taken to address and correct three (3) concerns that arose during the year, preventing recurrence through corrective and preventative actions. Additionally, PCCA's Environmental Department expanded its external education and outreach initiatives, engaging with an estimated 1,517 community members or stakeholders at 7 outreach events. Voluntary environmental certifications, including ISO14001 and Green Marine, were maintained, showcasing PCCA's leadership as a steward of the environment in the local community.

This report concludes with a review of PCCA's progress in meeting its 32 SWMP objectives, 28 of which are fully implemented.

Nomenclature

BMP	Best Management Practices
CAPA	Corrective and Preventative Action
CBBEP	Coastal Bend Bays and Estuaries Program
EMS	Environmental Management System
GIS	Geographic Information System
MS4	Municipal Separate Storm Sewer System
PCCA	Port of Corpus Christi Authority
SPCC	Spill Prevention Control and Countermeasure
STEM	Science, Technology, Engineering & Mathematics
SWMP	Stormwater Management Plan
TCEQ	Texas Commission on Environmental Quality
TPDES	Texas Pollutant Discharge Elimination System
PBR	Permit by Rule
TGLO	Texas General Land Office

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1. Introduction

In compliance with Part IV, Section C, of the Texas Pollutant Discharge Elimination System (TPDES) Municipal Separate Storm Sewer System (MS4) Permit No. WQ0004200000, the Port of Corpus Christi Authority (PCCA) of Nueces County, submits this Annual Report for reporting year 2024 under the current MS4 permit. Initially issued on August 11, 2008, the permit was renewed on October 21, 2020, by the Texas Commission on Environmental Quality (TCEQ). This report is provided to the City of Corpus Christi for inclusion in a comprehensive system-wide report for the MS4 permit. The PCCA report is due to the City of Corpus Christi 45 days prior to the system-wide report deadline of March 1, 2025. Covering activities from November 1, 2023, to October 31, 2024, the PCCA Annual Report specifically addresses the aspects of the MS4 for which PCCA serves as the operator.

2. Status of Implementing the SWMP

PCCA's Environmental Planning and Compliance Department has fully implemented the Stormwater Management Plan (SWMP) associated with Part III.C of the MS4 permit. As a co-permittee, PCCA submits annual status reports to the City of Corpus Christi.

3. Proposed Changes to the SWMP

There are no proposed changes to PCCA's SWMP. However, PCCA is committed to continuous improvement and implements changes as needed to improve system performance and protect stormwater quality. Many of the identified changes arise through the implementation of the Stormwater Master Plan.

4. Permit Compliance

4.1 Description of BMPs

PCCA staff continuously maintain stormwater inlet filters across its facilities within the MS4 co-permittee area. Drop-sock filters made of geotextile filter fabric are used for drainage grates, and wattles are utilized for drop curb inlets. These filters are designed to capture sediment, floatables, and hydrocarbons. These filters are inspected monthly by a PCCA Environmental Compliance Specialist. Required maintenance or replacement of the filters is reported to the Maintenance Operations Manager, who then assigns the task to a Maintenance team member. Completion of these tasks are tracked in Maintain X, PCCA's chosen software system for tracking maintenance operations.

Additionally, PCCA operations and activities incorporate non-structural BMPs established in the BMP manual. This manual provides best practices for 41 different operations, ranging from fueling to waste management, to sustainable purchasing. BMPs are reviewed daily by the operations teams at the start of each day, by reviewing the BMP Weekly which is provided to Operations Supervisors each week by an Environmental Compliance Specialist.

4.2 Inspections

A PCCA Environmental Compliance Specialist conducts an inspection of the MS4 co-permittee area each month to evaluate and ensure proper functioning of structural BMPs, compliance with non-structural BMPs, and to evaluate and resolve any other identified risks or stormwater exposures. During the reporting period, 25 storm water inspections and 21 fuel containment unit inspections and were conducted within the MS4 area. Records of these inspections are maintained following PCCA's records management procedure. Findings from these inspections are reported to PCCA executives each month via the Environmental Compliance Newsletter. This monthly Newsletter was initiated in February 2024 and has become an integral communication tool for the Environmental Compliance Team to PCCA executives and directors.

4.3 Corrective and Preventative Action

There were three findings during the reporting period which necessitated a Corrective and Preventative Action (CAPA). The CAPA template was updated in February 2024 and transitioned the investigation process from using 'five whys' to a fishbone diagram. This transition allowed Environmental Compliance staff to identify multiple root causes that culminated in an incident. An action plan template was also developed to improve the efficiency of follow up on these findings.

A non-conformity was identified in February 2024 due to benchmark exceedances associated with the Maintenance Facility stormwater sample results. An investigation and CAPA report determined that stormwater drainage from an uncovered scrap metal bin caused the exceedances. Operations staff covered the container as an immediate short-term solution. The next month, the bin was replaced with a covered one. To prevent recurrence, Maintenance Facility managers now ensure that only covered bins are used for this service, and environmental compliance staff have added the scrap metal bin to biweekly waste inspections and monthly storm water inspections to verify that the bins remain covered and compliant.

A non-conformity was identified in May 2024 when the Maintenance Department notified an Environmental Specialist that a small container with an unknown liquid waste was found outside of the Maintenance Facility waste storage area. Environmental staff were unable to identify the responsible party or determine the origin of the waste. However, they concluded that the issue stemmed from a widespread lack of understanding among operations employees about proper liquid waste disposal procedures and their importance. To address this, Environmental Compliance staff identified a need for improved communication across departments regarding waste disposal protocols. The issue was subsequently addressed through targeted training on waste disposal procedures during the annual all-employee environmental training. Procedures were also emphasized in multiple BMP weekly reviews, which covered various best management practices for handling different types of waste.

On June 26, 2024, barite off-loading operations commenced at Cargo Dock 8 without prior notice to the Environmental Planning and Compliance Department. However.

Environmental staff retroactively confirmed that appropriate dust prevention measures were being utilized. Environmental Compliance staff determined the remaining volume that can be handled under a permit by rule (PBR). The team is currently developing an air permit fact sheet to guide operations in compliance with the PBR. To prevent further gaps in communication, the Manager of Environmental Compliance has requested that the Assistant Director of Operations, Trade Development Department, and Wharfingers notify the Environmental Department via the Environmental Admin email communication channel whenever there is potential for a new operation, including existing operations planned for a new location at the Port.

4.4 Stormwater Monitoring

PCCA monitors stormwater samples from one location within the MS4 area. The collection location is designated as a representative stormwater outfall for the Maintenance Facility under the TPDES Multi-Sector General Permit (MSGP) No. TXR05K365. A Teledyne ISCO automatic sampler is used at the outfall to collect samples within the first 30 minutes of rainfall following three rain-free days. Once a sample is collected, the compliance team receives instant text notifications, and rainfall, flow rate, and level data are available through Flowlink software. When analytical testing is needed, the Environmental Compliance Specialist transfers the collected sample to sample bottles on-site, places them on ice, and delivers them to Pace Analytical laboratory. All laboratory results and monitoring records are maintained in accordance with PCCA's records management procedures.

Stormwater samples are monitored annually for hazardous metals. During this reporting period, no hazardous metal concentration exceedances occurred compared to the daily maximum effluent limitation for tidal waters. The results for the reporting period are shown in Table 1.

Table 1. Hazardous Metals Monitoring Results

Parameter	Units	Daily Maximum Effluent Limitation, Tidal Waters	Analytical Results Collected at Maintenance Facility Outfall 001 on 2/3/2024
Total Arsenic	mg/L	0.3	<0.0200
Total Barium	mg/L	4.0	0.490
Total Cadmium	mg/L	0.3	<0.00500
Total Chromium	mg/L	5.0	<0.00700
Total Copper	mg/L	2.0	<0.0200
Total Lead	mg/L	1.5	0.00760
Total Manganese	mg/L	3.0	0.0653
Total Mercury	mg/L	0.010	<0.000200
Total Nickel	mg/L	3.0	<0.0100
Total Selenium	mg/L	0.3	<0.0200
Total Silver	mg/L	0.2	<0.00500
Total Zinc	mg/L	6.0	0.146

Benchmark monitoring is conducted semiannually, with results shown in Table 2. The sample collected on February 3rd exceeded benchmark concentrations for Aluminum and Iron. An investigation into the cause of this exceedance is described in section 4.3. The sample collected on September 24th met all benchmark concentrations.

Table 2. Benchmark Monitoring Results

Parameter	Units	Sector Q Benchmark Levels	Analytical Results Sample Date: 2/3/2024	Analytical Results Sample Date: 9/24/2024
Total Aluminum	mg/L	1.2	3.09	<0.100
Total Iron	mg/L	1.3	2.56	<0.100
Total Lead	mg/L	0.010	0.00760	<0.00200
Total Zinc	mg/L	0.16	0.146	0.0472
Total Suspended Solids	mg/L	50	13.0	<2.50

Visual monitoring of stormwater is conducted quarterly. The following observations of stormwater samples are recorded during each monitoring event:

- Color
- Clarity
- Floating solids
- Suspended solids
- Foam
- Oil sheen
- Odors
- Other obvious indicators of stormwater pollution

Four stormwater samples were visually monitored during this reporting period. The sample collected on February 3rd was slightly murky and discolored. Samples collected on May 29th and July 23rd were clear but had some floating and suspended solids, which were determined to be from grass in the stormwater ditches throughout the facility. The sample collected on September 24th had no discoloration and very few suspended solids.

5. Education and Outreach

PCCA supports local environmental conservation and education organizations through financial contributions and volunteer efforts. Staff participated in various community events to promote environmental projects and initiatives.

5.1 Public Education

5.1.1 Trash Skimmer Program

In 2021, PCCA launched the Salt Flats Ditch Trash Reduction and Prevention Project, supported by EPA funding, to remove trash from local waterways and educate the community on marine debris. A solar-powered trash skimmer diverts litter from stormwater runoff to a collection bin. The collected materials are recorded each month, and the data is shared with the public through outreach events and public education efforts to encourage responsible waste disposal and create a lasting impact on local water quality.

PCCA Environmental staff volunteered at the Earth Day Bay Day event on April 13th to promote the Trash Skimmer Project. PCCA staff engaged visitors by conducting a survey with the question, “What motivates you to protect the environment?” and offered seed packets as an incentive to participate in the survey. A total of 164 people responded, and the results, shown in Figure 1, were analyzed to guide future outreach efforts. On June 1st, the team participated in the Texas General Land Office (TGLO) Coastal Roundup, replicating the survey activity. This time, 62 participants answered, and the responses are shown in Figure 2.

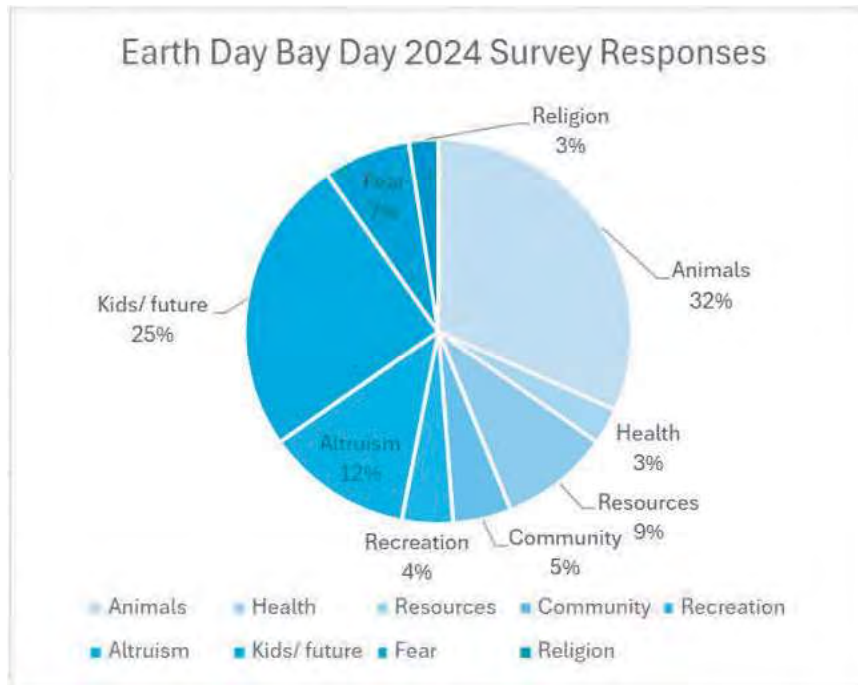


Figure 2. Survey Responses from Earth Day Bay Day

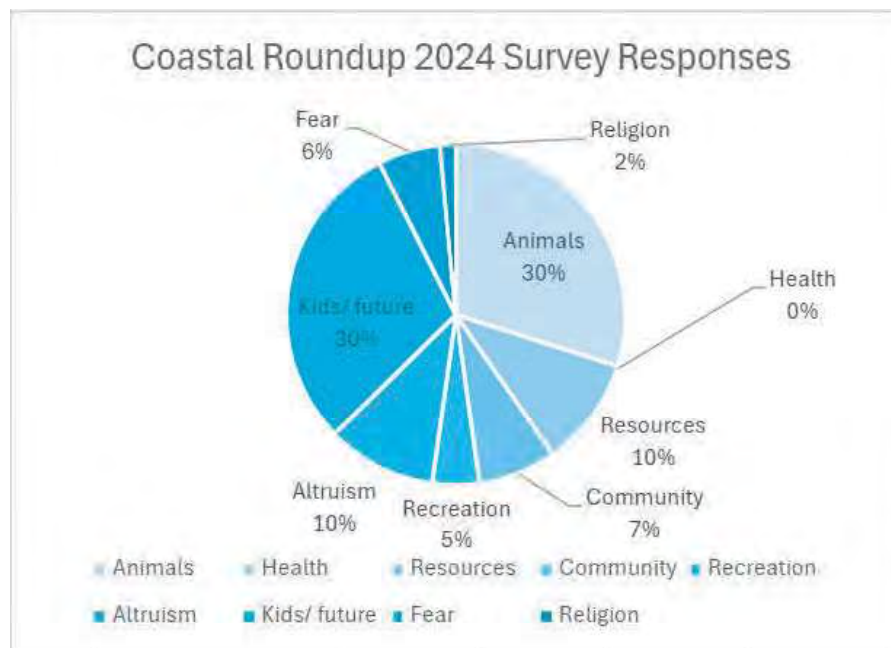


Figure 1. Survey Responses from Coastal Roundup

On June 13th and 27th, staff hosted an activity at the Texas State Aquarium (TSA) for kids in a TSA summer camp program, aged 11 to 12. The activity started with a presentation about the Port Trash Skimmer project and the effects of marine debris on wildlife. PCCA and Aquarium staff then guided the campers in designing their own trash skimmers using craft supplies like popsicle sticks and model magic. Campers presented their completed designs to the group and explained how they would work. The photos in Figure 3 are from these events. On July 24th, PCCA staff hosted a lunch-and-learn event at TSA for high school volunteers. In addition to learning about the skimmer, the volunteers also explored career paths at the Port that align with the student's interests in conservation and marine biology. The session highlighted various roles they might not have known about, broadening student's understanding of opportunities available to those passionate about protecting marine ecosystems.



Figure 3. Trash Skimmer Educational Event with Texas State Aquarium

On August 1st, PCCA staff attended the Local's List Event, an award ceremony honoring local businesses voted best in various categories. The event attracted many community leaders and provided PCCA staff with the opportunity to engage with them, discussing the types of litter originating within the community and exploring potential solutions to reduce littering. Participants were asked to complete the survey question "Why are you motivated to protect the environment?", the results of the survey are in Figure 4. A total of 24 people responded at this event, bringing the 2024 survey count to 255 respondents and reaching one of the key milestones for the Trash Skimmer Project.

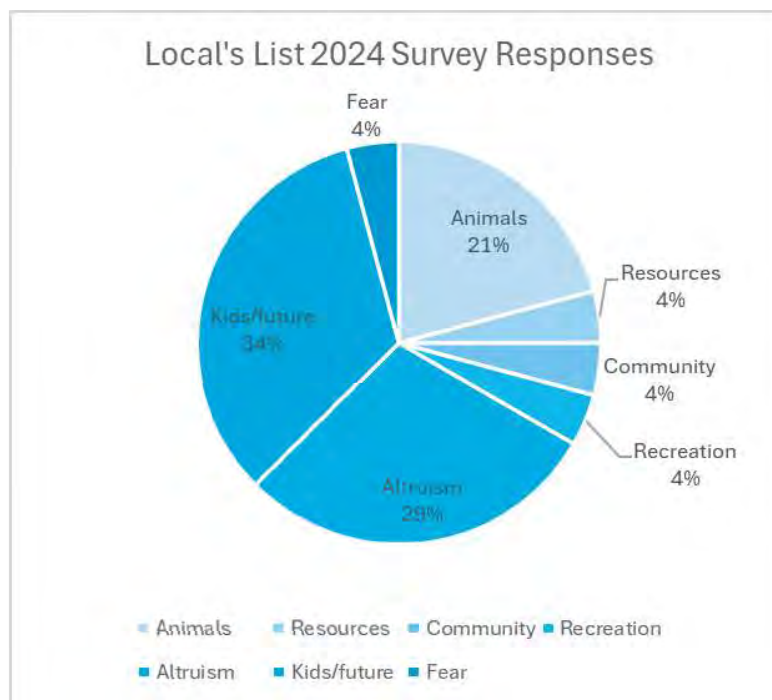


Figure 4. Survey Responses from Local's List

On September 18, 2024, PCCA staff attended the You Choose Career Fair in Robstown, TX. High school students were engaged to discuss various career paths emphasizing job opportunities that use creative solutions to tackle complex problems. The trash skimmer model served as an effective tool for explaining the program and sparked conversations about the careers of the PCCA staff in attendance. Staff tracked participation and recorded interactions with 83 adults and 1,242 students at the PCCA table. A photo from this event is shown in Figure 5.



Figure 5. YouChoose Career Fair

5.1.2 PCCA Commission Meetings

PCCA commission meetings are open to the public and recorded for online access. In February 2024 and September 2024, the Director of Environmental Planning and Compliance provided a semi-annual update on PCCA's environmental targets, focusing on six key environmental precepts, each linked to specific objectives. The presentation highlighted ongoing projects and progress towards achieving measurable targets. A recording of the presentations are available online at: <https://portofcc.com/about/commission/commission-agendas/>.

5.1.3 Learning Undefeated

PCCA continued its partnership with Learning Undefeated, a nonprofit that brings STEM (Science, Technology, Engineering, and Mathematics) experiences to schools. The PCCA PORT-Able Learning Lab is housed in a mobile shipping container and utilizes immersive reality, light, sound, and touch screen walls to provide a unique learning experience. The PORT-Able Learning Lab is a result of PCCA's commitment to supporting STEM education and STEM careers to develop the workforce of tomorrow. The lab travels directly to schools in Nueces and San Patricio Counties, a schedule of PORT-Able Learning Lab events is available at www.learningundefeated.org/events. During the reporting period, there were 47 PORT-Able Learning Lab events, which reached a total of 15,909 people at school visits and community events, 44 of which occurred in Nueces or San Patricio County.

5.2 Internal Education

5.2.1 All employee training

On November 8, 2023, the PCCA Environmental Team participated in the PCCA Health and Wellbeing Fair, organized by the PCCA Wellness Coordinator. The fair featured over 40 community vendors offering health and wellbeing services. The Environmental Team hosted a booth to share information about PCCA's environmental initiatives, with a special focus on the Trash Skimmer Project. This project demonstrated how everyday actions impact local marine ecosystems, fostering pride in the Corpus Christi area. The fair engaged PCCA employees and their families, enhancing awareness of environmental efforts alongside community wellness.

In June 2024, spill prevention training was delivered to employees at the PCCA Executive Administration Building via Neogov, PCCA's online training platform. This session provided a detailed overview of the Spill Prevention Control and Countermeasure (SPCC) program, highlighting employee responsibilities in case of a spill during vehicle fueling. A quiz followed the session to ensure comprehension and retention.

PCCA maintains an ISO 14001-certified Environmental Management System (EMS), a structured framework designed to manage environmental impacts, improve sustainability, and ensure regulatory compliance. On July 17, 2024, the Environmental Team hosted the first EMS Awareness Luncheon for Port employees. Previously, EMS training was

conducted via a 30-minute virtual meeting for each department. The new in-person session, lasting 1.5 hours, underscored the crucial role each employee plays in the EMS. To encourage engagement and reinforce learning, the session concluded with a quiz game that covered the key environmental topics discussed during the training.

5.2.2 Operations specific training

In November 2023, SPCC and stormwater training was conducted for operations personnel and the PCCA Police Department. Training was conducted in six (6) separate in-person sessions to accommodate employees with varying schedules, ensuring everyone had the opportunity to attend. This annual training ensures compliance with permit-specific requirements and equips participants with the knowledge needed to identify and address and/or report potential environmental issues to an Environmental Compliance Specialist for further investigation.

PCCA Operations employees participate in a weekly review of Best Management Practices (BMPs) through the BMP Weekly Review program. Each morning, essential aspects of a BMP are discussed alongside the daily safety briefing, reinforcing operational environmental awareness. During the reporting period, 33 BMP weekly trainings were conducted. Some training sessions covered multiple BMPs in a single week, while a few sessions focused on other topics, such as hurricane preparedness, upcoming audits, or updates to environmental procedures.

5.3 Environmental Leadership

Since 2007, PCCA has consistently demonstrated its commitment to environmental stewardship by maintaining ISO 14001 certification for its Environmental Management System (EMS). This certification reflects PCCA's dedication to systematically managing environmental impacts, ensuring compliance with regulatory requirements, and fostering continuous improvement in environmental performance. Achieving and maintaining this certification requires a comprehensive framework for identifying and addressing environmental aspects and impacts. In August 2024, the EMS underwent a third-party surveillance audit, which identified no non-conformances. During this audit, the auditor expressed appreciation for the strong evidence demonstrating the integration of environmental procedures in all operations and activities at the Port. The following positive observations were noted in the audit report:

- The port has made significant progress in reducing air and water pollutants, particularly a 71% reduction in zinc levels from the 2000 baseline.
- The port's Clean Fleet Program and efforts to transition to electric vehicles underscore its commitment to reducing greenhouse gas emissions.
- The port has voluntarily exceeded its habitat restoration goals, restoring 294.9 acres against a target of 50 acres every three years.

PCCA is also a member of Green Marine, an internationally recognized third-party certification program aimed at reducing the environmental and social impacts of the maritime industry. The Green Marine program evaluates participants on nine performance

indicators, each with levels from 1 to 5, where Level 5 signifies excellence in environmental performance. PCCA joined Green Marine in 2016, and since 2022, it has maintained the highest certification level—Level 5—across all applicable performance areas. This achievement makes PCCA the first U.S. port and the third in North America to reach this level of environmental leadership.

In line with its leadership in sustainability, PCCA is planning to expand its Trash Skimmer program by adding more collection devices and increasing outreach events to engage the community in environmental conservation. Additionally, during the report period, PCCA began planning to implement an additional Trash Skimmer in the Port area, including identifying potential locations and seeking grant funding.

Under the direction of the Chief Strategy and Sustainability Officer, PCCA has set measurable targets for environmental improvement based on six key precepts:

- Air Quality
- Water Quality
- Soils and Sediments
- Habitat
- Resilience/ Climate Adaptation
- Climate Action

The Environmental Planning and Compliance department leads numerous projects annually, each aligned with at least one of these precepts. The department provides monthly updates to PCCA executives, tracking progress on individual projects and the overall advancement of the environmental precepts. Figure 6 illustrates the status of 2023 projects aligned with each precept as of December 2023, while Figure 7 shows the status of 2024 projects included in the department's work plan as of October 2024.

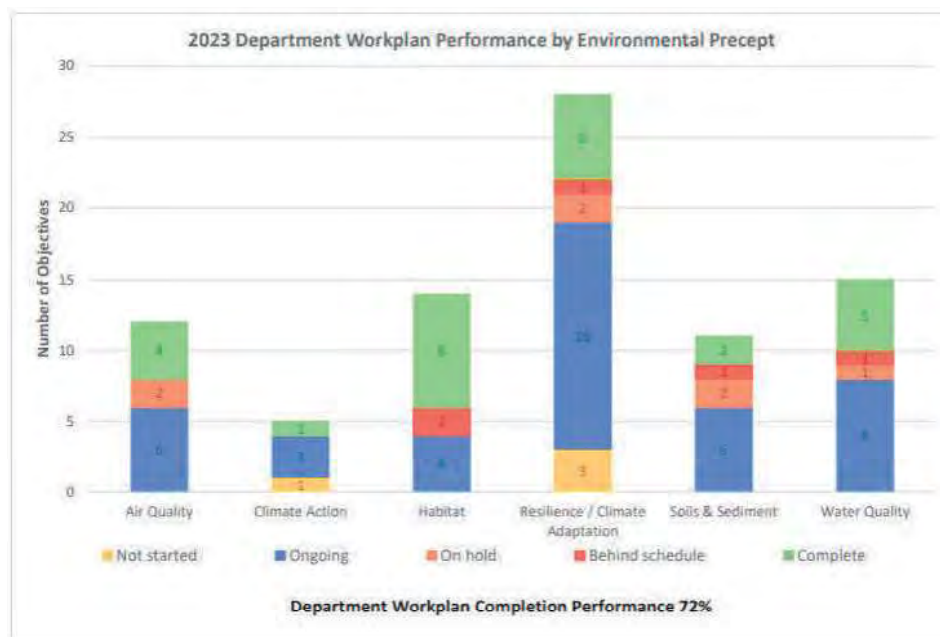


Figure 6. 2023 Environmental Department Workplan Project Status

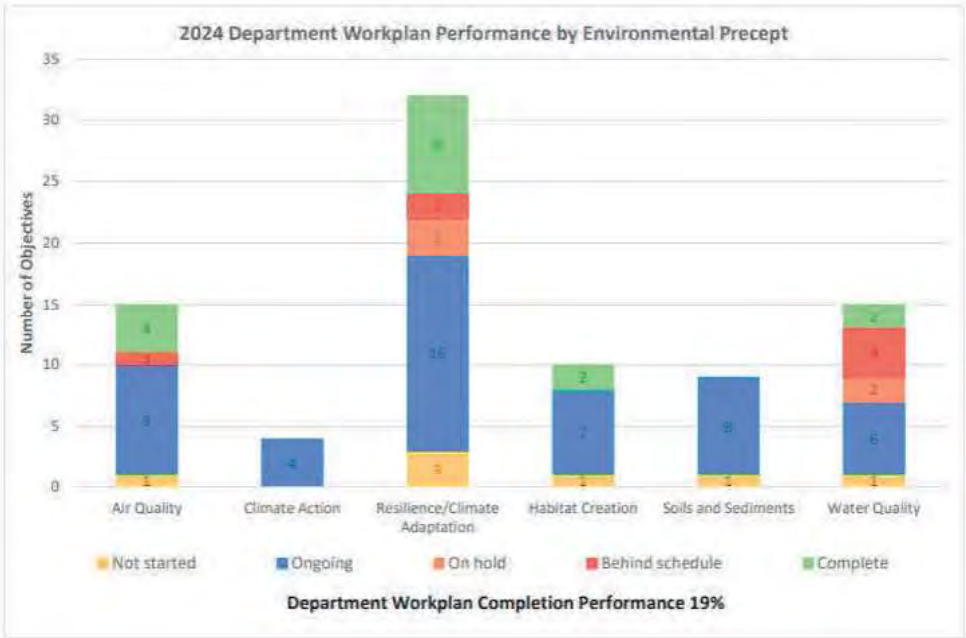


Figure 7. 2024 Environmental Department Workplan Project Status

6. Progress Toward Measurable Goals

PCCA’s SWMP establishes 32 measurable targets, 28 of which have been fully implemented. Table 3 provides details on the implementation of each of these targets.

Table 3. Progress Toward Measurable Goals

Element of Plan	Objective	Target	Implementation
Structural Controls	Reduce the amount of pollutants contributed to stormwater runoff.	Inspect existing structural controls monthly and evaluate for maintenance needs.	Fully implemented –During the reporting period PCCA Environmental staff conducted 25 storm water inspections, 21 containment unit inspections, 4 facility audits, and 1 compliance audit. A two-year Stormwater Maintenance contract has been in place since August 2023

Element of Plan	Objective	Target	Implementation
Areas of New Development and Significant Redevelopment	Adequately manage stormwater runoff in areas of new development or significant redevelopment to minimize runoff issues.	Utilize the Design Criteria Manual and checklists developed as part of the Stormwater Master Plan as tool during the review process for all Port construction activities	Fully implemented – Stormwater Master Plan is utilized for planning of all stormwater infrastructure and environmental staff systematically reviewed 26 construction plans and proposals
		Conduct monthly stormwater inspections	Fully implemented – 25 routine stormwater inspections
		Review tenant's construction drawings for incorporation of stormwater planning.	Fully implemented – environmental staff systematically reviewed 26 construction plans and proposals
Roadways	Work with Port users during bulk material cargo transfers to ensure material spilled or tracked on roadways is cleaned up.	Reduction in pollutants contributed to stormwater from bulk material handling through communication and education.	Ongoing – continuing to improve communication through tenant outreach

Element of Plan	Objective	Target	Implementation
		Reduction in pollutants contributed to stormwater from construction activities through TPDES permit TXR150000 compliance by incorporation in specific action and subsequent monitoring.	Ongoing – The Harbor Bridge project is within the MS4 area and has 2 active stormwater permits for which Flat Iron Dragados manages pollution control. Monthly storm water inspections of these sites are conducted by PCCA staff, and the sites were audited under the annual tenant audit program on 2/21/24.
		Conduct monthly stormwater inspections and advise tenants and members when material is tracked on roadways.	Fully implemented – 25 routine storm water inspections
Flood Control Projects	Not applicable.	Not applicable.	Not applicable.
Pesticide, Herbicide, and Fertilizer Applications	Reduce the degradation of water, soil, air quality, and worker health that results from herbicide use.	Herbicide storage inspected monthly.	Fully implemented – 28 waste and storage inspections
		Follow schedule for herbicide use to reduce total usage.	Fully implemented – herbicide manual, compliance audit of the Port's Maintenance Facility completed October 2024
Illicit Discharges and Improper Disposal	Reduce improper disposal practices in port area.	Inspect MS4 area monthly.	Fully implemented – 25 routine storm water inspections

Element of Plan	Objective	Target	Implementation
		Conduct tenant audits annually.	Fully implemented – 70 tenant audits
		Quarterly inspection of entire Port area for improper disposal.	Fully implemented – 4 quarterly inspections
		Proper waste and disposal program for Port operations.	Fully implemented – waste management and disposal program
		Inspection of Port owned and operated sanitary lift stations annually.	Fully implemented – lift stations inspected weekly
		Annual verification of grease trap maintenance at Ortiz Center	Fully implemented – inspected quarterly by a PCCA contractor
Spill Prevention and Response	Work with port users to reduce the occurrence of spills on public cargo docks and storage areas.	Establish baseline for Port users.	Completed – GIS layer
		All stevedores must develop their own EMS.	Fully implemented – All PCCA contracted stevedores have an EMS per Tariff 200 requires
		Inspect MS4 area monthly.	Fully implemented – 25 routine storm water inspections
		All liquid products and waste must be stored in containment units.	Fully implemented – SPCC plan and waste storage inspections 21 SPCC inspections and 28 waste and storage inspections

Element of Plan	Objective	Target	Implementation
		Train PCCA facility employees on spill response procedures annually.	Fully implemented – all employees received fueling procedures training and EMS awareness training; all operations employees received annual storm water and SPCC training
Industrial and High-Risk Runoff	Inspect port properties to ensure stormwater management programs in place at industrial facilities on port property.	Conduct annual tenant audits for each lease property within the MS4 area.	Fully implemented – 70 tenant audits
Construction Site Runoff	Reduce pollutants in stormwater discharges from construction activities and during operation.	Obtain TXR150000 coverage whenever applicable for construction projects in port area and properly maintain BMP's and controls to minimize pollutants and add additional controls when inadequate.	Fully implemented – 26 construction plans and proposals reviewed
		Utilize the Construction Activities Environmental checklist for all projects that occur in the Port.	Fully implemented – 26 construction projects were reviewed using the <i>Environmental Planning for Design Scope of Work</i> checklist, and <i>Coordination with Environmental Planning and Compliance During Detailed Design</i> checklists

Element of Plan	Objective	Target	Implementation
		For PCCA construction projects with an SWP3, conduct regular inspections during construction project and train personnel on its requirements and implementation.	Fully implemented – construction review process
		Utilize the Design Criteria Manual and checklists developed as part of the Stormwater Master Plan as tool during the review process of construction activities.	Fully implemented – 26 construction plans and proposals reviewed
		Utilize the Port GIS Platform to track and inform the need of incorporation of adequate BMP's elements into construction activities.	Fully implemented – Stormwater Master Plan GIS tool fully functional and in use
Public Education	Improve stormwater awareness with employees and contractors in port area.	Conduct quarterly training including a stormwater component with employees through EMS program and site-specific training as necessary.	Fully implemented – all employees received fueling procedures training and EMS awareness training; all operations employees received annual stormwater and SPCC training and reviewed BMPs daily with the BMP Weekly Review system

Element of Plan	Objective	Target	Implementation
		Provide technical specifications and/or requirement sheets to Port Contractors.	Fully implemented – 26 construction plans and proposals reviewed
		For PCCA construction projects with an SWP3, train construction personnel on its requirements and implementation.	Fully implemented – 26 construction plans and proposals reviewed
Monitoring & Screening Programs	Reduce the contribution of pollutants contributed to stormwater runoff at the Maintenance Facility.	Meet the benchmark levels of the Multi-Sector General Permit for Sector Q.	Ongoing – investigation procedures follow benchmark exceedances
		Audit tenants for compliance benchmark levels for their permits, if they should have one.	Fully implemented – 70 tenant audits
		Implement a tenant audit scorecard program.	Under development – A Strategic Tenant Communication Plan will analyze tenant operations and associated activities based on tenant audits

7. NPDES and TPDES Notice of Intent

During the reporting period, PCCA submitted three NOIs for construction projects with stormwater discharge in the MS4 area. Table 4 outlines all active construction projects in the MS4 area, including the Harbor Bridge project, for which the NOI was submitted prior to this period. It also includes a small construction site, under 5 acres, that did not require an NOI.

Table 4. Active Construction Sites within the MS4

Date of NOI Submission	Project Name	Site Location	General Permit Authorization No.
08/29/2024	Cement Terminal Storage Addition	2202 East, Navigation Blvd. Corpus Christi TX 78402	NA
08/05/2024	Bulk Material Terminal Public Pad 3, 4, 5, &6 Improvements	4820 E Navigation Blvd Corpus Christi TX 78402 1916	TXR1557RR
06/04/2024	Al Speight Rail and Drainage Improvements	Laydown Yard Between Sam Rankin, Brewster, Resaca, and North Tanchua Streets Corpus Christi 78401	TXR1510RB
NA project is less than 5 acres	Northside Open Storage Drainage Improvements & Maintenance Facility Area Drainage Improvements	718 E Navigation Blvd Corpus Christi TX 78402	NA
03/06/2018	US 181 Harbor Bridge Project	US 181, IH 37, City of Corpus Christi	TXR15596J

8. Enforcement Actions

During this reporting period, regulatory agencies did not issue enforcement actions against PCCA. PCCA yields to TCEQ for enforcement in the Port area. However, we support TCEQs efforts through a tenant audit program.

9. Roadways

Numerous roadways are located within the PCCA MS4 co-permittee area, as shown in Appendix A, the MS4 co-permittee area map. In the event of a spill on any of these roadways, the PCCA Police Department promptly secures the area as needed. The department receives annual spill prevention and response training, ensuring they are well-prepared to handle spills. If a responsible party cannot be identified, PCCA assumes responsibility for ensuring the cleanup is completed.

PCCA maintains several roadways, both within and outside the MS4 area. PCCA Maintenance staff regularly monitor and upkeep these roadways, including litter removal

and groundskeeping along the adjacent rights-of-way. They conduct regular roadway maintenance to ensure safety and functionality.

PCCA engineering staff conduct annual inspections to assess roadway conditions and identify any need for major repairs. When significant repairs are required, a project request is submitted for inclusion in the following year's budget. If approved, the project proceeds through design, bidding, and construction phases.

10. Pesticides, Herbicides, and Fertilizer Applications

Maintenance personnel apply herbicides throughout PCCA properties to control weed growth. Herbicide application is managed through the EMS program by employing a BMP aimed at minimizing the impacts associated with herbicide application, including the reduction of pollutants in stormwater runoff. The BMP dictates the appropriate use of herbicides in strict accordance with the label and the SDS. To facilitate accurate application, maintenance personnel utilize an herbicide manual with maps that identify specific areas within PCCA properties designated for spraying, along with the prescribed quantity of chemical application based on the label and SDS. The herbicide application sprayer is equipped with a flow meter to precisely measure the quantity of herbicide solution being applied. In March 2024, the PCCA herbicide inventory form was revised to facilitate easier recordkeeping of herbicide application. During the reporting period, PCCA employees applied 174 gallons of a 4% herbicide mixture across PCCA properties. The herbicide remains stored in a locked storage area with secondary containment. Trained staff use General Use Pesticide products throughout PCCA facilities. Contracted lawncare and maintenance services use restricted pesticides on parts of PCCA's Executive Administration Building. PCCA maintains a Self-Certification form for Level II under TPDES Pesticides General Permit TXG870000.

Fertilizers were not used on PCCA property during the reporting period. If fertilizer application becomes necessary, a BMP will be established before use.

11. Illicit Discharges and Improper Disposal

PCCA uses GIS to track all spills and illicit discharges on or near PCCA property, capturing details including the type and quantity of material spilled, responsible party information, and a unique spill record number. Table 5 provides a comprehensive list of the twelve spills within the co-permittee area during this reporting period, while Appendix B includes a map showing the spill locations. Spill records are maintained in accordance with PCCA's record control procedures. The spill notification and response procedures are outlined in Section 12.

PCCA reported one instance of water quality non-compliance to TCEQ when a guard house lift station overflowed on November 6th, 2024. A verbal notification was made to a local TCEQ representative within 24 hours of identifying the spill, followed by a written notification submitted within 5 days.

No instances of improper disposal of household hazardous waste were identified during the reporting period. PCCA continues to be classified as a Very Small Quantity Generator (VSQG).

Table 5. Spills within the MS4 Co-Permittee Area During this Reporting Period

Spill #	Material Spilled	PCCA Responsible	Unit of Measure (Gallons)	Spill Date and Time
15387	Hydraulic Fluid	No	2	01/08/2024 11:15
15394	Phosphoric Acid	No	55	01/25/2024 17:39
15395	Gasoline	Yes	0.5	01/26/2024 16:06
15397	Motor Oil	No	0.02	02/13/2024 14:50
15398	Motor Oil	No	0.06	02/14/2024 09:21
15414	Red Dye Diesel	No	5	05/14/2024 10:30
15416	Hydraulic Fluid	No	5	05/17/2024 04:44
15424	Motor Oil	Yes	5	06/14/2024 13:40
15444	Petroleum Coke Water Mixture	No	1	09/30/ 2024 10:30
15449	Oil	No	0.38	10/21/2024 14:44
15451	Hydraulic Fluid	No	22	10/28/2024 9:45
15452	Hydraulic Fluid	No	0.38	10/29/2024 11:11

12. Spill Prevention and Response

PCCA maintains a rigorous spill prevention and response program. All Port users are required to report any spill, regardless of quantity, to the PCCA Police Department. PCCA environmental staff respond to all spills on PCCA property, ensuring the responsible party takes appropriate action to protect the environment and manage cleanup. Staff follow a spill response flowchart to ensure all necessary notifications are made, and that every aspect of the response is properly documented. Records, including photos and analytical reports, are maintained in accordance with PCCA's records management procedures.

PCCA maintains on-site spill kits for employees to respond to small spills and contain larger spills when necessary. For spills that do not impact soil or water, employees use the materials in the kits to clean up the spill and document the incident using the provided form. During the reporting period, spills addressed using these spill kits were documented eight times, with fuel being the most commonly spilled material. To ensure readiness, the spill kits were inspected 25 times during the same period to verify that they were stocked with necessary supplies and that any used materials were promptly removed.

If a spill is too large to handle with the spill kits or if it reaches soil or water, employees must report the incident to Port Police. All PCCA employees are trained annually on how to use the spill kits and report spills. The most recent training, conducted virtually in June 2024, covered spill prevention during fueling, proper use of the spill kits, and reporting procedures. Operations employees received additional in-person Spill Prevention, Control, and Countermeasure (SPCC) training in November 2024.

13. Industrial High-Risk Runoff

No discharges from facilities transporting, storing, and disposing of wastes occurred within the MS4 co-permittee area during the reporting period.

14. Construction Site Runoff

The PCCA Environmental Department utilizes two checklists to review construction plans. These documents are the *Environmental Planning for Design Scope of Work* checklist, and the *Coordination with Environmental Planning and Compliance During Detailed Design* checklist. Before any construction commences, the Environmental Department thoroughly evaluates all project designs. Port-wide, 26 project reviews using these checklists occurred during the reporting period. This proactive review is aimed at guaranteeing the implementation of effective measures to prevent stormwater pollution.

15. Expenditures and Budget Related to Stormwater

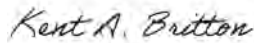
Budget and expenditures related to stormwater expenses are provided in Table 6.

Table 6. PCCA Expenditures and Budget Related to Stormwater

Major Elements of SMMP	Budget Program	2023 EXPND	2024 Budget	2024 EXPND	2025 Budget
Monitoring and Screening	General Environmental (Stormwater)	\$240,590	\$1,162,500	\$1,200,000	41,566,000
Measurable Goals	Construction Projects (Capital and Maintenance)	\$8,993,900	\$21,646,260	\$18,781,575	\$25,212,369
Port Operation Budget	Labor and Expenses	\$86,544,784	\$108,526,082	\$100,878,729	\$110,180,301
Structural Controls	Construction Projects (Maintenance)	\$8,993,900	\$21,646,260	\$18,781,575	\$25,212,369
Areas of New Development and Significant Redevelopment	Construction Projects (Capital)	\$46,086,486	\$ 134,129,720	\$100,000,000	\$166,204,917
Roadways	Construction Projects (Maintenance)	\$8,993,900	\$21,646,260	\$18,781,575	\$25,212,369
Flood Control Projects	Construction Projects (Capital)	\$46,086,486	\$ 134,129,720	\$100,000,000	\$166,204,917
Pesticide and Herbicide Application	Maintenance Operations – Labor and Expenses	\$8,993,900	\$21,646,260	\$18,781,575	\$25,212,369
Illicit Discharges and Improper Disposal	General Environmental (Waste Management)	\$287,118	\$301,000	\$300,000	\$213,100
Spill Prevention and Response	General Environmental	\$1,517,166	\$2,958,924	\$2,500,000	\$2,240,000
Industrial and High-Risk Runoff	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Construction Site Runoff	General Environmental (Stormwater)	\$240,590	\$1,162,500	\$1,200,000	\$1,566,000
Public Education	General Environmental	\$5,900,000	\$5,900,000	\$5,900,000	\$5,500,000

16. Certification and Signatures

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 a fine and imprisonment for knowing violations.



Kent Britton
Chief Executive Officer



Date



Kyle Hogan
Chief Operating Officer



Date



Jeff Pollack
Chief Strategy and Sustainability Officer



Date



Sarah L. Garza
Director of Environmental Planning and Compliance



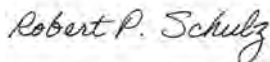
Date



Tony MacDonald
Director of Operations




Date



Robert Schulz
Manager of Environmental Compliance



Date



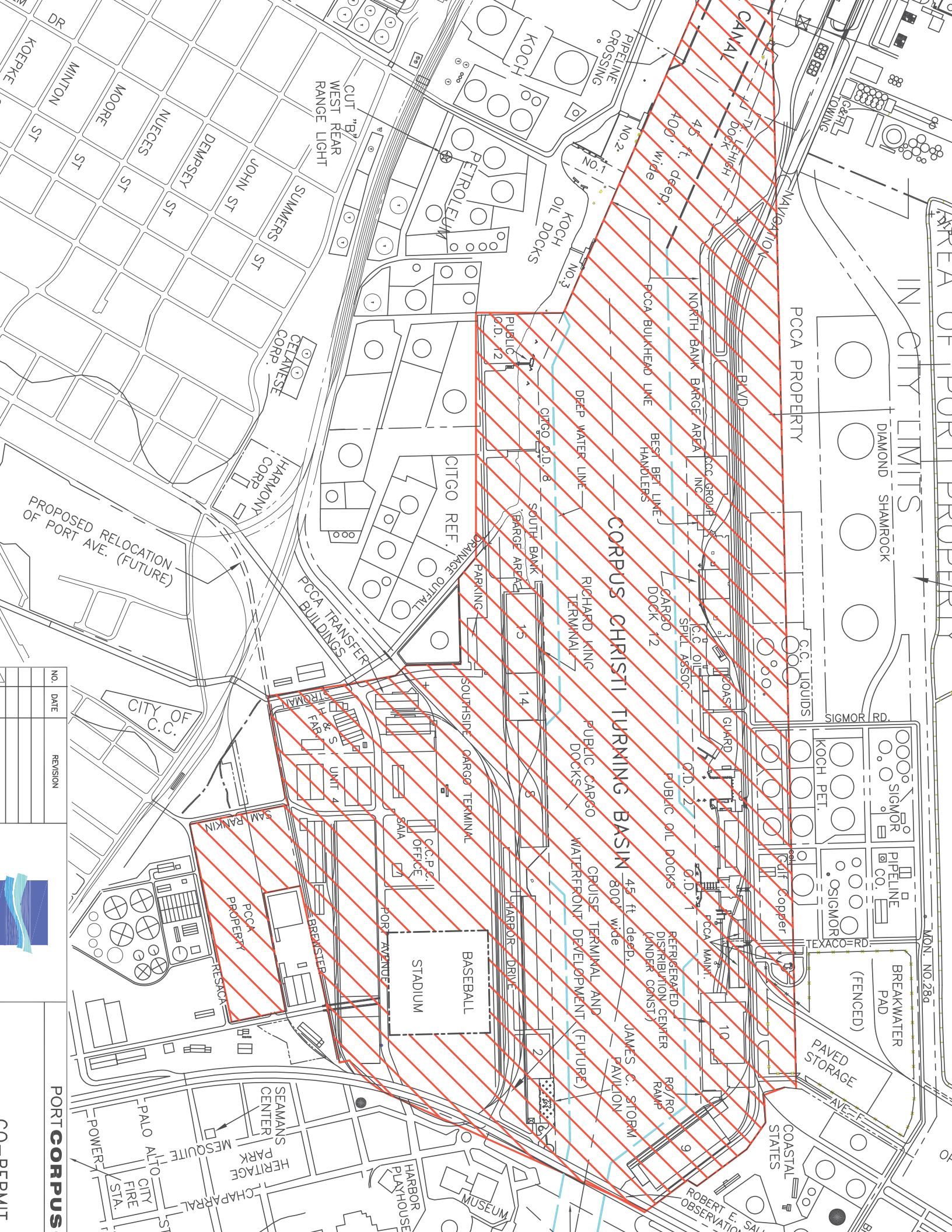
McKenzie Ward
Environmental Compliance Specialist



Date

Appendix A

MS4 Map



NO.	DATE	REVISION



Appendix B

Spill Maps

Spills within the MS4 Co-Permittee Area During the 2023 - 2024 Reporting Period



11/1/2024, 10:37:57 AM

● Spill Location

1:18,056

0 0.13 0.25 0.5 mi

0 0.2 0.4 0.8 km

Esri, HERE, Garmin, IPC, Maxar












MS4 Annual Report 2023-2024

Final Audit Report

2024-12-19

Created:	2024-12-13
By:	McKenzie Ward (mward@pocca.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAxBG-0xEdPwRhQECU_3IfYL_VsLt9QIH3

"MS4 Annual Report 2023-2024" History

-  Document created by McKenzie Ward (mward@pocca.com)
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-  Document emailed to Kent Britton (kbritton@pocca.com) for signature
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-  Document emailed to Kyle Hogan (khogan@pocca.com) for signature
2024-12-13 - 3:27:54 PM GMT
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2024-12-14 - 2:08:38 AM GMT- IP address: 172.226.175.24



Document e-signed by Kent Britton (kbritton@pocca.com)

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Email viewed by Robert Schulz (rschulz@pocca.com)

2024-12-18 - 11:31:45 PM GMT- IP address: 64.183.208.115



Document e-signed by Robert Schulz (rschulz@pocca.com)

Signature Date: 2024-12-18 - 11:32:21 PM GMT - Time Source: server- IP address: 64.183.208.115



Document e-signed by Kyle Hogan (khogan@pocca.com)

Signature Date: 2024-12-19 - 2:06:42 PM GMT - Time Source: server- IP address: 64.183.208.115



Email viewed by Sarah Garza (sarah@pocca.com)

2024-12-19 - 5:19:13 PM GMT- IP address: 64.183.208.115



Document e-signed by Sarah Garza (sarah@pocca.com)

Signature Date: 2024-12-19 - 5:20:22 PM GMT - Time Source: server- IP address: 64.183.208.115



Agreement completed.

2024-12-19 - 5:20:22 PM GMT



Adobe Acrobat Sign



**Co-Permittee
Del Mar**

January 8, 2025

Robert Anderson
Stormwater Superintendent
City of Corpus Christi, Utilities Department
2525 Hygeia St.
Corpus Christi, TX 78515

RE: 2024 Del Mar College TPDES Annual Report – Reporting Year 4

Dear Mr. Anderson,

Attached is the completed TPDES Annual Report for the period of October 1, 2023 through September 30, 2024 (Report Year 4).

During Report Year 4, major construction activities finished on the Memorial Classroom Building renovation project. The expenses for the project's MS4 initiatives are included in the annual report.

Personnel from the Environmental, Health & Safety Office purchased lawn vacuum equipment to assist in the removal of leaves, pollen, and other debris from parking lot curbs and gutters to prevent entering into the MS4. This activity is detailed in the annual report.

I have reviewed the report and signed the certification. We are grateful for the support you and your staff provide to Del Mar College. For additional information, please contact J. Chris Tweddle, Director of Environmental, Health and Safety at 361-698-1641 or jtweeddle@delmar.edu.

Sincerely,



John Strybos, PE, CPA

Vice President and

Chief Physical Facilities Officer

2024 MS4 ANNUAL REPORT: REPORTING YEAR 4

**TPDES PERMIT NO.
WQ0004200000**

**REPORTING PERIOD:
OCTOBER 1, 2023 –
SEPTEMBER 30, 2024**

Prepared by: J. Chris Tweddle
Director – EHS Office
01/09/2025



**Stormwater Swale between Health Science Buildings and Emerging Technology
Windward Campus**

OVERVIEW

The City of Corpus Christi (City), Port of Corpus Christi Authority (POCCA), Del Mar College (Del Mar), and Texas A&M University – Corpus Christi (TAMUCC) [collectively referred to as Co-applicants] hold a Phase I Texas Pollutant Discharge Elimination System (TPDES) Municipal Separate Storm Sewer System (MS4) permit (No. WQ0004200000) to discharge storm water from the MS4 boundaries. The previous permit, issued December 1, 2009, expired and was replaced with the current permit, issued October 21, 2020. During this reporting period, the College's SWMP was submitted to Texas Commission on Environmental Quality, Water Quality Division, Stormwater Team for review.

Del Mar College is comprised of **five (5)** developed sites and **one (1)** undeveloped site within the Corpus Christi Storm Water District. The locations are as follows:

- **Heritage Campus** (owned and operated by Del Mar College) is located at the intersection of Baldwin Boulevard and Ayers Street. The College acquired the corner lot in 1940. When the campus's first administration building (now the Memorial Classroom Building) was built in 1942, it housed every branch of the College. The Heritage Campus now includes about 20 buildings on 59 acres.
- **Windward Campus** (owned and operated by Del Mar College) is located at the intersection of Old Brownsville Road and Airport Road. It opened in 1958 as the Del Mar Technical Institute and consisted of five buildings on 13 acres. The campus now has about 24 buildings on 100 acres.
- **Oso Creek Campus** (owned and operated by Del Mar College) is 93.6 acres located at the junction of Yorktown Boulevard and Rodd Field Road. The campus fully opened in January 2023 with four buildings – Main Central; Hospitality and Culinary Arts Institute; Science, Technology, Engineering and Mathematics (STEM) Building; and Central Utilities Plant Building.

The construction of the Corpus Christi Police Training Academy was completed during this reporting period. The Police Training Academy is located on nine acres of the Oso Creek Campus and is owned and operated by the Corpus Christi Police Department. Del Mar College does not have any responsibilities for the operation and maintenance of the Police Training Academy.

- **Center for Economic Development** (owned and operated by Del Mar College) is located at the intersection of Kostoryz Road and South Staples Street. Opened in 2005 and known as the CED, the facility provides 52,000 square feet of space for Continuing Education; Corporate Training and other instruction; houses the Small Business Development Center; and the Del Mar College Foundation.

In 2013, KEDT Broadcasting partnered with the College to construct a 16,000 square-foot expansion to the CED, named the Center for Educational Broadcasting.

- **Aviation Technician Training Facility** (leased by Del Mar College) is located at the Corpus Christi International Airport and the College **does not** have operating control of the property. (See Appendix for Campus maps.) Known as the Crescent Hangar, provides a total of 16,840 square feet – 14,400 square feet of hangar space and 2,440 square feet for office and classroom space.
- **Tarlton Property located at 1502 Tarlton Street**, (owned by Del Mar College) is one block behind the College's Multi-Service Building on Ayers Street. The property is approximately 5 acres and was the site of Corpus Christi Osteopathic Hospital, which opened in November 1962. The facility closed in 1990 and remained empty and finally condemned until Del Mar College took possession of the building in 2012, and in 2013, the building was demolished. Currently, the property is undeveloped and maintained by the College.

Del Mar College's Environmental, Health & Safety (EHS) Office is responsible for the development and maintenance of the College's Storm Water Management Plan (SWMP).

The Permit requires all co-permittees to prepare an annual report describing the status of the measurable goals, detailed in the Permit, by which all co-permittees are required to meet. The annual report also identifies corrective actions the College will take for those measurable goals not achieved.

The following is Del Mar College's response to the eight separate sections pertaining to the annual report as outlined in the Permit under Part IV Section C Annual Report.

1. *The status of implementing the SWMP:*

The measures outlined in Del Mar College's current SWMP have been implemented. The EHS Office has submitted a copy of the College's Storm Water Management Plan to the City of Corpus Christi Storm Water Division, TCEQ Water Quality Division, Stormwater Team, and submits status reports on an annual basis.

2. *Any known proposed changes to the SWMP:*

YES.

During Reporting Year 4, Hanson Professional Services submitted a revised draft SWMP, which includes the Oso Creek Campus MS4 information, and aligns with the eight (8) required Minimum Control Measures (MCMs) in the City of Corpus Christi Municipal Separate Storm Sewer System (MS4) permit (TPDES No. WQ0004200000). The revised SWMP has not yet been finalized.

2.1 SWMP Priorities for Reporting Year 5

Priorities for Reporting Year 5 is to finalize the revised SWMP. Upon completion of the revised SWMP, the EHS Office will submitted it to the City of Corpus Christi, Storm Water Division and to the TCEQ.

3. *Revisions, if necessary, to the assessments of controls and the fiscal analysis reported in the permit application of the most recent report:*

The estimated budget included in the previous annual report has been modified to reflect actual expenditures for Reporting Year 4. There are no other revisions to the assessment of controls or fiscal analysis.

4. *A summary of data, including monitoring data accumulated during the reporting year:*

See the analytical data in the tables on the following pages as provided by the City of Corpus Christi. See Appendix for Dry Weather Screening results.



Storm Water Grab Sampling Analytical Results

The following table of laboratory terms and acronyms applies to all analytical reports and chain-of-custodies:

-
1. Quality assurance data for the sample batch which included this sample.
 2. Precision (PREC) is the absolute value of the relative percent difference between duplicate results.
 3. Recovery (RECOV) is the percent of analyte recovered from a spiked sample.
 4. Laboratory Control Sample (LCS) results are expressed as the percent recovery of analyte.
 5. Reporting Limit (RL), typically at or above the Limit of Quantitation (LOQ) of the analytical method.
 6. Data Qualifiers:
N=Analysis not performed as per client request. **H**=Sample exceeded holding time. **P**=Analysis is from an unpreserved sample. **J**=Value reported is less than the RL but greater than the MDL.
X=MS/MSD recovery or duplicates analysis exceeded the acceptance limit or Standard failed. **LA**=Lab accident. **LE**=Lab error. **OA**=Outside the scope of the lab's NELAC accreditation.
U=Unsuitable; sample turned turbid after incubation. **T**=Sample below temp requirement; not on ice. **EQ**=Equipment failure. **I**=Information on sample bottle and COC does not match.
S=Slow to filter; sample contains floc and/or large amount of residue on filter. **O**=Analysis performed by an outside NELAC accredited lab; **O^**=Analysis flagged by outside laboratory.
Z=Too many colonies present to provide a result (TNTC). **A**=Value reported is the mean of two or more determinations. **R**=Reagent water contamination suspected. **B**=Sample broken in transit.
NI=Not analyzed due to interferences. **K**=BOD result estimated due to blank exceeding the allowable oxygen depletion. **D**=Sample dilution required for analysis/ quality control.
SC=BOD/CBOD calculated using a seed correction factor not within acceptable range. **QB**=No QC data assigned to sample; sample result not affected.
EL=Oxygen usage is less than 2mg/L for all dilutions analyzed. The reported value is an estimated less than value and is calculated for the dilution containing the greatest concentration of sample.
EG=Less than 1mg/L DO remained for all dilutions analyzed. The reported value is an estimated greater than value and is calculated for the dilution containing the least concentration of sample.
E= The data exceed the upper calibration limit; therefore the concentration is reported as an estimate.

Analytical Report



Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469-9277 Phone: EMAIL: roberta3@cctexas.com	Report# /Lab ID#: AC21820 Report Date: 11/27/23 Sample Name: Del Mar West Date Received: 11/09/2023 Time: 15:59 Date Sampled: 11/09/2023 Time: 15:21
---	--

Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli (MPN)	402.0	MPN	D		11/9/23 16:18	SM 9223 B - Coli	FM/MS	
Enterococci	4352	MPN	D		11/9/23 16:18	Enterolert	FM	
Oil and Grease	3.0	mg/l		3	11/15/23 09:18	EPA 1664 B	CF, VM, FM	
pH (Field)	8.01	S.U.			11/9/23 15:21	SM 4500H+ B	FIELD	
Total Cyanide	< 2.0	µg/l	O	5	11/22/23 16:42	EPA 335.4	EUROFINS	
Total Hardness as CaCO3	64	mg/L		10	11/22/23 08:44	SM 2340 C	CF	
Water Temperature (in °C)	24.6	°C			11/9/23 15:21	SM 2550 B	FIELD	

Sample Comments:

This analytical report is respectfully submitted by the Water Utilities Laboratory. The enclosed results reflect only the sample(s) identified above. The results have been carefully reviewed and, unless otherwise indicated, meet the NELAC requirements as described by the Water Utilities Lab's QA/QC program. No part of this report shall be reproduced or transmitted in any form or by any means without the written consent of the City of Corpus Christi-Water Utilities Lab.

Respectfully Submitted,



Technical Director (or designee)



CHAIN OF CUSTODY RECORD

CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1853

Del Mar West
SAMPLE LOCATION

Pamela Howard 14781
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
E. Coli/Enterococci	11/9/23	15:21	G	Plastic	1	Na2S2O3
Total Hardness	11	11	G	Plastic	1	HNO3
Cyanide (T)	11	11	G	Plastic	1	NaOH
Oil & Grease	11	11	G	Glass	1	H2SO4

pH (25) 8.01

Temperature (C) 24.6

Remarks

All samples are stored on ice through laboratory receipt.

Relinquished by: <u>Pamela Howard</u>	Date/Time: <u>11/9/23 1559</u>	Received by: <u>Carolyn Hernandez</u>	Date/Time: <u>11/9/23 1559</u>
Relinquished by:	Date/Time:	Received by:	Date/Time:

COMPOSITE PARAMETERS

ANALYSIS
— Biochemical Oxygen Demand (BOD) mg/L
— Chemical Oxygen Demand (COD) mg/L
— Total Suspended Solids (TSS) mg/L
— Total Dissolved Solids (TDS) mg/L
— Total Nitrogen mg/L
— Total Kjeldahl Nitrogen (TKN) mg/L
— Nitrate-Nitrogen mg/L
— Ammonia-Nitrogen mg/L
— Total Phosphorus mg/L
— Dissolved Phosphorus mg/L
— Total Cadmium ug/L
— Total Chromium ug/L
— Total Copper ug/L
— Total Lead ug/L
— Total Nickel ug/L
— Total Zinc ug/L
— Total Atrazine ug/L

Units
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L

GRAB PARAMETERS

ANALYSIS
— ☒ Oil and Grease mg/L
— ☒ Total Cyanide ug/L
— ☒ Hardness mg/L
— ☒ E. coli MPN/100 mL
— ☒ Enterococci MPN/100 mL

Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL

Analytical Report



Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469-9277 Phone: EMAIL: roberta3@cctexas.com	Report# /Lab ID#: AC21788 Report Date: 11/27/23 Sample Name: Del Mar East Date Received: 11/09/2023 Time: 12:05 Date Sampled: 11/09/2023 Time: 11:18
--	--

Parameter	Result	Unit	Flag	RL	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli (MPN)	<1.0	MPN			11/9/23 13:53	SM 9223 B - Coli	MONICAS	
Enterococci	1723.0	MPN	D		11/9/23 13:23	Enterolert	MONICAS	
Oil and Grease	3.9	mg/l		3	11/15/23 09:18	EPA 1664 B	CF, VM, FM	
Total Cyanide	2.5	µg/l	O, J	5	11/22/23 16:42	EPA 335.4	EUROFINS	
Total Hardness as CaCO3	38	mg/L		10	11/22/23 08:44	SM 2340 C	CF	

Sample Comments:

This analytical report is respectfully submitted by the Water Utilities Laboratory. The enclosed results reflect only the sample(s) identified above. The results have been carefully reviewed and, unless otherwise indicated, meet the NELAC requirements as described by the Water Utilities Lab's QA/QC program. No part of this report shall be reproduced or transmitted in any form or by any means without the written consent of the City of Corpus Christi-Water Utilities Lab.

Respectfully Submitted,



Technical Director (or designee)



CHAIN OF CUSTODY RECORD

CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1853

AC21788

Del Mar East
SAMPLE LOCATION

Patchwork Howard
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
E. Coli/Enterococci	11/9/23	11:18	G	Plastic	1	Na2S2O3
Total Hardness	11	11	G	Plastic	1	HNO3
Cyanide (T)	11	11	G	Plastic	1	NaOH
Oil & Grease	11	11	G	Glass	1	H2SO4

pH (SU)

7.85

Temperature (C)

26.1

Remarks

Notes: Bad lot

pH 8.2 / 1514

Temp 10.1 / 18

Notes: W/CO2

All samples are stored on ice through laboratory receipt.

Relinquished by:	Date/Time	Received by:	Date/Time
<i>[Signature]</i>	11/9/23 1205	<i>[Signature]</i>	11-9-23 1205
Relinquished by:	Date/Time	Received by:	Date/Time
		<i>[Signature]</i>	

COMPOSITE PARAMETERS

☒ GRAB PARAMETERS

ANALYSIS	Units
Biochemical Oxygen Demand (BOD)	mg/L
Chemical Oxygen Demand (COD)	mg/L
Total Suspended Solids (TSS)	mg/L
Total Dissolved Solids (TDS)	mg/L
Total Nitrogen	mg/L
Total Kjeldahl Nitrogen (TKN)	mg/L
Nitrate-Nitrogen	mg/L
Ammonia-Nitrogen	mg/L
Total Phosphorus	mg/L
Dissolved Phosphorus	mg/L
Total Cadmium	ug/L
Total Chromium	ug/L
Total Copper	ug/L
Total Lead	ug/L
Total Nickel	ug/L
Total Zinc	ug/L
Total Atrazine	ug/L

ANALYSIS	Units
<input checked="" type="checkbox"/> Oil and Grease	mg/L
<input checked="" type="checkbox"/> Total Cyanide	ug/L
<input checked="" type="checkbox"/> Hardness	mg/L
<input checked="" type="checkbox"/> E. coli	MPN/100 mL
<input checked="" type="checkbox"/> Enterococci	MPN/100 mL

Analytical Report



Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469-9277 Phone: EMAIL: roberta3@cctexas.com	Report# /Lab ID#: AC23047 Report Date: 12/14/23 Sample Name: Del Mar West Date Received: 12/01/2023 Time: 14:25 Date Sampled: 12/01/2023 Time: 13:33
--	--

Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli (MPN)	1187.0	MPN	D		12/1/23 14:55	SM 9223 B - Coli	VP, MS	
Enterococci	15531.0	MPN	D		12/1/23 14:38	Enterolert	VP, MS	
Oil and Grease	3.0	mg/l		3	12/4/23 12:00	EPA 1664 B	FM	
pH (Field)	8.28	S.U.			12/1/23 13:33	SM 4500H+ B	FIELD	
Total Cyanide	5.6	µg/l	O	5	12/12/23 17:15	EPA 335.4	EUROFINS	
Total Hardness as CaCO3	32	mg/L		10	12/8/23 13:50	SM 2340 C	MONICAS	
Water Temperature (in °C)	22.1	°C			12/1/23 13:33	SM 2550 B	FIELD	

Sample Comments:

This analytical report is respectfully submitted by the Water Utilities Laboratory. The enclosed results reflect only the sample(s) identified above. The results have been carefully reviewed and, unless otherwise indicated, meet the NELAC requirements as described by the Water Utilities Lab's QA/QC program. No part of this report shall be reproduced or transmitted in any form or by any means without the written consent of the City of Corpus Christi-Water Utilities Lab.

Respectfully Submitted,



Technical Director (or designee)



CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

CHAIN OF CUSTODY RECORD

ACQ3047



Del Mar West
SAMPLE LOCATION

Crystal Graham, Patrick Howard
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
E. Coli/Enterococci	12/1/23	1333	G	Plastic	1	Na2S2O3
Total Hardness			G	Plastic	1	HNO3
Cyanide (T)			G	Plastic	1	NaOH
Oil & Grease			G	Glass	1	H2SO4

pH (SU) 8.28 Temperature (C) 22.1

Remarks

All samples are stored on ice through laboratory receipt.

Relinquished by: <u>Crystal Graham</u>	Date/Time: <u>12/1/23 1425</u>	Received by: <u>Patrick Howard</u>	Date/Time: <u>12/1/23 1425</u>
Relinquished by:	Date/Time:	Received by:	Date/Time:

COMPOSITE PARAMETERS

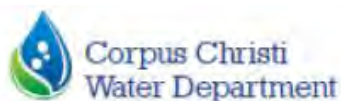
- ANALYSIS
- Biochemical Oxygen Demand (BOD)
 - Chemical Oxygen Demand (COD)
 - Total Suspended Solids (TSS)
 - Total Dissolved Solids (TDS)
 - Total Nitrogen
 - Total Kjeldahl Nitrogen (TKN)
 - Nitrate-Nitrogen
 - Ammonia-Nitrogen
 - Total Phosphorus
 - Dissolved Phosphorus
 - Total Cadmium
 - Total Chromium
 - Total Copper
 - Total Lead
 - Total Nickel
 - Total Zinc
 - Total Atrazine

Units
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L

GRAB PARAMETERS

- ANALYSIS
- ☒ Oil and Grease
 - ☒ Total Cyanide
 - ☒ Hardness
 - ☒ E. coli
 - ☒ Enterococci
- Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL

Temp: 13.9
Gun A



City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report



Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469-9277	Report# /Lab ID#: AC23686 Sample Name: Del Mar East Date Received: 12/13/2023 Time: 09:29 Date Sampled: 12/13/2023 Time: 07:40
Phone:	EMAIL: roberta3@cctexas.com

Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli (MPN)	677.0	MPN	D		12/13/23 14:52	SM 9223 B - Coli	MONICAS	
Enterococci	9208.0	MPN	D		12/13/23 15:48	Enterolert	VP	
Oil and Grease	<3	mg/l		3	12/14/23 10:30	EPA 1664 B	VP	
pH (Field)	7.5	S.U.			12/13/23 07:40	SM 4500H+ B	FIELD	
Total Cyanide	< 2.0	µg/l	O, H	5.0	12/28/23 12:33	EPA 335.4	EUROFINS	
Total Hardness as CaCO3	100	mg/L		10	12/13/23 10:35	SM 2340 C	VP	
Water Temperature (in °C)	19.7	°C			12/13/23 07:40	SM 2550 B	FIELD	

Sample Comments:

This analytical report is respectfully submitted by the Water Utilities Laboratory. The enclosed results reflect only the sample(s) identified above. The results have been carefully reviewed and, unless otherwise indicated, meet the NELAC requirements as described by the Water Utilities Lab's QA/QC program. No part of this report shall be reproduced or transmitted in any form or by any means without the written consent of the City of Corpus Christi-Water Utilities Lab.

Respectfully Submitted,

Technical Director (or designee)



CHAIN OF CUSTODY RECORD

CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78460-9277
(361) 826-1863

AC23686

Del Mar East
SAMPLE LOCATION

Oscar Gonzalez
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
E. Coli/Enterococci	12-13-23	0740	G	Plastic	1	Na2S2O3
Total Hardness			G	Plastic	1	HNO3
Cyanide (T)			G	Plastic	1	NaOH
Oil & Grease			G	Glass	1	H2SO4

pH (SU) 7.5

Temperature (C) 19.7

Remarks

All samples are stored on ice through laboratory receipt.

Relinquished by: [Signature]	Date/Time: 12/13/23 0740	Received by: [Signature]	Date/Time: 12/13/23 0729
Relinquished by:	Date/Time:	Received by:	Date/Time:

COMPOSITE PARAMETERS

ANALYSIS	Units
<input type="checkbox"/> Biochemical Oxygen Demand (BOD)	mg/L
<input type="checkbox"/> Chemical Oxygen Demand (COD)	mg/L
<input type="checkbox"/> Total Suspended Solids (TSS)	mg/L
<input type="checkbox"/> Total Dissolved Solids (TDS)	mg/L
<input type="checkbox"/> Total Nitrogen	mg/L
<input type="checkbox"/> Total Kjeldahl Nitrogen (TKN)	mg/L
<input type="checkbox"/> Nitrate-Nitrogen	mg/L
<input type="checkbox"/> Ammonia-Nitrogen	mg/L
<input type="checkbox"/> Total Phosphorus	mg/L
<input type="checkbox"/> Dissolved Phosphorus	mg/L
<input type="checkbox"/> Total Cadmium	ug/L
<input type="checkbox"/> Total Chromium	ug/L
<input type="checkbox"/> Total Copper	ug/L
<input type="checkbox"/> Total Lead	ug/L
<input type="checkbox"/> Total Nickel	ug/L
<input type="checkbox"/> Total Zinc	ug/L
<input type="checkbox"/> Total Atrazine	ug/L

☒ GRAB PARAMETERS

ANALYSIS	Units
<input checked="" type="checkbox"/> Oil and Grease	mg/L
<input checked="" type="checkbox"/> Total Cyanide	ug/L
<input checked="" type="checkbox"/> Hardness	mg/L
<input checked="" type="checkbox"/> E. coli	MPN/100 mL
<input checked="" type="checkbox"/> Enterococci	MPN/100 mL

Temp: 42
Gun: B

Analytical Report



Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469-9277 Phone: EMAIL: roberta3@cctexas.com	Report# /Lab ID#: AC32876 Report Date: 5/31/24 Sample Name: Del Mar East Date Received: 05/13/2024 Time: 20:53 Date Sampled: 05/13/2024 Time: 19:50
---	---

Parameter	Result	Unit	Flag	RL	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli (MPN)	19252.5	MPN	D	1.0	5/13/24 22:00	SM 9223 B - Coli	CF	
Enterococci	23020	MPN	D	1.0	5/13/24 21:48	Enterolert	CF	
Oil and Grease	47.9	mg/l	K, X	5.0	5/20/24 09:00	EPA 1664 B	VM	
pH (Field)	8.0	S.U.			5/13/24 19:50	SM 4500H+ B	FIELD	
Total Cyanide	3.4	µg/l	O, J	5.0	5/21/24 21:34	EPA 335.4	EUROFINS	
Total Hardness as CaCO3	104.35	mg/L		10	5/22/24 09:00	SM 2340 C	CF	
Water Temperature (in °C)	25.4	°C			5/13/24 19:50	SM 2550 B	FIELD	

Sample Comments:

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Respectfully Submitted,



Technical Director (or designee)



CHAIN OF CUSTODY RECORD



CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

Del Mar East 050
SAMPLE LOCATION

Debra Gonzalez
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
E. Coli/Enterococci	5/13/24	7:50 PM	G	Plastic	1	Na2S2O3
Total Hardness			G	Plastic	1	HNO3
Cyanide (T)			G	Plastic	1	NaOH
Oil & Grease			G	Glass	1	H2SO4

pH (SU)

9.0

Temperature (C)

25.4

Remarks

All samples are stored on ice through laboratory receipt.

Relinquished by:	Date/Time	Received by:	Date/Time
<u>[Signature]</u>	5-13-24 2053	<u>[Signature]</u>	5/13/24 2053
Relinquished by:	Date/Time	Received by:	Date/Time

COMPOSITE PARAMETERS

ANALYSIS

- Biochemical Oxygen Demand (BOD)
- Chemical Oxygen Demand (COD)
- Total Suspended Solids (TSS)
- Total Dissolved Solids (TDS)
- Total Nitrogen
- Total Kjeldahl Nitrogen (TKN)
- Nitrate-Nitrogen
- Ammonia-Nitrogen
- Total Phosphorus
- Dissolved Phosphorus
- Total Cadmium
- Total Chromium
- Total Copper
- Total Lead
- Total Nickel
- Total Nickel
- Total Diazinon

Units
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L

GRAB PARAMETERS

ANALYSIS

- ☒ Oil and Grease
- ☒ Total Cyanide
- ☒ Hardness
- ☒ E. coli
- ☒ Enterococci

Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL

Analytical Report




Client Info City of Corpus Christi Utilities Department-Stormwater P.O. Box 9277 Corpus Christi, TX 78469						Report# /Lab ID#: AC33229 Sample Name: Del Mar East Date Received: 05/17/2024 Time: 11:25 Date Sampled: 05/17/2024 Time: 10:50		Report Date: 6/5/24	
Phone:						EMAIL: roberta3@cctexas.com			

Parameter	Result	Unit	Flag	RL	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli (MPN)	957.5	MPN	D	25	5/17/24 11:44	SM 9223 B - Coli	MONICAS	
Enterococci	23020.0	MPN	D	25	5/17/24 11:44	Enterolert	MONICAS	
Oil and Grease	17.7	mg/l	K, X	5.0	6/3/24 11:00	EPA 1664 B	VM	
Total Cyanide	4.8	µg/l	O, J	5.0	5/27/24 18:34	EPA 335.4	EUROFINS	
Total Hardness as CaCO3	221.74	mg/L		10	5/22/24 09:00	SM 2340 C	CF	

Sample Comments:

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Respectfully Submitted,



Technical Director (or designee)



CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 626-1863

CHAIN OF CUSTODY RECORD



Del Mar East
SAMPLE LOCATION

R. Arriola, V. Ponce
COLLECTOR

AC33229

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
Total Hardness	5/17/24	10:54	G	Plastic	1	HNO3
Oil & Grease	5/17/24	10:50	G	Glass	1	H2SO4
Cyanide (T)	5/17/24	10:50	G	Plastic	1	NaOH
E. Coli/Enterococci	5/17/24	10:51	G	Plastic	1	Na2S2O3

pH (SU)

7.3

Temperature (C)

76.5

Remarks

Temp: 19.0 (A)
pH 8.14

All samples are stored on ice through laboratory receipt.

Relinquished by:	Date/Time	Received by:	Date/Time
<u>R. Arriola</u>	5/17/24 11:25	<u>[Signature]</u>	5/17/24 11:25
Relinquished by:	Date/Time	Received by:	Date/Time

COMPOSITE PARAMETERS

ANALYSIS	Units
<input type="checkbox"/> Biochemical Oxygen Demand (BOD)	mg/L
<input type="checkbox"/> Chemical Oxygen Demand (COD)	mg/L
<input type="checkbox"/> Total Suspended Solids (TSS)	mg/L
<input type="checkbox"/> Total Dissolved Solids (TDS)	mg/L
<input type="checkbox"/> Total Nitrogen	mg/L
<input type="checkbox"/> Total Kjeldahl Nitrogen (TKN)	mg/L
<input type="checkbox"/> Nitrate-Nitrogen	mg/L
<input type="checkbox"/> Ammonia-Nitrogen	mg/L
<input type="checkbox"/> Total Phosphorus	mg/L
<input type="checkbox"/> Dissolved Phosphorus	mg/L
<input type="checkbox"/> Total Cadmium	ug/L
<input type="checkbox"/> Total Chromium	ug/L
<input type="checkbox"/> Total Copper	ug/L
<input type="checkbox"/> Total Lead	ug/L
<input type="checkbox"/> Total Nickel	ug/L
<input type="checkbox"/> Total Zinc	ug/L
<input type="checkbox"/> Total Atrazine	ug/L

GRAB PARAMETERS

ANALYSIS	Units
<input checked="" type="checkbox"/> Oil and Grease	mg/L
<input checked="" type="checkbox"/> Total Cyanide	ug/L
<input checked="" type="checkbox"/> Hardness	mg/L
<input checked="" type="checkbox"/> E. coli	MPN/100 mL
<input checked="" type="checkbox"/> Enterococci	MPN/100 mL

Analytical Report



Client Info City of Corpus Christi Utilities Department-Stormwater P.O. Box 9277 Corpus Christi, TX 78469 Phone: EMAIL: roberta3@cctexas.com	Report# /Lab ID#: AC33230 Report Date: 6/5/24 Sample Name: Del Mar West Date Received: 05/17/2024 Time: 11:25 Date Sampled: 05/17/2024 Time: 10:15
--	--

Parameter	Result	Unit	Flag	RL	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli (MPN)	17167.5	MPN	D	25	5/17/24 11:44	SM 9223 B - Coli	MONICAS	
Enterococci	12210.0	MPN	D	25	5/17/24 11:44	Enterolert	MONICAS	
Oil and Grease	17.2	mg/l	K, X	5.0	6/3/24 11:00	EPA 1664 B	VM	
Total Cyanide	5.4	µg/l	O	5.0	5/27/24 20:25	EPA 335.4	EUROFINS	
Total Hardness as CaCO3	188.96	mg/L		10	5/22/24 09:00	SM 2340 C	CF	

Sample Comments:

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Respectfully Submitted,



Technical Director (or designee)



CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

CHAIN OF CUSTODY RECORD



Del Mar West
SAMPLE LOCATION

R. Ayala, V. Puente
COLLECTOR

AL33230

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
Total Hardness	5/17/24	10:17am	G	Plastic	1	HNO3
Oil & Grease	5/17/24	10:20am	G	Glass	1	H2SO4
Cyanide (T)	5/17/24	10:15	G	Plastic	1	NaOH
E. Coli/Enterococci	5/17/24	10:15	G	Plastic	1	Na2S2O3

pH (SU) 7.7

Temperature (C) 76.5

Remarks PC - Temp: 8.1 (A)
PH: 7.7

All samples are stored on ice through laboratory receipt.

Relinquished By: <u>[Signature]</u>	Date/Time: <u>5/17/24 11:25</u>	Received by: <u>[Signature]</u>	Date/Time: <u>5/17/24 11:25</u>
Relinquished by:	Date/Time:	Received by:	Date/Time:

COMPOSITE PARAMETERS

ANALYSIS

- ☐ Biochemical Oxygen Demand (BOD)
- ☐ Chemical Oxygen Demand (COD)
- ☐ Total Suspended Solids (TSS)
- ☐ Total Dissolved Solids (TDS)
- ☐ Total Nitrogen
- ☐ Total Kjeldahl Nitrogen (TKN)
- ☐ Nitrate-Nitrogen
- ☐ Ammonia-Nitrogen
- ☐ Total Phosphorus
- ☐ Dissolved Phosphorus
- ☐ Total Cadmium
- ☐ Total Chromium
- ☐ Total Copper
- ☐ Total Lead
- ☐ Total Nickel
- ☐ Total Zinc
- ☐ Total Atrazine

Units

- mg/L
- mg/L
- mg/L
- mg/L
- mg/L
- mg/L
- mg/L
- mg/L
- mg/L
- mg/L
- ug/L
- ug/L
- ug/L
- ug/L
- ug/L
- ug/L

GRAB PARAMETERS

ANALYSIS

- ☒ Oil and Grease
- ☒ Total Cyanide
- ☒ Hardness
- ☒ E. coli
- ☒ Enterococci

Units

- mg/L
- ug/L
- mg/L
- MPN/100 mL
- MPN/100 mL

Analytical Report




Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469-9277						Report# /Lab ID#: AC33867 Sample Name: Del Mar East Date Received: 05/29/2024 Time: 08:14 Date Sampled: 05/29/2024 Time: 03:30		Report Date: 6/12/24	
Phone:						EMAIL: roberta3@cctexas.com			

Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli (MPN)	49657.5	MPN	D	25	5/29/24 15:04	SM 9223 B - Coli	MONICAS	
Enterococci	18175.0	MPN	D	25	5/29/24 15:48	Enterolert	MONICAS	
Oil and Grease	3.0	mg/l	J	5.0	6/11/24 10:19	EPA 1664 B	VP	
pH (Field)	7.79	S.U.			5/29/24 03:30	SM 4500H+ B	FIELD	
Total Cyanide	< 2.0	µg/l	O	5.0	6/6/24 17:13	EPA 335.4	EUROFINS	
Total Hardness as CaCO3	40	mg/L		10	5/30/24 12:18	SM 2340 C	MS	
Water Temperature (in °C)	25.3	°C			5/29/24 03:30	SM 2550 B	FIELD	

Sample Comments:

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Respectfully Submitted,



Technical Director (or designee)



CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 825-1853

CHAIN OF CUSTODY RECORD



Del Mar East
SAMPLE LOCATION

C. Graham
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
Total Hardness	5/29/24	0330	G	Plastic	1	HNO3
Oil & Grease			G	Glass	1	H2SO4
Cyanide (T)			G	Plastic	1	NaOH
E. Coli/Enterococci			G	Plastic	1	Na2S2O3

pH (SU) 7.79

Temperature (C) 25.3

Remarks

All samples are stored on ice through laboratory receipt.

Relinquished by: <u>[Signature]</u>	Date/Time: <u>5/29/24 0814</u>	Received by: <u>[Signature]</u>	Date/Time: <u>5/29/24 0814</u>
Relinquished by:	Date/Time:	Received by:	Date/Time:

COMPOSITE PARAMETERS

ANALYSIS

- Biochemical Oxygen Demand (BOD)
- Chemical Oxygen Demand (COD)
- Total Suspended Solids (TSS)
- Total Dissolved Solids (TDS)
- Total Nitrogen
- Total Kjeldahl Nitrogen (TKN)
- Nitrate-Nitrogen
- Ammonia-Nitrogen
- Total Phosphorus
- Dissolved Phosphorus
- Total Cadmium
- Total Chromium
- Total Copper
- Total Lead
- Total Nickel
- Total Zinc
- Total Atrazine

Units
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L

☒ GRAB PARAMETERS

ANALYSIS

- ☒ Oil and Grease
- ☒ Total Cyanide
- ☒ Hardness
- ☒ E. coli
- ☒ Enterococci

Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL

Temp: 5.4 Gun: A

Analytical Report



Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469-9277	Report# /Lab ID#: AC34581 Report Date: 6/14/24 Sample Name: Del Mar West Date Received: 06/10/2024 Time: 11:35 Date Sampled: 06/10/2024 Time: 10:38
Phone: EMAIL: roberta3@cctexas.com	

Parameter	Result	Unit	Flag	RL ±	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli (MPN)	750.0	MPN	D	25	6/10/24 14:26	SM 9223 B - Coli	MONICAS	
Enterococci	5467.5	MPN	D	25	6/10/24 14:13	Enterolert	MONICAS	
Oil and Grease	2.9	mg/l	J	5.0	6/11/24 10:19	EPA 1664 B	VP	
pH (Field)	8.0	S.U.			6/10/24 10:38	SM 4500H+ B	CG	
Total Cyanide	3.1	µg/l	O, J	5.0	6/12/24 17:32	EPA 335.4	EUROFINS	
Total Hardness as CaCO3	50.00	mg/L		10	6/13/24 11:36	SM 2340 C	CF	
Water Temperature (in °C)	26.6	°C			6/10/24 10:38	SM 2550 B	CG	

Sample Comments:

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Respectfully Submitted,



Technical Director (or designee)



CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1663

CHAIN OF CUSTODY RECORD

AC34581



Del Mar West

SAMPLE LOCATION

COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
Total Hardness	6-10-24	10:38 am	G	Plastic	1	HNO3
Oil & Grease	6-10-24	10:38 am	G	Glass	1	H2SO4
Cyanide (T)	6-10-24	10:38 am	G	Plastic	1	NaOH
E. Coli/Enterococci	6-10-24	10:38 am	G	Plastic	1	Na2S2O3

pH (SU)

8.0

Temperature (C)

26.6

Remarks

Relinquished by:	Date/Time	Received by:	Date/Time
<i>[Signature]</i>	6/10/24 1135	<i>[Signature]</i>	6/10/24 1135
Relinquished by:	Date/Time	Received by:	Date/Time

COMPOSITE PARAMETERS

- ANALYSIS
- Biochemical Oxygen Demand (BOD)
 - Chemical Oxygen Demand (COD)
 - Total Suspended Solids (TSS)
 - Total Dissolved Solids (TDS)
 - Total Nitrogen
 - Total Kjeldahl Nitrogen (TKN)
 - Nitrate-Nitrogen
 - Ammonia-Nitrogen
 - Total Phosphorus
 - Dissolved Phosphorus
 - Total Cadmium
 - Total Chromium
 - Total Copper
 - Total Lead
 - Total Nickel
 - Total Zinc
 - Total Atrazine

Units
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L

GRAB PARAMETERS

- ANALYSIS
- ☒ Oil and Grease
 - ☒ Total Cyanide
 - ☒ Hardness
 - ☒ E. coli
 - ☒ Enterococci
- Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL

Temp: 10.5 Gun: A

AC34581

5. ***A summary of the number of the NPDES and TPDES Notices of Intent actually received for each general permit, the number of site notices received from small construction site operators seeking coverage for storm water discharges, and the number of inspections conducted at industrial facilities and construction sites;***

During Reporting Year 4, Del Mar College submitted **Zero (0)** Notices of Intent (NOIs) for a new construction project seeking coverage for storm water discharges.

Del Mar College does not have the authority to conduct inspections at industrial facilities or construction sites, therefore **Zero (0)** stormwater inspections were conducted by Del Mar College.

However, SpawGlass conducted **14 construction site inspections** for the Memorial Classroom Building construction site during Reporting Year 4.

6. ***Annual expenditures for the prior fiscal year, with a breakdown for the major elements of the SWMP, and the budget for the current fiscal year;***

Annual Expenditures for Period and Budget for Following Year

Del Mar College's Expenditures	Actual Costs for Report Year 4 (October 1, 2023 – September 30, 2024)	Budgeted Costs for Report Year 5 (October 1, 2024 – September 30, 2025)
New Development Plans, Designs and Construction		
SpawGlass: Memorial Classroom Bldg. Renovation	\$9,091.00	N/A
SpawGlass: ET Parking Lot Construction MS4 Initiatives	N/A	\$100,000
Grounds Maintenance & Litter Control		
Repairs to Existing Rain Gardens and MS4 Inlets (CC Lawn)	\$10,500.00	\$10,000.00
Contractor provided services & DMC Personnel	\$50,000	\$50,000
Street and Parking Lot Operation		
Venters Business Bldg Repair (Shoreline Plumbing)	\$8,000	N/A
Parking Lot Maintenance & Repair	\$1,000	\$10,000
Maintenance & Repair (Grounds Crew conducting asphalt repairs)	\$800	\$3,000
Cleaning/Sweeping (lawn vacuum equipment)	\$5,000	\$10,000

Del Mar College's Expenditures	Actual Costs for Report Year 4 (October 1, 2023 – September 30, 2024)	Budgeted Costs for Report Year 5 (October 1, 2024 – September 30, 2025)
Grass/Vegetation Clearing		
Mowing Driscoll Ditch	\$7,550	\$12,000
Maintenance of Structural Controls		
Hydro-excavation of storm drain lines and video record	\$0	\$30,000
Waste Disposal/Recycling		
Trash Disposal (Republic Services)	\$37,049	\$40,000
Single Stream Recycling (Republic Services)	\$3,087	\$4,000
Used Tire Disposal	\$0	\$1,000
Purchase of Recycling Equipment	\$0	\$1,500
Used Oil & Oil Related Material Disposal	\$75	\$1,000
Spent cooking oil disposal (no charge for service)	\$0	\$0
Kitchen Grease Interceptor Disposal	\$16,341	\$25,000
Hazardous Waste Disposal	\$3,949	\$50,000
Medical Waste Disposal	\$2,589	\$10,000
Fluorescent Lamp and Ballast Recycling	\$2,885	\$10,000
Public Education		
Use of Facilities / Supplies	\$1,000	\$1,000
Total Costs	\$158,916.00	\$368,500.00

7. *A summary describing the number and nature of enforcement actions, inspections, and public education programs;*

Enforcement Actions:

Del Mar College does not have enforcement action authority therefore **zero (0)** Enforcement Actions were issued by Del Mar College.

Inspections:

SpawGlass conducted **14 construction site inspections** for the Memorial Classroom Building construction site during Reporting Year 4.

Identified deficiencies were corrected in accordance with their site-specific SWPPP.

Inspections (cont.):

Del Mar College is responsible for conducting dry-weather screening of the MS4 components on college property. EHS personnel conducted dry-weather screenings **once** during the report period for a total of **174 storm water inlets** being visually assessed for illicit discharges.

As a result of dry-weather screening process **Zero (0)** illicit discharges were identified.

In the event that Physical Facilities personnel need to disturb campus grounds to make repairs, EHS personnel provides BMPs to prevent soil erosion from entering the MS4. The following is an example of the type of BMP provided for these repair projects.



DMC Ground crews installed BMPs provided by EHS Office in an area disturbed by underground sprinkler repairs.

Public Education Programs:

During the reporting period, Del Mar College partnered with Texas A&M AgriLife to co-sponsor Master Gardener workshops and EHS personnel provided MS4 Awareness Training for a total of 73 **external community members and college employees** receiving face-to-face MS4 training.

The EHS Office also offers on-line storm water management training programs for college employees. The EHS Office is able to monitor and track the progress of the students enrolled in the training program.

During Reporting Year 4, **29 employees** completed on-line MS4 Awareness training.

8. *Identification of any water quality improvements, degradations, and progress toward any measurable goals or measured reductions in pollutants.*

Del Mar College has established annual contracts with various disposal/recycle contractors. These contracts include: trash disposal; used oil & oil related material recycling; spent cooking oil recycling; kitchen grease trap disposal; hazardous waste disposal; single-stream recycling, e-waste and video tape recycling and; spent tire recycling.

8.1 Trash Disposal

Del Mar College contracts with Republic Services to provide dumpster disposal and recycling services. Currently, Del Mar College is using twenty-one (21) 8 yd. trash dumpsters to service all Del Mar College locations. These dumpsters are emptied either once or twice a week depending on the specific site. Del Mar College reduced the disposal frequency to once a week for the majority of the dumpsters.

Grounds personnel from the Physical Facilities department conduct trash pick-up at all College properties as part of their daily work activities.

During Reporting Year 4, the volume of trash disposed from Del Mar College was **563 Tons.**

8.2 Single-Stream Recycling

Del Mar College collects and recycles office paper, cardboard, and other recyclable items through the single-stream recycling program. Del Mar College utilizes 95-gallon Toters throughout the campus to collect recyclables. The Toters are emptied into three (3) 8-yard dumpsters located at Central Receiving and East Campus Physical Facilities. Republic Services empties the container and transports the material to a local recycling facility on a regular schedule.

During Reporting Year 4, the volume of waste material recycled from Del Mar College was **27.5 Tons.**

8.3 Used Oil & Oil Related Material Disposal

Del Mar College contracts with H&H Oil, a Used Oil vendor for the disposal of used motor oil, engine coolant; oil filters, spent oil absorbent and oily rags. The used motor oil is stored in 5 x 120 gallon tote containers and is removed via vacuum truck. The engine coolant is stored in 55 gallon drums and is removed via vacuum truck. The oil filters, spent oil absorbent and oil rags are stored in 55 gallon drums which are removed when full.

During Reporting Year 4, the volume of Used Oil & Oil Related Material disposed from Del Mar College was **140 gallons.**

8.4 Used Cooking Oil Disposal

During Reporting Year 4, Del Mar College ended the contract with DarPro Solutions and established a new contract with ReGrease of Texas for the removal of Used Cooking Oils generated at the college. Del Mar College uses 3 x 200 gallon containers to store Used Cooking Oil. The locations are as follows:

- Harvin Center (Heritage Campus): 1 x 200 gallon
- Coleman Center (Windward Campus): 1 x 200 gallon
- Culinary Arts (Oso Creek Campus): 1 x 200 gallon

Used Cooking oil is removed as needed and transported to a recycling/rendering facility.

During Reporting Period 4, **600 gallons** of Used Cooking Oil was transported to a recycling facility during this reporting period.

8.5 Grease Interceptor Disposal

Del Mar College has installed grease interceptor devices as a component of the sanitary sewer systems. Del Mar College utilizes contractors who are approved by the City of Corpus Christi, Water Department through the FOG program for the maintenance and cleaning of grease interceptors. The EHS Department manages the cleaning and disposal service of six (6) grease interceptors approximately every 90 days. The location and size of the grease interceptors are as follows:

- Oso Creek Campus Culinary Arts Institute:
 - Grease Interceptor #1 has a volume of 2000 gallons;
 - Grease Interceptor #2 has a volume of 3,500 gallons and;
 - Grease Interceptor #3 has a volume of 2,000 gallons.
- Heritage Campus Harvin Center:
 - 2,000 gallons.
- Heritage Campus Center for Early Learning:
 - 2,000 gallons.
- Windward Campus Coleman Center:
 - 1,000 gallons.

During Reporting Year 4, the volume of grease interceptor waste transported from Del Mar College at disposed through Texas Sludge Disposal in Taft, Texas was **52,000 gallons**.

NOTE: Del Mar College owns the Nutrition Education Building located on the Windward Campus however, the City of Corpus Christi is responsible for the operation of the Central Kitchen portion of the building and maintains the grease interceptor installed in the sanitary sewer system of the Nutrition Education Building.

8.6 Hazardous Waste Disposal

Del Mar College is a Conditionally Exempt Small Quantity Generator. Del Mar College currently contracts with Clean Harbors Environmental Services to provide hazardous waste disposal services.

During Reporting Year 4, the volume of RCRA hazardous waste disposed from Del Mar College was **3,085 pounds**.

8.7 Concrete Debris Recycling

When possible and feasible, Del Mar College requires the recycling of concrete materials recovered from the demolition of college buildings. During this reporting period, there were **zero (0)** demolition projects which recycled concrete debris.

8.8 Scrap Tire Recycle

Del Mar College collects scrap tires generated through the Automotive Technology program and general maintenance of vehicles and equipment. The scrap tires are collected and stored in a “landscape” style trailer and removed from the college by Liberty Tire Recycling and transported to a recycling facility.

Due to the low volume of scrap tires generated during Reporting Year 4, the College recycled **0 scrap tires**.

8.9 Medical Waste Disposal

Del Mar College generates medical waste and biohazardous waste through the procedures conducted in academic laboratories. To ensure proper disposal, Del Mar College contracts with SanPro Medical Disposal for the transportation and disposal of medical/biohazard waste.

During Reporting Year 4, the College disposed **63 boxes (1,200 pounds)** of medical waste.

8.10 e-Waste/Techno-trash and Battery Disposal

Del Mar College collects computer-related waste, spent media supplies (CDs, VHS tapes and cassettes, microfilm and microfiche, etc.) and obsolete accessories. To ensure proper disposal, Del Mar College contracts with GreenDisk to dispose/recycle techno-trash generated at the college.

Del Mar College collects rechargeable batteries and utilizes Call2Recycle and Interstate Batteries to properly recycle the batteries.

During Reporting Year 4, the College recycled **720 lbs** of batteries through Interstate Batteries.

8.11 Stormwater Sediment/Debris Screening Device

Del Mar College installed a Stormwater Sediment/Debris Screening Device to remove sediment/debris/floatables from water runoff at the ERT (Emergency Rescue Training) Facility on Windward Campus. This device recycles runoff water and returns it to a lift station to recharge the draft pit with reclaimed water. The device requires maintenance to remove the volume of sediment/debris collected.



During Reporting Year 4, **zero (0) pounds** of sediment/debris were removed from the device due on-going draught conditions and lack of run-off.

8.12 Proper Disposal of Pet Waste

The College has property which is adjacent to residential areas and the residents use College grounds as dog-walk areas. The EHS Office has installed pet waste collection stations in areas which are commonly used for dog-walks. Signage has been installed indicating pet waste must be properly disposed in accordance with *City Ordinance 22.11* which requires the owner or person in control of an animal to remove any feces deposited by the animal on public or private property immediately. Animal feces deposited upon on the owner's private property must be collected and removed daily.

During Reporting Year 4, EHS personnel installed **one (1) additional** Pet Waste Station at the Windward Campus. Additional Pet Waste Stations will be installed during Reporting Year 5.

8.13 Curb and Gutter Management

During Reporting Year 4, the EHS Office purchased lawn vacuum equipment to assist with the removal of leaves, pollen and other debris from parking lot curbs and gutters.



EHS personnel using Agri-Fab Lawn Vacuum to remove leaves/pollen and debris from parking lot curbs.



Two (2) Agri-Fab Lawn Vacuums were purchased to remove leaves/pollen and debris from campus parking lot curbs.

The previous items are further discussed in the following Measureable Elements table.

Measurable Elements of SWMP				
Storm Water Management Plan (SWMP) Element	Is this a measurable goal for DMC? YES / NO	If "No", explain why it is not measured by DMC	If "Yes" describe Element and frequency or volume/quantity of measurable goal.	Result
1. Structural Controls	YES		Driscoll Ditch Mowing. 2/year or as necessary.	<p>The Driscoll Ditch is located on the Windward Campus. It is an engineered structural control earthen ditch with a concrete junction box at the intersection of the existing drainage ditch.</p> <p>Due to drought conditions, DMC performed grass mowing operations <u>2 times</u> in Reporting Year 4.</p> <p>Maintained a low grass height to maximize drainage flow and minimize litter and debris from collecting.</p>
			Driscoll Ditch Visual Monitoring. As needed.	<p>Performed visual monitoring of the drainage ditch <u>2 times</u> in Reporting Year 4.</p> <p>Drove alongside the ditch banks looking for unusual debris, and excess standing water.</p> <p><u>Did not observe deficiencies.</u></p>
2. Areas of New Development and Significant Redevelopment	NO	This element of the SWMP is managed by the City of Corpus Christi.		

Measurable Elements of SWMP				
Storm Water Management Plan (SWMP) Element	Is this a measurable goal for DMC? YES / NO	If "No", explain why it is not measured by DMC	If "Yes" describe Element and frequency or volume/quantity of measurable goal.	Result
3. Roadways	YES		Street/Parking Lot Sweeping. 1/Qtr. or as necessary	Due to budget constraints, sweeping operations were 0 time in Reporting Year 4.
			Repairs to road base, entry/driveways and repaving areas of various parking lots on campus As necessary	0 major repair projects were completed in Reporting Year 4. 2 minor repair projects were completed in Reporting Year 4 (Repairs to VB and Memorial parking lots.)
4. Flood Control Projects	YES		West Campus Driscoll Ditch Mowing to maintained a low grass height in order to maximize drainage flow. 1/Qtr. or as necessary	Due to drought conditions, DMC performed grass mowing operations 2 times in Reporting Year 4. The Driscoll Ditch is an engineered flood control structure on the Windward Campus.
Flood Control Projects (Continued)	YES		Maintenance/Mowing of West Campus Swale between Health Science Complex and Emerging Technology Building. 1/Week or As Needed .	Mowing of grass in the Swale occurred 30 times in Reporting Year 4 period. Due to draught conditions, the grass was not mowed as often.

Measurable Elements of SWMP				
Storm Water Management Plan (SWMP) Element	Is this a measurable goal for DMC? YES / NO	If "No", explain why it is not measured by DMC	If "Yes" describe Element and frequency or volume/quantity of measurable goal.	Result
Flood Control Projects (Continued)	YES		Maintenance/Mowing of West Campus Swale between Health Science Complex and Emerging Technology Building. 1/Week or As Needed .	Mowing of grass in the Swale occurred <u>30 times</u> in Reporting Year 4 period. Due to draught conditions, the grass was not mowed as often.
5. Pesticide, Herbicide, and Fertilizer Application	YES		Sponsor/co-sponsor workshops. As Needed.	DMC co-sponsored 2 <u>workshops</u> with TAMU AgriLife pertaining to storm water management and Pesticide/Herbicide/ Fertilizer application in Reporting Year 4. Total participation: <u>13 attendees</u>
			Del Mar College Grounds Crew supervisor is a licensed pesticide applicator.	College employee is a licensed pesticide applicator and maintains usage logs. Pesticides are applied only in the correct weather conditions.
			Del Mar College contracts with a professional landscape contractor.	Contractor is a licensed pesticide applicator and maintains usage logs. Pesticides are applied only in the correct weather conditions.

Measurable Elements of SWMP				
Storm Water Management Plan (SWMP) Element	Is this a measurable goal for DMC? YES / NO	If "No", explain why it is not measured by DMC	If "Yes" describe Element and frequency or volume/quantity of measurable goal.	Result
6. Illicit Discharge and Improper Disposal a. Trash Disposal	YES		21 x 8 Yd. Trash Dumpsters Emptied 1-2 times/week	Based on the volume of the container, DMC potentially disposed of 563 Tons of trash Reporting Year 4 period.
b. Used Motor / Vehicle Fluids / Oily Waste Disposal	YES		Disposal of Used Oil As Needed	Disposed of 140 gallons of used motor oil in Reporting Year 4.
			Disposal of Anti-freeze As Needed	Disposed of 0 gallons of used anti-freeze in Reporting Year 4 period.
			Disposal Oil Filters / Oily Absorbent As Needed	Disposed of 0 drums of oil filters/oil absorbent in Reporting Year 4.
c. Spent Cooking Oil	YES		Removed grease from 3 storage containers As Needed	600 gallons of Spent Cooking Oil was sent to renderings facility in Reporting Year 4.
d. Kitchen Grease Interceptor Disposal	YES		Disposal of Grease Interceptor material As Needed	Pumped out 6 Grease Interceptor multiple times in Reporting Year 4. Removed 52,000 Gallons of material from Grease Interceptors in Reporting Year 4.
e. Oil/Water Separator	YES		Disposal of oil water and sediment from oil/water separators	Removed and disposed 0 gallons of oily water and sediment in Reporting Year 4.

Measurable Elements of SWMP				
Storm Water Management Plan (SWMP) Element	Is this a measurable goal for DMC? YES / NO	If "No", explain why it is not measured by DMC	If "Yes" describe Element and frequency or volume/quantity of measurable goal.	Result
f. Hazardous Waste Disposal	YES		Properly dispose of Hazardous and Nonhazardous Waste As Needed	Disposed of 3,085 lbs of hazardous waste in Reporting Year 4.
			Properly recycled fluorescent lightbulbs and ballasts. As Needed	Properly disposed/recycled 4,200 lbs of fluorescent lights in Reporting Year 4. Properly disposed 0 lbs of non-PCB ballasts in Reporting Year 4.
g. Single-stream recycling	YES		Collect recyclable items in 95-gallon totes and emptied into 3 x 8 yd. containers. On-going	Approximately 27.5 tons of recyclable items sent to Republic Services in Reporting Year 4.
h. Scrap Tires	YES		Collect and properly recycle scrap tires	Recycled 0 scrap tires through Liberty Tire Recycling in Reporting Year 4.
i. Medical Waste	YES		Disposal of Medical Waste As Needed	Disposed of 63 boxes (1,200 lbs) of Medical Waste through SanPro Medical Disposal in Reporting Year 4.

Measurable Elements of SWMP				
Storm Water Management Plan (SWMP) Element	Is this a measurable goal for DMC? YES / NO	If "No", explain why it is not measured by DMC	If "Yes" describe Element and frequency or volume/quantity of measurable goal.	Result
j. Techno-trash Waste and Rechargeable Batteries	YES		Disposal/Recycle of E-Waste/Technology accessories As Needed	Recycled <u>0 lbs</u> of Techno-trash (VHS tapes and other media) through GreenDisk. <u>720 lbs</u> of Rechargeable Batteries through Interstate Batteries in Reporting Year 4.
k. Stormwater Sediment/ Debris Screening	Yes		Removal of sediment/debris from Stormwater Screening Device on Windward Campus As Needed	Due to draught conditions and minimal runoff water entering the device, <u>0 lbs</u> of sediment/debris were removed.
l. Disposal of Pet Waste	YES		Provide education and means of disposal on pet waste. As Needed.	Installed <u>1</u> Ordinance 22.11 sign on Windward Campus. Installed <u>1</u> pet waste station on Windward Campus.
m. Curb and Gutter Maintenance	YES		Remove leaves/pollen/debris from campus curbs and gutters. As Needed.	<u>16,000 lbs</u> of leaves/debris were removed from campus curbs and gutters. (800 lbs/load)

Measurable Elements of SWMP				
Storm Water Management Plan (SWMP) Element	Is this a measurable goal for DMC? YES / NO	If "No", explain why it is not measured by DMC	If "Yes" describe Element and frequency or volume/quantity of measurable goal.	Result
7. Spill Prevention and Response	YES		DMC Personnel respond to on-campus vehicle fluid spills (Fuel / Oil) As Needed	Responded to <u>0</u> vehicle fluid spills during Reporting Year 4.
			DMC contacts CCFD HazMat Unit to respond to large vehicle fluid spills. As Needed	Responded to <u>0</u> vehicle fluid spills during Reporting Year 4.
8. Industrial and High Risk Runoff	NO	DMC does not own or operate Industrial and High Risk Facilities. This element of the SWMP is managed by the City of Corpus Christi.		
9. Construction Site Runoff	NO	This element of the SWMP is managed by the City of Corpus Christi.		

Measurable Elements of SWMP				
Storm Water Management Plan (SWMP) Element	Is this a measurable goal for DMC? YES / NO	If "No", explain why it is not measured by DMC	If "Yes" describe Element and frequency or volume/quantity of measurable goal.	Result
10. Public Education	YES		Sponsor MS4-related workshops. As Needed.	DMC Co-hosted <u>2 On-site workshops</u> with TAMU AgriLife with <u>13 attendees</u> in Reporting Year 4. EHS presented <u>2 MS4 Awareness</u> workshops for College employees (Exempt and Non-Exempt Development Day) with approximately <u>60 attendees</u> during Reporting Year 4. <u>29 Employees</u> completed the on-line training program in Reporting Year 4.

Measurable Elements of SWMP				
Storm Water Management Plan (SWMP) Element	Is this a measurable goal for DMC? YES / NO	If "No", explain why it is not measured by DMC	If "Yes" describe Element and frequency or volume/quantity of measurable goal.	Result
11. Monitoring and Screening Programs				
a. Dry Weather Screening	YES		Visually inspect the Storm Sewer System during dry weather for evidence of illicit discharge Various schedule	<p>SEE APPENDIX A</p> <p>The Heritage Campus has 139 MS4 inlets consisting of surface and curb drains.</p> <p>The EHS Office conducted Dry Weather Screening at 103 MS4 inlets 1 time for a total of 103 inlet visual screenings. 0 illicit discharges were discovered.</p> <p>The Windward Campus has 145 MS4 inlets consisting of surface and curb drains.</p> <p>The EHS Office conducted Dry Weather Screening at 71 MS4 inlets 1 time for a total of 71 inlet screenings. 0 illicit discharges were discovered.</p>
b. Wet Weather Screening	NO	This element of the SWMP is managed by the City of Corpus Christi.		

Certification

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



John Strybos, PE, CPA
Vice President and
Chief Physical Facilities Officer

January 8, 2025

Date

HERITAGE CAMPUS DRY WEATHER SCREENING SURVEY JANUARY 17, 2024							
QUADRANT 1		QUADRANT 2		QUADRANT 3		QUADRANT 4	
ID#	Comments	ID#	Comments	ID#	Comments	ID#	Comments
1	NA	1	Dry	1		1	NA
2	NA	2	Dry	2	Wet NO Flow	2	Dry
3	Dry	3	Dry	3	NA	3	NA
4	Dry	4	Dry	4	NA	4	Dry
5	Dry	5	Wet NO Flow	5	NA	5	NA
6	NA	6	Dry	6	NA	6	NA
7	Dry	7	NA	7	NA	7	NA
8	Dry	8	NA	8	Wet NO Flow	8	NA
9	Wet NO Flow	9	Dry	9	NA	9	NA
10	Dry	10	NA	10	Dry	10	NA
11	Dry	11	NA	11	Wet NO Flow	11	NA
12	Dry	12	Dry	12	Wet NO Flow	12	NA
13	Dry	13	Wet WITH Flow	13	Dry	13	NA
14	Dry	14	NA	14	Dry	14	NA
15	Dry	15	NA	15	Dry	15	Dry
16	NA	16	Dry	16	Dry	16	NA
17	Dry	17	NA	17	Dry	17	NA
18	Dry	18	Dry	18	Dry	18	Dry
19	Dry	19	Wet NO Flow	19	Dry	19	Dry
20	Dry	20	Wet NO Flow	20	Dry	20	NA
21	Dry	21	Wet NO Flow	21	Dry	21	Dry
22	Dry	22	Dry	22	Dry	22	Dry
23	Dry	23	Wet NO Flow	23	Wet NO Flow	23	Dry
		24	Dry	24	Dry	24	Wet NO Flow
		25	Dry	25	Dry	25	Wet NO Flow
		26	Dry	26	Dry	26	Wet NO Flow
		27	Dry	27	Dry	27	Dry
		28	Dry	28	Dry	28	NA
		29	Dry	29	Dry	29	NA
		30	Wet NO Flow	30	Wet NO Flow		
		31	Dry	31	Wet NO Flow		
		32	Dry	32	Dry		
		33	Dry	33	Dry		
		34	Wet NO Flow	34	Dry		
		35	Dry	35	Dry		
		36	Dry	36	Dry		
		37	Wet NO Flow	37	Dry		
		38	Dry	38	Dry		
		39	Dry	39	Dry		
				40	Dry		
				41	Wet NO Flow		
	WWF – Wet With Flow			42	Dry		
	WNF – Wet NO Flow			43	Wet NO Flow		
	Dry			44	Wet NO Flow		
				45	Dry		
				46	Dry		
				47, 48	Dry		

WINDWARD CAMPUS DRY SCREENING SURVEY JANUARY 17, 2024							
NORTH QUADRANT		NORTH QUADRANT		SOUTH QUADRANT		SOUTH QUADRANT	
ID#	Comments	ID#	Comments	ID#	Comments	ID#	Comments
N1	NA	N44	NA	S1	NA	S44	NA
N2	NA	N45	Dry	S2	NA	S45	NA
N3	Dry	N46	NA	S3	NA	S46	NA
N4	NA	N47	NA	S4	NA	S47	NA
N5	NA	N48	NA	S5	NA	S48	NA
N6	NA	N49	NA	S6	NA	S49	Dry
N7	NA	N50	NA	S7	NA	S50	Dry
N8	Dry	N51	Dry	S8	NA	S51	Dry
N9	Dry	N52	Dry	S9	NA	S52	Dry
N10	Dry	N53	Dry	S10	NA	S53	Dry
N11	Wet NO Flow	N54	Dry	S11	NA	S54	Dry
N12	Wet NO Flow	N55	Dry	S12	NA	S55	Dry
N13	Dry	N56	Dry	S13	NA	S56	Dry
N14	Dry	N57	Dry	S14	NA	S57	Dry
N15	Wet NO Flow	N58	Wet NO Flow	S15	Dry	S58	Dry
N16	Dry	N59	Dry	S16	Dry	S59	Dry
N17	Dry			S17	Dry	S60	Wet NO Flow
N18	Dry			S18	Dry	S61	NA
N19	Dry			S19	Dry	S62	NA
N20	Dry			S20	Dry	S63	NA
N21	NA			S21	Dry	S64	NA
N22	Dry			S22	Dry	S65	Dry
N23	NA			S23	Dry	S66	Dry
N24	NA			S24	NA	S67	Dry
N25	NA			S25	NA	S68	NA
N26	Dry			S26	NA	S69	NA
N27	Dry			S27	Dry	S70	NA
N28	Dry			S28	NA	S71	Dry
N29	Dry			S29	NA	S72	NA
N30	Wet NO Flow			S30	NA	S73	NA
N31	Dry			S31	Dry	S74	NA
N32	Dry			S32	Dry	S75	NA
N33	NA			S33	Dry	S76	NA
N34	NA			S34	Dry	S77	Dry
N35	NA			S35	NA	S78	Dry
N36	NA			S36	NA	S79	Dry
N37	NA			S37	NA	S80	Dry
N38	NA			S38	NA	S81	Dry
N39	NA			S39	NA	S82	Dry
N40	NA			S40	NA	S83	Dry
N41	Dry			S41	NA	S84	Dry
N42	Dry			S42	NA	S85	NA
N43	NA			S43	NA	S86	NA

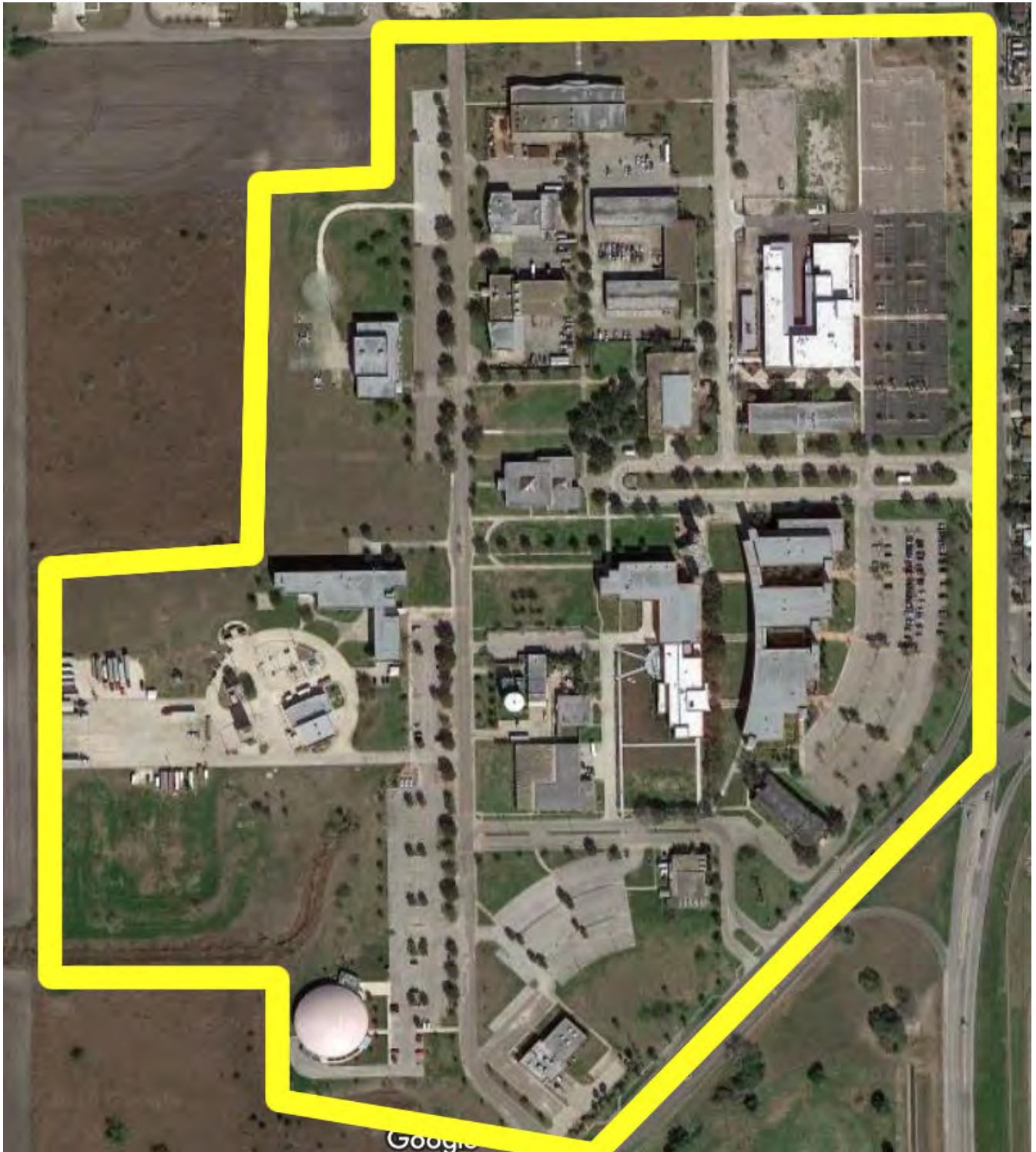
EAST CAMPUS AERIAL VIEW



EAST CAMPUS 3-D VIEW



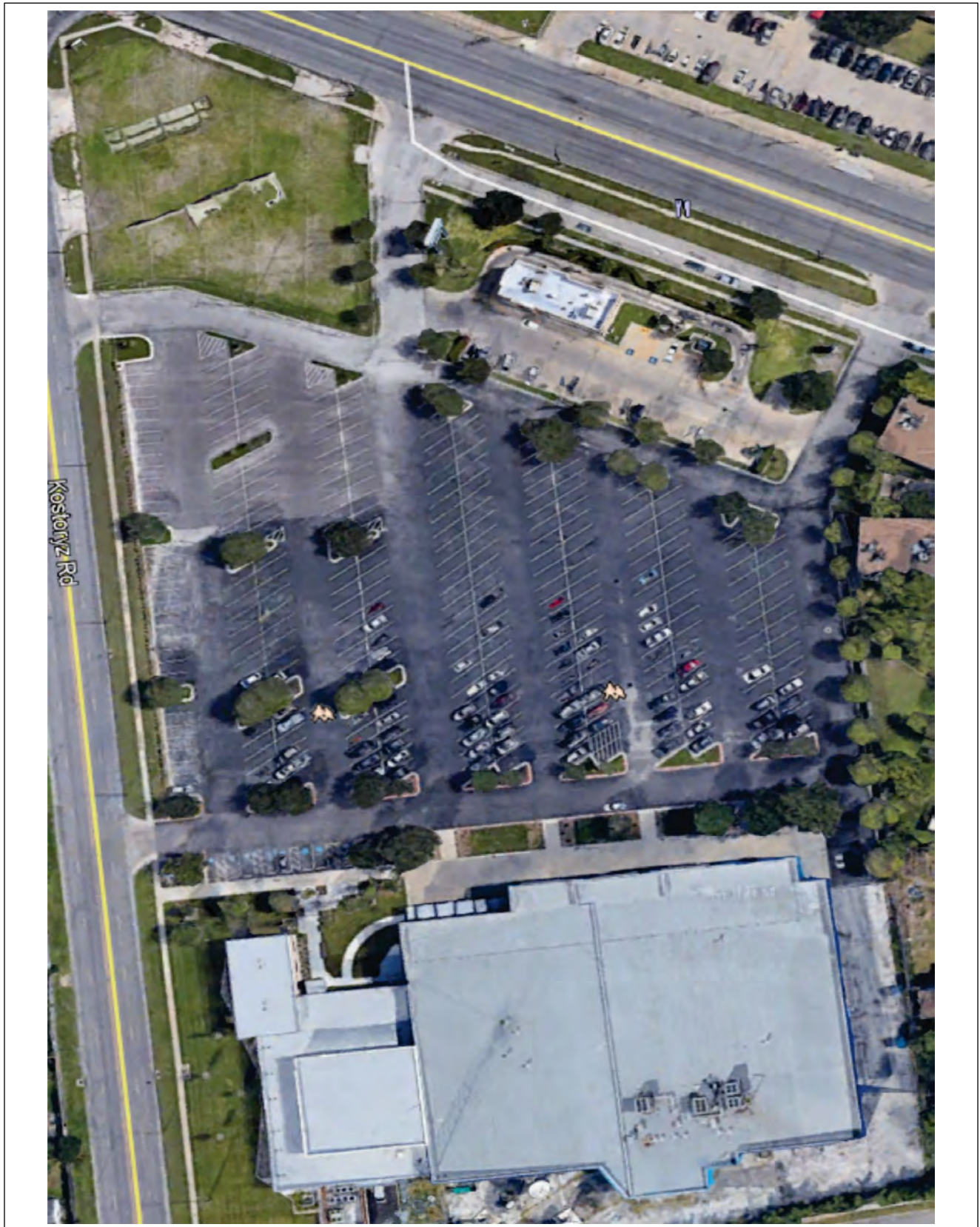
WEST CAMPUS AERIAL VIEW



West Campus



Center for Economic Development Aerial View



Center for Economic Development 3-D View



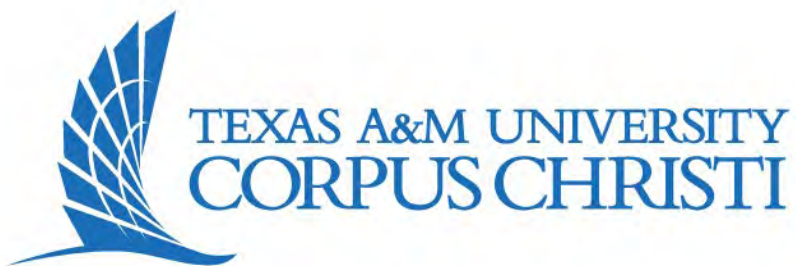


Oso Creek Campus





Co-Permittee Texas
A&M University



2024

STORMWATER MANAGEMENT PROGRAM ANNUAL REPORT



**MS4 TPDES PERMIT
NO. WQ0004200000**

**Permit Term: Year Three
October 1, 2023 – September 30, 2024**

Prepared by the Environmental, Health and Safety Department

6300 Ocean Drive, Unit 5876

Corpus Christi, TX 78412-5876

361-825-5555 (o) | 361-825-5556 (f)

**<http://safety.tamucc.edu>
ehs@tamucc.edu**

I. Stormwater Management Program Overview

Co-Permittee: Texas A&M University-Corpus Christi (TAMU-CC)
CN601422033 / RN102778727

A. Signature and Certification Summary

1. Authorized Signatory

The Environmental, Health & Safety Coordinator position within the TAMU-CC Department of Environmental, Health & Safety (EHS) is responsible for:

- Preparing, planning, implementing, and evaluating the Storm Water Management Plan (SWMP).
- Coordinating and ensuring university compliance with Texas Pollutant Discharge Elimination System (TPDES) permit-regulated facility operations, activities, and environmental matters.
- Compiling, preparing, and submitting required timely reports and documentation.
- Overseeing Environmental Management for all properties and facilities owned, leased, or operated by TAMU-CC.

2. Certification Summary

I, Alfred Sustaita Jr., ER103840, Director, EHS, TAMU-CC,
(Name), (STEERS ID), (Title), (Co-Permittee),

as a 30 TAC 305.128 signatory to reports for the Co-Permittee TAMU-CC, 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.

Signature: _____

Date: 10 Dec 2024

B. SWMP Area of Responsibility

1. This report is submitted for inclusion in the City of Corpus Christi's System-Wide Municipal Separate Storm Sewer System (MS4) Annual Report to the Texas Commission on Environmental Quality (TCEQ).
2. TAMU-CC owns and operates the MS4 at two geographical locations:
 - Island Campus – 240-acre island
 - Along Ocean Drive / State Highway Spur 3
 - Historically known as Ward Island
 - Momentum Campus – 137-acers
 - Intersections of Ennis Joslin Road, Nile Drive, Islander Way, and the Oso Wastewater Treatment Plan
 - Formerly South Guth Park in the City of Corpus Christi
3. Graphical maps and diagrams of the TAMU-CC MS4 area are attached as an appendix to this report.

C. Summary of Changes

1. Revisions needed to the assessment of controls or fiscal analysis of most recent report:
 - Reorganized section headings to coincide with the MS4 Phase 1 Annual Checklist provided by TCEQ and included information for the following sections:
 - II.C.11 (Additional Control Measures)
 - II.C.12 (Monitoring Programs)
 - Removed references to potential pollutant sources that could create a High-Risk Runoff. TAMU-CC does not own, operate, or accept runoff from Type 1 and Type 2 Industrial and High-Risk Facilities. Therefore, this information does not appear to be required under the MS4 Phase 1 Annual Checklist provided by TCEQ.
 - II.C.8 (Industrial and High-Risk Runoff)
 - Planned revisions to SWMP:
 - System-Wide Public Education, Outreach, Involvement, and Participation Project:
 - Survey the residents of the MS4 area.
 - Collected data to assess the public knowledge of stormwater
 - Collected data to assess the efficiency of the City's Public Education, Outreach, Involvement, and Participation programs
 - Collaboration between the City of Corpus Christi and the TAMU-CC Public Administration Program, with the Department of Social Sciences, College of Liberal Arts.
 - TAMU-CC to create physical and electronic surveys for distribution.
 - Findings to be submitted to the City of Corpus Christi.

- City of Corpus Christi to review, update, and implement Public Education, Outreach, Involvement, and Participation Programs based off survey findings.
2. Summary of data collected during reporting year (refer to Section II.C):
 - Visual inspections of drainage outlets did not yield findings of illicit discharges, improper disposals, nor drainage that were unable to be traced back to a source.
 3. Monitoring data (refer to Section II.C):
 - Corpus Christi Storm Event Monitoring analytical results provided by the city are attached as Appendix 2 to this report.

D. Annual Expenditures

1. Annual Expenditures and Budgets by Report Year:

	Year One		Year Two		Year Three	
	<u><i>FY22 Actual</i></u>	<u><i>FY23 Estimate</i></u>	<u><i>FY23 Actual</i></u>	<u><i>FY24 Estimate</i></u>	<u><i>FY24 Actual</i></u>	<u><i>FY25 Estimate</i></u>
Streets, parking lots, sidewalk cleaning, and litter control	\$33,883	\$34,646	\$27,781	\$28,406	\$26,938	\$27,544
Trash disposal	\$126,393	\$131,448	\$138,041	\$141,146	\$190,218	\$194,498
Recycling	\$59,862	\$62,256	\$63,880	\$65,318	\$87,026	\$88,984
Haz. Waste Disposal	\$44,763	\$50,000	\$33,518	\$46,778	\$48,668	\$38,447
Wastewater Sewer Line Upgrades	\$265,884	\$200,000	\$126,877	\$200,000	\$19,881	\$200,000

E. SWMP Activities

The following information is intended to provide status updates on TAMU-CC SWMP activities.

1. Enforcement Actions
 - Received by TAMU-CC
 - During the reporting year, TAMU-CC has not received notification of TPDES Permit enforcement actions.
 - The City of Corpus Christi and TCEQ are the Authorized Enforcement Agencies for the MS4 TPDES Permit.
 - Enforcements by TAMU-CC

- The TAMU-CC University Police Department (UPD) enforces the laws of the State of Texas for TAMU-CC properties.
- The TAMU-CC EHS Department administers and implements the provisions of the TPDES Permit for TAMU-CC operations.
- During the reporting year, TAMU-CC enforced the requirements of the TPDES Permit on two recordable incidents.
 - 1 – Sanitary sewer overflow. Overflow did not enter storm drain and, therefore, did not result in release from the MS4 permit area.
 - 1 – Motor vehicle fluid leak. Fluid leak did not enter the storm drain and, therefore, did not result in release from the MS4 permit area.
- Additional Regulatory Requirements of TAMU-CC: The information provided in this paragraph is for reference only. For more information on Additional Regulatory Requirements, contact the TAMU-CC EHS Department.
 - *Permits, Registrations, or Authorizations:* The following Table includes the regulatory programs, and associated identification numbers, for TAMU-CC.

Program	ID Type	ID Number	ID Status
Industrial and Hazardous Waste	EPA ID	TXD981514409	ACTIVE
Industrial and Hazardous Waste	Solid Waste Registration (SWR)	69955	ACTIVE
Petroleum Storage Tank Registration	Registration	601	ACTIVE
Pollution Prevention Planning	ID Number	P04589	ACTIVE
Radiation Producing Devices	Registration	R29970	ACTIVE
X-Ray Machines	Registration	R35779	ACTIVE
Laser Use	Registration	Z03387	ACTIVE
Oil Spill Prevention and Response Facility	Facility Number	2844	ACTIVE
Oil Spill Prevention and Response Certification	Certificate Number	30224	ACTIVE

- *Regulated Environmental Activities*
 - Hazardous Waste Central Accumulation Area
 - Universal Waste Accumulation Area(s)
 - Hazardous Waste Satellite Accumulation Areas
 - Hazardous Materials locations of Occupational Exposure
 - Bulk Oil storage locations; more than 55 gallons
 - Oil Filled Equipment
 - Used Oil collection and storage
 - Tier II Chemicals

- Controlled Substances and their precursors
- Registered Lasers
- Registered Radiation Producing Equipment
- Registered X-Ray Device
- Laboratories with Biohazardous Materials, up to and including BSL2
- Laboratories with Live Vertebrate Animals
- Laboratories with Live Vertebrate Animals and Biohazards, up to and including ABSL2
- Indoor Air Quality

2. Inspections

- Dry & Wet Weather Screening for the following MS4 Areas:
 - Island Campus: Ten major outfalls.
 - Four Outfalls discharge to Corpus Christi Bay
 - Six Outfalls discharge to Oso Bay
 - Momentum Campus: Drainage canal.
 - Discharges to wetland swale inlet of Oso Bay
- TAMU-CC EHS Staff conduct the following SWMP visual inspections. Findings from these inspections can be found in Section II.C of this report:
 - Dry & Wet Weather Inspections
 - Periodically during each permit year.
 - Post-Rain Event Inspections
 - After rain events, when safe to do so, as time, feasibility allow.
 - Construction Site Inspections
 - On campus constructions sites, regardless of size.
- Storm Event Discharge Monitoring
 - The City of Corpus Christi performs Storm Event Monitoring within the TAMU-CC MS4 area.
 - The Storm Event Monitoring site is the Island Campus major outfall #9, located behind the Natural Resources Center (NRC), northwest side of building.
 - A graphical diagram of the MS4 Major Outfalls on the Island Campus, with diameters and identifying numbers, is included as Appendix 1.
 - Analytical monitoring results provided by the city are attached as Appendix 2 to this report.

3. Public Education Programs

- The TAMU-CC SWMP identifies minimum training requirements.
 - TAMU-CC SWMP Awareness Level Training – In-Person/Virtual
 - University employees and contractors whose duties may potentially impact the MS4.
 - Environmental/Safety Orientation – Online
 - TAMU-CC New Employee Orientation
 - University Students registered in laboratories

- TAMU-CC EHS develops, publishes, and maintains program manuals, plans, procedures, and guidelines for health, safety, and the environment at TAMU-CC.
 - For information on other required employee trainings, please contact the TAMU-CC EHS Department.
 - Services and accommodations are available from TAMU-CC to assist with Co-Permittee and System-Wide public education, outreach, involvement, and participation programs.
4. Stormwater General Permit for Construction Activities
- TAMU-CC requires all contractors to meet the minimum standards of the SWMP, SWP3, and TPDES regulations for all construction related activities within the TAMU-CC MS4 Area.
 - No small construction activities were performed within the TAMU-CC MS4 area requiring notice of intent (NOI).
 - One large construction activity was performed within the TAMU-CC area requiring NOI.
 - Site-Specific TPDES Authorization Number: TXR1513RA

F. SWMP Water Quality

1. Water Quality Improvements/Degradation
- The City of Corpus Christi Storm Water Division takes storm water samples from the TAMU-CCs main campus during rain events over one-tenth of an inch. Results from these wet weather monitoring will indicate if the water quality of the storm water effluent meets the federal and state requirements for tested pollutant levels. During the reporting period, there were no known reports of pollutants discharged from the TAMU-CC campus.
2. Progress Towards Measurable Goals
- All Stormwater Analytical Reports received from the City of Corpus Christi state that, unless otherwise indicated, results meet the National Environmental Laboratories Accreditation Conference (NELAC) requirements.
3. Measured Reductions in Pollutants
- Some of the Sample Comments provided state the following:
 - Only one Phosphorus analysis was requested. The dissolved PO4 was submitted, so I think D-PO4 was run.
 - B – The analyte was found in both the sample and the blank (Chromium)
 - J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
 - Cadmium/Chromium/Copper/Lead/Nickel/Zinc sub-out to Pace Analytical; external report available upon request.
 - Analytical reports for the reporting period are attached as Appendix 2.

II. SWMP Elements

The information of this section includes findings from monitoring programs, recordable events, status updates, and measures taken for the following control measure elements.

The control measures listed on this section are those relating to Part IV Section C.2 of the TPDES WQ0004200000 Permit.

A. SWMP Implementation

1. The program elements of the TAMU-CC SWMP are fully implemented.

B. Schedule Compliance

1. TAMU-CC submits the Stormwater Annual Report to the City of Corpus Christi each year no less than 45 days prior to the March 1st due date to TCEQ in accordance with the latest Interlocal Cooperation Agreement between the City of Corpus Christi and TAMU-CC.

C. Status Updates

1. Structural Controls:
 - Storm Sewer Inlets, Catch Basins, Grates, Ditches, Berms, Conveyance Swales, and Bioswales are major components of the TAMU-CC MS4.
 - These controls serve an important function in safely conveying storm water.
 - TAMU-CC Facilities Services maintains the Ground of the TAMU-CC MS4 Area to prevent erosion and potential degradation of the system.
 - There were no areas of structural controls that required maintenance or repair during the reporting year.
 - Measurable goal: Yes
2. Areas of New Development:
 - TAMU-CC Administrative Operations oversees all construction plans to ensure compliance with local, state, and federal codes and the requirements of The Texas A&M University System (TAMUS).
 - A new Arts and Media building is being constructed in place of the old Classroom East building (since demolished). Construction began in June 2024 and is expected to be completed in May 2026.
 - Measurable goal: Yes
3. Roadways:
 - One street sweeper is utilized to clean the roadways and parking lots on the Island Campus.
 - A work order system is used to schedule the cleaning of roadways and parking lots.

- Measurable goal: Yes
4. Flood Control Projects:
- Berms and swales have been designed into the TAMU-CC campus landscape that controls flooding and erosion.
 - There were no new flood control projects for the TAMU-CC MS4 area during the reporting year.
 - Measurable goal: Yes
5. Pesticide, Herbicide, and Fertilizer Application:
- Two Grounds employees hold Handler Verification Cards indicating that they have completed the EPA Pesticide Handler and Worker Safety Training as required by the Federal Worker Protection Standard.
 - A work order system is used to schedule the applications.
 - Measurable goal: Yes
6. Illicit Discharges and Improper Disposal:
- Non-storm Water
 - None
 - Overflows and Infiltration
 - Overflow incident that threatened the impacted waters of Oso Bay:
 - Sanitary Sewer Overflow, 09/05/2024, at Southeast side of Jetty and Surf student housing.
 - Emergency Response efforts by TAMU-CC EHS resulted in the prevention of discharge from the MS4 area.
 - Floatables
 - None observed during the reporting period.
 - Hazardous Waste and Used Motor Vehicle Fluids
 - TAMU-CC operates as a Small Quantity Generator of Hazardous Waste and a Small Quantity Handler of Universal Waste.
 - SET Environmental, Inc. is contracted to prepare, transport, and dispose of the University's hazardous waste.
 - Safety-Kleen Systems, Inc. is contracted to collect and disposes of used oil/oily water/grit from the vehicle wash rack grit trap and the used oil storage tank.
 - TAMU-CC reports annually, the Annual Waste Summary of hazardous waste generated by TAMU-CC, to TCEQ through the STEERS e-reporting system.
 - Motor vehicle fluid leak occurred on 02/01/2024, at Hammerhead parking lot Northeast end of campus.
 - Emergency Response efforts by TAMU-CC EHS resulted in the prevention of discharge from the MS4 area
 - MS4 Screening and Illicit Inspections
 - At least one (1) visual screening of the MS4 will be performed for each seasonal monitoring periods.

- At least two (2) visual inspections will be performed for each major outfall on campus during each seasonal monitoring period.
 - Visual inspections look for: flowing water, turbidity, odor, scum or algae, oil sheen, soil or debris, signs of erosion, and a source point for any discharge.
 - Measurable goals: Yes
- 7. Spill Prevention and Response:
 - To respond to discharges of potential pollutants from the MS4 on campus, TAMU-CC has developed, in accordance with the Clean Water Act, an EPA Spill Prevention Control and Countermeasures (SPCC) Plan.
 - Pursuant to the State of Texas Oil Spill Prevention and Response Act, TAMU-CC maintains a Facility Response Plan, recertified in June 2020, expires June 2025, by the Oil Spill Division of the Texas General Land Office (TGLO).
 - Spill kits are located at:
 - each of the 13 emergency generator sites
 - the motor pool used oil collection tank
 - the fueling station
 - the hazardous waste central accumulation storage building
 - The TGLO performs an annual facility inspection.
 - During the reporting year, TGLO Annual Audit of Certificate # 30224
 - Audit completed with no findings
 - Date of Inspection 06/25/2024
 - Annual Oil Spill Drill completed 06/25/2024
 - Notice of “No Issues” received 12/06/2024
 - During the reporting year, TAMU-CC responded to:
 - One sanitary sewer overflow
 - Emergency Response efforts by TAMU-CC EHS resulted in the prevention of discharge from the MS4 for the incident.
 - Measurable goals: Yes
- 8. Industrial & High-Risk Runoff:
 - TAMU-CC does not own, operate, or accept runoff from Type 1 and Type 2 Industrial and High-Risk Facilities as described in the TPDES Permit.
 - Measurable goal: Not applicable
- 9. Construction Site Runoff:
 - This element of the SWMP is managed under the City of Corpus Christi’s Guidance Document for Developmental Planning and Construction Activities.
 - There is one permitted large construction site located within TAMU-CCs permitted area.
 - TPDES Authorization Number: TXR1513RA
 - Measurable goal: Yes
- 10. Public Education:

- Environmental Awareness training provided to all new university employees during a New Employee Orientation Compliance Workshop. During the reporting period, New Employee Orientation was provided to university employees on these dates:
 - 2023: 10/2/2023, 10/9/2023, 10/16/2023, 10/23/2023, 11/1/2023, 11/6/2023, 11/13/2023, 12/4/2023, 12/11/2023, 12/18/2023
 - 2024: 1/2/2024, 1/8/2024, 1/16/2024, 1/22/2024, 1/29/2024, 2/1/2024, 2/5/2024, 2/12/2024, 2/19/2024, 2/26/2024, 3/4/2024, 3/11/2024, 3/18/2024, 3/25/2024, 4/1/2024, 4/8/2024, 4/15/2024, 4/22/2024, 4/29/2024, 5/1/2024, 5/6/2024, 5/13/2024, 5/20/2024, 5/28/2024, 6/3/2024, 6/10/2024, 6/17/2024, 6/24/2024, 7/1/2024, 7/8/2024, 7/17/2024, 7/22/2024, 7/29/2024, 8/1/2024, 8/5/2024, 8/12/2024, 8/19/2024, 8/26/2024, 9/3/2024, 9/9/2024, 9/16/2024, 9/23/2024, 9/30/2024
- Measurable goal: Yes

11. Additional Control Measures:

- None identified for the reporting period.
- Measurable goal: Not applicable

12. Monitoring Programs

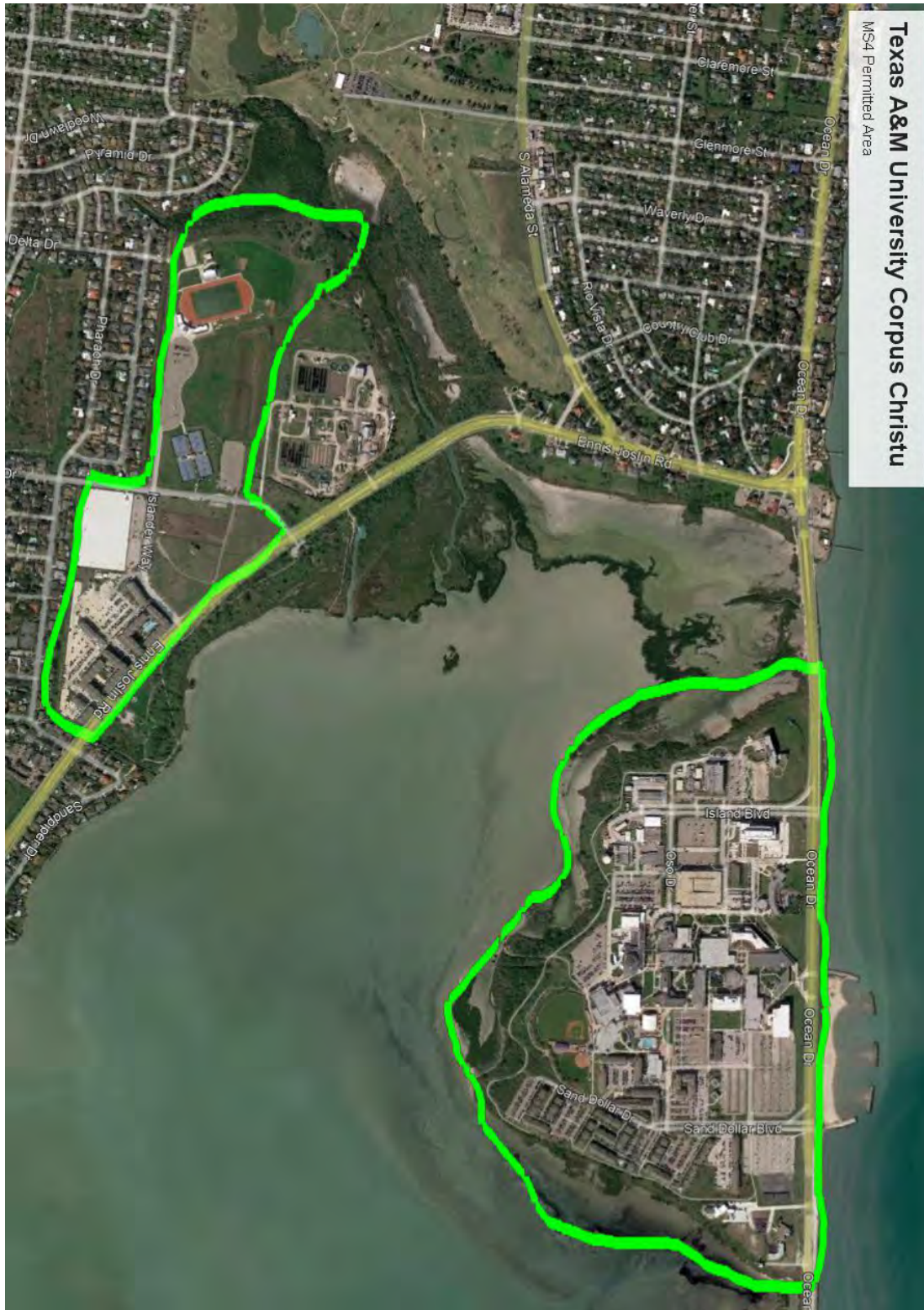
- Dry Weather Screening
 - Outfall visual inspections conducted each month.
- Wet Weather Screening
 - Outfall visual inspections conducted in the following months:
 - 10/02/2023
 - 11/12/2023
 - 06/19/2024
 - 07/25/2024
 - 09/04/2024
- Representative Storm Event Monitoring
 - Corpus Christi sampling dates:
 - 10/23/2023
 - 11/09/2023
 - 11/10/2023
 - 12/14/2023
 - 04/26/2024
 - 05/17/2024
- Floatables Monitoring
 - Visual inspections conducted in the following months:
 - 10/02/2023
 - 11/12/2023
 - 06/19/2024
 - 07/25/2024
 - 09/04/2024

D. Measurable Goals

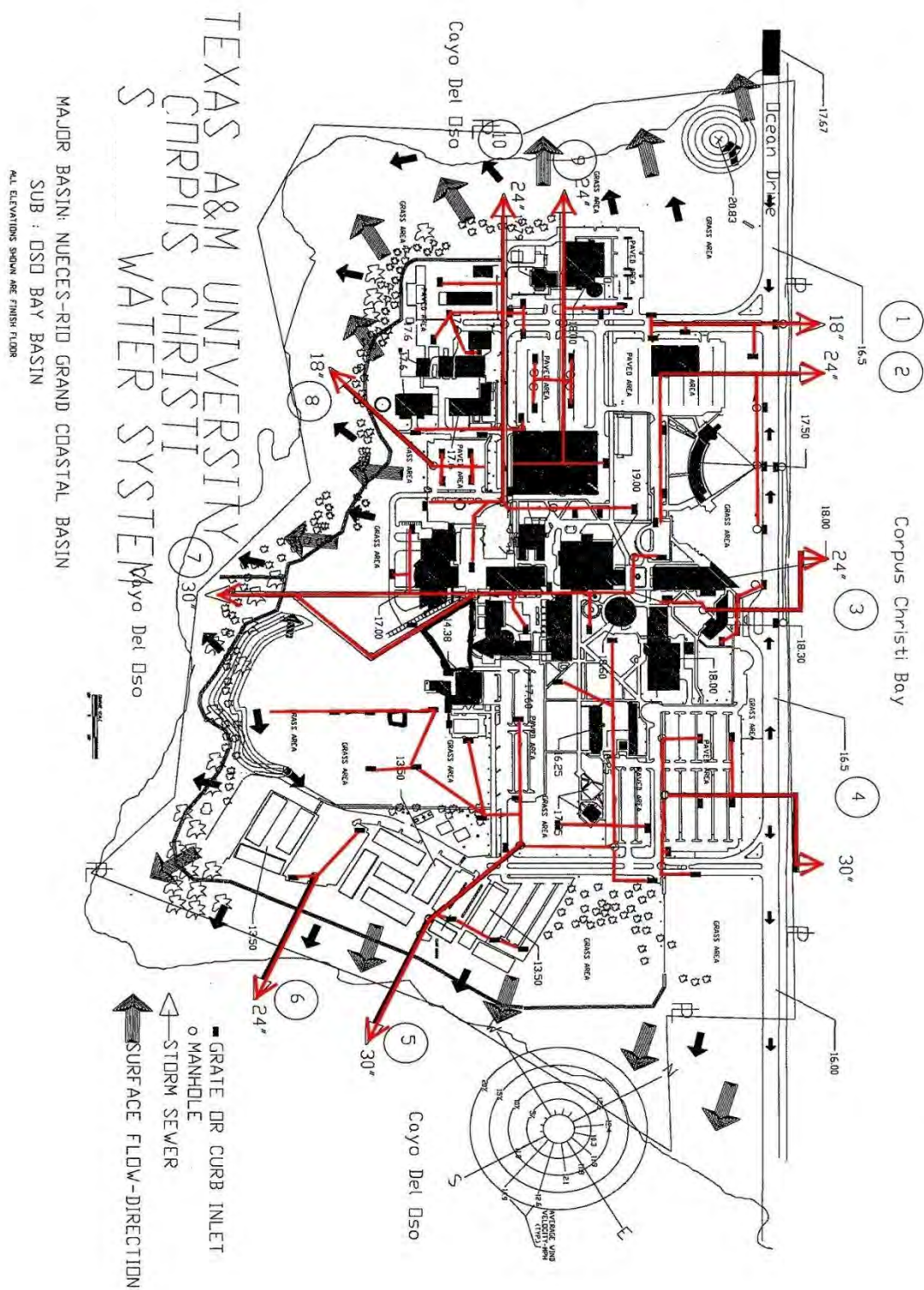
1. Indicated in each applicable area within Section II.C above.

Appendix 1 - Storm Drain System Diagram

TAMU-CC permitted MS4 area includes the 240-acre Island Campus and 140-acre Momentum Campus.



Island Campus





[illegible][illegible]

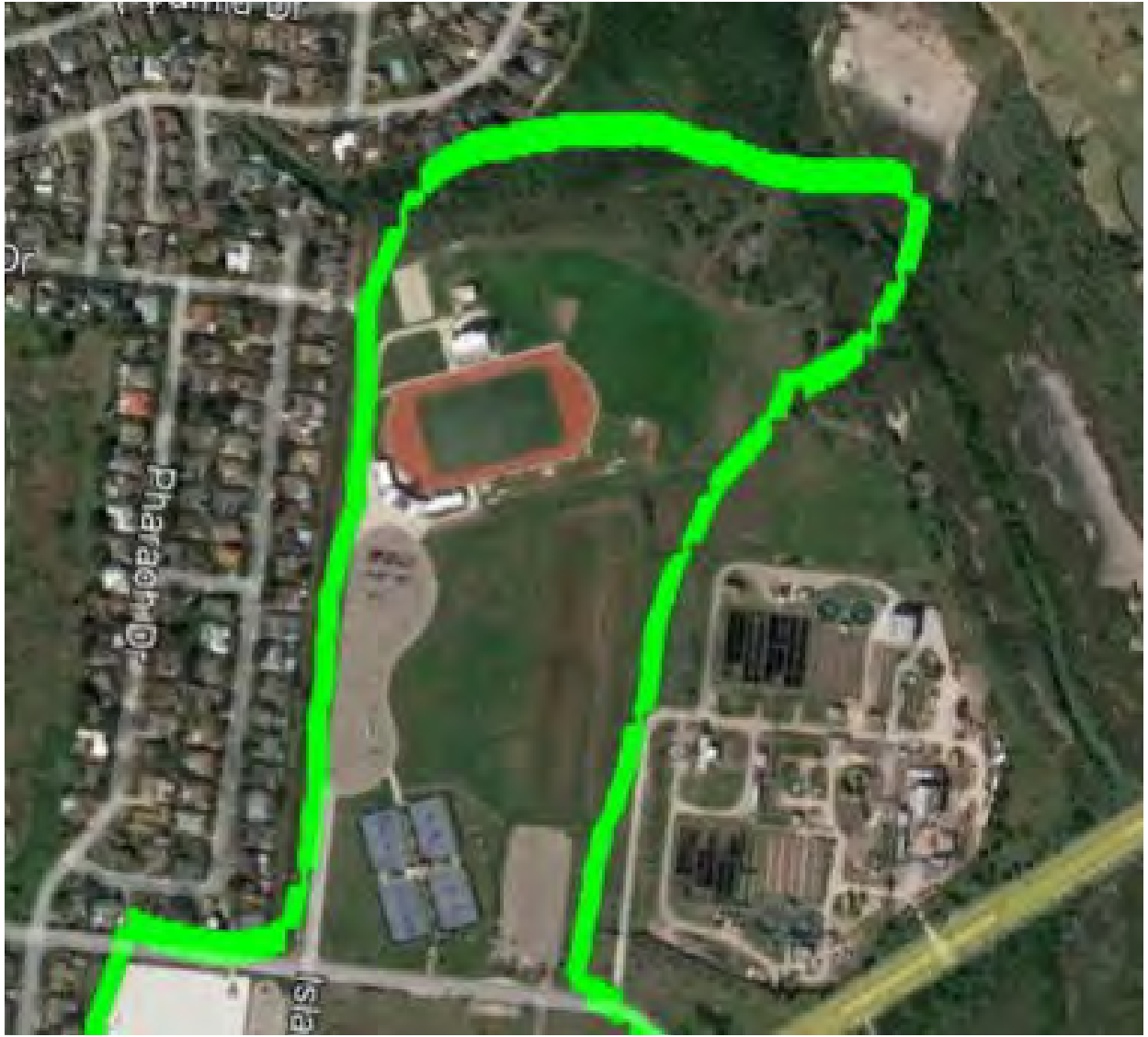
MOMENTUM SPORTS COMPLEX
TEXAS A&M UNIVERSITY
CORPUS CHRISTI

DATE PREPARED: 11/25/12
DATE: 11/25/12
DRAWN BY: BS/BS
CHECKED BY: BS/BS
REVISIONS: 11

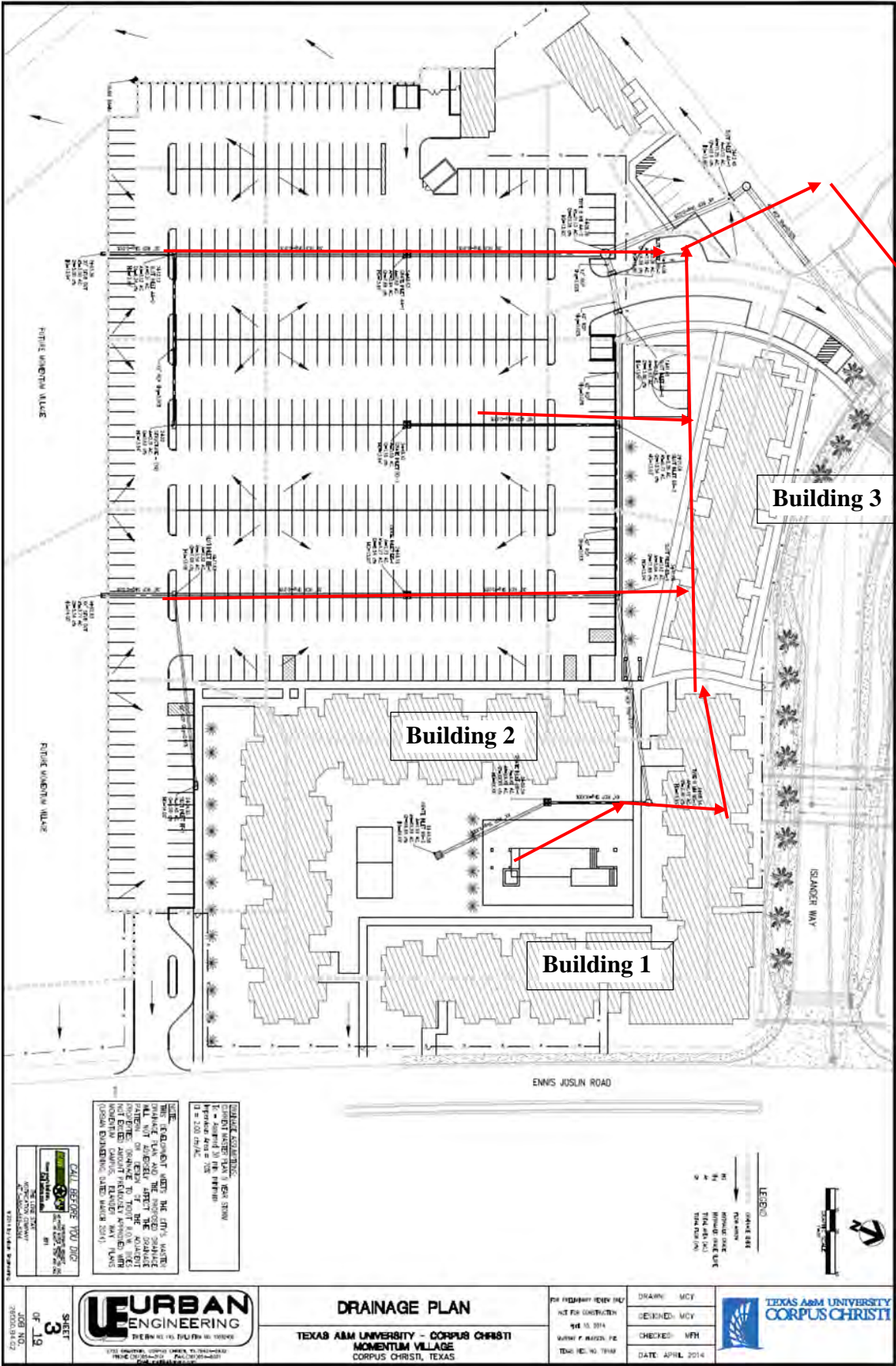
ERROSION +
SEDIMENT
CONTROL PLAN

C2.0

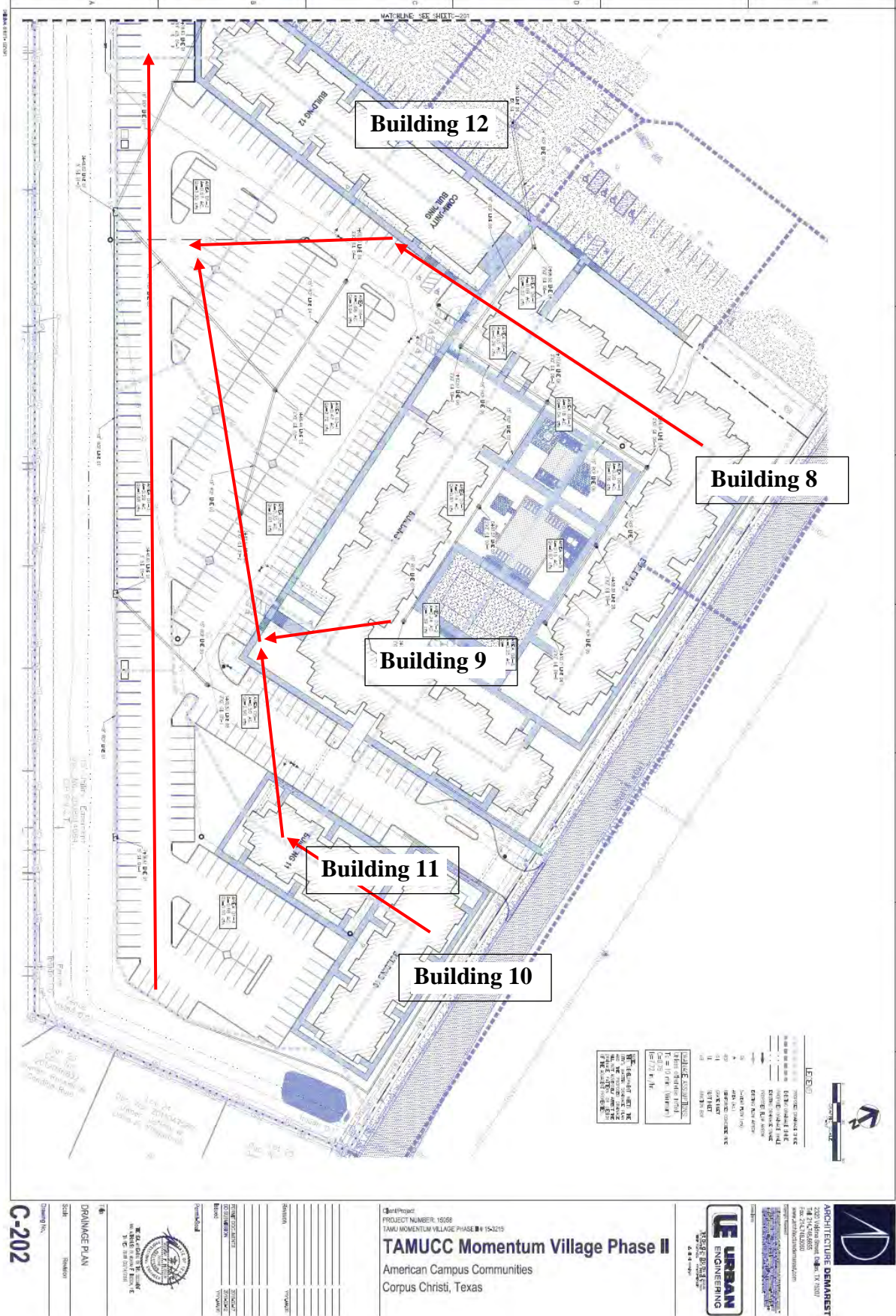
SEE FOR CONSTRUCTION



Momentum Campus – East of Nile Drive, Buildings 1, 2, & 3



Momentum Campus – East of Nile Drive, Buildings 8 thru 12





Appendix 2 – Corpus Christi Storm Event Discharge Monitoring Analytical Reports

Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469						Report# /Lab ID#: AC20622 Report Date: 11/10/23 Sample Name: TAMU-CC Stormwater (City) Date Received: 10/23/2023 Time: 10:24 Date Sampled: 10/23/2023 Time: 09:29		
Phone:						EMAIL: roberta3@cctexas.com		

Parameter	Result	Unit	Flag	RL _s	Date/Time Analyzed	Method	Analyst	Analysis Comments
Ammonia (ISE)	<0.2	mg/l		0.20	10/24/23 10:35	SM 4500 NH3 D -2	VM	
Atrazine	<0.60	ug/l	O	2	10/26/23 07:13	EPA 625.1	EUROFINS	
Biochemical Oxygen Demand	5.3	mg/L			10/23/23 11:56	SM 5210 B	VP	
Cadmium	<0.00026	mg/L	O	1	10/31/23 11:58	EPA 200.8	EUROFINS	
Chemical Oxygen Demand	32	mg/l	X	10	10/24/23 09:06	SM 5220 D	VM	
Chromium	0.0016	mg/l	O, J	2	10/31/23 11:58	EPA 200.8	EUROFINS	
Copper	0.0099	mg/l	O	2	10/31/23 11:58	EPA 200.8	EUROFINS	
Dissolved Phosphorous	0.022	mg/l	O		11/3/23 15:54	EPA 365.1	EUROFINS	
Lead	0.0016	mg/l	O, J	2	10/31/23 11:58	EPA 200.8	EUROFINS	
Nickel	0.0014	mg/L	O, J	2	10/31/23 11:58	EPA 200.8	EUROFINS	
Nitrate	0.19	mg/l		0.02	10/23/23 10:59	EPA 300.0	MONICAS	
Nitrite	<0.025	mg/l		0.02	10/23/23 10:59	EPA 300.0	MONICAS	
Total Dissolved Solids	140	mg/l			10/25/23 14:08	SM 2540 C	FM/VM	
Total Kjeldahl Nitrogen	0.64	mg/l		0.20	10/26/23 12:07	EPA 351.4	FM	
Total Nitrogen by IC	Not detected	mg/L			11/10/23 11:29	Calculated	LDP	
Total Phosphorus	0.061	mg/L	O		11/8/23 16:40	EPA 365.1	EUROFINS	
Total Suspended Solids	12	mg/l		2.5	10/23/23 13:15	SM 2540 D	VM	
Zinc	49	ug/l	O	5	10/31/23 11:58	EPA 200.8	EUROFINS	

Sample Comments: J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469						Report# /Lab ID#: AC20622 Report Date: 1/23/24 Sample Name: TAMU-CC Stormwater (City) Date Received: 10/23/2023 Time: 10:24 Date Sampled: 10/23/2023 Time: 09:29		
Phone:						EMAIL: roberta3@cctexas.com		
Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments
Ammonia (ISE)	<0.2	mg/l		0.20	10/24/23 10:35	SM 4500 NH3 D -2	VM	
Atrazine	<0.60	ug/l	O	2	10/26/23 07:13	EPA 625.1	EUROFINS	
Biochemical Oxygen Demand	5.3	mg/L			10/23/23 11:56	SM 5210 B	VP	
Cadmium	<0.00026	mg/L	O	1	10/31/23 11:58	EPA 200.8	EUROFINS	
Chemical Oxygen Demand	32	mg/l	X	10	10/24/23 09:06	SM 5220 D	VM	
Chromium	0.0016	mg/l	O, J	2	10/31/23 11:58	EPA 200.8	EUROFINS	
Copper	0.0099	mg/l	O	2	10/31/23 11:58	EPA 200.8	EUROFINS	
Dissolved Phosphorous	0.022	mg/l	O		11/3/23 15:54	EPA 365.1	EUROFINS	
Lead	0.0016	mg/l	O, J	2	10/31/23 11:58	EPA 200.8	EUROFINS	
Nickel	0.0014	mg/L	O, J	2	10/31/23 11:58	EPA 200.8	EUROFINS	
Nitrate	0.19	mg/l		0.02	10/23/23 10:59	EPA 300.0	MONICAS	
Nitrite	<0.025	mg/l		0.02	10/23/23 10:59	EPA 300.0	MONICAS	
Total Dissolved Solids	140	mg/l			10/25/23 14:08	SM 2540 C	FM/VM	
Total Kjeldahl Nitrogen	0.64	mg/l		0.20	10/26/23 12:07	EPA 351.4	FM	
Total Nitrogen by IC	Not detected	mg/L			11/10/23 11:29	Calculated	LDP	
Total Phosphorus	0.061	mg/L	O		11/8/23 16:40	EPA 365.1	EUROFINS	
Total Suspended Solids	12	mg/l		2.5	10/23/23 13:15	SM 2540 D	VM	
Zinc	49	ug/l	O	5	10/31/23 11:58	EPA 200.8	EUROFINS	
Sample Comments: J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.								


Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469						Report# /Lab ID#: AC21827 Report Date: 11/27/23 Sample Name: TAMU-CC Stormwater (City) Date Received: 11/09/2023 Time: 22:39 Date Sampled: 11/09/2023 Time: 21:55		
Phone: EMAIL: roberta3@cctexas.com								

Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli (MPN)	129970.0	MPN	D		11/9/23 23:39	SM 9223 B - Coli	CRYSTALY	
Enterococci	98040.0	MPN	D		11/9/23 23:11	Enterolert	CRYSTALY	
Oil and Grease	<3.0	mg/l		3	11/15/23 09:18	EPA 1664 B	CF, VM, FM	
pH (Field)	6.3	S.U.			11/9/23 21:55	SM 4500H+ B	FIELD	
Total Cyanide	< 2.0	µg/l	O	5	11/22/23 16:42	EPA 335.4	EUROFINS	
Total Hardness as CaCO3	60	mg/L		10	11/22/23 08:44	SM 2340 C	CF	
Water Temperature (in °C)	24.8	°C			11/9/23 21:55	SM 2550 B	FIELD	

Sample Comments:

This analytical report is respectfully submitted by the Water Utilities Laboratory. The enclosed results reflect only the sample(s) identified above. The results have been carefully reviewed and, unless otherwise indicated, meet the NELAC requirements as described by the Water Utilities Lab's QA/QC program. No part of this report shall be reproduced or transmitted in any form or by any means without the written consent of the City of Corpus Christi-Water Utilities Lab.

Respectfully Submitted,



Technical Director (or designee)

Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469						Report# /Lab ID#: AC21834 Report Date: 2/27/24 Sample Name: TAMU-CC Stormwater (City) Date Received: 11/10/2023 Time: 09:29 Date Sampled: 11/10/2023 Time: 08:03		
Phone:						EMAIL: roberta3@cctexas.com		
Parameter	Result	Unit	Flag	RL _s	Date/Time Analyzed	Method	Analyst	Analysis Comments
Ammonia by Probe	<0.2	mg/L			11/13/23 09:30	SM 4500 NH3 D -2	FM/VM	
Atrazine	< 0.60	µg/l	O	10	11/17/23 06:16	EPA 625.1	EUROFINS	
Biochemical Oxygen Demand	8.0	mg/L	K, X		11/10/23 12:30	SM 5210 B	FM/VM	
Cadmium in µg/L	< 1.3	µg/L	O	10	11/21/23 13:30	EPA 200.8	EUROFINS	
Chemical Oxygen Demand	36	mg/l		10	11/15/23 09:04	SM 5220 D	CF	
Chromium reported in µg/L	< 1.6	µg/l	O	20	11/21/23 13:30	EPA 200.8	EUROFINS	
Copper reported in µg/L	36	µg/l	O	20	11/21/23 13:30	EPA 200.8	EUROFINS	
Dissolved Phosphorous	0.81	mg/l	O^	0.020	11/28/23 15:17	EPA 365.1	EUROFINS	
Lead Reported in µg/L	3.0	µg/l	O, J	10	11/21/23 13:30	EPA 200.8	EUROFINS	
Nickel Reported in µg/L	< 2.4	µg/L	O	10	11/21/23 13:30	EPA 200.8	EUROFINS	
Nitrate by IC	0.20	mg/L			11/10/23 13:27	EPA 300.0	MONICAS	
Total Dissolved Solids	118	mg/L			11/13/23 08:50	SM 2540 C	VP	
Total Kjeldahl Nitrogen	0.66	mg/L		0.20	11/20/23 07:20	EPA 351.4	FM/VM	
Total Nitrogen by IC	0.86	mg/L			11/28/23 15:17	Calculated	EUROFINS	
Total Phosphorus	0.81	mg/L	O	0.02	11/28/23 15:14	EPA 365.1	EUROFINS	
Total Suspended Solids	9.3	mg/L		2.5	11/10/23 14:16	SM 2540 D	VM	
Zinc Reported in µg/L	47	µg/l	O	20	11/21/23 13:30	EPA 200.8	EUROFINS	
Sample Comments:								


Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469						Report# /Lab ID#: AC23839 Report Date: 7/8/24 Sample Name: TAMU-CC Stormwater (City) Date Received: 12/14/2023 Time: 14:57 Date Sampled: 12/14/2023 Time: 13:25		
Phone:						EMAIL: roberta3@cctexas.com		

Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli (MPN)	24196.0	MPN	D	1.0	12/14/23 16:06	SM 9223 B - Coli	MONICAS	
Enterococci	92080.0	MPN	D	1.0	12/15/23 16:03	Enterolert	MONICAS	
Oil and Grease	5.2	mg/l		3	12/27/23 07:45	EPA 1664 B	CF	
pH (Field)	7.96	S.U.			12/14/23 13:25	SM 4500H+ B	FIELD	
Total Cyanide	-	µg/l	LE	5	7/6/24 12:08	EPA 335.4	MICHAELM10	
Total Hardness as CaCO3	72	mg/L		10	12/20/23 15:02	SM 2340 C	CF	
Water Temperature (in °C)	19.0	°C			12/14/23 13:25	SM 2550 B	FIELD	

Sample Comments: LE - Samples were not sent out for analysis (Cyanide)

This analytical report is respectfully submitted by the Water Utilities Laboratory. The enclosed results reflect only the sample(s) identified above. The results have been carefully reviewed and, unless otherwise indicated, meet the NELAC requirements as described by the Water Utilities Lab's QA/QC program. No part of this report shall be reproduced or transmitted in any form or by any means without the written consent of the City of Corpus Christi-Water Utilities Lab.

Respectfully Submitted,



Technical Director (or designee)


Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469						Report# /Lab ID#: AC31835 Report Date: 5/20/24 Sample Name: TAMU-CC Stormwater (City) Date Received: 04/26/2024 Time: 13:54 Date Sampled: 04/26/2024 Time: 12:32		
Phone: EMAIL: roberta3@cctexas.com								

Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli (MPN)	>24196.0	MPN	D		4/26/24 14:24	SM 9223 B - Coli	VP	
Enterococci	>24196.0	MPN	D		4/26/24 14:04	Enterolert	MS / FK /CY	
Oil and Grease	3.9	mg/l	X	3	4/29/24 11:43	EPA 1664 B	VM	
pH (Field)	8.08	S.U.			4/26/24 12:32	SM 4500H+ B	FIELD	
Total Cyanide	2.8	µg/l	O, J,	5.0	5/14/24 22:11	EPA 335.4	EUROFINS	
Total Hardness as CaCO3	77.6	mg/L		10	5/3/24 13:15	SM 2340 C	VM	
Water Temperature (in °C)	25.9	°C			4/26/24 12:32	SM 2550 B	FIELD	

Sample Comments:

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Respectfully Submitted,



Technical Director (or designee)

Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469						Report# /Lab ID#: AC31850 Report Date: 6/28/24 Sample Name: TAMU-CC Stormwater (City) Date Received: 04/26/2024 Time: 16:29 Date Sampled: 04/26/2024 Time: 15:34		
Phone:						EMAIL: roberta3@cctexas.com		
Parameter	Result	Unit	Flag	RL _s	Date/Time Analyzed	Method	Analyst	Analysis Comments
Ammonia by Probe	0.66	mg/L		0.1	4/29/24 14:42	SM 4500 NH3 D -2	VP	
Atrazine	< 0.60	µg/l	O	10	5/2/24 14:46	EPA 625.1	EUROFINS	
Biochemical Oxygen Demand	10.76	mg/L		7.7	4/27/24 12:14	SM 5210 B	VP/CF	
Cadmium in µg/L	0.26	µg/L	O, J	2.0	5/8/24 09:00	EPA 200.8	EUROFINS	
Chemical Oxygen Demand	53	mg/l		10	4/30/24 09:33	SM 5220 D	VM	
Chromium reported in µg/L	2.0	µg/l	O, J	4.0	5/8/24 09:00	EPA 200.8	EUROFINS	
Copper reported in µg/L	21	µg/l	O	4.0	5/8/24 09:00	EPA 200.8	EUROFINS	
Dissolved Phosphorous	0.13	mg/l	O	0.020	5/9/24 21:24	EPA 365.1	EUROFINS	
Lead Reported in µg/L	0.81	µg/l	O, J	2.0	5/8/24 09:00	EPA 200.8	EUROFINS	
Nickel Reported in µg/L	2.8	µg/L	O	2.0	5/8/24 09:00	EPA 200.8	EUROFINS	
Nitrate by IC	1.27	mg/L		0.016	4/27/24 09:31	EPA 300.0	MONICAS	
TKN - Simplified	1.9	mg/L	X	0.20	5/6/24 10:18	HACH 10242	VP	
Total Dissolved Solids	168	mg/L			4/29/24 14:52	SM 2540 C	CF, VM	
Total Nitrogen by IC	3.8	mg/L			5/9/24 21:24	Calculated	EUROFINS	
Total Phosphorus	-	mg/L	LE	0.020	5/9/24 21:24	EPA 365.1	EUROFINS	
Total Suspended Solids	21.1	mg/L		2.5	4/29/24 15:15	SM 2540 D	CF, VM	
Zinc Reported in µg/L	31	µg/l	O	2.0	5/8/24 09:00	EPA 200.8	EUROFINS	
Sample Comments: Only one Phosphorus analysis was requested. The dissolved PO4 was submitted, so I think D-PO4 was run.								


Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469						Report# /Lab ID#: AC33252 Report Date: 6/5/24 Sample Name: TAMU-CC Stormwater (City) Date Received: 05/17/2024 Time: 15:09 Date Sampled: 05/17/2024 Time: 11:45		
Phone: EMAIL: roberta3@cctexas.com								

Parameter	Result	Unit	Flag	RL s	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli (MPN)	>60490.0	MPN	D	25	5/17/24 15:37	SM 9223 B - Coli	MONICAS	
Enterococci	60490.0	MPN		1.0	5/17/24 15:42	Enterolert	MS/CF	
Oil and Grease	18.1	mg/l	K, X	5.0	6/3/24 11:00	EPA 1664 B	VM	
pH (Field)	8.3	S.U.			5/17/24 11:45	SM 4500H+ B	FIELD	
Total Cyanide	2.3	µg/l	O, J	5.0	5/29/24 23:04	EPA 335.4	EUROFINS	
Total Hardness as CaCO3	165.22	mg/L		10	5/22/24 09:00	SM 2340 C	CF	
Water Temperature (in °C)	26.2	°C			5/17/24 11:45	SM 2550 B	FIELD	

Sample Comments:

This analytical report is respectfully submitted by the Water Utilities Laboratory. The enclosed results reflect only the sample(s) identified above. The results have been carefully reviewed and, unless otherwise indicated, meet the NELAC requirements as described by the Water Utilities Lab's QA/QC program. No part of this report shall be reproduced or transmitted in any form or by any means without the written consent of the City of Corpus Christi-Water Utilities Lab.

Respectfully Submitted,



Technical Director (or designee)

Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469						Report# /Lab ID#: AC33253 Report Date: 6/3/24 Sample Name: TAMU-CC Stormwater (City) Date Received: 05/17/2024 Time: 16:23 Date Sampled: 05/17/2024 Time: 15:32		
Phone:						EMAIL: roberta3@cctexas.com		
Parameter	Result	Unit	Flag	RL _s	Date/Time Analyzed	Method	Analyst	Analysis Comments
Ammonia by Probe	0.20	mg/L		0.1	5/24/24 10:20	SM 4500 NH3 D -2	VM	
Atrazine	< 0.60	µg/l	O, H	10	5/28/24 09:16	EPA 625.1	EUROFINS	
Biochemical Oxygen Demand	4.1	mg/L	H	3.1	5/20/24 12:19	SM 5210 B	VP	
Cadmium in µg/L	< 0.26	µg/L	O	2.0	5/29/24 14:00	EPA 200.8	EUROFINS	
Chemical Oxygen Demand	8	mg/l		10	5/22/24 10:00	SM 5220 D	VM	
Chromium reported in µg/L	2.9	µg/l	O^, J	4.0	5/29/24 14:00	EPA 200.8	EUROFINS	
Copper reported in µg/L	6.5	µg/l	O	4.0	5/29/24 14:00	EPA 200.8	EUROFINS	
Dissolved Phosphorous	0.055	mg/l	O	0.020	5/25/24 19:27	EPA 365.1	EUROFINS	
Lead Reported in µg/L	1.2	µg/l	O, J	2.0	5/29/24 14:00	EPA 200.8	EUROFINS	
Nickel Reported in µg/L	1.2	µg/L	O, J	2.0	5/29/24 14:00	EPA 200.8	EUROFINS	
Nitrate by IC	0.40	mg/L		0.016	5/18/24 00:46	EPA 300.0	CF/MS	
Total Dissolved Solids	160	mg/L			5/23/24 10:05	SM 2540 C	VM	
Total Kjeldahl Nitrogen	0.59	mg/L		0.20	5/30/24 10:33	EPA 351.4	VP	
Total Nitrogen by IC	0.99	mg/L			5/31/24 08:56	Calculated	MICHAELM10	
Total Phosphorus	0.055	mg/L	O	0.020	5/25/24 19:25	EPA 365.1	EUROFINS	
Total Suspended Solids	7.1	mg/L		2.5	5/20/24 13:44	SM 2540 D	VP	
Zinc Reported in µg/L	41	µg/l	O	4.0	5/29/24 14:00	EPA 200.8	EUROFINS	
Sample Comments: B - The analyte was found in both the sample and the blank (Chromium)								

ATTACHMENT G

**Annual Report and SWMP Implementation
Application Form Item O.d**

Attachment G.1
City of Corpus Christi
Phase I MS4 Permit Renewal Application
Annual Report and SWMP Implementation

The City of Corpus Christi (City), Port of Corpus Christi Authority of Nueces County (POCCA), Del Mar College (Del Mar), and Texas A&M University – Corpus Christi (TAMUCC) [collectively referred to as Co-applicants] hold a Phase I Texas Pollutant Discharge Elimination System (TPDES) Municipal Separate Storm Sewer System (MS4) permit (No. WQ0004200000) to discharge storm water from the MS4 boundaries. The existing permit was issued October 21, 2020 and will expire October 21, 2025.

Each co-applicant developed a Stormwater Management Plan (SWMP) that specifies the activities taken to achieve the eight minimum control measures (MCMs) required by the permit. Measurable goals are developed and implemented according to the SWMP over the five-year permit term. The effectiveness of the SWMP is examined every year with the Annual Report and changes are made if any best management practice (BMP) is deemed to be ineffective. A summary of how each co-applicant has met the program requirements is outlined in Attachment G.2.

Attachment G.2
City of Corpus Christi
Phase I MS4 Permit Renewal Application
Annual Report and SWMP Implementation

Minumum Control Measure (MCM)	City of Corpus Christi
MCM 1, MS4 Maintenance Activities.	The City uses strategies such as flatter channel slopes, vegetative cover, and litter control programs to maintain stormwater controls. Street maintenance activities also aim to minimize pollutant runoff.
MCM 2, Post–Construction Stormwater Control Measures.	The City enforces stormwater quality management plans for new developments and redevelopments, requiring plans that minimize erosion and pollutant discharge. These projects must adhere to specific guidelines, including environmental considerations and compliance with flood hazard prevention codes, while a comprehensive master planning process ensures effective stormwater management across the city.
MCM 3, Illicit Discharge Detection and Elimination.	The City implements a comprehensive program to detect and eliminate illicit discharges and improper disposal into the MS4, which includes regular field screening, inspections, and spill response procedures. This program also involves public awareness efforts, coordination between various agencies for spill management, and measures to prevent infiltration from sanitary sewers.
MCM 4, Pollution Prevention and Good Housekeeping for Municipal Operations.	The City has implemented various environmental initiatives to reduce pollution from municipal operations, including the installation of bilge water reclamation systems at marinas, waste management practices at landfills, and stormwater pollution prevention measures at wastewater treatment plants and the airport. Additionally, the city educates the public on proper waste disposal, pesticide use, and landscape standards to further protect water quality and reduce non-point source pollution.
MCM 5, Industrial and High Risk Runoff.	The City conducts inspections on Type 1 and Type 2 facilities at least once per permit term to ensure compliance with stormwater discharge regulations, focusing on high-risk industrial facilities and those contributing significant pollutant loads. Inspections are based on factors like the need for a TPDES permit, complaints, and prior violations. Enforcement actions are outlined in the city's ordinances.
MCM 6, Construction Site Stormwater Runoff.	The City enforces erosion and sediment control measures at construction sites through inspections and requires site operators to implement BMPs for stormwater management. The Development Services ensures compliance through plan reviews, education, and regular training for staff and contractors, while the Environmental Services Division monitors construction sites to reduce pollutants entering the MS4.
MCM 7, Public Education, Outreach, Involvement and Participation	The City's public awareness and education program engages the community through year-round outreach, including social media, billboards, and events.. The program also includes employee training, a call center, and a mobile app for reporting environmental issues, as well as educating the public on proper disposal of oil, hazardous waste, and the use of pesticides, herbicides, and fertilizers.
MCM 8, Monitoring, Evaluating and Reporting.	The City's Stormwater-Environmental Services Division operates a wet weather screening program to detect illicit discharges and inspect stormwater lines following qualifying rain events. The program includes required sampling at designated outfalls and additional sites for co-permittees, with samples collected during the wet and dry seasons. The division also conducts quarterly receiving water body sampling to assess water quality, in coordination with the Nueces River Authority and Texas Clean Rivers Program.

Attachment G.2
City of Corpus Christi
Phase I MS4 Permit Renewal Application
Annual Report and SWMP Implementation

Minumum Control Measure (MCM)	Port of Corpus Christi Authority of Nueces County
MCM 1, MS4 Maintenance Activities.	The POCCA maintains structural controls, reduces floatables, and maintains roadways by performing routine inspections, maintaining proper disposal practices, and regular street sweeping.
MCM 2, Post–Construction Stormwater Control Measures.	POCCA implements and enforces controls to minimize pollutant discharge from new and redeveloped areas by expanding the master planning process to include all significant projects, ensuring the SWMP includes regulatory mechanisms and BMP strategies, and assessing the impacts on receiving waters for all flood control projects, with new structures designed for erosion prevention and pollutant removal.
MCM 3, Illicit Discharge Detection and Elimination.	POCCA implements procedures to prevent illicit discharges and improper disposal by regularly monitoring storm water discharges, conducting tenant audits, and ensuring compliance with TPDES permits. They also manage overflows and infiltration, promote proper disposal of hazardous wastes, and maintain screening and inspection programs to address and eliminate illicit discharges promptly.
MCM 4, Pollution Prevention and Good Housekeeping for Municipal Operations.	POCAA implements a pollution prevention and good housekeeping program for municipal operations, ensuring proper disposal of waste removed from the MS4 or other municipal operations. It also maintains a list of all municipal operations subject to the program and all municipally owned and operated industrial activities subject to TPDES or NPDES industrial stormwater regulations.
MCM 5, Industrial and High Risk Runoff.	PCCA does not own or operate industrial and high-risk runoff facilities, but manages discharges from port operations under a TPDES Multi-Sector General Permit. Tenant operations must comply with legal requirements, and permitted storm water and non-storm water discharges are allowed, with annual tenant audits conducted to review compliance, while ultimate enforcement is handled by the TCEQ.
MCM 6, Construction Site Stormwater Runoff.	POCCA uses a Construction Activities Environmental Checklist to ensure compliance with storm water runoff requirements for construction projects, providing technical specifications that meet TPDES Permit TXR150000 requirements to Port Contractors. Permitted non-storm water discharges from construction projects are allowed.
MCM 7, Public Education, Outreach, Involvement and Participation	POCCA provides regular SWMP training through the EMS program to port employees, contractors, and temporary employees, using technical specifications, requirements sheets, and an environmental awareness video. Additionally, POCCA collaborates with the City on public outreach programs through financial and in-kind contributions.
MCM 8, Monitoring, Evaluating and Reporting.	The City is responsible for storm water monitoring and screening activities under the MS4 permit, using a watershed approach approved by the TCEQ. POCCA complements these activities through dry and wet weather screening programs, tenant audits, and routine inspections, ensuring compliance with environmental regulations and proper permitting for storm water discharges.

Attachment G.2
City of Corpus Christi
Phase I MS4 Permit Renewal Application
Annual Report and SWMP Implementation

Minumum Control Measure (MCM)	Del Mar College
MCM 1, MS4 Maintenance Activities.	Del Mar and the City's Storm Water Department maintain flood controls and storm water pipes on Del Mar properties, prioritizing repairs based on public safety, water quality, and aesthetics. Del Mar conducts routine inspections, debris removal, and contracts street sweeping services to ensure proper drainage and cleanliness.
MCM 2, Post–Construction Stormwater Control Measures.	Del Mar's storm water system, made of reinforced concrete and high-density polyethylene pipes, discharges into the City's system. Del Mar's construction storm water management program focuses on engineering controls, pollution prevention, and good housekeeping, as well as requiring contractors to follow the City's storm water management practices and submit necessary documentation.
MCM 3, Illicit Discharge Detection and Elimination.	Del Mar prohibits illicit discharges to the storm water system and has a comprehensive program for spill prevention, hazardous waste disposal, and limiting pollutants from construction sites. Del Mar also takes measures to prevent sanitary sewage overflows and investigates potential illicit discharges.
MCM 4, Pollution Prevention and Good Housekeeping for Municipal Operations.	Del Mar follows strict pollution prevention and housekeeping procedures, including compliance with Corpus Christi City Ordinances on yard waste, grass clippings, and litter control. The Physical Facilities Department maintains the grounds, contracts licensed firms for herbicide and pesticide application, and cooperates with the City's Vector Control programs.
MCM 5, Industrial and High Risk Runoff.	Del Mar's permitted MS4 area does not include Industrial or High-Risk Runoff.
MCM 6, Construction Site Stormwater Runoff.	Del Mar requires all contractors involved with construction projects on Del Mar properties to follow the requirements established by the City's Guidance Document for Developmental Planning & Construction Activities.
MCM 7, Public Education, Outreach, Involvement and Participation	The EHS Office at Del Mar provides employee training on storm water management and collaborates with the City and other agencies to organize community training sessions, potentially using Del Mar facilities for these events.
MCM 8, Monitoring, Evaluating and Reporting.	Del Mar conducts annual dry weather screenings of storm water lines to check for potential illicit discharges, using visual and olfactory monitoring techniques. the City handles wet weather screenings, including visual assessments and sample collection.

Attachment G.2
City of Corpus Christi
Phase I MS4 Permit Renewal Application
Annual Report and SWMP Implementation

Minimum Control Measure (MCM)	Texas A&M - Corpus Christi
MCM 1, MS4 Maintenance Activities.	TAMUCC operates and maintains structural flood controls, including subsurface storm sewer pipes, with SSC Service Solutions handling maintenance. The Environmental, Health & Safety Department conducts visual inspections to prioritize maintenance based on public health and safety, water quality, and aesthetics.
MCM 2, Post–Construction Stormwater Control Measures.	TAMUCC’s storm water management for construction focuses on engineering controls, pollution prevention, and good housekeeping to ensure storm water runoff quality, using silt fences, hay bales, or concrete rip rap at discharge points to minimize soil erosion and turbidity in bay waters during new construction.
MCM 3, Illicit Discharge Detection and Elimination.	TAMUCC prohibits non-stormwater discharges within the MS4 area and conducts dry and wet weather screenings to monitor and address potential pollutants. Authorized non-stormwater discharges include water line flushing and landscape irrigation. Measures to prevent sanitary sewage overflows, emergency response procedures, and hazardous waste disposal practices are in place, with financial tracking for SWMP elements.
MCM 4, Pollution Prevention and Good Housekeeping for Municipal Operations.	TAMUCC prevents illicit discharges through training and good housekeeping practices, maintaining the landscape to minimize litter and debris buildup. SSC Service Solutions manages storm water runoff from streets and parking lots, and contracts licensed commercial pesticide companies to apply pesticides, herbicides, and fertilizers, ensuring compliance with regulations and minimizing pollutant discharge.
MCM 5, Industrial and High Risk Runoff.	TAMUCC’s permitted MS4 area does not include Industrial or High-Risk Runoff.
MCM 6, Construction Site Stormwater Runoff.	TAMUCC’s storm water management for construction focuses on engineering controls, pollution prevention, and good housekeeping to ensure runoff quality, using silt fences, hay bales, or concrete rip rap to minimize soil erosion. Contractors must comply with TCEQ, TPDES regulations, and the City’s guidance for developmental planning and construction activities.
MCM 7, Public Education, Outreach, Involvement and Participation	The Pollution Prevention Partnership (P3) at TAMUCC, supported by the POCCA, provides environmental education, pollution prevention, and compliance assistance. Key programs include the AutoCheck Program for vehicle emissions testing and repairs, and the CleanFleet Program for free emission testing of fleet vehicles, affiliated with EPA’s SmartWay Program.
MCM 8, Monitoring, Evaluating and Reporting.	TAMUCC conducts annual dry and wet weather visual surveys of the MS4 area and collaborates with the City for storm event monitoring. These programs aim to detect pollutants, assess their impact, and investigate their origins, ensuring compliance and environmental protection.