PROCEDURES FOR AUTHORIZED DISCHARGE OF GROUNDWATER TO THE CITY OF CORPUS CHRISTI MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) (STORM WATER DRAINAGE SYSTEM)

AUTHORIZATION:

The authorization for this requirement of testing the groundwater prior to discharge is found in City of Corpus Christi Code of Ordinances, Article XVI, Section 55-203, Prohibited Discharges into the MS4, Ordinance No. 022583.

Paragraph c (1) describes allowed discharges including "uncontaminated groundwater." Paragraph (e) discusses using sampling and testing as a defense to an illicit discharge by proving the discharge is equal to or better than the quality of the first natural receiving water body. <u>All</u> steps of this procedure shall be completed prior to any discharge of groundwater to the MS4.

Any discharge to the City of Corpus Christi MS4 must be covered by and in compliance with either a National Pollutant Discharge Elimination System (NPDES) Permit or Texas Pollutant Discharge Elimination System (TPDES) Permit. Unpermitted discharges are prohibited.

Construction activities that disturb less than 1 acre, and are not part of a larger common plan of development that would disturb 1 or more acres, are not required to obtain NPDES or TPDES permit coverage, but still must obtain authorization to discharge from the City of Corpus Christi.

STEPS TO DETERMINE AN ALLOWABLE DISCHARGE TO THE MS4:

1. IDENTIFY THE FIRST RECEIVING WATER

When the first water body is a fresh water system (Nueces River or Oso Creek,) the analysis typically fails because our groundwater is too high in Total Dissolved Solids (TDS.) Alternative methods for groundwater discharges shall be considered, such as: discharge to adjacent fields with no run off (with permission of property owner required), permitted discharge to the wastewater collection system (826-1817 for permit), tanking and hauling for legal disposal, or using for dust control.

If the first receiving water is a marine environment, proceed with step two to compare the groundwater quality to the receiving water quality.

2. COMPARE GROUNDWATER DISCHARGE QUALITY TO RECEIVING WATER QUALITY

The attached table, Groundwater Discharge Limits, provides the baseline parameters for comparison. For Total Dissolved Solids (TDS) and Total Suspended Solids (TSS), the applicant may test the receiving waters at the specific MS4 outfall where the discharge will occur or may use the general parameters established by the City Storm Water Department for the major receiving water bodies (Corpus Christi Bay, Oso Bay, Nueces Bay, Oso Creek, Laguna Madre, Inner Harbor, Nueces River Tidal, Nueces River, and Gulf of Mexico). The specific parameters may be obtained by contacting the individual(s) in step 6.

3. ANALYZE GROUNDWATER FOR HYDROCARBON CONTAMINATION

All parameters listed on the attached Groundwater Discharge Limits table shall be analyzed prior to requesting authorization to discharge to the storm water system. If no limits are exceeded, groundwater discharge to the MS4 may be authorized following MS4 operator review of laboratory reports, pollution prevention measures, NPDES/TPDES permit coverage, and completed and signed "Request for Authorization" form. Analytical results shall be retained on site or readily available for review by local, state, or federal inspectors.

4. IMPLEMENT POLLUTION PREVENTION MEASURES:

A storm water pollution prevention plan or pollution control plan shall be developed and implemented prior to any groundwater discharge to the MS4. The plan's objectives are to limit erosion and scour of the MS4, minimize TSS and other pollutants, and prevent any damage to the MS4. Note that groundwater discharges must cease immediately upon the first recognition of contamination, either by sensory or analytical methods. If the discharge of groundwater results in any damages to the MS4, the responsible party shall remediate any damage to the MS4 to the satisfaction of the MS4 operator.

5. COMPLETE THE <u>REQUEST FOR AUTHORIZATION TO DISCHARGE TO</u> <u>THE CITY OF CORPUS CHRISTI MUNICIPAL SEPARATE STORM SEWER</u> SYSTEM (MS4) FORM

When completing this form, note that the responsible party is the same person who signs the Notice of Intent to Discharge. The knowledgeable person is the best person to contact if there are any questions concerning the application to discharge. The discharge location can be a physical street address, GPS coordinates, a written description of how to find the discharge point, or an attached location map; the Storm Water Department must be able to locate the activity to perform any necessary inspections.

6. REQUEST MS4 OPERATOR AUTHORIZATION

Discharging of groundwater may not begin until the MS4 operator authorizes it in writing. Notification may be sent via email to: <u>roberta3@cctexas.com</u> and/or <u>rebeccap@cctexas.com</u> and/or <u>felipem@cctexas.com</u> or via hardcopy to:

Robert Anderson / Rebecca Ayala / Felipe Martinez City of Corpus Christi Storm Water PO BOX 9277 Corpus Christi, TX 78469-9277

Discharge cannot begin until receipt of written approval by the Storm Water Department.

REQUEST FOR AUTHORIZATION TO DISCHARGE TO THE CITY OF CORPUS CHRISTI MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

Project Name:

Responsible Party:

Knowledgeable Person Contact Name:

Address:

Phone #: () – () Email:

NPDES/TPDES Permit No.:

Discharge Location:

Receiving Water:

Estimated start and duration of project:

Estimated flow rate:

Linear Project: Yes/No

Pollution Prevention Measures Implemented:

A complete analytical test report (includes case narrative, CoC, QA/QC data and all sample validation documentation) of the results of groundwater testing shall be submitted with this request. Copy of the EPA/TCEQ Notice of Intent (NOI), small construction site notice, or other form of application for NPDES/TPDES permit coverage as applicable shall be submitted with this request.

I, _____, certify that all sampling and analysis of the proposed discharge has (Printed Name)

Signature

Date _____

been completed as applicable and meets the requirements of an authorized discharge to the City of Corpus Christi's MS4. I also acknowledge that I am obligated to immediately cease discharge and notify the MS4 Operator if contamination is detected by either sensory or analytical means.

GROUNDWATER DISCHARGE LIMITS

	Monitoring	Analytical	Maximum Limitation	
Parameter	Frequency	Test Method	(mg/l)	Comments
Total Dissolved Solids (TDS)	Once	2540 C-2011	≤ Receiving Water TDS	Initial testing determines whether this value is less than the receiving water body.
Total Suspended Solids (TSS)	Once	2540 D-2011	≤ Receiving Water TSS	Initial testing determines whether this value is less than the receiving water body.
рН *	weekly	150.2	6-9 standard units	
Total Petroleum Hydrocarbons *	weekly	TX1005	15.0	Initial TPH should identify any petroleum contamination. <i>If none is detected, then the weekly and monthly samples below are not required.</i> Values and frequencies of this and next parameters were set by TCEQ.
Total Lead *	weekly	200.7	0.10	
Benzene *	weekly	8260B	0.005	
Total BTEX *	weekly	8260B	0.10	Sum of benzene, toluene, ethylbenzene, and total xylenes
Polynuclear Aromatic Hydrocarbons **	monthly	8270	0.01	Sum of acenaphthene, acenapthylene, anthracene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(ghi)perylene, benzo(a)pyrene, chrysene, dibenzo(a,h)anthracene, fluoranthene, fluorene, ideno(1,2,3-cd)pyrene, naphthalene, phenanthrene, and pyrene
MTBE *	weekly	8260B	0.15	methyl tert-butyl ether

* If pumping is to last less than one week then the initial testing prior to discharge is the only lab sample required.
** Only required if TPH identifies petroleum contamination