



**Municipal Separate Storm
Sewer System (MS4)
2020/21 Annual Report**

TPDES Permit NO. WQ0004200000



November 1, 2020 – October 20, 2021

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*



January 25, 2022

Ms. Rebecca L. Villalba, Team Leader
TCEQ Stormwater and Pretreatment Team
P.O. Box 13087
MC-148
Austin, TX 78711-3087

SUBJECT: TPDES Permit No. WQ0004200000 – Annual Report

Dear Ms. Villalba:

Pursuant to Texas Pollutant Discharge Elimination System (TPDES) Permit Number WQ0004200000, Part IV.C Annual Report, attached you will find the required annual system-wide report which covers the period of November 1, 2020 through October 20, 2021. A new permit was issued on October 21, 2021. This report includes an overview for the entire Municipal Separate Storm Sewer System (MS4) and reports from each individual co-permittee on Stormwater Management Program implementation for the portions of the MS4 for which they are responsible. Pursuant to Part IV.A.I. of the permit, representative monitoring results are included on the enclosed Discharge Monitoring Report Forms which include one original and one copy.

Sincerely,

Robert C. Anderson
Environmental Services Superintendent
City of Corpus Christi Public Works Department

cc: Susan Clewis, Regional Director, TCEQ Region 14



TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM ANNUAL REPORT

NOVEMBER 2020 THROUGH OCTOBER 2021

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 that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

1/14/22

Robert C. Anderson
Environmental Services Superintendent
City of Corpus Christi Public Works Department

Date

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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, 2020 to October 20, 2021 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 2020 – October 2021

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 2020-21 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 revised within the specified compliance period and submitted to the TCEQ in October of 2021 for approval.

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. An I-plan for these segments is currently being developed.

The city has implemented targeted controls in the TMDL areas by focusing 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 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.

Tracking of targeted controls is to begin with the 2021-2022 reporting year.

V. 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 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.

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

VI. Summary of the data during the reporting year

During this reporting period, stormwater 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 3,500 gallons of bilge water, 3,000 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.

The program was cancelled because of COVID-19 in 2019. The city hopes to bring this program back next year.

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	4858 lbs
Corrosives	1,377 lbs
Oxidizers	3786 lbs
Pesticides	2921 lbs
Batteries	3287 lbs
Automotive Fluids	42898.7 lbs
Paint/Paint Related	1605 lbs
CFLs/Mercury Containing Equipment	567.5 lbs
Other (Aerosols, Cylinders, Non-Regulated, Reactive)	10816.7 lbs
Used Electronics	1580 lbs

TOTAL 73,696.9 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 2020/21 Solid Waste Services collected a total of 8,132.64 tons of recyclable materials. The total average monthly curbside recyclable material collected is 678 tons. The following is a breakdown by type of recyclable materials collected during this permit period:

Cardboard	2912.99 tons
Mixed Paper	3840.08 tons
Plastic	829.95 tons
Aluminum	234.8 tons
Tin	314.82 tons

TOTAL 8,132.64 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 27 new Notices of Intent (NOIs) for TPDES Multi Sector General Permit (TXR050000) for a total of 124 active NOIs. 10 new No Exposure Certifications for Multi Sector General Permit (TXR050000) were received for a total of 41 active No Exposure Certifications. There was 1 new NOI for a Concrete Production Facility (TXG1) during this permit year bringing the total to 9 active facilities.

Construction Site Notices

Ninety-three (93) new NOI's for TPDES Construction General Permit (TXR150000) were received this permit year for a total of 98 active NOIs.

Industrial Inspections

During the 2020-2021 Permit Year, Stormwater staff inspected 89 facilities through the Industrial & High-Risk program, which included 16 high risk, 68 low risk, 2 random facility inspections, and 3 no exposure facilities. Of the facilities that were inspected, 19 were found non-compliant, with deficiencies corrected after written notification of violation(s) except for one facility. One industrial facility required enforcement action that resulted in filing three court referrals for possible litigation. That facility is now in compliance with the stormwater ordinances.

Construction Site Inspections

Development Services and Stormwater staff conducted 2,542 inspections under the Construction Site Inspection Program with multiple inspections of some sites. Of these inspections, Development Services staff conducted 2,256 and Stormwater staff conducted 286. One hundred twenty-two (122) sites were found non-compliant, and deficiencies corrected after notification of the violations. The number of violations from Development Services inspections were not available. No construction site operators were referred to Environmental Court for prosecution for failure to correct violations.

VIII. Annual estimated expenditures for prior fiscal year and budget for current fiscal year.

Program	2020-21 Expenditures	2021 - 22 Budget
STORMWATER OPERATIONS PROGRAMS		
Stormwater Admin – Equipment Replacement	7,426	568,468
Stormwater Vegetation Management	2,390,262	2,935,581
Stormwater Concrete Maintenance	2,164,410	3,347,029
Stormwater Street Sweeping Program	570,168	1,096,718
Stormwater Channel Maintenance	3,676,114	4,747,012
Stormwater Treatment Operating Budget	752,627	1,364,063
Stormwater Flood Control Management	852,274	1,204,256
Stormwater Underground Pipe Inspection	34,554	34,554
Subtotal for All Stormwater Operations	\$8,285,999	\$15,297,681
SUPPORT PROGRAMS		
Recycling Program	3,481,730	2,807,278
Dead Animal Pick Up	99,204	86,658
Code Enforcement	2,937,795	1,294,517
Curbside Heavy Brush Collection	2,454,288	2,781,192
Hazardous Material Spill Response Team	5,525,901	4,502,633

Municipal Landfills	8,918,012	9,334,838
Education & Outreach	320,096	351,737
Water Conservation Education & Outreach	72,700	99,600
Household Hazardous Waste	100,000	100,000
Municipal Maintenance Yard Activities	59,286	58,572
Subtotal of All Support Programs	\$23,969,012	\$21,417,025
Total for all Stormwater Programs	\$32,255,011	\$36,714,706

*Please note that the City of Corpus Christi Fiscal Year is from October 1, 2020 – September 31, 2021. 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, 279 violations occurred regarding unauthorized set out and carts left in the right-of-way, and 0 violations for hauler issues such as lost trash and litter. Violations with brush and bulky items that were set out in unauthorized periods accounted for 3919 compliance violations. There were 46 violations written for other various compliance issues regarding litter, cleanliness and illegal dumping during the reporting period.

Compliance Investigations

During this reporting period 22,000 compliance investigations were conducted by Code Enforcement following reports, complaints, or observations of spills and 2,600 inspections resulted in violations. Of the inspections resulting in violations, 942 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 748, with 285 of those investigations resulting in violations.

Investigation	Violations	No Violations	Total Count
Dumping Liquids	60	52	112
Dumping Solids	13	3	19
Grass/Leaves	168	20	188
Sediment/Mud	17	5	22
Non-Environmental	0	99	99
Odor	0	0	0
Spills	27	191	218
Totals	285	814	1099

X. Public Education and Outreach

The COVID-19 pandemic has greatly affected our ability to meet with resident's face-to-face. The City Manager eliminated all face-to-face public outreach meetings for all departments. As a result, all the scheduled outreach events after March 14, 2020, were cancelled through the end of the permit year. Public outreach since the pandemic began has been primarily through billboards, website, distributing written materials along with branded premiums, and social media posts.

During the reporting period of November 1, 2020 through October 20, 2021, the City Stormwater Department participated in 862 events, gave 67 presentations, and reached 34,993 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, and 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, 1207 people were reached.

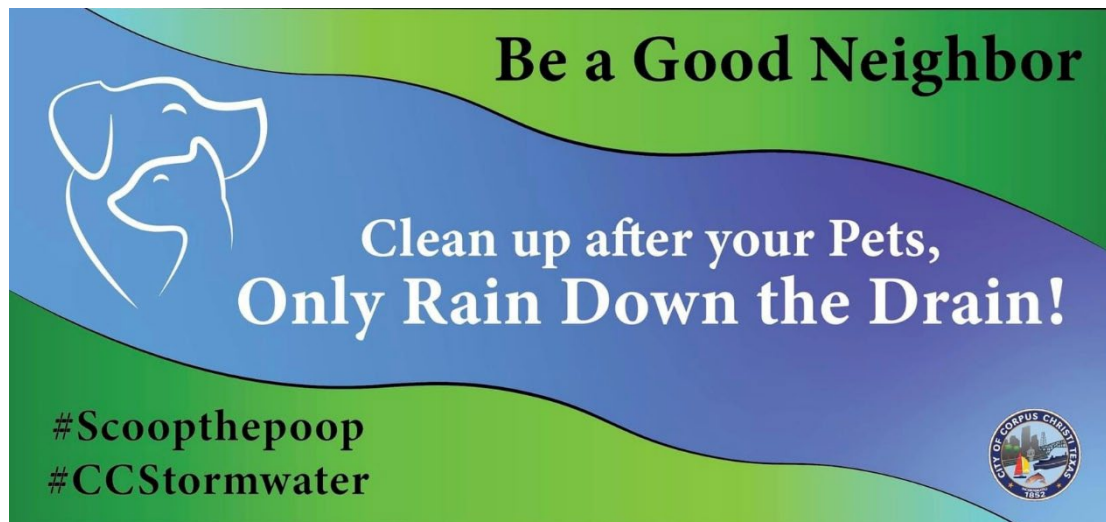
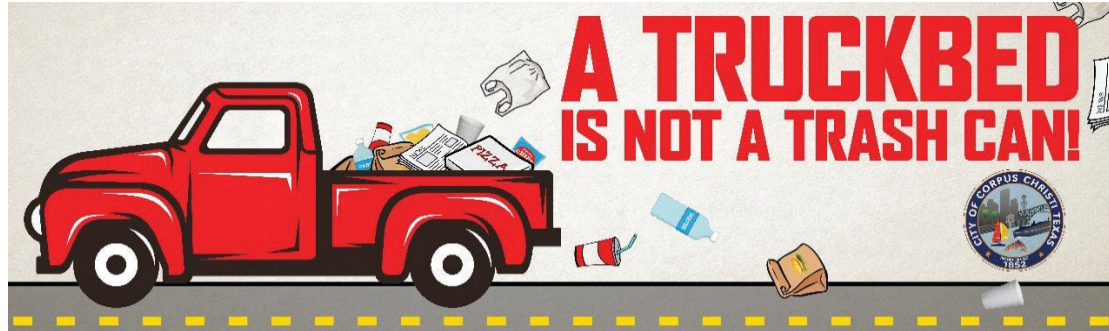
The Stormwater Division developed a training program for all new city employees as part of the New Employee Training. This training is held every Monday or Tuesday if Monday is a holiday. This program began on March 2, 2020. The presentation was initially in person, but due to COVID-19, the program was recorded, and the video is presented instead. A total of 709 new employees received the training that focuses on ways to prevent stormwater pollution not only on the job, but also in the home.

Partnerships

During the reporting period, the City continued to participate in the Coastal Bend Bays and Estuaries Program (CBBEP), Coastal Bend Bays Foundation (CBBF), Oso Bay Oso Creek Coordinating Committee, Local Emergency Planning Committee, and the Corpus Christi Xeriscape Steering 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 \$21,000 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 1,207 Neighborhood Cleanups and Activities. The Texas Adopt-A-Beach program held 3 cleanup events and 1061 volunteers picked up 15,425 pounds of litter over 58 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 2020/21 permit year, 500 pounds of trash was picked up during the Adopt-A-Park cleanup events. There were only three 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 in partnership with Texas Parks and Wildlife, the Coastal Bend Bays and Estuaries Program, United States Fish and Wildlife Service, Texas General Land Office, the US Coast Guard Auxiliary, and Audubon Texas for the Rookery Islands cleanup event. However, that event was canceled due to the COVID-19 pandemic in 2019 and have not resumed.

Adopt-A-Park Cleanup		
Sites	Volunteers	Pounds
Ropes Park	3	500
Rookery Islands	0	0
Total	3	500

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 2020/21 permit year, 80 inlet markers were placed on stormwater drains as part of public education and outreach in cooperation with the Surfrider Foundation.

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 22 stormwater related posts that had 3,625 total impressions (views) that resulted in 70 engagements from posts. The City Public Information Office social media posts tagged the Stormwater Department Facebook page 3 times producing a total of 17,442 impressions and 257 engagements. The combined social media activity totals 21,067 impressions and 327 engagements.

The City also has a website with sections dedicated to stormwater pollution prevention. The website was updated extensively in 2019. The

website since that time is updated as necessary with current information, additional content, and links to direct the reader to other resources available on the worldwide web.

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 361-826-CITY (2489), City's stormwater hotline number 361-826-3800, 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 an amobile 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 this reporting period, no water quality improvements or degradation were identified in the City's MS4. We have continued emphasizing means of reducing stormwater pollution through education & outreach, monitoring, 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 1356 tons of debris during the Permit Year via street sweeping, 123 tons from inlet cleaning, 23.7 tons removed by the vegetation maintenance crews from open ditches, and 1.35 tons from trash rakes at the pumping stations. The total amount of debris/litter recovered from the MS4 was 1503.5 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 64 Stormwater Quality Management Plans encompassing 1,149 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, 114 vehicle accidents with automotive fluid spilled were responded to. A total of 579.625 gallons of automotive fluids were captured and approximately 28,981.25 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, 2020, through October 20, 2021, the City of Corpus Christi's contractors swept 3,379 curb miles of streets. The Solid Waste Department has inhouse 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 86 flood control projects for water quality impacts in this reporting period.

Section 5. Pesticide, Herbicide & Fertilizer Application – This program was cancelled and no longer applies.

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, 2020, through October 20, 2021, 748 compliance investigations were conducted following reports, complaints, or observations of spills or prohibited discharges to the MS4 with 285 investigations resulting in violations. There was 1 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, 2020, the City of Corpus Christi's HAZMAT team expended \$5,525,901 as a result of responding to hazardous waste spills. The budget for the subsequent Fiscal Year (October 1, 2020, through September 30, 2021) is \$5,722,101.

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, 2020, through October 20, 2021, staff conducted 94 Industrial & High-Risk inspections, including 2 random facility inspections and 3 no exposure certification inspections. Of these inspections, 2 Industrial & High-Risk facilities were found non-compliant, with deficiencies corrected after written notification of violation except for one facility that was issued two court referrals for failing to obtain coverage under the TCEQ Industrial Multisector General Stormwater permit.

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, 2020, through October 20, 2021, 2,542 site visits under the Construction Site Inspection Program were conducted, with multiple visits to some sites. Of these inspections, 122 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. Zero (0) construction site operators 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 \$668,870.21 in operations during the Fiscal Year ending September 30, 2021.

These expenditures included \$21,000 spent on billboard education and \$117,503 spent on education and outreach supplies and events. Additionally, the Solid Waste Department spent \$144,140 in anti-littering education and outreach efforts and reached 79,865 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, 2020, through October 20, 2021, 259 Dry Weather Field Screening inspections were conducted, finding 19 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, 2020, through October 21, 2021, 17 Wet Weather Field Screening inspections were conducted, finding 3 locations with flow. During the dry period the City missed collecting a composite sample at the Carmel sample site. This was due to a lack of rain due to stage one drought conditions combined with equipment failures that prevented the collection of this sample. All other samples were collected within the permit seasons.

Appendices

Appendix A: Co- Permittee Annual Reports

Appendix A-1: Port of Corpus Christi

Authority ReportAppendix A-2: Del Mar

College District Report

Appendix A-3: Texas A&M University – Corpus Christi Report



- APPENDIX A -1
CO-PERMITTEE REPORTS
Port of Corpus Christi

January 14, 2022

Rebecca L. Ayala
City of Corpus Christi Utilities Department
P.O. Box 9277
Corpus Christi, Texas 78469-9277

Subject: Port of Corpus Christi Authority MS4 Co-Permittee Annual Report for TPDES Permit No. WQ0004200000 for November 1, 2020 – October 31, 2021

Dear Ms. Ayala,

The Port of Corpus Christi Authority (PCCA) has prepared a Co-Permittee Annual Report for the above-referenced Texas Pollutant Discharge Elimination System (TPDES) Municipal Separate Storm Sewer System (MS4) permit for the reporting period of November 1, 2020 through October 31, 2021. The Annual Report has been prepared to meet requirements set forth in IV.C of the existing MS4 Permit. A Report Checklist for the MS4 Permit Report is enclosed with this letter identifying where throughout the report specific requirements are addressed.

In accordance with Part IV.C of the existing permit, this Co-Permittee Annual Report is submitted to the City of Corpus Christi (City) by January 14, 2022 is enclosed for incorporation into the City's Annual Report which is due to the Texas Commission on Environmental Quality by March 1, 2022. Below are highlights from PCCA's Annual Report:

- There were no proposed changes to the PCCA's Storm Water Management Program (SWMP).
- PCCA received re-certification under the ISO 14001:2015 standard for the 14th consecutive year in 2020. A third-party audit was conducted in August 2021 with zero (0) non-conformances identified.
- PCCA also maintains Green Marine certification, an environmental benchmarking certification program for the maritime industry.
- Through the Tenant Audit Program, PCCA conducted thirty-eight (38) tenant audit and inspections during the reporting period within PCCA property, including the MS4 area. No illicit discharges were identified during the PCCA audits.
- PCCA monitors storm water discharges from operations at the PCCA Maintenance Facility for compliance with TPDES Multi-Sector General Permit (MSGP), Authorization No. TXR05K365. Results of monitoring can be found in Sections 4 and 8 of the Annual Report. In addition, PCCA conducted sixty-six (66) monthly, routine, follow-up, and maintenance inspections as well as an annual MSGP inspection during the reporting period.
- Construction projects undergo an environmental review prior to bidding using a Construction Activities Environmental Compliance Checklist. During the reporting period, PCCA advertised twenty-three (23) construction or material handling projects. Technical specifications on environmental issues including storm water pollution prevention are included in the bid documents as applicable.

- During the reporting period, PCCA conducted site inspections at all construction sites at a minimum of once a day, five days a week, which included stormwater compliance. It is estimated that over 500 inspections of construction sites were conducted around the Port, some of which are outside the MS4 area. Any issues related to stormwater identified during these inspections were managed in accordance with the associated permit and storm water pollution prevention plans (SWP3s).
- The PCCA continues to require stevedores to develop and implement an Environmental Management System (EMS) as a Tariff requirement. The stevedores' EMS programs are intended to ensure compliance, continual improvement of environmental performance, and pollution prevention. PCCA continued to work with stevedores throughout 2020 and 2021 to improve their EMS programs, performance, and management reviews. This includes records review, inspections, and site visits conducted throughout various PCCA properties.
- During the reporting period, PCCA provided training and hosted education events for staff members. PCCA contributes financial assistance to several organizations to further the environmental and educational goals of these organizations. In addition, PCCA installed the marine debris skimmer in the Salt Flats Ditch and will conduct community outreach and education events related to marine pollution prevention.

The Port continues to manage its storm water programs in accordance with the PCCA SWMP, as required in the existing MS4 permit. This is accomplished through the PCCA's ISO 14001:2015 certified EMS program, whereby we prevent pollution, continually improve and maintain compliance of our operations. If you have any questions or concerns, please call me at (361) 885-6163.

Sincerely,
PORT OF CORPUS CHRISTI AUTHORITY



Sarah L. Garza
Director of Environmental
Planning and Compliance

Enclosures (2): Annual Report Checklist
 PCCA Co-Permittee Annual Report (November 1, 2020 to October 31, 2021)

Cc: Sean Strawbridge, Chief Executive Officer, Port of Corpus Christi Authority
Clark Robertson, Chief Operation Officer, Port of Corpus Christi Authority
Jeffrey Pollack, Chief Strategy and Sustainability Officer, Port of Corpus Christi Authority
Robert P. Schulz, Manager of Environmental Compliance, Port of Corpus Christi Authority
McKenzie Ward, Environmental Specialist, Port of Corpus Christi Authority



**ANNUAL REPORT CHECKLIST
PHASE I MUNICIPAL
SEPARATE STORM SEWER
SYSTEM (MS4)**

Permit Number: WQ0004200000
Reporting Year: Year 13 (November 1, 2020 to October 31, 2021)
MS4: City of Corpus Christi
Permittee: Port of Corpus Christi Authority

Purpose: The following checklist includes all required elements that must be included in an Annual Report for a Phase I Municipal Separate Storm Sewer System (MS4) Permit.

CHECK IF ADDITIONAL INFORMATION IS REQUIRED	INDICATE YES, NO, OR N/A	ANNUAL REPORT REFERENCE	REQUIRED ELEMENT
I. <u>SWMP Overview</u>			
	yes	Section 9.0	A. Signature and Certification: Does the report include a signature from each co-permittee?
	yes	Section 9.0	1. Do all the signatures meet the requirements of 30 TAC Section? <i>For a municipality, state, federal, or other public agency, the report must be signed by either a principal executive officer or a ranking elected official, or by a person who has been properly authorized.</i>
	yes	Section 9.0	2. Does the report include the following certification statement? "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."

PHASE I MS4 ANNUAL REPORT CHECKLIST
Reporting Year: Year 13 (November 1, 2020 to October 31, 2021)
Permittee: Port of Corpus Christi Authority



CHECK IF ADDITIONAL INFORMATION IS REQUIRED	INDICATE YES, NO, OR N/A	ANNUAL REPORT REFERENCE	REQUIRED ELEMENT
	N/A	N/A	B. Shared SWMP: For a shared SWMP, does the report describe the portion of the SWMP that this permittee has implemented?
	yes	Section 2.0	C. Revisions: Does this report include any proposed changes to the SWMP in the coming reporting year?
	N/A	N/A	<i>If yes, then briefly describe revisions to SWMP</i>
	yes	Section 3.0	1. Does the report indicate whether any revisions are needed to the assessments of controls or to the fiscal analysis that was most recently reported?
	yes	Section 4.0	2. Does the report include a summary of data that was collected during the reporting year?
	yes	Tables 4-1 and 4-2 and 4-3	3. Does the above data include monitoring data?
			D. Expenditures
	yes	Section 6.0	1. Does the report include a summary of the expenditures over the reporting period, with a breakdown of the major elements of the SWMP (See Section II below)?
	yes	Table 6-1	2. Does the report include the budget for the next reporting year?
			E. Activities: Does the report include a summary of the following?
	yes	Section 7.1	1. Enforcement actions
	yes	Sections 5.3 and 7.2	2. Inspections
	yes	Section 7.3	3. Public education programs
	yes	Section 5.1	4. Number of NPDES and TPDES NOIs received for each general permit
	yes	Section 5.2	5. Number of site notices received from small construction site operators seeking CGP coverage
			F. Water Quality: Does the report include information on the following?
	yes	Section 8.0	1. Identification of any water quality improvements or degradation.
	yes	Section 8.0	2. Progress towards measurable goals
	yes	Section 8.0	3. Measured reductions in pollutants

PHASE I MS4 ANNUAL REPORT CHECKLIST
Reporting Year: Year 13 (November 1, 2020 to October 31, 2021)
Permittee: Port of Corpus Christi Authority



CHECK IF ADDITIONAL INFORMATION IS REQUIRED	INDICATE YES, NO, OR N/A	ANNUAL REPORT REFERENCE	REQUIRED ELEMENT
II. <u>SWMP Elements</u>			
	yes	Section 1.0 & Section 8	A. SWMP Implementation: Does the Annual Report include information on the status of implementing the SWMP?
	yes	Section 1.0	B. Compliance Schedules: Does the report include information on compliance with schedules that are listed in the permit?
			C. SWMP Status: Does the Annual Report include information on the status of each of the following sections of the SWMP (revise as necessary)?
	yes	Section 8.1	1. Structural Controls
	yes	Section 8.2	2. Areas of New Development and Significant Redevelopment
	yes	Section 8.3	3. Roadways
	yes	Section 8.4	4. Flood Control Projects
	yes	Section 8.5	5. Pesticide, Herbicide, and Fertilizer Application
	yes	Section 8.6	6. Illicit Discharges and Improper Disposal:
	yes	Section 8.6	a. Non-storm Water
	yes	Section 8.6	b. Overflows and Infiltration
	yes	Section 8.6	c. Floatables
	yes	Section 8.6	d. Household Hazardous Waste and Used Motor Vehicle Fluids
	yes	Section 8.6	e. MS4 Screening and Illicit Discharge Inspections
	yes	Section 8.6	f. Elimination of Illicit Discharges and Improper Disposal
	yes	Section 8.6	g. List of Discharges to MS4 authorized under NPDES or TPDES permit
	yes	Section 8.7	7. Spill Prevention and Response

PHASE I MS4 ANNUAL REPORT CHECKLIST
 Reporting Year: Year 13 (November 1, 2020 to October 31, 2021)
 Permittee: Port of Corpus Christi Authority



CHECK IF ADDITIONAL INFORMATION IS REQUIRED	INDICATE YES, NO, OR N/A	ANNUAL REPORT REFERENCE	REQUIRED ELEMENT
	yes	Section 8.8	8. Industrial & High-Risk Runoff
	yes	Section 8.9	9. Construction Site Runoff
	yes	Section 8.10	10. Public Education
	N/A	N/A – None	11. Additional Control Measures Required by Permit (list):
	yes	Section 8.11	12. Monitoring Programs
	yes	Section 8.11	a. Dry Weather Screening
	yes	Section 8.11	b. Wet Weather Screening
	yes	Section 8.11	c. Industrial and High-Risk Runoff Monitoring Program
	yes	Section 8.11	d. Representative Storm Event Monitoring
	yes	Section 8.11	e. Floatables Monitoring
	N/A	N/A – Measurable Goals are included in the SWMP, not the Annual Report	D. Measurable Goals: Does the annual report include measurable goals for each of the above
III. <u>Additional Requirements (list)</u>			
	N/A	N/A – None	A.



MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) CO-PERMITTEE ANNUAL REPORT

TPDES PERMIT NO. WQ0004200000
FOR
NOVEMBER 1, 2020 – OCTOBER 31, 2021



PORTCORPUS CHRISTI®

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In accordance 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) submits this Annual Report for Reporting Year 2021 of the current MS4 permit. The current permit was issued on August 11, 2008 and was renewed on October 21, 2020 by the Texas Commission on Environmental Quality (TCEQ).

This report has been provided to the City of Corpus Christi for compilation into a 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 due date of March 1, 2020. The PCCA Annual Report pertains to those activities that occurred from November 1, 2020, through October 31, 2021, that relate to the portions of the MS4 for which PCCA is the operator.

1.0 STATUS OF IMPLEMENTING THE SWMP

Part III.C of the MS4 permit includes a Storm Water Management Program (SWMP) compliance deadline to fully implement all new items required in the SWMP within one year of permit issuance. All elements of the PCCA SWMP are fully implemented and the results of the implementation are described in more detail throughout this report.

2.0 PROPOSED CHANGES TO THE SWMP

There were no changes to the SWMP during the reporting period. The plan is reviewed for any necessary changes when there is a technical or operational change in the field. Changes to the SWMP can also be proposed during the monthly MS4 inspections.

3.0 REVISIONS TO THE ASSESSMENT OF CONTROLS AND THE FISCAL ANALYSIS

The 2020 expenditures that were included in the previous annual report have been modified to reflect all costs as a result of the year-end closeout. Section 6.0 of the Annual Report describes annual expenditures for the prior fiscal year and the budget for the current fiscal year.

4.0 SUMMARY OF DATA

The City of Corpus Christi maintains responsibility for conducting wet weather monitoring and floatables monitoring, as described in Part IV of the MS4 permit. However, PCCA monitors and collects data related to storm water runoff. Within the MS4, the PCCA collects and monitors storm water runoff from the Maintenance Facility, which is authorized to discharge storm water associated with industrial activities under the TPDES Multi-Sector General Permit (MSGP) No. TXR050000. The PCCA has established an objective and target under its Environmental Management System (EMS) for storm water discharges to comply with the numeric limitations for hazardous metals and Sector Q benchmark levels outlined in the MSGP. In order to minimize the amount of heavy metals

and other pollutants from impacting stormwater runoff, PCCA has installed structural controls at all inlets at the Maintenance Facility as well as nonstructural controls outlined in PCCA's Best Management Practices Manual. The following sections summarize Maintenance Facility storm water analytical results for hazardous metals monitoring and benchmark monitoring.

4.1 HAZARDOUS METALS MONITORING

Samples of storm water discharges from the Maintenance Facility were collected in December 2020 and March 2021 to be analyzed for twelve (12) hazardous metals required by the MSGP. All monitoring results were below the daily maximum effluent limitations for discharges to tidal waters, as described in Section Q of the MSGP. Tables 4-1 and 4-2 provide summaries of hazardous metals monitoring results and the associated daily maximum effluent limitations.

**Table 4-1
ANNUAL HAZARDOUS METALS MONITORING RESULTS AT
PCCA MAINTENANCE FACILITY**

Parameter	Units	Daily Maximum Effluent Limitation, Tidal Waters	2021 Analytical Results Sample ID: MF-SW-1 03/17/2021 0952
Total Arsenic	mg/L	0.3	0.0017
Total Barium	mg/L	4.0	0.75
Total Cadmium	mg/L	0.3	<0.001
Total Chromium	mg/L	5.0	0.0083
Total Copper	mg/L	2.0	0.023
Total Lead	mg/L	1.5	0.017
Total Manganese	mg/L	3.0	0.060
Total Mercury	mg/L	0.010	<0.0002
Total Nickel	mg/L	3.0	0.0053
Total Selenium	mg/L	0.3	<0.002
Total Silver	mg/L	0.2	<0.0001
Total Zinc	mg/L	6.0	0.61

**Table 4-2
ANNUAL HAZARDOUS METALS MONITORING RESULTS AT
PCCAMAINTEANCE FACILITY**

Parameter	Units	Daily Maximum Effluent Limitation, Tidal Waters	2020 Analytical Results Sample ID: MF-SW-1 12/30/20 2038
Total Arsenic	mg/L	0.3	0.0041
Total Barium	mg/L	4.0	0.74
Total Cadmium	mg/L	0.3	<0.001
Total Chromium	mg/L	5.0	0.013
Total Copper	mg/L	2.0	0.026
Total Lead	mg/L	1.5	0.018
Total Manganese	mg/L	3.0	0.24
Total Mercury	mg/L	0.010	<0.0002
Total Nickel	mg/L	3.0	0.0056
Total Selenium	mg/L	0.3	<0.002
Total Silver	mg/L	0.2	<0.0001
Total Zinc	mg/L	6.0	0.71

4.2 BENCHMARK MONITORING

In accordance with Benchmark Monitoring Requirements in the MSGP, storm water discharges from the Maintenance Facility were collected and analyzed for the five (5) Sector Q benchmark parameters. Storm water samples were collected in December 2020, March 2021 and August 2021. Analytes for the December 2020 and March 2021 sampling events exceeded the Sector Q benchmark levels outlined in the MSGP in all five (5) parameters, including Aluminum, Iron, Lead, Zinc, and Total Suspended Solids. Table 4-3 summarizes the results of the December 2020 semiannual benchmark monitoring requirements. Table 4-4 summarizes the results of the March 2021 semiannual benchmark monitoring. An investigation into the cause of these exceedances was conducted and found that there was structural damage to an area of the stormwater drain leading to the outfall where the samples were collected. The damaged structure allowed sediments to be picked up by storm water during a rainfall event which contributed to the elevated pollution levels. Other contributing factors include dirt in the inlet filters, or waddles that had slipped out of place during rain events. The stormwater filter system near Outfall #1 was replaced as a temporary solution to this issue while construction plans are underway to permanently fix this area of the storm drain system. In the next sampling event levels of pollutants significantly decreased, showing that the filter worked to block elevated pollutants that resulted from the damaged stormwater conveyance system. Table 4-5 summarizes monitoring results for the August semiannual benchmark monitoring requirements. The analytes for the August sampling event showed

that Zinc concentration slightly exceeded the Sector Q benchmark levels outlined in the MSGP.

Table 4-3
SECTOR Q BENCHMARK MONITORING RESULTS AT PCCA MAINTENANCE FACILITY

Parameter	Units	Sector Q Benchmark Levels	2020 Analytical Results Sample ID: MF-SW-1 12/30/20 2038
Total Aluminum	mg/L	1.2	3.2
Total Iron	mg/L	1.3	4.0
Total Lead	mg/L	0.010	0.018
Total Zinc	mg/L	0.16	0.71
Total Suspended Solids	mg/L	0	172

* Red denotes exceedance of benchmark value

Table 4-4
SECTOR Q BENCHMARK MONITORING RESULTS AT PCCA MAINTENANCE FACILITY

Parameter	Units	Sector Q Benchmark Levels	2021 Analytical Results Sample ID: MF-SW-1 03/17/2021 0952
Total Aluminum	mg/L	1.2	2.3
Total Iron	mg/L	1.3	3.0
Total Lead	mg/L	0.010	0.017
Total Zinc	mg/L	0.16	0.61
Total Suspended Solids	mg/L	50	114

* Red denotes exceedance of benchmark value

Table 4-5
SECTOR Q BENCHMARK MONITORING RESULTS AT PCCA MAINTENANCE FACILITY

Parameter	Units	Sector Q Benchmark Levels	2021 Analytical Results Sample ID: MF-SW-2 08/05/2021 1102
Total Aluminum	mg/L	1.2	0.615
Total Iron	mg/L	1.3	0.723
Total Lead	mg/L	0.010	0.00355
Total Zinc	mg/L	0.16	0.183
Total Suspended Solids	mg/L	50	8.43

* Red denotes exceedance of benchmark value

5.0 SUMMARY OF NPDES AND TPDES NOTICES OF INTENT, SMALL CONSTRUCTION SITE NOTICES, AND INSPECTIONS AT INDUSTRIAL AND CONSTRUCTION SITES

The following sections provide a summary of the National Pollutant Discharge Elimination System (NPDES) and TPDES Notices of Intent (NOIs) 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.

5.1 NPDES AND TPDES NOTICE OF INTENT (NOI)

During the reporting period, PCCA received a Large Construction Site Notice of Intent (NOI) from Rib Contracting Inc. under TPDES Permit No. TXR150000 for the Good Hope DMPA Cell J Improvement Project. PCCA also maintains an NOI for this project. Additionally, PCCA received an NOI from Haas Anderson Construction, Ltd. for activities to expand and improve Rincon Road from Joe Fulton International Trade Corridor. PCCA also maintains an NOI for this project. Neither of these projects are within an MS4 area.

The Harbor Bridge Project has been underway since 2016 and continues to be covered under the CGP. The project crosses PCCA property, and the contractor, Flatiron LLC., has leases in place for the use of Port property, with stipulations for environmental compliance. Due to the expansive nature of the Harbor Bridge Project, <https://harborbridgeproject.com> has been developed and maintained to provide updates on the stages of construction. This website provides valuable updates to the community regarding traffic, status updates, and project overview. As part of the SWPPP developed for the Harbor Bridge Project, weekly stormwater inspections by the contractor are conducted throughout the site to ensure compliance with the CGP. In addition, Technical Provisions for the US 181 Harbor Bridge Project has been developed for the Texas Department of Transportation (TxDOT) which describes various requirements the contracting company is obligated to fulfill throughout construction including the development of a Comprehensive Environmental Protection Plan (CEPP) that incorporates all features of the ISO 14001 standard. Part of the CEPP includes the implementation of an environmental management system to track ongoing issues, identify environmental compliances, non-compliance and identify actions required/taken to correct any such non-compliance. Supporting documentation, including the SWPPP, the TPDES GCP NOI, and weekly environmental monitoring reports, are required to remain on-site and available for TxDOT inspection. PCCA Environmental Specialists inspect the project area during the Monthly MS4 inspection and report any findings to the project management team.

In connection with the ongoing Harbor Bridge Project, PCCA concluded the Hillcrest and Washington-Coles Voluntary Acquisition and Relocation Program. The voluntary relocation and acquisition program offered incentives to residents of the Hillcrest and

Washington-Coles neighborhoods to help them relocate after selling their property to PCCA. Although the program has ended, PCCA is still in the process of purchasing the last remaining properties in these neighborhoods. Throughout the acquisition process, PCCA contractors conduct asbestos and waste inspections and abatements when asbestos is identified. Potential hazards to the MS4 have been discovered including, household chemicals such as paint, pesticides, and fuels, lightbulbs, PCB and non-PCB ballasts, Mercury thermostats, and household appliances. PCCA oversees the proper collection, disposal, and recycling of these materials. Following completion of the abatement and waste removal, the homes are demolished, and the ground stabilized to prevent erosion.

5.2 SMALL CONSTRUCTION SITE NOTICES

During the reporting period, PCCA received a Small Construction Site NOI from AEP Texas for an Undersea Cable Transmission Project under TPDES Permit No. TXR150000. This project is in an MS4 area not operated by PCCA. Additionally, PCCA submitted an NOI for a TPDES general permit under TXG830000 to discharge petroleum contaminated water.

5.3 INDUSTRIAL AND CONSTRUCTION SITE INSPECTIONS

PCCA performs routine industrial facility inspections at the Maintenance Facility, which is authorized to discharge storm water associated with industrial activity under the TPDES MSGP. During the reporting period, PCCA performed twelve (12) industrial site inspections at the Maintenance Facility to assess compliance with the MSGP. In order to assess compliance with the MS4 permit, PCCA conducts routine inspections of properties within the MS4 area that are owned by the PCCA. PCCA conducted twelve (12) MS4 area inspections of PCCA property during the reporting period.

During the reporting period, PCCA conducted construction inspections, which included stormwater compliance checks, at all sites at a minimum of once a day, 5 days a week. It is estimated that over 500 inspections were completed in this manner at construction sites throughout the Port, some of which are not in the MS4 area. Further information regarding inspection results can be found in Section 7.2 and Section 8 of this Annual Report.

6.0 ANNUAL EXPENDITURES FOR THE PRIOR FISCAL YEAR AND THE BUDGET FOR THE CURRENT FISCAL YEAR

In accordance with Part IV.C of the existing permit, annual expenditures for the prior fiscal year, with a breakdown for the major elements of the SWMP, and the current fiscal year within the reporting period are included in Table 6-1. PCCA budgets are approved by the Port Commission on a calendar year basis. The budget line items include allocations for storm water expenditures, the General Environmental budget, and the Environmental Management System budget. The General Environmental Budget for 2020 was \$3,114,867 and the General Environmental Budget for 2021 is \$3,642,424. This is the

primary budget in which the annual expenditures for routine stormwater costs are included. Projects related to storm water improvements range from surveying and updating storm water drainage information for input into design and construction projects, improvements to the existing drainage systems at our Bulk Terminal and Maintenance Facilities, and ongoing maintenance of drainage infrastructure and controls. Additional detail on budgets and expenditures for the reporting period where the elements of the SWMP are captured, is included in Table 6-1.

Table 6-1
ANNUAL EXPENDITURES AND BUDGET RELATED TO STORM WATER

Major Elements of SMMP	Budget Program	2020 Expenditure	2021 Budget	2021 Expenditure	2022 Budget
Monitoring and Screening	General Environmental (Stormwater)	\$256,010	\$594,250	\$10,935,249	\$340,500
Measurable Goals	Construction Projects (Capital and Maintenance)	\$8,805,126	\$16,077,512	\$10,935,249	\$12,416,369
Port Operation Budget	Labor and Expenses	\$67,951,393	\$74,741,951	\$63,109,970	\$80,816,984
Structural Controls	Construction Projects (Maintenance)	\$8,805,126	\$16,077,512	\$10,935,249	\$12,416,369
Areas of New Development and Significant Redevelopment	Construction Projects (Capital)	\$38,000,000	\$170,900,000	\$92,100,000	\$106,448,582
Roadways	Construction Projects (Maintenance)	\$8,805,126	\$16,077,512	\$10,935,249	\$12,416,369
Flood Control Projects	Construction Projects (Capital)	\$38,000,000	\$170,900,000	\$92,100,000	\$106,448,582
Pesticide and Herbicide Application	Maintenance Operations – Labor and Expenses	\$8,805,126	\$16,077,512	\$10,935,249	\$12,416,369
Illicit Discharges and Improper Disposal	General Environmental (Waste Management)	\$117,932	\$235,637	\$132,848	\$285,680
Spill Prevention and Response	General Environmental	\$1,014,504	\$2,198,300	\$977,602	\$2,578,250
Industrial and High-Risk Runoff	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Construction Site Runoff	General Environmental (Stormwater)	\$256,010	\$594,250	\$149,813	\$340,500
Public Education	General Environmental	\$256,010	\$594,250	\$149,813	\$340,500

7.0 SUMMARY OF ENFORCEMENT ACTIONS, INSPECTIONS, AND PUBLIC EDUCATION PROGRAMS

The following sections provide a summary describing the number and nature of

enforcement actions, inspections, and public education programs that occurred during the reporting year.

7.1 ENFORCEMENT ACTIONS

During the reporting period, zero (0) enforcement actions were issued against PCCA.

The PCCA does not currently issue enforcement actions against other entities; therefore, PCCA issued zero (0) enforcement actions during the reporting period. However, PCCA ensures tenant and port user environmental compliance through tariff requirements and lease agreements. Lease language requires the tenant to not only follow applicable State and Federal regulations regarding spill prevention and response but also report to PCCA spills and clean them up to background levels. During the term of the lease, PCCA conducts an annual inspection to evaluate the tenant's compliance with the lease. Prior to a lease ending, PCCA also conducts an inspection to ensure no evidence of spills, waste, or debris remain.

While PCCA does not issue enforcement actions against parties responsible for spills on or adjacent to Port property, PCCA tracks all spills and works with the responsible parties to ensure all spills are properly cleaned. Figure 7-1 shows all the spills that occurred in 2021 and tracks the quantity of material spilled by responsible party each month. PCCA reviews its own operations practices after a spill occurs to determine if it was preventable. If a spill was not preventable, PCCA will update its best management practices to prevent a spill of a similar nature.

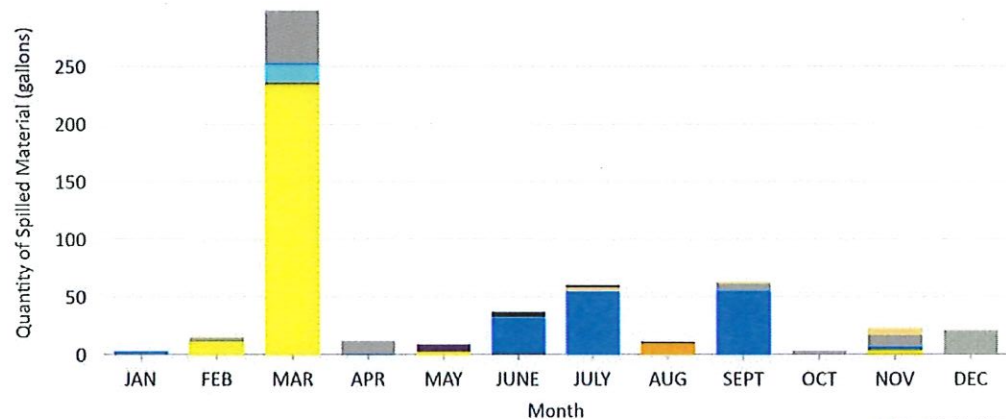
Figure 7-1 REPORTED SPILLS



Reported Spills per
Responsible Party Group
(Gallons) [Number of
occurrences]

- UNKNOWN (0.0 gals) [12]
- ADJACENT PROPERTY OWNER (239 gals) [9]
- PORT USER (95 gals) [17]
- PCCA (142 gals) [13]
- TRANSPORTATION COMPANY (10 gals) [5]
- CONTRACTOR (4 gals) [3]
- LINE HANDLER (15 gals) [1]
- VEHICLE ACCIDENT (10 gals) [1]
- BARGE OPERATOR (2 gals) [1]
- DREDGER (5 gals) [1]
- VESSEL (0.0 gals) [1]
- MILITARY (0.0 gals) [1]

2021 - Quantity of Material Spilled by Responsible Party Group by Month (On-going)



Date Created: 11/30/2021

7.2 INSPECTIONS

As previously mentioned, during the reporting period, PCCA conducted site inspections at all construction sites which included stormwater compliance, at a minimum of once a day, 5 days a week. It is estimated that over 500 inspections were completed in this manner at construction sites throughout the Port, some of which are not in the MS4 area. Issues identified during any storm water inspection are managed in accordance with the associated SWP3 and general permit.

PCCA operates the Maintenance Facility, which complies with requirements of the MSGP under Authorization No. TXR05K365. The MSGP requires monthly, quarterly, and annual storm water inspections of the Maintenance Facility. Sixty-six (66) inspections were

conducted during the reporting period, including twelve (12) routine monthly inspections of the storm water conveyance system at the Maintenance Facility. Twelve (12) routine inspections for potential stormwater hazards within the MS4 area, one (1) annual comprehensive site compliance evaluation, four (4) storm water runoff visual monitoring inspections, two (2) hazardous metals analytical monitoring events, three (3) benchmark monitoring events, and thirty-two (32) inspections of structural controls by maintenance personnel.

PCCA continues to work with tenants and port users through lease agreements, tariffs, and various programs such as the tenant audit program to minimize the introduction of pollutants into the MS4. All tenants are audited annually to ensure compliance with their lease agreement. The audit involves a review of their environmental records and an inspection of their site to look for any non-conformities or potential hazards. Fifteen (15) tenant audits occurred within the MS4 area during the reporting period. No illicit discharges were observed with tenant operations.

The PCCA Wharfinger conducts visual inspections of all facilities including docks and laydown yards within the MS4 area to identify, and document areas needing attention/repairs. Under the supervision of the Wharfinger the PCCA Marine Maintenance Team performs maintenance and repairs to waterfront facilities and infrastructure.

Tracking of materials, floatables, spills, leaking equipment, and other pollutants are minimized using best management practices (BMPs). These BMPs are verified during routine inspections of public docks, storage yards, and their associated facilities. Additionally, employees are trained to identify damaged BMPs and replace them as needed. Deficiencies noted during compliance inspections of Port tenants, users, and stevedores are communicated to the responsible parties for corrective action.

The PCCA has a tariff requirement for stevedores to develop and implement their own Environmental Management System (EMS) program. All stevedores must conduct an annual review of their EMS, which must be reviewed and approved by PCCA Environmental Compliance Specialists for the stevedores to operate on PCCA property the following year. In the review process during this reporting period, one company's EMS review was determined to be insufficient. Environmental Specialists insisted that they conduct a more thorough review before their approval to operate on PCCA property was renewed. The stevedore company followed up with a review that met all necessary requirements. All stevedores' EMS reviews were approved by Environmental Specialists during the reporting period. The stevedores' EMS programs are intended to ensure compliance, continual improvement, and pollution prevention. PCCA monitors stevedores' EMS programs through site visits, records reviews, inspections, regular communication, and audits.

7.3 PUBLIC EDUCATION PROGRAMS

PCCA contributes financial assistance to a wide range of organizations throughout the community. Several of these organizations directly contribute to environmental

conservation and public education about the local environment. While each organization supported by PCCA has its own wide range of specific environmental goals, storm water management, environmental education for the public, and area institutions are a high priority. As such, PCCA contributed \$3,000 to the Coastal Bend Bays Foundation (CBBF), which includes annual sponsorship of CBBF's Earth Day Bay Day, and the Annual Conservation & Environmental Stewardship Awards Banquet. PCCA contributed \$174,029 to Coastal Bend Bays and Estuaries, \$10,000 to the Coastal Conservation Association, and \$510,000 to the Texas State Aquarium. PCCA also contributed \$90,000 to the Corpus Christi Air Quality Group, which funds a portion of the chairperson's position. Finally, PCCA contributed \$15,000 to the South Texas Botanical Gardens, and \$5,000 to Saltwater-Fisheries Enhancement

PCCA utilizes various means and methods to educate staff, users, stakeholders, and the community on storm water pollution prevention, environmental compliance, and spill prevention and response which is described further in the following section.

Staff Training and Education

Staff education includes annual storm water and Spill Prevention, Control, and Countermeasure (SPCC) training for all applicable employees. Also, training on best management practices and environmental management programs is provided to Operations staff monthly. Bulletin boards in strategic PCCA facilities are regularly updated to educate and inspire environmental compliance and stewardship.

To encourage employee participation, the SPCC and SWPPP training was conducted by a third party using a virtual platform to convey the necessary information and including a quiz at the end of the training session. Eighty-six (86) employees participated.

PCCA Users and Stakeholders

When a storm water compliance issue involving tenants, users, or stevedores occur, corrective and preventative action (CAPA) plans are requested from them in the event of a pollution incident. CAPAs are designed to discover the root cause of an incident in order to develop procedures or BMPs that will prevent the recurrence of the incident. CAPAs are tracked to identify frequent incident responsible parties for further interaction and continuing education on pollution prevention requirements mandated by Federal and State entities as well as PCCA's tariff items.

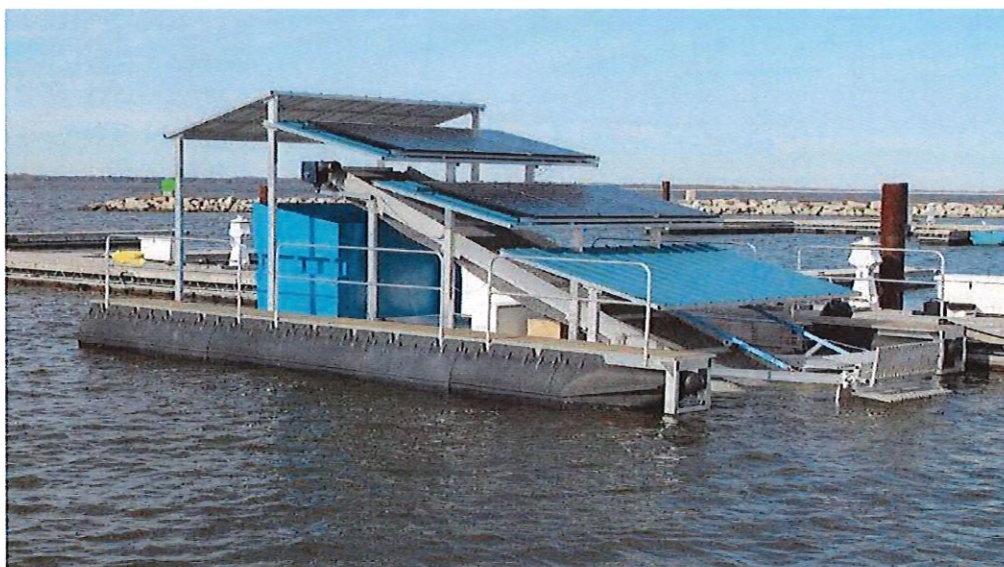
During the reporting period, the Environmental Department reconfigured its process for annual budget inspections of PCCA property. By using the mobile phone application "Survey 123" the budget inspections will now be consistent across surveyors. The information collected will be used with GIS technology to track and map areas of concern and plan repair schedules for damaged infrastructure. The Environmental Department will conduct these inspections quarterly in the next reporting period to fully assess the state of PCCA infrastructure and schedule improvement projects and repairs before any environmental issues arise.

Community and Stakeholders

PCCA strives to continually communicate its environmental performance, including storm water management performance, through multiple venues.

On April 21, 2020, the EPA announced PCCA was selected to receive 100% of the cost to purchase a stationary surface skimming trash collector, as shown in Figure 7-2, and three years of contractual maintenance, operation, and disposal of collected trash. The Salt Flats Ditch Trash Reduction & Prevention Project was developed as a result of the need to address the significant amount of trash being accumulated at the mouth of the Salt Flats Ditch during stormwater runoff events. Through this project, PCCA will develop an outreach campaign to ensure quarterly (at a minimum) events providing information to the public to create awareness about proper trash collection and disposal and illegal dumping. This information will include information about habitat impacts as well as strategies for reducing pollution impacts. The marine debris skimmer was installed at the Salt Flats Ditch on November 19, 2021.

Figure 7-2 MARINE DEBRIS SKIMMER



PCCA is part of the Water and Sediment Quality Implementation Team with the Coastal Bend Bays and Estuaries Program (CBBEP). Part of PCCA's role in this team is to evaluate proposals for projects seeking funding from CBBEP. CBBEP hosts a monthly Coastal Issues Forum in which PCCA presents in January. In November of 2021, CBBEP recognized PCCA for contributing to protecting and preserving Coastal natural resources and awarded PCCA the Environmental Stewardship Award in the industry category. The Coastal Bend Bays & Estuaries Program operates under an Annual Work Plan, and each year CBBEP works with community implementation teams to evaluate project proposals for inclusion in the upcoming Work Plan. These implementation teams were formed to provide oversight and guidance for ongoing projects and related monitoring and research initiatives, to help identify needs within specific priority areas, and to help develop project proposals that address the priority issues which include: 1) Alteration of

Freshwater Inflow into Bays and Estuaries, 2) Condition of Living Resources, 3) Loss of Wetlands and Estuarine Habitats, 4) Degradation of Water Quality, 5) Altered Estuarine Circulation, 6) Bay Debris, and 7) Selected Public Health Issues. PCCA, along with the Texas A&M University Pollution Prevention Partnership (P3) and the Texas Commission on Environmental Quality host a free, public Auto-Check event at Whataburger Field. This event is held on an annual basis and is open to the public.

PCCA did not host a public auto-check event during the reporting period, the last public event was held on December 8, 2021 at the Whataburger Field parking lot. During the event, the community is invited to have their vehicle inspected for emissions. In addition, engine diagnostics, gas caps, tire gauges, and pollution prevention pamphlets are provided to participants. Figure 7-3 shows a picture of an Auto-Check event. Additionally, PCCA participates in monthly meetings with P3 to increase the number of events in the community.

Figure 7-3 AUTO-CHECK EVENT HOSTED BY PCCA



PCCA periodically updates the community on our environmental performance, including storm water management, through media advertisements, social media, and press releases. The PCCA website also includes a news feed that highlights environmental accomplishments as they occur, <https://portofcc.com/news/>.

In October 2021 PCCA announced that it had entered a Memorandum of Understanding with the U.S. Department of Energy's National Renewable Energy laboratory. This agreement will encourage collaboration towards the goal of sustainable energy transition and decarbonization projects. This agreement exemplifies the commitment PCCA has made to become the Energy Transition Port of the Americas.

PCCA implemented the Up2U campaign, which is a litter prevention campaign in partnership with the CBBEP. The campaign involves making litter collection bags available throughout the watersheds within the Coastal Bend including several locations on PCCA property. The bags serve as a tool for trash removal, trash prevention, and community outreach. Figure 7-4 shows what the collection bags and bag stations look like. On Earth day, April 22, 2021 the PCCA Environmental department brought collection bags to the PCCA East fishing area and cleaned trash and debris from the area. The CBBEP website includes a map with the distribution locations of the litter bags. <https://www.cbbep.org/up2u/>

Figure 7-4 Up2U CAMPAIGN



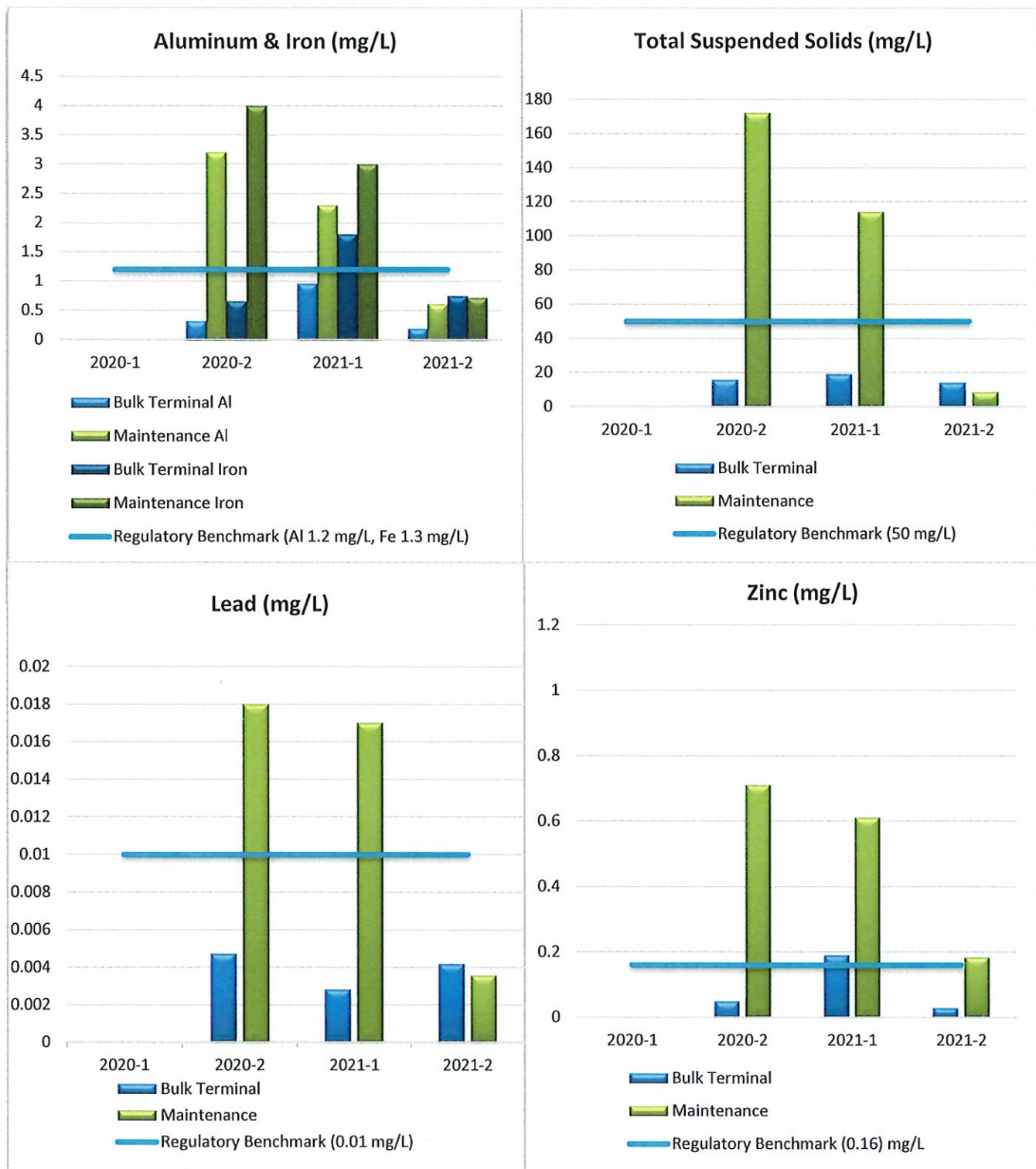
8.0 IDENTIFICATION OF ANY WATER QUALITY IMPROVEMENTS, DEGRADATIONS, AND PROGRESS TOWARD MEASURABLE GOALS

Under the SWMP, PCCA established measurable goals, which generally are managed as objectives and targets under the PCCA's EMS program. The EMS is aimed at reducing the environmental impact of operations and promoting environmental stewardship. Since 2007, the PCCA has achieved ISO 14001 certification for the EMS. The International Organization for Standardization sets out criteria for an environmental management system. ISO 14001 maps out a framework for organizations to follow in setting up effective environmental management systems. During the reporting period, the PCCA maintained the ISO 14001:2015 certification. PCCA's EMS underwent an audit conducted by a certified third-party auditor in August of 2021. No areas of non-conformance were identified during the audit. As such, 2021 is the 14th consecutive year for the PCCA EMS to maintain ISO 14001 certification. As shown in Figure 8-1, PCCA has previously identified two objectives related to stormwater quality using the methodology outlined in the EMS. Through the implementation of BMPs, inspections, and employee training, PCCA has been able to make considerable strides towards these goals as shown in Figure 8-2. The replacement of the filter system at the Maintenance Facility between the first quarter and second quarter samples collected in 2021 made a significant improvement to the water quality. The 2021 second quarter samples show that Zinc and Lead levels were still above PCCA's EMS objective, but PCCA expects the repair of the Maintenance Facility storm water drainage system along with continuing inspections and improvement projects to lead to further improvement of the water quality.

Figure 8-1 EMS OBJECTIVES

Significant Aspect	Environmental Objective	Measurable Improvement
Storm Water Runoff	Reduce pollutants contributed to storm water runoff at the Maintenance Facility	Reduce the contribution of pollutants to storm water runoff to less than 1.2 mg/L for Total Al, 1.3 mg/L for Total Fe, 0.01 mg/L for Total Pb, 0.16 mg/L for Total Zn, and 50 mg/L for Total Suspended Solids
Storm Water Runoff	Reduce pollutants contributed to storm water runoff at the Bulk Terminal	Reduce the contribution of pollutants to storm water runoff to less than 1.2 mg/L for Total Al, 1.3 mg/L for Total Fe, 0.01 mg/L for Total Pb, 0.16 mg/L for Total Zn, and 50 mg/L for Total Suspended Solids

Figure 8-2
STORM WATER RUNOFF SEMI-ANNUAL SAMPLING RESULTS



In August of 2021 PCCA finished construction on the new Executive Administration Building. The new building utilizes xeriscaping in front of the building, as shown in figure 8-3. Xeriscape is a landscaping style that utilizes vegetation which is native to the regional area, therefore it requires little or no irrigation. The xeriscape landscaping also serves as a storm water retention area. As of the end of this reporting period, a temporary irrigation system is in place to facilitate the growth of the native vegetation while it takes root.

PCCA has been practicing sustainability since its inception, and in October of 2021 the PCCA Environmental Department created an established functional area to focus on sustainability throughout the organization. The sustainability functional area will collaborate with each department within PCCA. Incorporating sustainable methods of operation throughout the Port is at the core of PCCA's strategic objectives and long term plan.

In 2021, a total of 1,225 cubic yards of soil was removed from the PCCA stormwater conveyance system for maintenance. This was a 15% increase from the volume of soil removed in 2020. Figure 8-4 shows the areas where soil has been removed in the last three years. In 2021, all the removed soil was taken from the bulk terminal area and redistributed to tenant stock pads.

Figure 8-3
XERISCAPE AT PCCA EXECUTIVE
ADMINISTRATION BUILDING

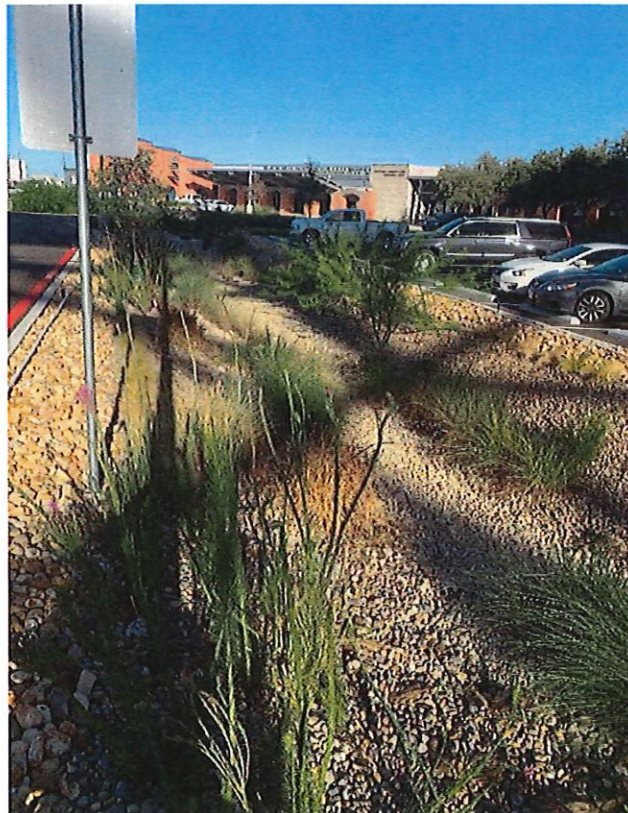
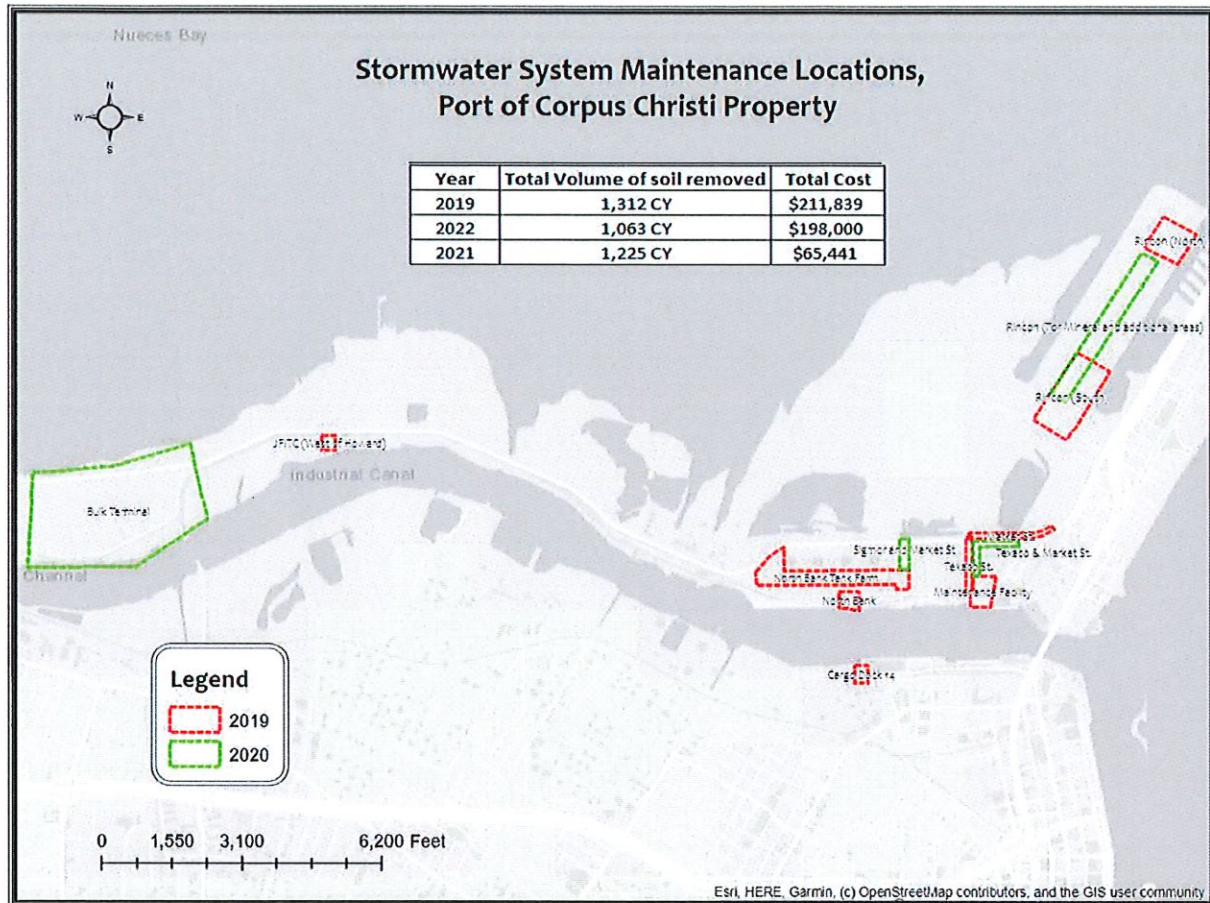


Figure 8-4 AREAS OF SOIL REMOVAL



As a complement to the EMS, PCCA also continues to maintain Green Marine certification. Green Marine is an environmental benchmarking certification program for the maritime industry. PCCA completed a self-evaluation in March of 2021 for eight (8) performance indicators, which include aquatic invasive species, greenhouse gases, and air pollutants, spill prevention, dry bulk handling and storage, community impacts, environmental leadership, waste management, and underwater noise. The self-evaluation was approved for continued certification with an increase in 5 of the 8 performance indicators, having already satisfied the maximum requirement of the aquatic invasive species performance indicator. PCCA strives for excellence and in accordance with our strategic plan, continues to pursue additional Green Marine certification levels by benchmarking our environmental performance through the mandatory performance indicators. In line with 2023 strategic plan, PCCA has a strategic goal to achieve highest level of Green Marine Certification in five (Greenhouse Gases and Air Pollutants; Spill Prevention; Dry Bulk Handling & Storage; Community Impacts; Waste Mgmt.) of seven program areas as shown in Figure 8-3.

**Figure 8-3
PCCA'S STRATEGIC GOAL FOR GREEN MARINE**

Precept	2020	2021	2022 Predicted	2023 Predicted
Aquatic Invasive Species	1	1	1	1
GHG and Air Pollutants	4	5	5	5
Spill Prevention and Stormwater Management	4	5	5	5
Dry Bulk Handling and Storage	4	5	5	5
Community Impacts	2	2	4	5
Environmental Leadership	4	4	5	5
Waste Management	3	3	4	5
Underwater Noise	1	2	3	5
Community Relations	NA	2	3	5
Aquatic Ecosystems	NA	NA	NA	2

The following section provides a discussion of the status of meeting the objectives and targets identified in our SWMP and any water quality improvements or degradations observed.

8.1 STRUCTURAL CONTROLS

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.

The target for structural controls is to meet the benchmark levels set forth for Sector Q facilities by the MSGP. PCCA continues to maintain storm water BMPs at the Maintenance Facility, including utilizing inlet filter sacks, gutter guards, heavy metal absorbent socks, and a filter system within the outfall pipe, which minimize the discharge of sediments, petroleum hydrocarbons, and floatables into the MS4. These controls are inspected and cleaned or replaced by PCCA staff regularly. PCCA conducted sixty-one (61) inspections of the Maintenance Facility within the reporting period.

In addition to the current structural controls, PCCA is in the final stages of development for a StormWater Master Plan for the Inner Harbor Industrial Area, which comprises more than

5,000 acres. The purpose of the master plan is to develop prioritized infrastructure projects to improve the water quality of the Inner Harbor and mitigate flooding potential. As part of this plan, PCCA has a strategic goal for the next five years to implement annually at least one new (relative to 2018 baseline) water quality treatment Best Management Practice in 10% of stormwater sub-basins on PCCA property. PCCA has contracted Plummer to help with identifying and documenting drainage infrastructure and capacities throughout the port.

8.2 AREAS OF NEW DEVELOPMENT AND SIGNIFICANT REDEVELOPMENT

As discussed in the SWMP, improvements in the areas of new development and significant redevelopment are implemented on a case-by-case basis. At a minimum, all activities are compliant with the TPDES CGP and TPDES MSGP, as applicable. PCCA maintains storm water specifications that incorporate requirements of the TPDES CGP for inclusion in the contract documents. Additionally, environmental specifications related to pollution prevention and other environmental issues are included, as appropriate. Applicability is determined using the Design and Construction Environmental Checklist. Eighty-seven (87) checklists were completed during this reporting period.

8.3 ROADWAYS

PCCA is responsible for operations and maintenance of only one roadway within the Port's MS4 area. Navigation Boulevard extends from the intersection of Avenue F up to and including the Joe Fulton Corridor. One (1) vehicle incident occurred within the MS4 area within the reporting period in which PCCA maintenance personnel conducted clean-up of spilled petroleum products. The cleanup was completed and no negative impacts to the MS4 occurred.

PCCA also works with port users on a case-by-case basis during material transfers and construction activities to ensure spilled or tracked materials are cleaned off the roadway. PCCA maintenance staff routinely monitor and maintain the roadway and adjacent right of way, including litter removal and street sweeping as needed. All other streets and roadways within the MS4 area are owned by the City of Corpus Christi or Nueces County, who have responsibility for maintenance.

8.4 FLOOD CONTROL PROJECTS

PCCA facilities are designed to an elevation of one foot above the 100-year flood. Otherwise, PCCA does not typically participate in flood management projects. The City of Corpus Christi operates and maintains flood control structures near the port area in the MS4 area. PCCA and the City of Corpus Christi are in Texas Flood Planning Region 13, Nueces Flood Planning Region. PCCA's Chief Strategy and Sustainability Officer, Jeffery Pollack, was appointed as a voting member of this planning group.

8.5 PESTICIDES, HERBICIDES, AND FERTILIZER APPLICATIONS

The following sections summarize the PCCA's activities with regards to pesticides, herbicides, and fertilizer applications.

Pesticides

Pesticides are generally applied by a licensed pest applicator when necessary to eradicate significant pest problems. On a localized scale, when a pest impedes work, PCCA performs minor pesticide applications using publicly available aerosol cans of sprays or powders for ants, wasps, or bees following manufactures recommendations.

Herbicides

Under our EMS program, PCCA has a BMP for herbicide application, which is included in the BMP Manual and utilized by Port maintenance staff when applying herbicides. Additionally, staff utilizes an herbicide map book that quantifies the maximum amount of publicly available herbicide to be applied at locations around the port to meet the goal of not exceeding the dilution application rate specified on the label. Staff are trained on the BMPs and how to utilize the herbicide map book. Herbicides are stored on secondary containment pallets, within a locked and covered storage area that is surrounded by a concrete containment with locked valves. The herbicide storage area is inspected monthly.

Fertilizers

Fertilizers are not applied in the Port area.

8.6 ILLICIT DISCHARGES AND IMPROPER DISPOSAL

Under the objective and target for control of illicit discharges and improper disposal, PCCA maintains in GIS a port-wide inventory of our storm water system. During routine inspections, this information is verified and updated, as necessary. Additionally, new storm water system features are added to GIS as construction projects are completed.

During the reporting period, PCCA systematically inspected non-submerged outfalls and inlets for illicit discharges and found none. No illicit discharges were identified as a result of MS4 inspections. Inspections of the MS4 areas identified housekeeping and work practice issues at the laydown areas that PCCA owns. PCCA worked with the customers and their contractors to clean up the areas and ensure BMPs were employed.

PCCA continues to work with port users within its fence line of the EMS program. The EMS program ensures compliance, continual improvement, and pollution prevention. PCCA staff communicate with port users within the fence line about PCCA's EMS program and storm water pollution prevention measures and provide brochures on PCCA's EMS program.

During the reporting period, fifteen (15) tenant audits and inspections were conducted within the MS4 area. During a tenant audit, PCCA reviews the tenant's environmental management programs and environmental compliance. Through the lease agreement, tenants are responsible for complying with all applicable federal, state, and local regulations, including obtaining their own permits and conducting required inspections, as applicable. During a tenant inspection, field screening is conducted to identify general compliance with applicable environmental regulations and to ensure illicit discharges are not occurring. When provided information regarding NPDES and TPDES-permitted discharges to the MS4, PCCA maintains the information on file in our property database and GIS. No illicit discharges were observed with tenant operations during the tenant audits.

An adjacent landowner in the MS4 area is a minor league baseball team. Friday night home games and other special events include firework displays. The adjacent landowner hires a third party to remove the firework debris from PCCA property post-event.

During the reporting period, six (6) sanitary sewer overflows were observed by PCCA in the MS4 area. Notification within 24 hours and subsequent written 5-day notifications were provided to the TCEQ. Each overflow was contained to the extent possible and repairs were made to the appropriate wastewater infrastructure.

A storm water and wastewater improvement project is ongoing at Cargo Dock 9 in response to wastewater discharges that have occurred at this location. The improvement project will eliminate roof gutter leaks, improve stormwater drainage, repair underground damage and deterioration to prevent washouts, and repair wastewater line damage to prevent leaks and outages. The project is expected to be completed in 2022.

During the reporting period, there were no identified instances of improper disposal of household hazardous wastes. A total of 51,028 pounds of materials (used oil filters, batteries, cardboard, metals, etc.), 1,384 gallons of materials (used oil, antifreeze, etc.), and 929 items (used lamps, etc.) were recycled from PCCA facilities. In addition to the housekeeping performed by port users, PCCA maintenance staff dispose of trash and debris that can become floatables from PCCA property and before conducting landscape maintenance.

PCCA will continue to conduct inspections, update information in the GIS database, and conduct awareness training to prevent illicit discharges and improper disposal practices.

8.7 SPILL PREVENTION AND RESPONSE

PCCA tracks spills that occur in the port area to ensure proper cleanup and educate PCCA employees, users, and contractors on spill prevention. During the reporting period, ten (10) spills or leaks associated with PCCA operations were documented in the MS4 area. All spills were cleaned up using the EMS spill kits present in the port area. Also, during the reporting period, twenty (20) spills and leaks occurred as a result of port user

operations within the MS4 area. Of the thirty (30) total spills in the MS4 area, two (2) were of a reportable quantity. Through the EMS program, PCCA will continue to manage spill potential in the port area and train employees, port users, contractors, and vendors on ways to prevent spills. To support this effort, PCCA requires Very Large Crude Carriers to pre-deploy oil spill boom around the vessel prior to commencing in cargo transfer operations. This initiative reduces the environmental impact should a spill occur.

8.8 INDUSTRIAL AND HIGH-RISK RUNOFF

There are currently no waste transportation, storage, and disposal facilities discharging to the MS4 area where the PCCA is the operator. PCCA maintains a tenant audit program in which tenants are reviewed annually for compliance with all applicable environmental regulations, including storm water requirements. Additionally, lease-ending audits are conducted prior to lease termination to ensure there are no outstanding storm water or other environmental concerns. PCCA maintains a GIS database that assists with ensuring audits are completed promptly. The GIS tracks the varying environmental issues associated with tenant operations. Under their respective lease agreements, tenants are responsible for compliance of site operations with applicable environmental requirements. During the reporting period, fifteen (15) within the MS4 area. No illicit discharges were identified within the MS4 area during the tenant audits. PCCA will continue to monitor both tenant and PCCA operations to ensure that storm water runoff is being properly managed.

8.9 CONSTRUCTION SITE RUNOFF

PCCA continues to use the design and construction project review checklists. The checklists are (1) Coordination with Environmental Planning and Compliance Department to Develop Design Scope of Work; and, (2) Coordination with Environmental Planning and Compliance during Construction Design. The checklists are utilized for ensuring environmental compliance on construction projects. The use of the checklists has proven to be successful in ensuring that the appropriate storm water and environmental specifications are included in the contract documents for construction projects.

During the reporting period, the PCCA advertised twenty-three (23) construction or material handling projects to bid, some of which are not within the MS4 area. All PCCA projects were reviewed utilizing the checklist to ensure appropriate storm water and environmental specifications were included in the bid and contract documents. The bid and contract documents contain storm water management requirements consistent with TPDES CGP to inform prospective bidders of the legal requirements to control storm water runoff. Additionally, construction projects under \$50,000 that are not required to be bid are also reviewed to determine the inclusion of appropriate storm water and environmental controls. Inspections of PCCA construction projects are routinely conducted by a PCCA inspector from its Engineering Department. The construction inspector has copies of all active PCCA construction projects and assures specifications are being followed. Through this review and inspection process, PCCA staff ensure that storm water runoff from construction site activities is being appropriately managed.

8.10 PUBLIC EDUCATION

Environmental training is provided regularly (monthly and annually) to port employees. The employee training curriculum is annually reviewed and tracked to ensure employees receive appropriate environmental training including storm water pollution prevention training.

An environmental newsletter was sent out to all employees at PCCA in the fourth quarter of 2021. The newsletter discussed the Marine Debris Skimmer that was recently installed, the new Sustainability Functional Area of the Environmental Department, a reminder about PCCA's idling policy, and sustainability tips for the holidays. The Environmental Department plans to update PCCA employees quarterly with an environmental newsletter that will discuss ongoing and completed environmental projects, and information for employees to be more sustainable at work and at home.

As mentioned in Section 7 of this report, PCCA was awarded the Reduction and Prevention of Trash in the Five Coastal States (Texas, Louisiana, Mississippi, Alabama, and Florida) of the Gulf of Mexico Watershed Grant in April 2020. As a result of this grant, the marine debris skimmer was installed at the Salt Flats Ditch on November 19, 2021. As part of the outreach program being developed as the result of this grant, PCCA will work with local university and K-12 students to identify projects that record the volume of trash that is removed from the water and analyze for trends. This information will be shared to promote awareness and outreach. PCCA will utilize existing social media, advertisements, and presentations at community events to promote the expected success of the Project. Also, since PCCA already partners with the Texas State Aquarium which is located just downstream from the Salt Flats Ditch and draws water from the Ship Channel for use in its live animal exhibits, PCCA will work with the aquarium to incorporate the results of this effort into an interpretive display.

The PCCA employs a Talent Development position responsible for developing, preparing, facilitating, and monitoring the training and development of all PCCA staff. Human Resources collaborate with the Environmental Planning and Compliance Department to ensure applicable PCCA staff receive appropriate training on storm water, spill prevention control and countermeasures, and the EMS. All new full-time and contract employees participate in environmental awareness upon employment. Human Resources is also building a new training module in the talent management system, NEOGOV, that will help track and deliver different trainings as well as work in identifying training needs.

8.11 MONITORING & SCREENING PROGRAMS

In accordance with TPDES Permit No. WQ0004200000, the City of Corpus Christi maintains responsibility for conducting wet-weather monitoring at the three outfalls identified in Part IV.A.1.a (3) of the permit, as well as floatables monitoring specified in Part IV.B. However, an objective and target to have parameter monitoring levels below the benchmark levels required by the MSGP been set for the Maintenance Facility.

During the reporting period, samples were collected and analyzed for Sector Q benchmark levels. Storm water monitoring results for Annual Hazardous Metals Monitoring and Sector Q benchmark monitoring at the Maintenance Facility are provided in Sections 4.1 and 4.2.

Dry weather screening and Industrial and High-Risk Runoff Monitoring occur through a variety of existing environmental programs previously discussed in this report including MS4 inspections, tenant audits, construction inspections, and MSGP inspections.

9.0 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 a fine and imprisonment for knowing violations.

Additionally, a copy of this Annual Report will be provided to the Port Commission in the Executive Director's Report at the Commission Meeting on February 15, 2022.



Sean Strawbridge
Chief Executive Officer

1-14-2022

Date



Clark Robertson
Chief Operating Officer

January 14, 2022

Date



Jeff Pollack
Chief Strategy and Sustainability Officer

1-14-2022

Date



Sarah L. Garza
Director of Environmental Planning and Compliance

1/14/2022

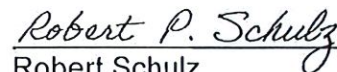
Date



Tony MacDonald
Director of Operations

1/14/22

Date



Robert Schulz
Manager of Environmental Compliance

1/14/2022

Date



McKenzie Ward
Environmental Specialist

1/14/2022

Date



- APPENDIX A-2
CO-PERMITTEE REPORT
Del Mar College



January 13, 2021

Robert Anderson
Stormwater Superintendent
City of Corpus Christi, Utilities Department
2525 Hygeia St.
Corpus Christi, TX 78515

RE: 2021 Del Mar College TPDES Annual Report

Dear Mr. Anderson,

Attached is the completed TPDES Annual Report for the period of November 1, 2020 through October 31, 2021. During this reporting period, Del Mar College was operating under COVID-19, Phase III restrictions which meant our normal operations were limited and the storm water initiatives we would typically list here have been significantly curtailed. The College was unable to partner with our external associates (i.e., City of Corpus Christi, Texas A&M AgriLife) to host community education events for the reporting period.

However, the EHS Office developed an on-line storm water management training program for college employees and contractors. We did not generate the usual volume of wastes, therefore, we did not conduct any RCRA hazardous waste disposal projects.

An activity we can report is the continuing development of Del Mar College property at the junction of Yorktown Boulevard and Rodd Field Road. This 93.6-acre tract project began in previous reporting years and will become the Oso Creek Campus. Phase 1 is scheduled to be complete in 2022.

I have reviewed the report and signed the certification. We are grateful for the support you and your staff provide to Del Mar College. If any additional information is needed, please contact J. Chris Tweddle, Director of the Environmental, Health and Safety Office at 361-698-1641 or jtweeddle@delmar.edu.

Sincerely,

A handwritten signature in black ink that reads 'John Strybos' in a cursive script.

John Strybos, PE, CPA
Vice President and
Chief Physical Facilities Officer



Dreams. Delivered.

**DEL MAR COLLEGE
MS4 ANNUAL
REPORT TPDES
WQ0004200000**

**REPORTING PERIOD:
NOVEMBER 1, 2020 –
OCTOBER 31, 2021**

**Prepared by: Environmental, Health
& Safety office**

January 6, 2022



WINDWARD CAMPUS



HERITAGE CAMPUS



CENTER FOR ECONOMIC DEVELOPMENT



OSO CREEK 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 developed sites within the Corpus Christi Storm Water District. 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 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. (See Appendix for Campus maps.)

Del Mar College also owns two additional locations within the MS4 boundaries. The first location is approximately 4 acres located at 1502 Tarlton Street which is non-developed and non-occupied. Del Mar College frequently maintains the vegetative growth on this property.

The second location, Oso Creek Campus, is 93.6 acres located at the junction of Yorktown Blvd. and Rodd Field Road and is comprised of three individual properties identified as follows:

- Flour Bluff & ENC FRM GDN Tract 35.19 ACS out of Lot 9 & 10, Sec 21, Nueces County, TX (Tract 1, 35.19 acres)
- Flour Bluff & ENCINAL F&G TRACTS, Block 21, Lot 11, Nueces County, TX (Tract 2, 19.48 acres)
- Flour Bluff & ENCINAL F&G TRACTS, Sec. 21, Lots 12 & 13, Nueces County, TX 6702 & 6810 Yorktown Blvd (Tract 3, 38.94 Acres)

Development on this property continued during this reporting period with the construction of piers, underground infrastructures and the construction of four (4) major buildings. The operational control for this property is Fulton Construction Corporation who has responsibility for all storm water activities which will be addressed in their site specific SWPPP.

The Environmental, Health & Safety (EHS) Office for Del Mar College is responsible for the development and maintenance of the College's Storm Water Management Plan (SWMP) which has been previously submitted to the City of Corpus Christi, Storm Water Division.

The Permit requires the co-permittees to prepare an annual report discussing how the requirements established in the SWMP and all measureable goals were achieved throughout the reporting period.

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 SWMP have been implemented. The Environmental, Health & Safety (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.

The measures outlined in the SWMP will be implemented at the Tarlton Street and Yorktown Boulevard locations when necessary.

2. *Any known proposed changes to the SWMP;*

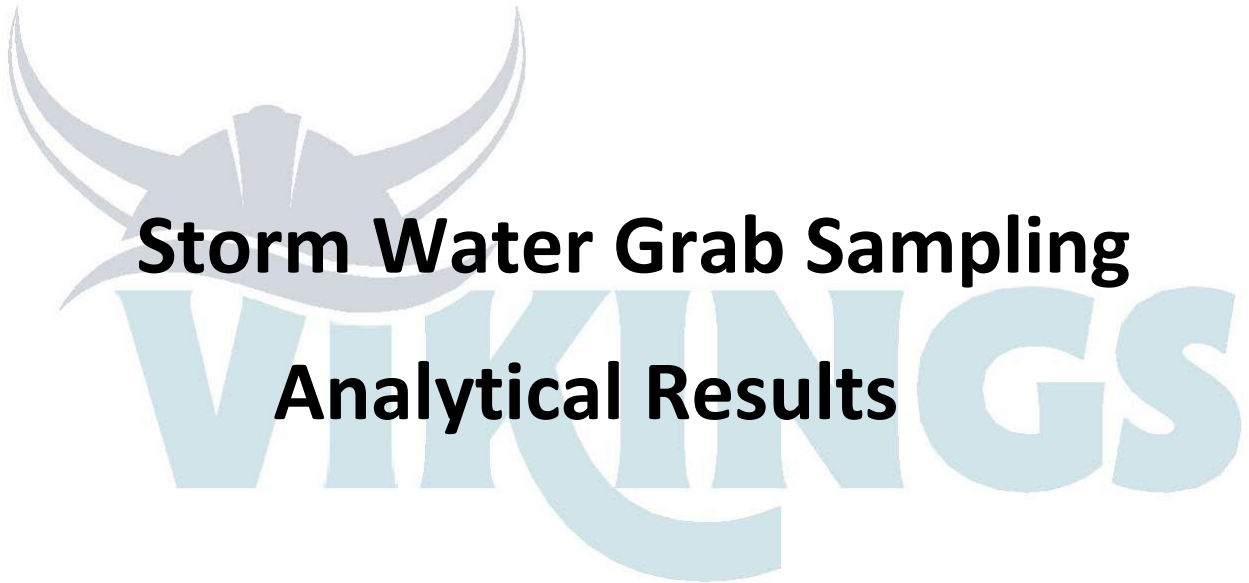
YES. At the time of this report, changes to the SWMP will be necessary due to the development of the Oso Campus. The EHS Office will work with consultants to revise the current SWMP.

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 which was included in the previous annual report has been modified to reflect actual expenditures for this reporting period. There are no other revisions to the assessment of controls or fiscal analysis.

4. *A summary of data, including monitoring data that is 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

Analytical Report



Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469-9277 Phone: EMAIL: jefft@cctexas.com	Report# /Lab ID#: AB65843 Sample Name: Del Mar East Date Received: 12/31/2020 Time: 00:22 Date Sampled: 12/30/2020 Time: 23:40 Report Date: 10/18/21
---	---

Parameter	Result	Unit	Flag	RL	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli - SM9223 B	4891.5	MPN	A,D		12/31/20 01:00		KVV	
Enterococci	12996.5	MPN	A,D	1	12/31/20 00:40	Enterolert	KVV	
Hardness as CaCO3 - SM2240C	32	mg/l		10	12/31/20 09:20		DM	
Oil and Grease - 1664B	<3	mg/l		3	1/22/21 09:30		MONICAS	
pH	9.05	SU			12/30/20 23:41		EQS-PH,RC	*Field Measurement
Total Cyanide	<10.0	µg/l	O	5	1/8/21 11:06		PACE	
Water Temperature	17.1	Deg C			12/30/20 23:41		EQS-PH,RC	*Field Measurement

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.

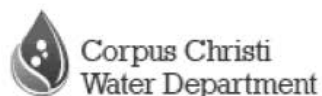
Respectfully Submitted,



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:

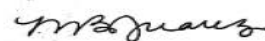
N=Analysis not performed as per client request. **H**=Sample exceeded holding time. **P**=Analysis is from an unpreserved sample. **J**=Value reported is less than the RL but greater than the MDL.
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S=Slow to filter; sample contains floc and/or large amount of residue on filter. **O**=Analysis performed by an outside NELAC accredited lab; **O^**=Analysis flagged by outside laboratory.
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.



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#: AB66276 Sample Name: Del Mar East Date Received: 01/10/2021 Time: 10:51 Date Sampled: 01/10/2021 Time: 08:59		Report Date: 10/18/21		
Phone:					EMAIL: jeff@cctexas.com				
Parameter	Result	Unit	Flag	RLs	Date/Time Analyzed	Method	Analyst	Analysis Comments	
E. coli - SM9223 B	275	MPN	D		1/10/21 11:51		DM		
Enterococci	3076	MPN	D	1	1/10/21 12:25	Enterolert	DM		
Hardness as CaCO ₃ - SM2240C	24	mg/l		10	1/14/21 08:07		BR		
Oil and Grease - 1664B	<3	mg/l		3	2/10/21 10:07		MONICAS		
pH	7.60	SU			1/10/21 08:59		JRG	*Measured in field.	
Total Cyanide	10.4	µg/l	O	5	1/14/21 11:00		PAGE LAB		
Water Temperature	15.6	Deg C			1/10/21 08:59		JRG	*Measured in field.	
Sample Comments:									
<p>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 NELAP 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.</p> <p>Respectfully Submitted,</p> <p></p> <p>Technical Director (or designee)</p>									
<p>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 NELAP 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 NELAP accredited lab; OA=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.</p>									



CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

CHAIN OF CUSTODY RECORD



AB66276

Del Mar East
SAMPLE LOCATION

COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
E. Coli/Enterococci	1-10-21	8:59 AM	G	Plastic	1	Na2S203
Total Hardness	1-10-21	8:59 AM	G	Plastic	1	HNO3
Cyanide (T)	1-10-21	8:59 AM	G	Plastic	1	NaOH
Oil & Grease	1-10-21	8:59 AM	G	Glass	1	H2SO4

pH (SU) 7.60

Temperature (C) 15.6

Remarks

Temp @ lab 3.1°C / CT: 3.1°C Gun B

Hardness pH < 2

Cyanide pH > 11

pH strip lot # W1946B

All samples are stored on ice through laboratory receipt.

Relinquished by: <u>[Signature]</u>	Date/Time: <u>1-10-21 10:51 AM</u>	Received by: <u>[Signature]</u>	Date/Time: <u>1-10-21 10:51</u>
Relinquished by: <u>[Signature]</u>	Date/Time: <u>1-10-21 10:51 AM</u>	Received by: <u>[Signature]</u>	Date/Time: <u>1-10-21 10:51</u>

COMPOSITE PARAMETERS

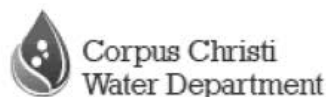
ANALYSIS
___ Biochemical Oxygen Demand (BOD)
___ Chemical Oxygen Demand (COD)
___ Total Suspended Solids (TSS)
___ Total Dissolved Solids (TDS)
___ Total Nitrogen
___ Total Kjeldahl Nitrogen (TKN)
___ Nitrate-Nitrogen
___ Ammonia-Nitrogen
___ Total Phosphorus
___ Dissolved Phosphorus
___ Total Cadmium
___ 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 78469-9277	Report# / Lab ID#: AB72317 Sample Name: Del Mar East Date Received: 05/11/2021 Time: 07:43 Date Sampled: 05/11/2021 Time: 04:16	Report Date: 10/18/21
Phone: EMAIL: roberta3@cctexas.com		

Parameter	Result	Unit	Flag	RLs	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli - SM9223 B	154	MPN	D,A		5/11/21 09:12		DM	
Enterococci	1025.5	MPN	D,A	1	5/11/21 09:12	Enterolert	DM	
Hardness as CaCO3 - SM2340C	88	mg/l		10	5/12/21 08:10		MONICAS	
Oil and Grease - 1664B	10	mg/l		3	6/1/21 08:15		MONICAS	
pH	6.40	SU			5/11/21 04:16		EQS	*Field measurement.
Total Cyanide	26.2	µg/l	O	5	5/21/21 11:27		PACE LABS	
Water Temperature	24.4	Deg C			5/11/21 04:16		EQS	*Field measurement.

Sample Comments:

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Respectfully Submitted,

Technical Director (or designee)

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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 NELAP 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 NELAP 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.



CHAIN OF CUSTODY RECORD



CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

Del Mar East
SAMPLE LOCATION

COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
E. Coli/Enterococci	5/11/21	04:16 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)

6.40

Temperature (C)

24.4

Remarks

Rec'd Temp 3.1
Gus A

All samples are stored on ice through laboratory receipt.

Relinquished by:	Date/Time	Received by:	Date/Time
Pat Rusk	5/11/21 0743	[Signature]	5/11/21 0743
Relinquished by:	Date/Time	Received by:	Date/Time

COMPOSITE PARAMETERS

☒ GRAB PARAMETERS

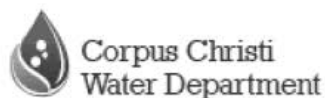
ANALYSIS
___ Biochemical Oxygen Demand (BOD) mg/L
___ Chemical Oxygen Demand (COD) mg/L
___ Total Suspended Solids (TSS) mg/L
___ Total Dissolved Solids (TDS) mg/L
___ Total Nitrogen mg/L
___ Total Kjeldahl Nitrogen (TKN) mg/L
___ Nitrate-Nitrogen mg/L
___ Ammonia-Nitrogen mg/L
___ Total Phosphorus mg/L
___ 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

ANALYSIS
☒ Oil and Grease
☒ Total Cyanide
☒ Hardness
☒ E. coli
☒ Enterococci

Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL


Hardness pH < 2.0
Cyanide pH > 10
Strip
hot #
W1946C



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#: AB73043 Sample Name: Del Mar East Date Received: 05/23/2021 Time: 11:56 Date Sampled: 05/23/2021 Time: 09:45			
Phone:					EMAIL: roberta3@cctexas.com			
Parameter	Result	Unit	Flag	RL's	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli - SM9223 B	866.4	MPN	D		5/23/21 12:14		KVV	
Enterococci	866.4	MPN	D	1	5/23/21 12:14	Enterolert	SF	
Hardness as CaCO ₃ - SM2240C	32	mg/l		10	5/25/21 08:30		DM	
Oil and Grease - 1664B	9	mg/l		3	6/1/21 08:15		MONICAS	
pH	7.75	SU			5/23/21 04:45		EGS	*Field measurement.
Total Cyanide	11.2	µg/l	O	5	5/28/21 15:21		PACE LABS	
Water Temperature	25.5	Deg C			5/23/21 04:45		EGS	*Field measurement.
Sample Comments: Cyanide subbed out to Pace Analytical; external report available upon request.								
<p>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 NELAP 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.</p> <p>Respectfully Submitted,</p> <p></p> <p>Technical Director (or designee)</p>								
<p>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 NELAP 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 NELAP 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.</p>								



CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

CHAIN OF CUSTODY RECORD



Del Mar East
SAMPLE LOCATION

RL/FM
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
E. Coli/Enterococci	5/23/21	9:45 AM	G	Plastic	1	Na2S2O3
Total Hardness	1	1	G	Plastic	1	HNO3
Cyanide (T)	1	1	G	Plastic	1	NaOH
Oil & Grease	1	1	G	Glass	1	H2SO4

pH (SU)

7.75

Temperature (C)

25.5

9:45 AM

Remarks

All samples are stored on ice through laboratory receipt.

Relinquished by: <i>[Signature]</i>	Date/Time: 5/23/21 11:52 AM	Received by: <i>[Signature]</i>	Date/Time: 5-23-21 11:56
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

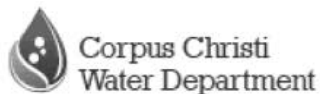
Units
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L

☒ GRAB PARAMETERS

ANALYSIS
☒ Oil and Grease
☒ Total Cyanide
☒ Hardness
☒ E. coli
☒ Enterococci

Units
mg/L
ug/L 10146 L
mg/L
MPN/100 mL
MPN/100 mL


Rec'd temp 6.3 Am H
pH 6.2 for T. and
pH 7.14 for T. CN

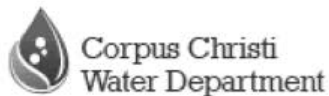


City of Corpus Christi
Water Utilities Laboratory
13101 Leopard Street
361-826-1200 Fax: 361-242-9131

Analytical Report




Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469-9277					Report# /Lab ID#: AB65847 Sample Name: Del Mar West Date Received: 12/31/2020 Time: 00:31 Date Sampled: 12/30/2020 Time: 23:55		Report Date: 10/18/21		
Phone:					EMAIL: jefft@cctexas.com				
Parameter	Result	Unit	Flag	RL	Date/Time Analyzed	Method	Analyst	Analysis Comments	
E. coli - SM9223 B	4.1	MPN			12/31/20 01:00		KW		
Enterococci	387.3	MPN		1	12/31/20 00:40	Enterolert	KW		
Hardness as CaCO ₃ - SM2240C	194	mg/l		10	12/31/20 09:20		DM		
Oil and Grease - 1664B	<3	mg/l		3	1/22/21 09:30		MONICAS		
pH	8.64	SU			12/30/20 23:55		EGS-PH,RC	*Field Measurement	
Total Cyanide	<10.0	µg/l	O	5	1/8/21 11:06		PACE		
Water Temperature	16.0	Deg C			12/30/20 23:55		EGS-PH,RC	*Field Measurement	
Sample Comments:									
<p>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.</p> <p>Respectfully Submitted,</p> <p></p> <p>Technical Director (or designee)</p>									
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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 Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469-9277						Report# /Lab ID#: AB66275 Sample Name: Del Mar West Date Received: 01/10/2021 Time: 10:51 Date Sampled: 01/10/2021 Time: 08:36			Report Date: 10/18/21
Phone:						EMAIL: jefft@cctexas.com			
Parameter	Result	Unit	Flag	RL's	Date/Time Analyzed	Method	Analyst	Analysis Comments	
E. coli - SM9223 B	538	MPN	D		1/10/21 11:51		DM		
Enterococci	1046	MPN	D	1	1/10/21 12:25	Enterolert	DM		
Hardness as CaCO ₃ - SM2249C	42	mg/l		10	1/14/21 08:07		BR		
Oil and Grease - 1664B	<3	mg/l		3	2/10/21 10:07		MONICAS		
pH	8.07	SU			1/10/21 08:36		JRG	*Measured in field.	
Total Cyanide	<10.0	µg/l	O	5	1/14/21 11:00		PAGE LAB		
Water Temperature	14.8	Deg C			1/10/21 08:36		JRG	*Measured in field.	
Sample Comments:									
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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



Del Mar West
SAMPLE LOCATION

AB66275

Collector

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
E. Coli/Enterococci	1-10-21	8:36 am	G	Plastic	1	Na2S2O3
Total Hardness	1-10-21	8:36 am	G	Plastic	1	HNO3
Cyanide (T)	1-10-21	8:36 am	G	Plastic	1	NaOH
Oil & Grease	1-10-21	8:36 am	G	Glass	1	H2SO4
Oil & Grease Spike	1-10-21	8:36 am	G	Glass	1	H2SO4
Oil & Grease Dup	1-10-21	8:36 am	G	Glass	1	H2SO4

pH (SU)

8.07

Temperature (C)

14.8

Remarks

Temp@lab 4.6°C / CT: 4.6°C

Gen B

Hardness pH < 2

Cyanide pH > 11

pH strip lot # W1946B

All samples are stored on ice through laboratory receipt.

Relinquished by:	Date/Time	Received by:	Date/Time
JZ	1-10-21 10:51 am	M. Garcia	1-10-21 10:51
Relinquished by:	Date/Time	Received by:	Date/Time

COMPOSITE 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

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



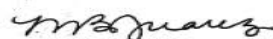
Client Info City of Corpus Christi Stormwater Division P.O. Box 9277 Corpus Christi, TX 78469-9277 Phone: EMAIL: roberta3@cctexas.com	Report# /Lab ID#: AB72318 Sample Name: Del Mar West Date Received: 05/11/2021 Time: 07:43 Date Sampled: 05/11/2021 Time: 04:39
	Report Date: 10/18/21

Parameter	Result	Unit	Flag	RLs	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli - SM9223 B	3448	MPN	D		5/11/21 09:12		DM	
Enterococci	6867	MPN	D	1	5/11/21 09:12	Enterolert	DM	
Hardness as CaCO3 - SM2240C	68	mg/l		10	5/12/21 08:10		MONICAS	
Oil and Grease - 1664B	<3	mg/l		3	6/1/21 08:15		MONICAS	
pH	6.49	SU			5/11/21 04:39		EQS	*Field measurement.
Total Cyanide	<10.0	µg/l	O	5	5/21/21 11:27		PACE LABS	
Water Temperature	25.0	Deg C			5/11/21 04:39		EQS	*Field measurement.

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

Del Mar West
SAMPLE LOCATION

Ray Lyles / Rick Howard
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
E. Coli/Enterococci	5/11/21	0739	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)

6.40 PH 6.49

Temperature (C)

24.4 PH 25.0 CH

Remarks

Rec'd Temp 3.1
Bun A

All samples are stored on ice through laboratory receipt.

Relinquished by:	Date/Time	Received by:	Date/Time
<u>Ray Lyles</u>	5/11/21 0743	<u>Ray Lyles</u>	5/11/21 0743
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

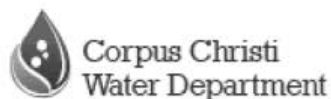
Units
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L

ANALYSIS

- ☒ Oil and Grease
- ☒ Total Cyanide
- ☒ Hardness
- ☒ E. coli
- ☒ Enterococci

Units
mg/L
ug/L
mg/L
MPN/100 mL
MPN/100 mL

Hardness pH > 2.0 - H flag
Cyanide pH 2.0
> 10 - H flag



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#: AB73042 Sample Name: Del Mar West Date Received: 05/23/2021 Time: 11:56 Date Sampled: 05/23/2021 Time: 10:40		Report Date: 10/18/21	
Phone:						EMAIL: roberta3@cctexas.com			

Parameter	Result	Unit	Flag	RLs	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli - SM9223 B	6867.0	MPN	D		5/23/21 12:14		KW	
Enterococci	6867.0	MPN	D	1	5/23/21 12:14	Enterolert	SF	
Hardness as CaCO ₃ - SM2240C	32	mg/l		10	5/25/21 08:30		DM	
Oil and Grease - 1664B	4	mg/l		3	6/1/21 08:15		MONICAS	
pH	8.26	SU			5/23/21 10:40		EQS	*Field measurement.
Total Cyanide	<10.0	µg/l	O	5	5/28/21 15:21		PACE LABS	
Water Temperature	27.1	Deg C			5/23/21 10:40		EQS	*Field measurement.

Sample Comments: Cyanide subbed out to Pace Analytical; external report available upon request.

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Respectfully Submitted,

[Signature]

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

Del Mar West
SAMPLE LOCATION

RC
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
E. Coli/Enterococci	5/23/21	10:40 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)

8.26

Temperature (C)

27.1

1045 AM

Remarks

All samples are stored on ice through laboratory receipt.			
Relinquished by: <i>[Signature]</i>	Date/Time: 5/23/21 11:57 AM	Received by: <i>[Signature]</i>	Date/Time: 5-23-21 1156
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 w/1046 L
mg/L
MPN/100 mL
MPN/100 mL

*Rec'd temp 6.9 for A
PH < 2 for T. Hard
PH > 14 for T. CW*

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 this report period, **Zero (0)** Notices of Intent for a new construction project seeking coverage for storm water discharges were submitted for Del Mar College.

50 storm water inspections for construction sites were conducted on the Southside Campus project during this report period.

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 (November 1, 2020 – Oct 31, 2021)	Budgeted Costs (November 1, 2021 – Oct 31, 2022)
New Development Plans, Designs and Construction		
Heritage Hall Demolition Memorial Classroom Bldg. / Harvin Center Renovation	\$1,000	\$50,000
SWPP Maintenance Costs During Construction		
Southside Campus	\$4,000.00	\$2,000.00
Grounds Maintenance & Litter Control		
Contractor provided services & DMC Personnel	\$44,000	\$45,000
Street and Parking Lot Operation		
Maintenance & Repair	\$200.00	\$500.00
Cleaning/Sweeping	\$3,000.00	\$10,000.00
Grass/Vegetation Clearing		
Mowing Driscoll Ditch	\$5,000	\$10,600.00
Maintenance of Structural Controls		
Hydro-excavation of storm lines	\$0	\$500.00
Waste Disposal/Recycling		
Trash Disposal	\$41,488	\$45,000
Single Stream Recycling	\$1,400	\$1,500
Used Tire Disposal	\$0	\$500
Purchase of Recycling Equipment	\$0	\$1,500
Used Oil & Oil Related Material Disposal	\$0	\$2,000
Spent cooking oil disposal	\$0	\$0
Kitchen Grease Trap Disposal	\$2,500.00	\$12,000

Del Mar College's Expenditures	Actual Costs (November 1, 2020 – Oct 31, 2021)	Budgeted Costs (November 1, 2021 – Oct 31, 2022)
Waste Disposal/Recycling (cont.)		
Hazardous Waste Disposal	\$0	\$10,000.00
Medical Waste Disposal	\$6,000.00	\$10,000.00
Fluorescent Lamp and Ballast Recycling	\$6,500.00	\$10,000.00
Public Education		
Use of Facilities / Supplies	\$0	\$1,000
Total Costs	\$173,588.00	\$212,100.00

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.

During this reporting period **zero (0)** Enforcement Actions were issued against Del Mar College.

Inspections:

50 construction site inspections were conducted during the reporting period. Identified deficiencies were corrected by Fulton Construction.

Public Education Programs:

During the reporting period, Del Mar College was operating under COVID-19 Phase III campus restrictions. The Phase III restrictions limited the activities of the college to essential operations. Offering education programs to the public was deemed nonessential in preference to public health during the pandemic, therefore, **zero (0)** on-site public education programs were offered with **zero (0)** non-college attendees.

However, the EHS Office developed on-line storm water management training programs for college employees. This on-line training program allowed employees to receive storm water management information without having to gather in a large-crowd format. The EHS Office is able to monitor and track the progress of the students enrolled in the training program.

During this reporting period, **eighteen (18)** employees completed the on-line storm water management training program.

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.

Due to the COVID-19 pandemic, the college was in limited operations and did not generate normal volume of wastes, therefore, we had **zero (0) pounds** of RCRA hazardous waste disposed in the reporting period.

8.1 Trash Disposal

During the reporting period, the College was operating under restricted measures, therefore trash disposal did not cease. Del Mar College has contracted with Allied Waste Services to provide dumpster and disposal 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.

8.2 Used Oil & Oil Related Material Disposal

Del Mar College contracts with 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 4 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. However, due to the COVID-19 pandemic, we did not generate our normal volume of Used Oil, therefore, we had **zero (0)** Used Oil disposal.

8.3 Spent Cooking Oil Disposal

Del Mar College contracts with DarPro Solutions for the removal of spent cooking oils generated at the college. Del Mar College uses 2 x 200 gallon containers and 1 x 30 gallon container to store spent cooking oil. The oil is collected approximately every two months and transported to a recycling/rendering facility. During the reporting period, **2,016 gallons** of Spent Cooking Oil was removed and transported to a recycling facility.

8.4 Grease Trap Disposal

Del Mar College contracts with Valicor Environmental Services for the maintenance and cleaning of grease traps. Valicor Environmental Services cleans four (4) grease traps approximately every 90 days at Del Mar College and transports the material to a proper disposal facility. During the reporting period, **7,700 gallons** of Grease Trap material was removed and transported to a disposal facility.

8.5 Hazardous Waste Disposal

Del Mar College is classified as a Conditionally Exempt Small Quantity Generator. Del Mar College currently contracts with Clean Harbors Environmental Services to provide hazardous waste disposal services.

However, due to the COVID-19 pandemic, we did not generate our normal volume of hazardous waste, therefore, we had **zero (0)** pounds of hazardous waste disposal.

8.6 Single-Stream Recycling

During the reporting period, the College was operating under restricted measures, therefore recycling services did not cease. 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 totes throughout the campus to collect recyclables. The totes are emptied into three (3) 8-yard dumpsters which are located at Central Receiving and East Campus Physical Facilities. Allied Waste/Republic Services empties the container and transports the material to a local recycling facility on a regular schedule.

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.

8.8 Scrap Tire Recycle

Del Mar College collects scrap tires generated through the Automotive Technology program and also through general maintenance of vehicles and equipment. The scrap tires are removed from the college by Liberty Tire Recycling and transported to a recycling facility. However, due to the COVID-19 pandemic, we did not generate our normal volume of scrap tires, therefore, we had **zero (0)** scrap tires for recycle.

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 dispose of medical/biohazard waste.

Even though the college was in COVID-19 Phase III restrictions during the reporting period, the medical programs were deemed essential and continued to generate waste, therefore, we disposed **1,520 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 the reporting period, **300 lbs** of batteries were recycled through Interstate Batteries.

These 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	The Driscoll Ditch is located on the West Campus. It is an engineered structural control earthen ditch with a concrete junction box at the intersection of the existing drainage ditch. Due to drought conditions, DMC performed grass mowing operations 1 time in reporting period. Maintained a low grass height to maximize drainage flow and minimize litter and debris from collecting.
			Driscoll Ditch Visual Monitoring 1/Qtr	Performed visual monitoring of the drainage ditch 2 times in reporting period. Drove alongside the ditch banks looking for unusual debris, and excess standing water. <u>Did not observe deficiencies.</u>
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	Performed sweeping operations <u>1 time</u> in reporting period. Removed an estimated total of <u>20 tons</u> of debris/dirt/gravel from drives and parking lots on East Campus and West Campus.
			Repairs to road base, entry/driveways and repaving areas of various parking lots on campus As necessary	<u>2 repair projects</u> were completed in this reporting period. <u>2,000 lbs</u> of asphalt mix was used to patch for campus roads Project cost: <u>\$400.00</u>
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	DMC performed grass mowing operations <u>1 time</u> in reporting period. The Driscoll Ditch is an engineered flood control structure on the West Campus. Project cost: <u>\$10,000.00</u>

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		West Campus Driscoll Ditch Visual Monitoring for debris and erosion Bi-Monthly	Performed visual monitoring of the drainage ditch <u>2 times</u> in reporting period due to construction of FEMA Dome. Drove alongside the ditch banks looking for unusual debris, and excess standing water. Did not observe deficiencies.
			Maintenance/Mowing of West Campus Retention Pond between Health Science Complex and Emerging Technology Building 1/Week or as necessary	Mowing of grass in the Retention Pond occurred <u>36 times</u> in reporting period. Due to COVID-19 restrictions and draught conditions, the grass was not mowed as often.
5. Pesticide, Herbicide, and Fertilizer Application	YES		Sponsor workshops As Needed	DMC co-sponsored <u>0 workshops</u> pertaining to storm water management and Pesticide/Herbicide/Fertilizer application in reporting period. Total participation: <u>0 attendees</u>
			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.
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 <u>11,904 cu yds.</u> of trash.

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
b. Used Motor Vehicle Fluids Disposal	YES		Disposal of Used Oil As Needed	Disposed of <u>0 gallons</u> of used motor oil in the reporting period.
			Disposal of Anti-freeze As Needed	Disposed of <u>0 gallons</u> of used anti-freeze in the reporting period.
c. Spent Cooking Oil	YES		Pump out grease from 3 storage containers As Needed	<u>2,016 lbs</u> of Spent Cooking Oil was sent to renderings facility.
d. Kitchen Grease Trap Disposal	YES		Disposal of Grease Trap material As Needed	Pumped out <u>4 Grease Traps 1 time</u> in the reporting period. Removed <u>7,700 Gallons</u> of material from Grease Traps.
e. Oil/Water Separator	YES		Disposal of oil water and sediment from oil/water separators	Removed and disposed <u>0 gallons</u> of oily water and sediment.
f. Hazardous Waste Disposal	YES		Properly dispose of Hazardous and Nonhazardous Waste As Needed	Properly disposed of <u>0 lbs</u> of hazardous waste.
			Properly recycled fluorescent lightbulbs and ballasts As Needed	Properly disposed/recycled <u>5,615 lbs</u> of fluorescent lights. Properly disposed <u>30 lbs</u> of PCB ballasts. Properly disposed/recycled <u>3,481 lbs</u> of fluorescent light ballasts.

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
g. Single-stream recycling	YES		Collect recyclable items in 95-gallon totes and emptied into 3 x 8 yd. containers On-going	Approximately 18.6 tons of recyclable items sent to Allied Waste / Republic Services.
h. Scrap Tires	YES		Collect and properly recycle scrap tires	Recycled 0 scrap tires through Liberty Tire Recycling
i. Medical Waste	YES		Disposal of Medical Waste As Needed	Disposed of 96 boxes (1,520 lbs) of Medical Waste through a licensed disposal contractor.
j. Techno-trash Waste and Rechargeable Batteries	YES		Disposal/Recycle of E-Waste/Technology accessories As Needed	Recycled 0 lbs of Techno-trash (VHS tapes and other media) through GreenDisk. 300 lbs of Rechargeable Batteries through Interstate Batteries
7. Spill Prevention and Response	YES		DMC Personnel respond to on-campus vehicle fluid spills (Fuel / Oil) As Needed	Responded to 0 vehicle fluid spills during the reporting period.
			DMC contacts CCFD HazMat Unit to respond to large vehicle fluid spills. As Needed	Responded to 0 vehicle fluid spills during the reporting period.

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
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.		
10. Public Education	YES		Sponsor workshops As Needed	Due to COVID-19 restrictions, DMC hosted 0 On-site Symposiums in the reporting period. EHS Office developed an On-line Storm Water Management training program: 18 Students completed the training program.

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	On the East Campus there are 139 inlets to the storm drain system. The EHS Office conducted Dry Weather Screening at 106 of these inlets. 0 illicit discharges were discovered SEE APPENDIX A On the West Campus there are 145 inlets to the storm drain system. The EHS Office conducted Dry Weather Screening at 80 of these inlets. 0 illicit discharges were discovered. SEE APPENDIX A
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.



January 13, 2022

John Strybos, PE, CPA
Vice President and
Chief Physical Facilities Office

Date

EAST CAMPUS AERIAL VIEW



EAST CAMPUS 3-D VIEW





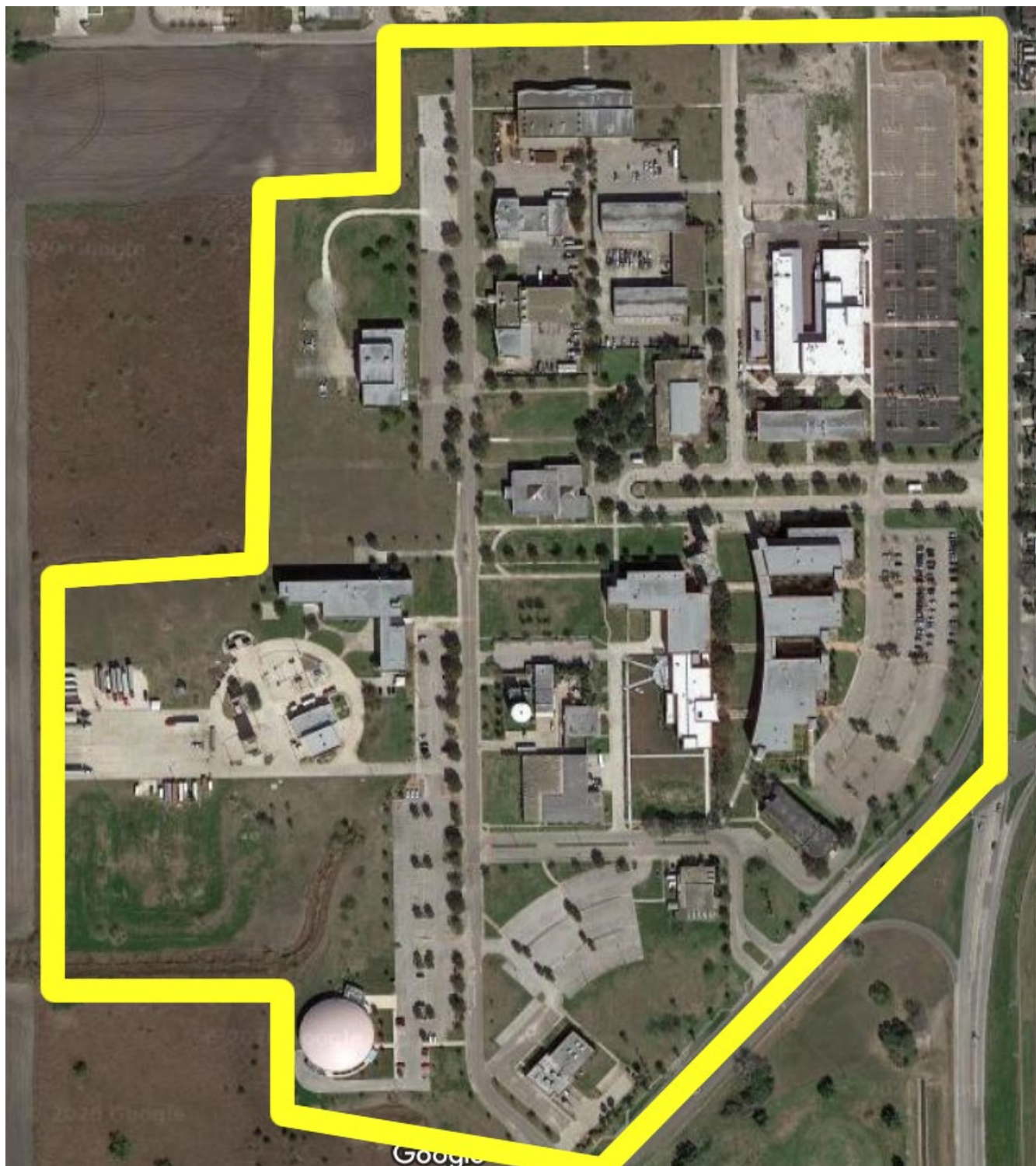
Storm Water Management Program
Dry Weather Screening

Screening Completed
by: Alex Cahill OCT 2021

EAST CAMPUS

Date	QUADRANT 1		QUADRANT 2		QUADRANT 3		QUADRANT 4	
	ID#	Comments	ID#	Comments	ID#	Comments	ID#	Comments
	1	NA	1	Dry	1		1	NA
	2	Dry	2	Dry	2	Wet NO Flow	2	Dry
	3	Dry	3	Dry	3	NA	3	NA
	4	Dry	4	Wet NO Flow	4	NA	4	Dry
	5	Dry	5	Wet With Flow	5	NA	5	Dry
	6	NA	6	Wet With Flow	6	NA	6	NA
	7	NA	7	NA	7	NA	7	NA
	8	Dry	8	NA	8	Wet NO Flow	8	NA
	9	Dry	9	NA	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	Wet NO Flow
	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	Dry		
					48	Dry		

WEST CAMPUS AERIAL VIEW



West Campus





Storm Water Management Program
Dry Weather Screening

Screening Completed
by: Alex Cahill OCT 2021

WEST CAMPUS

Date	NORTH QUADRANT		NORTH QUADRANT		SOUTH QUADRANT		SOUTH QUADRANT	
	ID#	Comments	ID#	Comments	ID#	Comments	ID#	Comments
	N1	NA	N44	NA	S1	Dry	S44	NA
	N2	NA	N45	Dry	S2	Dry	S45	NA
	N3	NA	N46	NA	S3	Dry	S46	NA
	N4	Dry	N47	NA	S4	Dry	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	Wet NO Flow	N51	Dry	S8	NA	S51	Dry
	N9	Wet NO Flow	N52	Dry	S9	NA	S52	Dry
	N10	Wet NO Flow	N53	Dry	S10	NA	S53	Dry
	N11	Dry	N54	Dry	S11	NA	S54	Dry
	N12	Dry	N55	Dry	S12	Dry	S55	Dry
	N13	Wet NO Flow	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	Wet NO Flow	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	NA			S22	Dry	S65	NA
	N23	Dry			S23	Dry	S66	NA
	N24	NA			S24	NA	S67	NA
	N25	NA			S25	NA	S68	NA
	N26	Dry			S26	NA	S69	NA
	N27	Dry			S27	NA	S70	NA
	N28	Dry			S28	NA	S71	NA
	N29	Dry			S29	NA	S72	NA
	N30	Dry			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	Dry			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

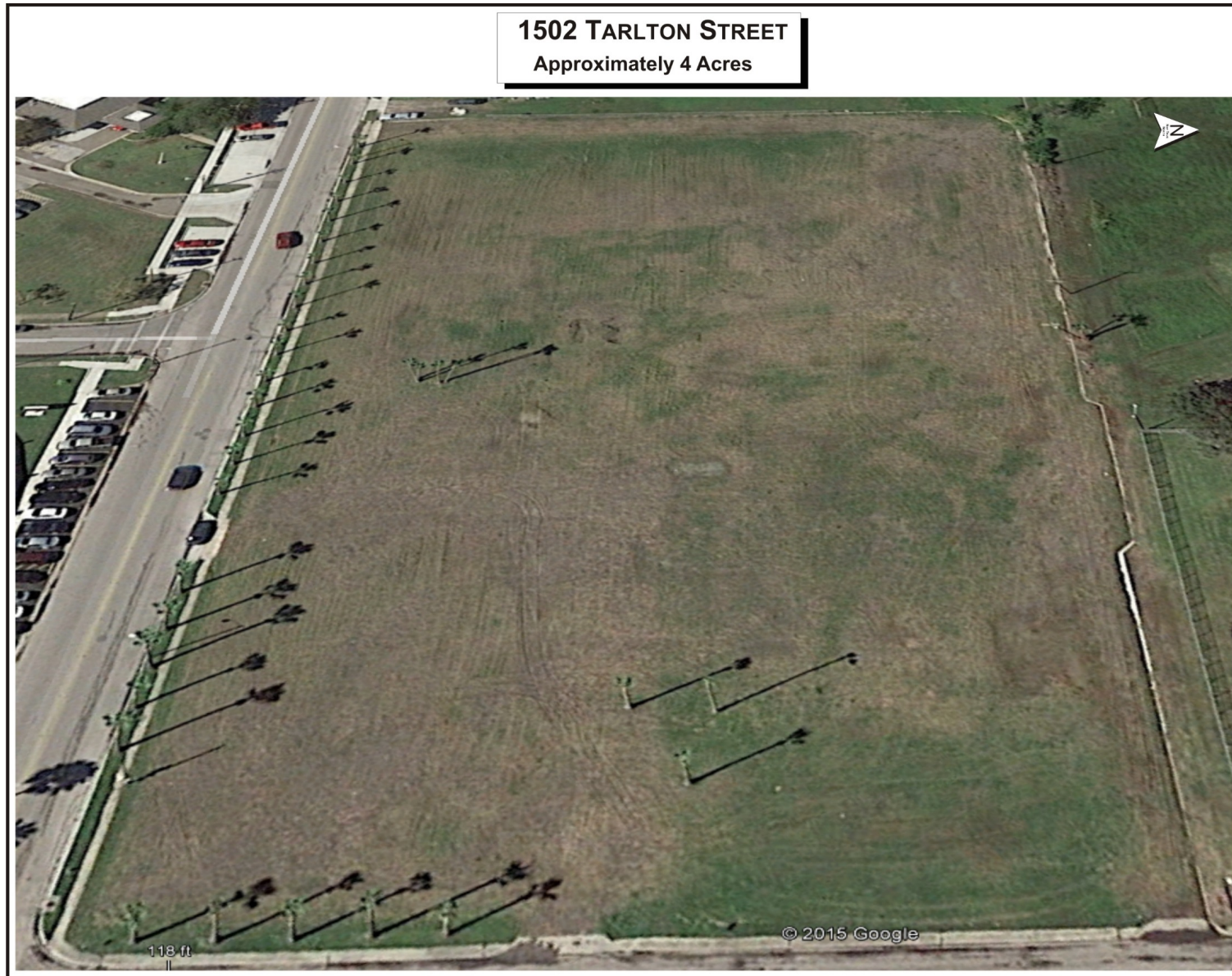
NOTE: The WET drains were either from irrigation or previous rains. There was no flow associated with any WET drain.

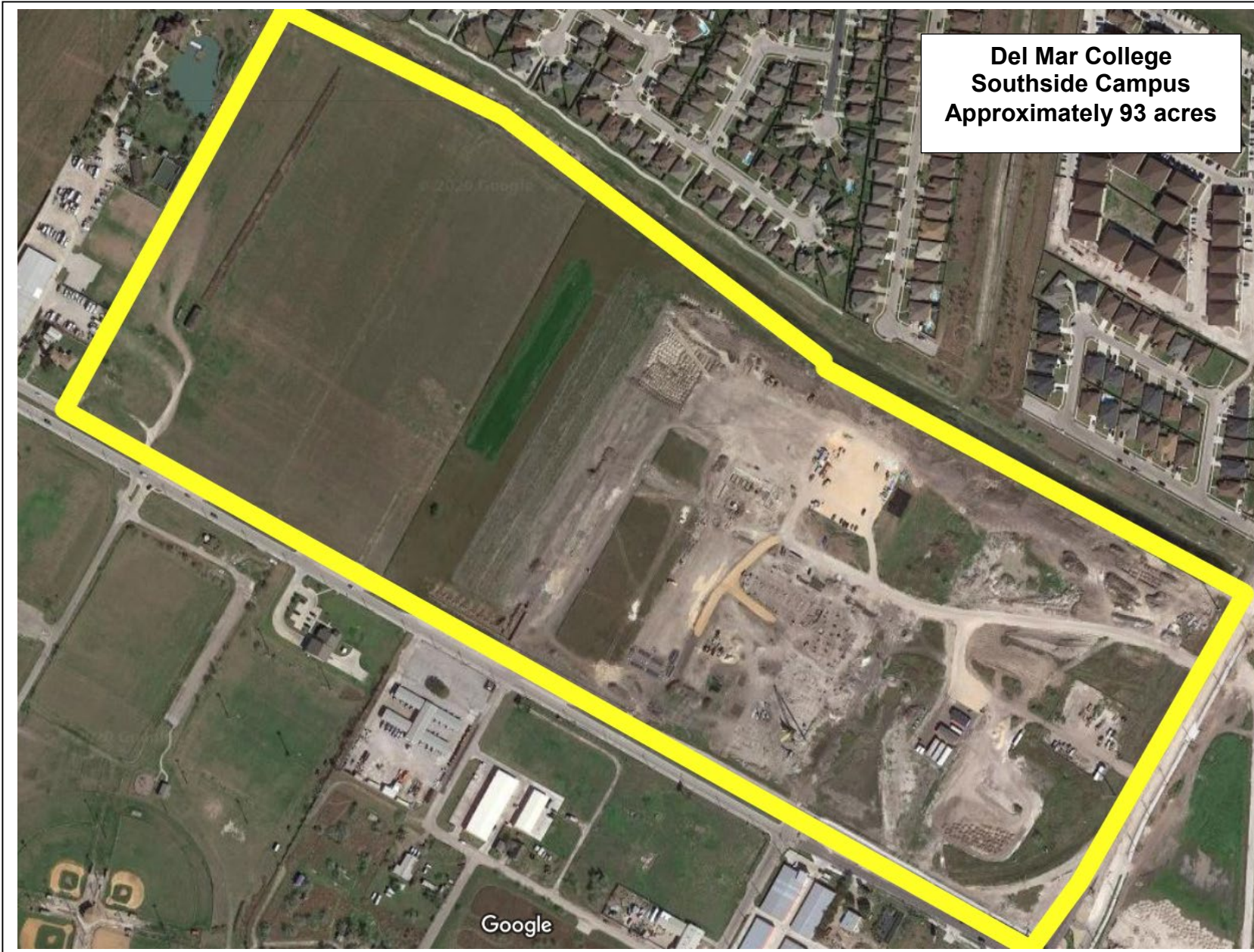
Center for Economic Development Aerial View



Center for Economic Development 3-D View

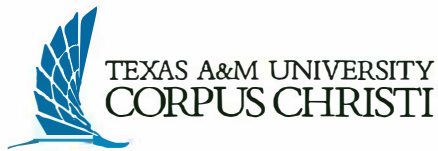








- APPENDIX A-3
CO-PERMITTEE REPORT
Texas A&M University



Jaclyn Mahlmann
Vice President for Finance & Administration
6300 Ocean Drive, Unit 5761
Corpus Christi, Texas 78412-5761
O 361.825.2321 • F 361.825.5810

January 20, 2022

Mr. Robert Anderson
Environmental Services Superintendent
Public Works – Stormwater Environmental
City of Corpus Christi

RE: TPDES Municipal Separate Storm Sewer System (MS4)
Permit NO. WQ0004200000 - Annual Report

Dear Mr. Anderson:

The enclosed annual report is submitted in compliance with Part IV.C Annual Report of referenced permit for the reporting period of October 1, 2020, to September 30, 2021.

Texas A&M University-Corpus Christi remains committed to full compliance with the referenced permit, initiatives and measures which limits as well as prevents discharge of pollutants through storm water runoff.

Sincerely,



Jaclyn Mahlmann
Vice President for Finance & Administration

Enclosure



2021

STORM WATER MANAGEMENT PROGRAM ANNUAL REPORT



**MS4 TPDES PERMIT NO.
WQ0004200000**

October 1, 2020 – September 30, 2021

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

1. The status of implementing the Storm Water Management Plan (SWMP).

Texas A&M University-Corpus Christi's (TAMU-CC) Environmental, Health & Safety (E,H&S) Department has submitted a copy of the University's Storm Water Management Plan to the City of Corpus Christi's Storm Water Division and submits these status reports on an annual basis.

2. Any known proposed changes to the SWMP.

No proposed changes to the TAMU-CC Storm Water Management Plan.

3. Revisions, if necessary, to the assessments of controls and fiscal analysis reported in the permit application of the most recent report.

A survey of sanitary and storm drain sewer lines was completed using video scopes. Deteriorating lines were identified. The process of repairing and/or replacing sewer lines is underway. Cost information regarding sewer line upgrades for this reporting period will be reported on the next reporting period's annual report.

4. A summary of data, including monitoring data that was accumulated during the reporting year.

a. Dry & Wet Weather Screening

Visual inspections of drainage outlets did not yield findings of illicit discharges, improper disposals, nor drainage that were unable to trace back to a source. Information on dates and the number of inspections referenced in the "measurable goals" section, page 8 of this report.

b. Dry & Wet Weather Monitoring

Dry & Wet Weather Monitoring is performed by the City of Corpus Christi. See Appendix 1 for monitoring results.

5. A summary of the number of National Pollution Discharge Elimination System (NPDES) and Texas Pollution Discharge Elimination System (TPDES) Notices of Intents.

Texas A&M University-Corpus Christi (TAMU-CC) is a co-permittee on the TPDES Municipal Separate Storm Sewer System (MS4) permit with the City of Corpus Christi. All contractors are required to comply with the Texas Commission on Environmental Quality (TCEQ) TPDES regulations.

There was one construction site located within TAMU-CC's permitted area during the reporting period.

Stormwater Permit TXR15088V, for the Momentum Rec Sports Fields, was completed, ground stabilized, and remains active for future planned development on the Momentum Campus, located at the intersection of Nile Drive and Islander Way, Corpus Christi, Texas 78412.

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 the Following Year:

	<u>FY19</u>	<u>FY20</u>	<u>FY20</u>	<u>FY21</u>	<u>FY21</u>	<u>FY22</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Actual</u>	<u>Estimate</u>	<u>Actual</u>	<u>Estimate</u>
Streets, parking lots, sidewalk cleaning, and litter control	\$34,795	\$35,578	\$30,929	\$31,625	\$31,187	\$31,889
Trash disposal	\$119,414	\$124,190	\$145,521	\$151,342	\$147,548	\$157,449
Recycling	\$65,777	\$68,409	\$39,655	\$41,241	\$35,570	\$36,992
Sewer line Upgrades	*	*	*	*	**	**

*Not a part of SWMP during this reporting period

** Information regarding expenditures for this reporting period will be reported on the next reporting period's annual report

7. A summary describing the number and nature of enforcement actions, inspections, and public education programs.

a. Enforcement Actions

TAMU-CC does not have enforcement action authority. Enforcement actions are referred to the City of Corpus Christi and TCEQ as the authority having jurisdiction.

b. Inspections

The City of Corpus Christi performs a Storm Water inspection after rain events over one-tenth of an inch at the Storm Event Monitor Site Location. The Storm Event Monitor Site Location is located at the Carlos Truan Natural Resources Center (NRC) Building, storm water outfall #9, located on the northwest side of building. A map of the storm water outfalls can be found on page 9 of this report. The monitoring results can be found in Appendix 1 at the end of this report.

The general contractor on construction sites, or their designee, performs inspections of their respective areas as required by the Construction General Permit.

TAMU-CC E,H&S staff performs visual inspections of the major outfalls through the permit year. Information on the number and dates of visual inspections found in the "measurable goals" section, page 8, of this report.

c. Public Education Programs

TAMU-CC Storm Water Management Awareness Training

The E,H&S Department provides annual storm water awareness training for the applicable university employees and SSC Service Solutions (SSC) contractors whose outdoor duties could potentially impact the storm water drainage systems.

TAMU-CC outsources all grounds, custodial, and maintenance operations to the contracted company SSC.

The E,H&S Department provides environmental awareness training to new hires during the monthly new employee orientation program.

Information regarding training is referenced in the “measurable goals” section, page 8, of this report.

8. Identification of any water quality improvements, degradations, and progress toward any measurable goals or measured reductions in pollutants.

The City of Corpus Christi’s Storm Water Division takes storm water samples from the TAMU-CC’s 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.

SSC operates two street sweepers to keep streets and parking lots clear of debris and to reduce potential pollutants that may enter storm drains.

A survey of sanitary and storm drain sewer lines was completed using video scopes. Deteriorating lines were identified. The process of repairing and/or replacing sewer lines is underway. Cost information regarding sewer line upgrades for this reporting period will be reported on the next reporting period’s annual report.

The following are TAMU-CC's measurable goals under TPDES WQ0004200000 - Part III Section B, Items 1 through 11. Permit No. WQ0004200000 for the reporting period: October 1, 2020 – September 31, 2021.

1. Structural Controls:

Measurable goal: Yes

Storm Sewer Inlets, Catch Basins, Grates, Ditches, Conveyance Swales, and Bioswales are major components of the MS4 that serve an important function in safely conveying storm water. SSC Grounds Services maintains the structural controls to prevent erosion and potential degradation of the system. During this reporting period, no structural controls required maintenance or repairs.

2. Areas of New Development:

Measurable goal: Yes

The Texas A&M University System (TAMUS) Facilities Planning and Construction oversees new construction to ensure that the project complies with local, state and federal codes.

During the reporting period, there were no new areas of development to the storm drain system

3. Roadways:

Measurable goal: Yes

SSC operates one street sweepers. A work order system is used to schedule the cleaning of roadways and parking lots.

4. Flood Control Projects:

Measurable goal: Yes

Berms and swales have been designed into the TAMU-CC campus landscape that controls flooding and erosion.

5. Pesticide, Herbicide, and Fertilizer Application:

Measurable goal: Yes

Two SSC 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.

6. Illicit Discharges and Improper Disposal:

Measurable goal: Yes

Safety-Kleen Systems, Inc. collects and disposes of used oil/oily water/grit from the vehicle wash rack grit trap and the used oil storage tank. During the reporting period, October 1, 2020 -- September 30, 2021, approximately 388 gallons of used oil/oily water/grit was removed.

TAMU-CC maintains a Hazardous Waste Management Plan as required by the US Environmental Protection Agency. The TAMU-CC Hazardous Waste Management Plan can be found on the E,H&S website <http://safety.tamucc.edu>. The University is a Small Quantity Generator of Hazardous Waste. SET Environmental, Inc. manifests and ensures proper disposal of the University's hazardous waste.

Annual Expenditures for Period and Budget for the Following Year:

	FY19	FY20	FY20	FY21	FY21	FY22
	<u>Actual</u>	<u>Estimate</u>	<u>Actual</u>	<u>Estimate</u>	<u>Actual</u>	<u>Estimate</u>
Haz. Waste Disposal	\$18,394	\$35,000	\$18,525	\$35,000	\$46,484	\$55,000

7. Spill Prevention and Response:

Measurable goal: Yes

TAMU-CC maintains a Spill Prevention Control and Counter Measures Plan as required by the U.S. Environmental Protection Agency (EPA) and a Facilities Response Plan as required by the Texas General Land Office (TGLO). The TGLO performs an annual facilities inspection.

Spill kits are located at each of the emergency generator sites; the motor pool used oil collection tank; the fueling station; and the hazardous waste central accumulation storage building.

A storm drain cover for spill response is located at the motor pool.

8. Industrial & High-Risk Runoff:

Measurable goal: No

TAMU-CC does not own or operate Industrial and High-Risk Facilities.

9. Construction Site Runoff:

Measurable goal: Yes

This element of the SWMP is managed under the City of Corpus Christi's Guidance Document for Developmental Planning and Construction Activities.

One permitted large construction site located within TAMU-CC's permitted area remains active for future planned development: Stormwater Permit TXR15088V.

10 Public Education:

Measurable goal: Yes

Environmental Awareness training is provided to all new university employees during a New Employee Orientation. During the reporting period, new university employees received environmental awareness training provided by E,H&S on these dates:

October 13, 2020
November 10, 2020
December 8, 2020
January 12, 2021
February 9, 2021
March 9, 2021
April 13, 2021
July 13, 2021
August 10, 2021
September 14, 2021

11. Monitoring and Screening Program:

Measurable goal: Yes

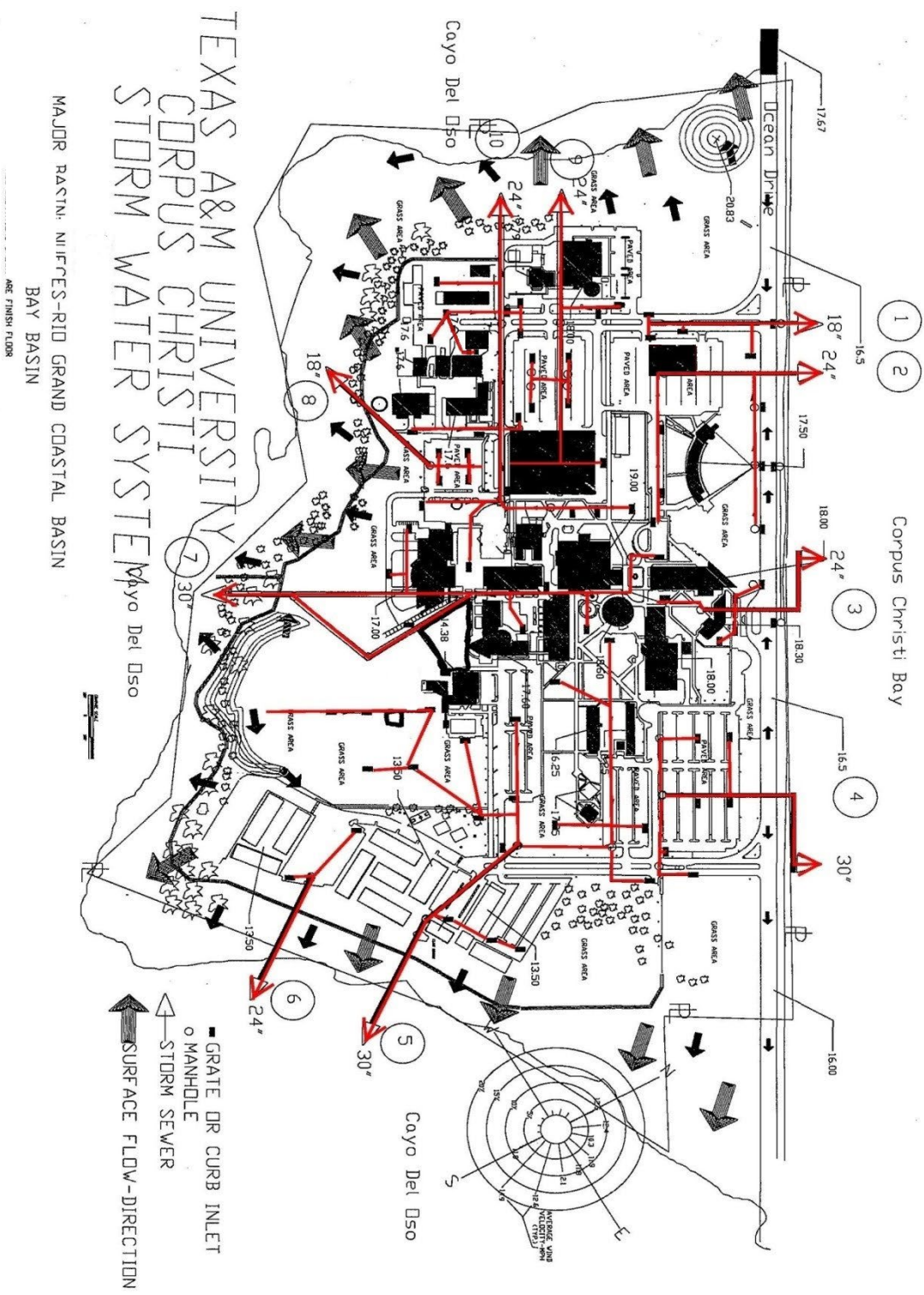
TAMU-CC visually inspects the ten existing structural storm water outfalls to detect illicit discharges and improper disposal. Visual inspections performed on all ten outfalls on these dates:

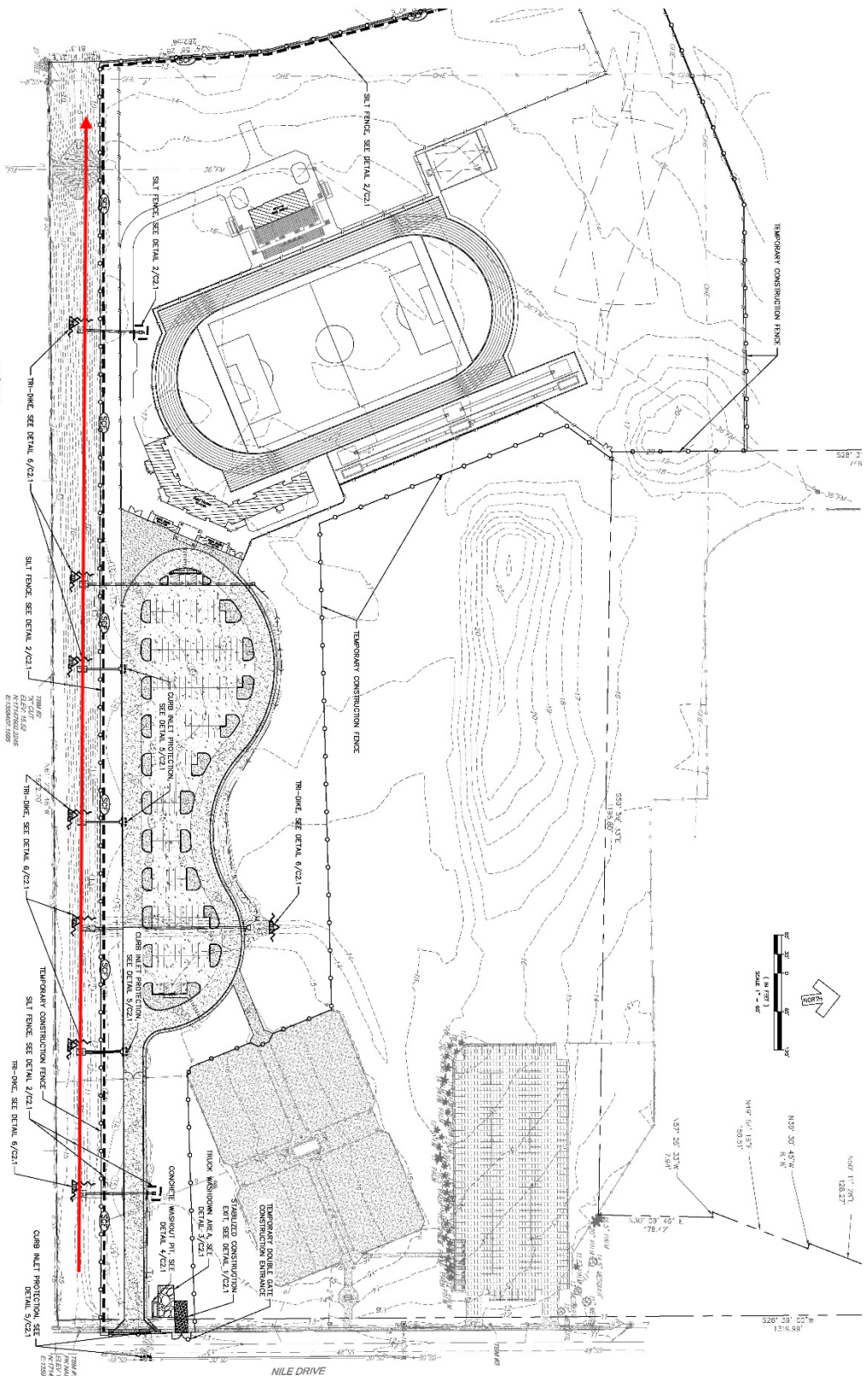
October 13, 2020
January 14, 2021
April 2, 2021
July 20, 2021
September 7, 2021

There were no findings of any illicit discharges or improper disposal.

The City of Corpus Christi performs dry & wet weather monitoring for this location. See Appendix 1 for the monitoring results.

9. Storm Drain System Diagram





- LEGEND**
- EXIST. CONTOUR (MAJOR)
 - EXIST. CONTOUR (MINOR)
 - CONCRETE WASHOUT PIT, SEE DETAIL 4/2/21
 - TRUCK WASHDOWN AREA, SEE DETAIL 5/2/21
 - CONCRETE WASHOUT PIT, SEE DETAIL 4/2/21
 - TRIANGULAR FILTER DOME, SEE DETAIL 6/2/21
 - SILT FENCE, SEE DETAIL 2/2/21
 - CURB INLET PROTECTION, SEE DETAIL 5/2/21
 - NEW CONTOUR
 - CONSTRUCTION DET, SEE DETAIL 7/2/21
 - CONSTRUCTION ACTIVITY, COORDINATE WITH OWNER

- EROSION CONTROL NOTES:**
1. ANY WORK INVOLVING EXCAVATION OR DISTURBANCE OF SOILS SHALL BE DONE IN ACCORDANCE WITH THE EROSION CONTROL PLAN AND THE EROSION CONTROL ACT.
 2. EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
 3. EROSION CONTROL MEASURES SHALL BE REMOVED OR MODIFIED AS REQUIRED BY THE ENGINEER.
 4. EROSION CONTROL MEASURES SHALL BE MAINTAINED IN ACCORDANCE WITH THE EROSION CONTROL PLAN.
 5. EROSION CONTROL MEASURES SHALL BE MAINTAINED IN ACCORDANCE WITH THE EROSION CONTROL PLAN.

C20

EROSION + SEDIMENT CONTROL PLAN

DATE: 1/22/22

BY: [Signature]

CHECKED: [Signature]

REVISIONS:

MOMENTUM SPORTS COMPLEX

TEXAS A&M UNIVERSITY

CORPUS CHRISTI

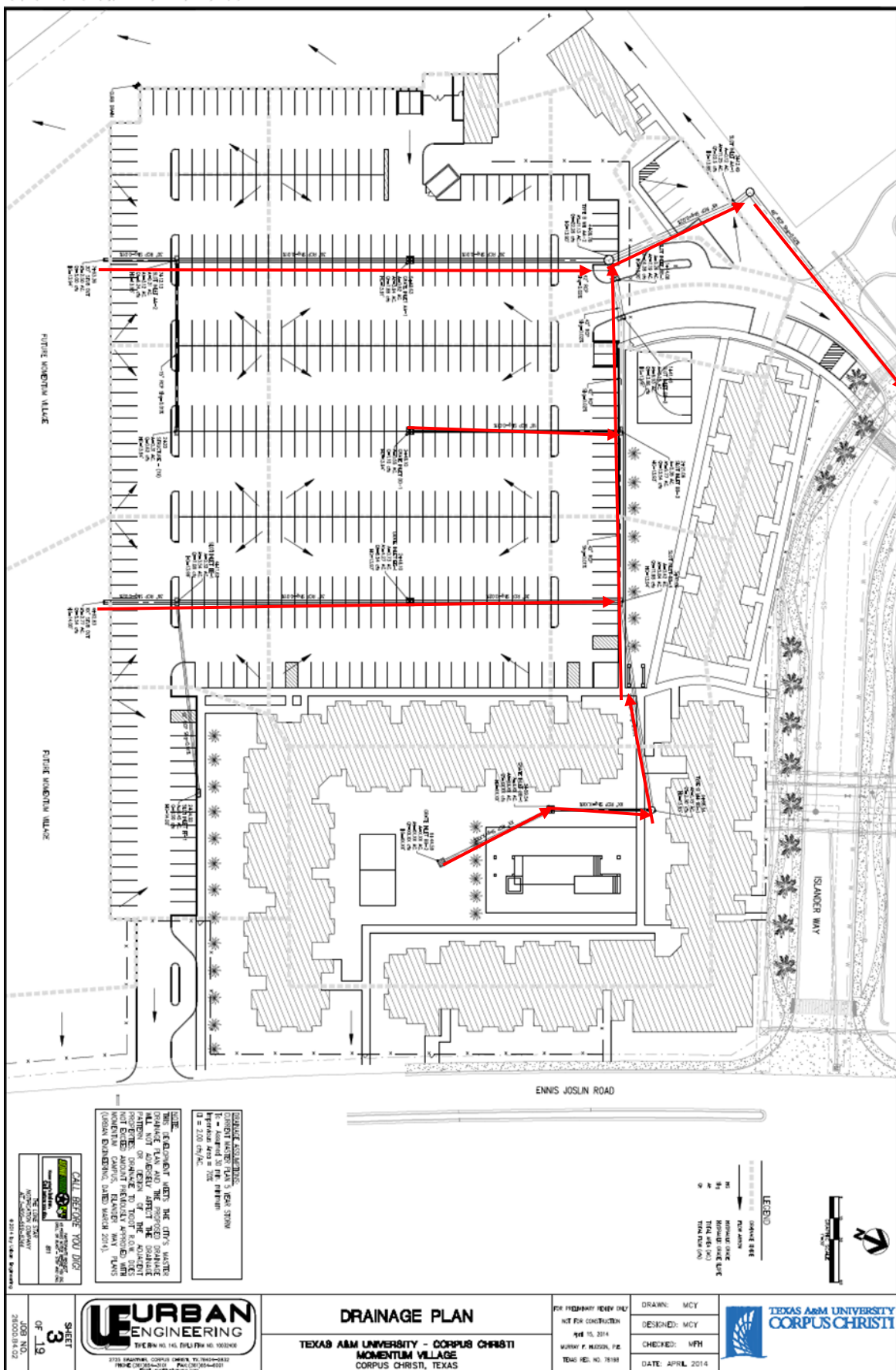
PKR

Architectural
Engineering
Planning
Fully Compliant

TEXAS A&M

CORPUS CHRISTI

CONSULTANTS
Project Name: Momentum Sports Complex
Project Number: C20
Client: Texas A&M University
Location: Corpus Christi, TX
Scale: 1" = 50'
North Arrow: [North Arrow]





DRAINAGE PLAN

Scale: 1" = 50'

Drawing No. C-202

TAMUCC Momentum Village Phase II

American Campus Communities
Corpus Christi, Texas

ARCHITECTURE DEMAREST

2020 Highway Street, Suite 100
Corpus Christi, TX 78401

ENGINEERING

2020 Highway Street, Suite 100
Corpus Christi, TX 78401

Co-Permittee: Texas A&M University-Corpus Christi

I, Jaclyn Mahlmann Vice President for Finance and Administration
(Typed or Printed Name) (Title)

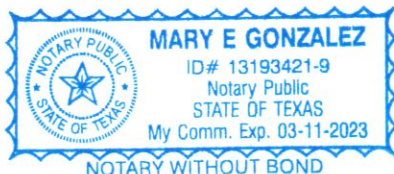
Certify under penalty of law that those documents related to the MS4 annual report prepared by Texas A&M University-Corpus Christi and all supporting attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and 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 are true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for known violations.

Signature: [Signature] Date: 1/20/22

Note: All APPLICATIONS MUST BEAR THE SIGNATURE AND SEAL OF NOTARY PUBLIC

SUBSCRIBED AND SWORN to before me by the said Jaclyn Mahlmann
on this 20th day of JANUARY, 2022.

My commission expires on the 11th day of MARCH, 2023.



Mary E. Gonzalez
Notary Public

Nueces County

APPENDIX



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#: AB65343
Sample Name: TAMU-CC
Date Received: 12/20/2020
Date Sampled: 12/20/2020
Report Date: 1/21/21
Time: 08:18
Time: 07:22

Phone: **EMAIL:** jeff@cctexas.com

Parameter	Result	Unit	Flag	RL's	Date/Time Analyzed	Method	Analyst	Analysis Comments
Ammonia (AP)	<0.2	mg/l		0.2	12/23/20 10:13	EPA 350.1	MONICAS	
Atrazine	<10.0	µg/l	O	2	1/5/21 06:45	EPA 625	PACE LABS	
Biochemical Oxygen Demand	7	mg/l		2.0	12/20/20 10:40	SM 5210B	DM	
Cadmium	<1.0	µg/l	O	1	12/22/20 12:10	EPA 200.8	PACE LABS	
Chemical Oxygen Demand	23	mg/l		10	12/28/20 11:55	SM 5220D	MONICAS	
Chromium	<3.0	µg/l	O	2	12/22/20 12:10	EPA 200.8	PACE LABS	
Copper	9.5	ug/l	O	2	12/22/20 12:10	EPA 200.8	PACE LABS	
Dissolved Phosphorus	0.42	mg/l	X		12/28/20 15:53	EPA 365.1	MONICAS	
Lead	<0.5	ug/l	O	2	12/22/20 12:10	EPA 200.8	PACE LABS	
Nickel	<2.0	µg/l	O	2	12/22/20 12:10	EPA 200.8	PACE LABS	
Nitrate	0.28	mg/l		0.02	12/20/20 14:00	EPA 300.0	MONICAS	
Nitrite	0.07	mg/l		0.02	12/20/20 14:00	EPA 300.0	MONICAS	
Total Dissolved Solids	109	mg/l			12/24/20 09:55	SM 2540C	BR	
Total Kjeldahl Nitrogen	1.2	mg/l		0.20	1/12/21 08:56	EPA 351.4	MONICAS	
Total Nitrogen	1.5	mg/l			1/13/21 09:00		WUL	Calculated result.
Total Phosphorus	0.24	mg/l		0.20	12/28/20 15:53	EPA 365.1	MONICAS	
Total Suspended Solids	3	mg/l		2.5	12/22/20 15:02	SM2540D	BR	
Zinc	31.0	µg/l	O	5	12/22/20 12:10	EPA 200.8	PACE LABS	

Sample Comments:

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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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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.



CHAIN OF CUSTODY RECORD



CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1963

TAMUCC
SAMPLE LOCATION

Collector
Patricia Howard

Sample Identification	Collection Date	Collection Time	Grab (g) Comp (C)	Container Type	Number of Containers	Preservative
Composite	12/20/2010	0722	C	Glass	1	Ice

pH (SU)

8.31

Temperature (C)

18.4

Remarks

Temp Can A 19.8 CT 13.8

All samples are stored on ice through laboratory receipt.

Relinquished by: <i>Patricia Howard</i>	Date/Time 12/20/20 0818	Received by: <i>David Smith</i>	Date/Time 12-20-20 0818
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

☐ GRAB PARAMETERS

ANALYSIS

- Units
- mg/L
- mg/L
- 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
- 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#: AB65867 **Report Date:** 2/26/21
Sample Name: TAMU-CC
Date Received: 12/31/2020 **Time:** 12:26
Date Sampled: 12/31/2020 **Time:** 11:10

Phone: **EMAIL:** jeff@cctexas.com

Parameter	Result	Unit	Flag	RL's	Date/Time Analyzed	Method	Analyst	Analysis Comments
Ammonia (SE)	<0.2	mg/l		0.20	1/4/21 10:34	SM 4500-NH3	MONICAS	
Atrazine	<2.5	µg/l	O	2	1/6/21 09:42	EPA 625	PACE LABS	
Biochemical Oxygen Demand	4	mg/l		2.0	1/1/21 11:00	SM 5210B	DM	
Cadmium	<1.0	µg/l	O	1	1/6/21 09:05	EPA 200.8	PACE LABS	
Chemical Oxygen Demand	22	mg/l		10	1/7/21 11:42	SM 5220D	MONICAS	
Chromium	<3.0	µg/l	O	2	1/6/21 09:05	EPA 200.8	PACE LABS	
Copper	5.0	ug/l	O	2	1/6/21 09:05	EPA 200.8	PACE LABS	
Dissolved Phosphorous	<0.2	mg/l			1/8/21 13:57	EPA 365.1	MONICAS	
Lead	1.6	ug/l	O	2	1/6/21 09:05	EPA 200.8	PACE LABS	
Nickel	<2.0	µg/l	O	2	1/6/21 09:05	EPA 200.8	PACE LABS	
Nitrate	0.22	mg/l	X	0.02	1/1/21 11:28	EPA 353.2	MONICAS	
Nitrite	0.03	mg/l		0.02	1/1/21 11:28	EPA 353.2	MONICAS	
Total Dissolved Solids	126	mg/l			1/4/21 15:00	SM 2540C	BR	
Total Kjeldahl Nitrogen	0.5	mg/l		0.20	1/27/21 09:40	EPA 351.4	MONICAS	
Total Nitrogen	0.72	mg/l			1/28/21 09:00		WUL	
Total Phosphorus	0.53	mg/l		0.20	1/8/21 13:57	EPA 365.1	MONICAS	
Total Suspended Solids	19	mg/l		2.5	1/4/21 08:55	SM2540D	KW	
Zinc	21.0	µg/l	O	5	1/6/21 09:05	EPA 200.8	PACE LABS	

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

TAMUCC
SAMPLE LOCATION
2nd set

Collector: B. Rando / O. Gonzalez

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
Composite	12/31/20	11:00 AM	C	Glass	1	Ice

pH (SU)

Temperature (C)

7.7 / 7.7 °C

Remarks

Run A

All samples are stored on ice through laboratory receipt.

Relinquished by: <i>[Signature]</i>	Date/Time: 12/31/20 12:26	Received by: <i>[Signature]</i>	Date/Time: 12/31/2020 12:26
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#: AB65341 Sample Name: TAMU-CC Date Received: 12/19/2020 Date Sampled: 12/19/2020	Report Date: 1/27/21 Time: 14:39 Time: 09:35
--------------------	--	--	---

Phone: **EMAIL:** jeff@cctexas.com

Parameter	Result	Unit	Flag	RL's	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli - SM923 B	>24196	MPN	A		12/19/20 15:01		BR	
Enterococci	>24196	MPN	A	1	12/20/20 15:30	Enterolert	BR	
Hardness as CaCO3 - SM2340C	112	mg/l		10	12/24/20 08:30		DM	
Oil and Grease - 1664B	4	mg/l		3	1/22/21 09:30		MONICAS	
pH	7.65	SU			12/19/20 09:35		EQS-PH	*Field Measurement
Total Cyanide	<10.0	µg/l	O	5	12/28/20 11:48		PACE	
Water Temperature	21.0	Deg C			12/19/20 09:35		EQS-PH	*Field Measurement

Sample Comments:

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Respectfully Submitted,

Technical Director (or designee)

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 - OA=Outside the scope of the lab's NELAP accreditation.
 - U=Unsuitable; sample turned turbid after incubation.
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 - K=BOD result estimated due to blank exceeding the allowable oxygen depletion.
 - D=Sample dilution required for analysis/ quality control.



CHAIN OF CUSTODY RECORD



CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

TAMUCC
SAMPLE LOCATION
F-706 & Howard
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (g)	Container Type	Number of Containers	Preservative
E. Coli/Enterococci	12/19/20	0935	G	Plastic	1	Na2S2O3
Total Hardness	12/19/20	0935	G	Plastic	1	HNO3
Cyanide (T)	12/19/20	0935	G	Plastic	1	NaOH
Oil & Grease	12/19/20	0935	G	Glass	1	H2SO4

pH (SU)

7.65

Temperature (C)

21.0

Temp Gun B
4.9 CT 4.9

Remarks

All samples are stored on ice through laboratory receipt.

Relinquished by: <u>Joe Rinal</u>	Date/Time: <u>12/19/2020</u>	Received by: <u>Brendan Roberts</u>	Date/Time: <u>12-19-20 1439</u>
Relinquished by:	Date/Time:	Received by:	Date/Time:

COMPOSITE PARAMETERS

☒ GRAB PARAMETERS

ANALYSIS		Units	ANALYSIS		Units
Biochemical Oxygen Demand (BOD)		mg/L	<input checked="" type="checkbox"/> Oil and Grease		mg/L
Chemical Oxygen Demand (COD)		mg/L	<input checked="" type="checkbox"/> Total Cyanide		ug/L
Total Suspended Solids (TSS)		mg/L	<input checked="" type="checkbox"/> Hardness		mg/L
Total Dissolved Solids (TDS)		mg/L	<input checked="" type="checkbox"/> E. coli		MPN/100 mL
Total Nitrogen		mg/L	<input checked="" type="checkbox"/> Enterococci		MPN/100 mL
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			



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#: AB65846 **Report Date:** 1/27/21
Sample Name: TAMU-CC
Date Received: 12/31/2020 **Time:** 00:22
Date Sampled: 12/30/2020 **Time:** 22:45

Phone: 361-825-4180 **EMAIL:** jeff@cctexas.com

Parameter	Result	Unit	Flag	RL's	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli - SM223 B	>2419.6	MPN			12/31/20 01:00		KW	
Enterococci	>2419.6	MPN		1	12/31/20 00:40	Enterolert	KW	
Hardness as CaCO3 - SM2340C	24	mg/l		10	12/31/20 09:20		DM	
Oil and Grease - 1664B	<3	mg/l		3	1/22/21 09:30		MONICAS	
pH	9.35	SU			12/31/20 22:49		EQS-RC	*Field Measurement
Total Cyanide	<10.0	µg/l	O	5	1/8/21 11:06		PACE	
Water Temperature	20.7	Deg C			12/31/20 22:49		RC	*Field Measurement

Sample Comments:

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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 NELAP 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.
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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

TAMUCC
SAMPLE LOCATION
2nd set

AB05840

PC

COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (g)	Container Type	Number of Containers	Preservative
E. Coli/Enterococci	12/30/20	2245	G	Plastic	1	Na2S2O3
Total Hardness			G	Plastic	1	HNO3
Cyanide (T)			G	Plastic	1	NaOH
Oil & Grease			G	Glass	1	H2SO4

pH (SU)

9.35 pH

Temperature (C)

20.7

2245 T-2

Remarks

TEMP: 2.7 CT: 2.7 GUN A

pH < 2 line 2, 4
pH > 12 line 3
W19440D

All samples are stored on ice through laboratory receipt.

Relinquished by:	Date/Time	Received by:	Date/Time
<i>[Signature]</i>	12/31/20 06:03	DANIELLE MARSHALL	12/31/20 0:22
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
mg/L
mg/L
mg/L
mg/L
mg/L
mg/L
mg/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#: AB72651 **Report Date:** 7/1/21
Sample Name: TAMU-CC
Date Received: 05/16/2021 **Time:** 12:03
Date Sampled: 05/16/2021 **Time:** 11:20

Phone: **EMAIL:** roberta3@ccetexas.com

Parameter	Result	Unit	Flag	RL's	Date/Time Analyzed	Method	Analyst	Analysis Comments
Ammonia (AP)	<0.2	mg/l		0.2	5/17/21 12:09	EPA 350.1	MONICAS	
Atrazine	<2.6	µg/l	O	2	6/22/21 16:50	EPA 625	PACE LABS	
Biochemical Oxygen Demand	4	mg/l	K.X	2.0	5/17/21 11:09	SM 5210B	BRSE	
Cadmium	<1.0	µg/l	O	1	5/25/21 17:37	EPA 200.8	PACE LABS	
Chemical Oxygen Demand	27	mg/l		10	5/21/21 09:46	SM 5220D	MONICAS	
Chromium	<3.0	µg/l	O	2	5/25/21 17:37	EPA 200.8	PACE LABS	
Copper	7.01	ug/l	O	2	5/25/21 17:37	EPA 200.8	PACE LABS	
Dissolved Phosphorous	<0.2	mg/l			5/21/21 11:17	EPA 365.1	MONICAS	
Lead	<0.50	ug/l	O	2	5/25/21 17:37	EPA 200.8	PACE LABS	
Nickel	<2.0	µg/l	O	2	5/25/21 17:37	EPA 200.8	PACE LABS	
Nitrate	0.24	mg/l		0.02	5/16/21 11:25	EPA 300.0	DM	
Nitrite	0.04	mg/l		0.02	5/16/21 11:25	EPA 300.0	DM	
Total Dissolved Solids	136	mg/l			5/20/21 15:55	SM 2540C	KW/MS	
Total Kjeldahl Nitrogen	0.8	mg/l		0.20	5/24/21 09:00	EPA 351.4	BR	
Total Nitrogen	1.04	mg/l			5/25/21 09:00		WUL	*Calculated result.
Total Phosphorus	1.33	mg/l		0.20	5/21/21 11:17	EPA 365.1	MONICAS	
Total Suspended Solids	2	mg/l		2.5	5/17/21 13:30	SM2540D	KW	
Zinc	15.5	µg/l	O	5	5/25/21 17:37	EPA 200.8	PACE LABS	

Sample Comments:

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Respectfully Submitted,



Technical Director (or designee)

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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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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. **OA**=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.



CHAIN OF CUSTODY RECORD



CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1853

TAMUCC 2nd St
SAMPLE LOCATION

Patricia Howard
COLLECTOR

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
Composite	5/16/2021	1120	C	Glass	1	Ice

pH (SU) 8.42

Temperature (C) 24.3 C

Remarks TRMP:12.1 CT:12.1 GUN A

All samples are stored on ice through laboratory receipt.

Relinquished by: <u>Patricia Howard</u>	Date/Time <u>5/16/21 1203</u>	Received by: <u>D. Marshall</u>	Date/Time <u>5/16/21 @ 1203</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
mg/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
- ANALYSIS

Oil and Grease
Total Cyanide
Hardness
E. coli
Enterococci

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#: AB73429 **Report Date:** 9/29/21
Sample Name: TAMU-CC
Date Received: 06/01/2021 **Time:** 09:43
Date Sampled: 06/01/2021 **Time:** 08:20

Phone: **EMAIL:** roberta3@octexas.com

Parameter	Result	Unit	Flag	RL's	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli - SM9223 B	64880	MPN	D		6/2/21 09:42		KW	
Enterococci	19863	MPN	D	1	6/1/21 14:30	Enterolert	KW	
Hardness as CaCO3 - SM2240C	36	mg/l		10	6/22/21 08:30		DM	
Oil and Grease - 1664B	3	mg/l		3	6/1/21 08:15		MONICAS	
pH	7.51	SU			6/1/21 08:20		EOS	*Field measurement.
Total Cyanide	<10.0	µg/l	O	5	6/4/21 15:45		PACE LABS	
Water Temperature	22.6	Deg C			6/1/21 08:20		EOS	*Field measurement.

Sample Comments:

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Respectfully Submitted,

Technical Director (or designee)

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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.



CHAIN OF CUSTODY RECORD



CITY OF CORPUS CHRISTI
STORMWATER DEPARTMENT
PO BOX 9277
CORPUS CHRISTI, TEXAS 78469-9277
(361) 826-1863

TAMUCC
SAMPLE LOCATION
2nd set

AB13429

Collector

Sample Identification	Collection Date	Collection Time	Grab (g) Comp (C)	Container Type	Number of Containers	Preservative
E. Coli/Enterococci	6-1-21	8:20 am	G	Plastic	1	Na2S2O3
Total Hardness	6-1-21	8:20 am	G	Plastic	1	HNO3
Cyanide (T)	6-1-21	8:20 am	G	Plastic	1	NaOH
Oil & Grease	6-1-21	8:20 am	G	Glass	1	H2SO4

pH (SU)

7.51

Temperature (C)

22.6

Remarks

Temp 7:37.3 at Gull A
W446DD line 2-2 line 3 712

All samples are stored on ice through laboratory receipt

Relinquished by:	Date/Time	Received by:	Date/Time
6-1-21 9:53	6-1-21 9:53	6-1-21 9:53	6-1-21 9:53
Relinquished by:	Date/Time	Received by:	Date/Time
6-1-21 9:53	6-1-21 9:53	6-1-21 9:53	6-1-21 9:53

COMPOSITE PARAMETERS

GRAB PARAMETERS

ANALYSIS

Biochemical Oxygen Demand (BOD)	mg/L	ANALYSIS	Units
Chemical Oxygen Demand (COD)	mg/L	<input checked="" type="checkbox"/> Oil and Grease	mg/L
Total Suspended Solids (TSS)	mg/L	<input checked="" type="checkbox"/> Total Cyanide	ug/L
Total Dissolved Solids (TDS)	mg/L	<input checked="" type="checkbox"/> Hardness	mg/L
Total Nitrogen	mg/L	<input checked="" type="checkbox"/> E. coli	MPN/100 mL
Total Kjeldahl Nitrogen (TKN)	mg/L	<input checked="" type="checkbox"/> Enterococci	MPN/100 mL
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		



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#: AB72409 Sample Name: TAMU-CC Date Received: 05/12/2021 Date Sampled: 05/12/2021	Report Date: 6/29/21 Time: 07:22 Time: 01:05
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Phone: **EMAIL:** roberta3@octexas.com

Parameter	Result	Unit	Flag	RL's	Date/Time Analyzed	Method	Analyst	Analysis Comments
E. coli - SM9223 B	32550	MPN	D		5/12/21 07:35		KW	
Enterococci	21870	MPN	D	1	5/12/21 07:35	Enterolert	KW	
Hardness as CaCO3 - SM2240C	40	mg/l		10	5/12/21 08:10		MONICAS	
Oil and Grease - 1664B	<3	mg/l		3	6/1/21 08:15		MONICAS	
pH	6.40	SU			5/10/21 01:05		EOS	*Field measurement.
Total Cyanide	<10	µg/l	O	5	5/21/21 11:20		PACE LABS	
Water Temperature	24.1	Deg C			5/10/21 01:05		EOS	*Field measurement.

Sample Comments:

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Technical Director (or designee)

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 - LA=Lab accident.
 - LE=Lab error.
 - OA=Outside the scope of the lab's NELAP 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 NELAP accredited lab.
 - O+=Analysis flagged by outside laboratory.
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 - R=Reagent water contamination suspected.
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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

AB72409

TAMUCC
SAMPLE LOCATION
COLLECTOR
Gonzalez / Gurrea

Sample Identification	Collection Date	Collection Time	Grab (G) Comp (C)	Container Type	Number of Containers	Preservative
E. Coli/Enterococci	5-12-21	1:05 PM	G	Plastic	1	Na2S2O3
Total Hardness	5-12-21	1:05 PM	G	Plastic	1	HNO3
Cyanide (T)	5-12-21	1:05 PM	G	Plastic	1	NaOH
Oil & Grease	5-12-21	1:05 PM	G	Glass	1	H2SO4
Oil & Grease Spike	5-12-21	1:05 PM	G	Glass	1	H2SO4
Oil & Grease Dup	5-12-21	1:05 PM	G	Glass	1	H2SO4

pH (SU) 6.40 Temperature (C) 24.1

Remarks

All samples are stored on ice through laboratory receipt.

Relinquished By: <i>[Signature]</i>	Date/Time: 5/12/21 0722	Received by: <i>[Signature]</i>	Date/Time: 5-12-21 / 0722
Relinquished by:	Date/Time	Received by:	Date/Time

COMPOSITE PARAMETERS

GRAB PARAMETERS

ANALYSIS	Units	ANALYSIS	Units
Biochemical Oxygen Demand (BOD)	mg/L	Oil and Grease	mg/L
Chemical Oxygen Demand (COD)	mg/L	Total Cyanide	ug/L
Total Suspended Solids (TSS)	mg/L	Hardness	mg/L
Total Dissolved Solids (TDS)	mg/L	E. coli	MPN/100 mL
Total Nitrogen	mg/L	Enterococci	MPN/100 mL
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		

Reed temp 33°C
Gun A CT 3.3°C