

**The University of Texas Rio Grande Valley  
Edinburg Campus  
Municipal Separate Storm Sewer System (MS4) Plan  
TPDES Phase II MS4 General Permit (TXR040000)  
Five Year Plan (2014-2018)**



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TPDES Phase II MS4 General Permit (TXR040000)**

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## SECTION I - DEFINITIONS

**Best Management Practices (BMPs)** - Schedules of activities, prohibitions of practices, maintenance procedures, structural controls, local ordinances, and other management practices to prevent or reduce the discharge of pollutants. BMPs also include treatment requirements, operating procedures, and practices to control runoff, spills or leaks, waste disposal, or drainage from raw material storage areas.

**Classified Segment** - refers to a water body that is listed and described in Appendix A or Appendix C of the Texas Surface Water Quality Standards, at 30 TAC ' 307.10.

**Clean Water Act (CWA)** - The Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972, Pub.L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483 and Pub. L. 97-117, 33 U.S.C. 1251 et.seq.

**Common Plan of Development or Sale** - A construction activity that is completed in separate stages, separate phases, or in combination with other construction activities. A common plan of development or sale is identified by the documentation for the construction project that identifies the scope of the project, and may include plats, blueprints, marketing plans, contracts, building permits, a public notice or hearing, zoning requests, or other similar documentation and activities.

**Construction Site Operator** - The person or persons associated with a small or large construction project that meets either of the following two criteria:

1. the person or persons that have operational control over construction plans and specifications (including approval of revisions) to the extent necessary to meet the requirements and conditions of this general permit; or
2. the person or persons that have day-to-day operational control of those activities at a construction site that are necessary to ensure compliance with a stormwater pollution prevention plan for the site or other permit conditions (e.g. they are authorized to direct workers at a site to carry out activities required by the Stormwater Pollution Prevention Plan or comply with other permit conditions).

**Conveyance** - Curbs, gutters, man-made channels and ditches, drains, pipes, and other constructed features designed or used for flood control or to otherwise transport stormwater runoff.

**Discharge** - When used without a qualifier, refers to the discharge of stormwater runoff or certain non-stormwater discharges as allowed under the authorization of this general permit.

**Final Stabilization** - A construction site where either of the following conditions are met:

1. All soil disturbing activities at the site have been completed and a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70% of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.
2. For individual lots in a residential construction site by either:
  - a. the homebuilder completing final stabilization as specified in condition (a) above; or

- b. the homebuilder establishing temporary stabilization for an individual lot prior to the time of transfer of the ownership of the home to the buyer and after informing the homeowner of the need for, and benefits of, final stabilization.
- c. For construction activities on land used for agricultural purposes (e.g. pipelines across crop or range land), final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to a surface water and areas which are not being returned to their preconstruction agricultural use must meet the final stabilization conditions of condition (a) above.

**Ground Water Infiltration** - For the purposes of this permit, groundwater that enters a municipal separate storm sewer system (including sewer service connections and foundation drains) through such means as defective pipes, pipe joints, connections, or manholes.

**Illicit Connection** - Any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer.

**Illicit Discharge** - Any discharge to a municipal separate storm sewer that is not entirely composed of stormwater, except discharges pursuant to this general permit or a separate authorization and discharges resulting from emergency firefighting activities.

**Indian Country** - Defined in 18 USC Section (') 1151, means (a) all land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation; (b) all dependent Indian communities within the borders of the United States whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a state, and (c) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same. This definition includes all land held in trust for an Indian tribe.

**Industrial Activities** - manufacturing, processing, material storage, and waste material disposal areas (and similar areas where stormwater can contact industrial pollutants related to the industrial activity) at an industrial facility described by the TPDES Multi Sector General Permit, TXR050000, or by another TCEQ or TPDES permit.

**Large Construction Activity** - Construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than five (5) acres of land. Large construction activity also includes the disturbance of less than five (5) acres of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than five (5) acres of land. Large construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, and original purpose of a ditch, channel, or other similar stormwater conveyance. Large construction activity does not include the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing right-of-ways, and similar maintenance activities.

**MS4 Operator** – For the purpose of this permit, the public entity, and/ or the entity contracted by the public entity, responsible for management and operation of the small municipal separate storm sewer system that is subject to the terms of this general permit.

**Non-traditional Small MS4** - A small MS4 that often cannot pass ordinances and may not have the enforcement authority like a traditional small MS4 would have to enforce the stormwater management program. Examples of non-traditional small MS4s include counties, transportation authorities (including the Texas Department of Transportation), municipal utility districts, drainage districts, military bases, prisons and universities.

**Notice of Change (NOC)** - Written notification from the permittee to the executive director providing changes to information that was previously provided to the agency in a notice of intent.

**Notice of Intent (NOI)** - A written submission to the executive director from an applicant requesting coverage under this general permit.

**Notice of Termination (NOT)** - A written submission to the executive director from a permittee authorized under a general permit requesting termination of coverage under this general permit.

**Outfall** - For the purpose of this permit, a point source at the point where a municipal separate storm sewer discharges to waters of the United States (U.S.) and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances that connect segments of the same stream or other waters of the U.S. and are used to convey waters of the U.S.

**Permittee** - The MS4 operator authorized under this general permit.

**Permitting Authority** - For the purposes of this general permit, the TCEQ.

**Point Source** - (from 40 CFR ' 122.22) any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

**Pollutant(s) of Concern** - Include biochemical oxygen demand (BOD), sediment or a parameter that addresses sediment (such as total suspended solids, turbidity or siltation), pathogens, oil and grease, bacteria (see page 13), mercury, and any pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from an MS4. (Definition from 40 CFR ' 122.32(e)(3)).

**Redevelopment** - Alterations of a property that changed the Afootprint@ of a site or building in such a way that there is a disturbance of equal to or greater than one (1) acre of land. This term does not include such activities as exterior remodeling.

**Small Construction Activity** - Construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than one (1) acre and less than five (5) acres of land. Small construction activity also includes the disturbance of less than one (1) acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one (1) and less than five (5) acres of land. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, and original purpose of a ditch, channel, or other similar stormwater conveyance. Small construction activity does not include the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing right-of-ways, and similar maintenance activities.

**Small Municipal Separate Storm Sewer System (MS4)** – refers to a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) Owned or operated by the United States, a state, city, town, borough, county, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under ' 208 of the CWA; (ii) Designed or used for collecting or conveying stormwater; (iii) Which is not a combined sewer; (iv) Which is not part of a publicly owned treatment works (POTW) as defined at 40 CFR ' 122.2; and (v) Which was not previously authorized under a NPDES or TPDES individual permit as a medium or large municipal separate storm sewer system, as defined at 40 CFR §§122.26(b)(4) and (b)(7). This term includes systems similar to separate storm sewer systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. This term does not include separate storm sewers in very discrete areas, such as individual buildings. For the purpose of this permit, a very discrete system also includes storm drains associated with certain municipal offices and education facilities serving a nonresidential population, where those storm drains do not function as a system, and where the buildings are not physically interconnected to an MS4 that is also operated by that public entity.

**Stormwater and Stormwater Runoff** - Rainfall runoff, snow melt runoff, and surface runoff and drainage.

**Stormwater Associated with Construction Activity** - Stormwater runoff from an area where there is either a large construction activity or a small construction activity.

**Stormwater Management Program (SWMP)** - A comprehensive program to manage the quality of discharges from the municipal separate storm sewer system.

**Structural Control (or Practice)** - A pollution prevention practice that requires the construction of a device, or the use of a device, to capture or prevent pollution in stormwater runoff. Structural controls and practices may include but are not limited to: wet ponds, bioretention, infiltration basins, stormwater wetlands, silt fences, earthen dikes, drainage swales, vegetative lined ditches, vegetative filter strips, sediment traps, check dams, subsurface drains, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins.

**Surface Water in the State** - Lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, wetlands, marshes, inlets, canals, the Gulf of Mexico inside the territorial limits of the state (from the mean high water mark (MHW) out 10.36 miles into the Gulf), and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or non navigable, and including the beds and banks of all water-courses and bodies of surface water, that are wholly or partially inside or bordering the state or subject to the jurisdiction of the state; except that waters in treatment systems which are authorized by state or federal law, regulation, or permit, and which are created for the purpose of waste treatment are not considered to be water in the state.

**Total Maximum Daily Load (TMDL)** - The total amount of a substance that a water body can assimilate and still meet the Texas Surface Water Quality Standards.

**Urbanized Area (UA)** - An area of high population density that may include multiple MS4s as defined and used by the U.S. Census Bureau in the 2000 decennial census.

**Waters of the United States** - (from 40 CFR ' 122.2) Waters of the United States or waters of the U.S. means:

1. all waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. all interstate waters, including interstate wetlands;
3. all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds that the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
  - a. which are or could be used by interstate or foreign travelers for recreational or other purposes;
  - b. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
  - c. which are used or could be used for industrial purposes by industries in interstate commerce;
4. all impoundments of waters otherwise defined as waters of the United States under this definition;
  - a. tributaries of waters identified in paragraphs (a) through (d) of this definition;
  - b. the territorial sea; and
  - c. wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR ' 423.11(m) which also meet the criteria of this definition) are not waters of the United States. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

#### Commonly Used Acronyms

BMP	Best Management Practice
CFR	Code of Federal Regulations
CGP	Construction General Permit, TXR150000
CWA	Clean Water Act
DMR	Discharge Monitoring Report
EPA	Environmental Protection Agency
FR	Federal Register
IP	Implementation Procedures
MCM	Minimum Control Measure
MSGP	Multi-Sector General Permit, TXR050000
MS4	Municipal Separate Storm Sewer System
NOC	Notice of Change
NOD	Notice of Deficiency
NOI	Notice of Intent
NOT	Notice of Termination (to terminate coverage under a general permit)

NPDES	National Pollutant Discharge Elimination System
SWMP	Stormwater Management Program
SWP3,	Stormwater Pollution Prevention Plan
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
TPDES	Texas Pollutant Discharge Elimination System
TWC	Texas Water Code



## **SECTION II: OBJECTIVES**

This Municipal Separate Stormwater System (MS4) plan addresses operations at the University of Texas – Rio Grande Valley (UTRGV) at the Edinburg Main Campus, located at 1201 West University Drive in Edinburg, Texas, Hidalgo County, U.S.A. It has been developed to meet the requirements of the general permit issued by the State of Texas for Municipal Separate Stormwater System discharges ; TPDES Phase II MS4 General Permit (TXR040000). The UTRGV is considered Non-Traditional MS4 . The storm drains flow into the City of Edinburg’s Storm Drain System.

This MS4 plan describes The University of Texas – Rio Grande Valley and its operations, identifies targeted potential sources of stormwater pollution from the campus, adopts appropriate Best Management Practices (BMPS) with scheduled completion dates, and provides for periodic review of this MS4 Plan. The primary goal of this MS4 plan is to improve the quality of surface waters by reducing the amount of pollutants potentially contained in stormwater runoff to the maximum extent practicable (MEP).

## **SECTION III: SITE DESCRIPTION**

### **The University of Texas – Rio Grande Valley**

The University of Texas-Rio Grande Valley (UTRGV) is located in the Rio Grande Valley, a river delta of the Rio Grande at the Tropical Tip of Texas. The main campus of the University is in Edinburg, Texas, population 46,000, Hidalgo County, Texas. There are additional campuses located in Brownsville, Harlingen, McAllen, and Rio Grande City.

The UTRGV Edinburg Campus has a student population of approximately 16,000 and an employee population of approximately 3500. It is an academic and research institution with a Medical School comprised of 67 buildings which include teaching facilities, research, teaching and clinical laboratories, libraries, a baseball stadium, theaters, cafeterias, restaurants, bookstore, swimming pools, cooling plants, and a planetarium. The majority of the students on this campus commute. There are approximately 700 students that live in campus residential housing. More than 50% percent of the campus is covered by buildings, parking lots, sidewalks or streets and is impervious to stormwater infiltration.

### **The Laguna Madre**

Stormwater drainage flows primarily via surface drainage ways and to stormwater drains located on the campus to the City of Edinburg storm drain system, the Hidalgo County Drainage District, to the **Arroyo Colorado**, which flows through Hidalgo, Cameron and Willacy Counties into the **Laguna Madre**. The Laguna Madre is a long, shallow, hypersaline lagoon along the western coast of the Gulf of Mexico in Nueces, Kenedy, Kleberg, Willacy and Cameron Counties in Texas, United States. The significance of preserving the ecosystem of the Laguna Madre cannot be ignored. It is one of the most important and unspoiled lagoon ecosystems in Texas. Fish, shrimp and crab, which feed the bird populations, depend on the lagoon and its plentiful beds of seagrass for survival. The seagrass of Laguna Madre accounts for 80% of all seagrass found off the Texas Coast. It is home to more finfish than anywhere else on the Texas coast, with such species as blue catfish, hardhead catfish, Atlantic croaker, black drum, red drum, southern flounder, alligator gar, hound fish, crevalle jack, southern kingfish, ladyfish, Atlantic midshipman, mojarras, striped mullet, pinfish, Florida pompano, smooth butterfly ray, spotted seatrout, blacktip shark, sheepshead, bigmouth sleeper, gray snapper, common snook, southern stargazer, southern stingray and tripletail. Many fowl migrate and live around the lagoon including 75% of all redhead ducks. Other birds in the area include the peregrine falcon, piping plover, roseate spoonbill, long-billed curlew, crane, egret and the brown pelican. Sea turtles and dolphins can be found in the bay, while cattle, white-tailed deer, nilgai and bobcats can sometimes be seen near the shore.

### **Arroyo Colorado**

The Arroyo Colorado is a river in Hidalgo, Cameron and Willacy Counties, Texas, that flows mostly eastward some 53 miles (85 km) from Lake Llano Grande into the Laguna Madre. Flow in the Arroyo Colorado is sustained by wastewater discharges, agricultural irrigation return flows, urban runoff, and base flows from shallow groundwater. The Arroyo is the major source of fresh water to the lower Laguna Madre, an economically and ecologically important resource to the region. The Lower Laguna Madre receives significant quantities of agricultural pesticides and other environmental contaminants from the Arroyo Colorado, an irrigation drainage of the Lower Rio Grande Valley. Oil spills from barges, Discharge from the Mexican side of the Rio Grande, and hydrocarbon extraction are the threats posed by the high volume of commercial activities taking place on the Laguna Madre.

### Arroyo Colorado Impairment Designation

Arroyo Colorado (Above Tidal) is designated as impaired based on certain contaminant levels and is included in the “Texas Integrated Report on Water Quality” list formally known as the Texas Water Quality and 303(d) list. The Texas Integrated Report is a requirement of the federal Clean Water Act Sections 305(b) and 303(d) and includes those impaired waters for which Total Maximum Daily Loads (TMDs) exceed established regulatory levels and management strategies are planned to reduce those levels. The official ID designation for the impaired water is SegID : 2202 and is identified in the following wording: “*From a point 100 meters (110 yards) downstream of Cemetery Road south of Port Harlingen in Cameron County to FM 2062 in Hidalgo County* . The pollutants identified in the report entitled “2014 Integrated Report – Texas 303(d) List. Category 5 include the following pollutants.

1. Bacteria
2. Mercury in Edible Tissue
3. PCB’s in edible Tissue

The potential sources for these respective “Pollutants of Concern” as they apply to UTRGV are included in Section V entitled Potential Pollutants and Activities.

#### SECTION IV. STORMWATER MANAGEMENT TEAM

A Storm Water Management Team has been established to develop, implement, maintain and provide for the enforcement of the MS4 plan. They involve stakeholders from all areas of the institution whose actions directly or indirectly influence storm water management and are listed in Table 2.

**Table 2. UTRGV Storm Water Management Team**

<b>Name</b>	<b>Title</b>	<b>Department</b>
Richard Costello	Director – EHSRM	Environmental Health, Safety and Risk Management
Juan Huerta	Manager – Environmental Protection Program	Environmental Health, Safety and Risk Management
Jorge Garza	Assistant Director	Facilities Planning, Construction
Oscar Villarreal	Operations and Maintenance	Operations and Maintenance
Sergio Martinez	Director – Residence Life	Enrollment and Student Services
Peter Averack	Senator	Staff Senate

The storm water management team will be on a quarterly basis to evaluate the existing state of the MS4 plan and make any updates as appropriate.

## SECTION V. POTENTIAL POLLUTANTS AND ACTIVITIES

In addition to instruction and research, activities conducted at the UTRGV campus, in support of these efforts include building construction and municipal related activities such as landscape maintenance, vehicle maintenance, vehicle washing, and chemical and material storage. Table 32 outlines activities associated with the UTRGV environment and the potential pollutants that can be released to the stormwater if not managed in the appropriate manner. The Stormwater control methods, referenced in Section 5, will be implemented in an effort to eliminate the risk of the release of these contaminants to the stormwater, or in the event of an accidental release minimize any potential impact.

**Table 3. Potential Storm Water Pollutants released from UTRGV activities.**

Activity	Potential Pollutants
Construction	Sediment, Trash, Metals, Oil and Grease, Organics, <b>Bacteria</b>
Building Maintenance	Sediment, Trash, Metals, <b>Bacteria</b> , Oil and Grease, Organics, Pesticides, Oxygen Demanding Substances
Grounds and Landscape Maintenance ;	Sediment, Trash, Bacteria, Oil and Grease, Pesticides, Oxygen Demanding Substances.
Parking / Storage Area Maintenance	Sediment, Trash, Metals, Bacteria, Oil and Grease, Organics, Oxygen Demanding Substances.
Vehicle Maintenance	Sediment, Trash, Metals, Oil and Grease, Organics,
Vehicle and Equipment Washing	Sediment, Trash, Metals, Oil and Grease, Organics, Oxygen Demanding Substances.
Outdoor storage of materials	Sediment, Trash, Metals, Oil and Grease, Organics, Oxygen Demanding Substances.
Hazardous waste collection, treatment, storage and disposal	Metals, Oil and Grease, Organics, Pesticides
Student Housing Related Activities	Oil and grease

### Potential Pollutants

The pollutants identified in the report entitled “2014 Integrated Report – Texas 303(d) List ( Category 5) include the following :

1. Bacteria
2. Mercury in Edible Tissue
3. PCB’s in edible Tissue

### PCB’s

Currently there are no equipment containing PCB’s on the UTRGV – Edinburg campus. Traditionally used in transformers, those that contained PCB’s were removed in the latter part of the nineties and early 2000’s. Therefore there is not potential risk for PCB’s to be released to the storm sewer.

## Bacteria

*E. coli* bacteria are a group of fecal coliform bacteria found in the lower intestine of warm-blooded organisms such as humans, livestock, wildlife, including mammals and birds, and domesticated animals. The presence of these bacteria in a river or stream indicates the water has been contaminated with the fecal material of humans or animals. An evaluation of the potential sources of bacteria on the Edinburg Campus include the following:

### Sanitary Sewer System Failures

A sanitary sewer failure can result in a release to the environment and ultimately to the storm sewer if not addressed immediately. The potential for this type of release can be via a sanitary sewer line break, or a sewer backup that is either released inside one of the institution's buildings, or outside in a buried pipe. Those that occur inside a building can be easily identified and corrected through a quick response by the facilities group. For those releases that occur outside the building, because all of the buildings are located underground, identification of this type of release is identified generally by a water and sewer saturated ground, sewer system backup, accompanied by a raw sewage smell. The Minimum Control measures for this type of release are included in MCM 5, entitled Pollution Prevention Housekeeping for Municipal Operations. The BMPS include the following

- 1) Education in how to identify this type of release and adequate response.
- 2) Conducting routine inspections as part of the comprehensive MS4 inspection program.

### Portable Toilets

Storm water runoff originating from portable toilets are generally located at any of the university's construction sites. The BMP's associated with ensuring this type of release are included in MCM 3 entitled Construction Site Storm Water Runoff Control. The primary BMP used to ensure that bacterial matter is not released through the storm sewer is through initial and routing inspections of the porta potties as part of the comprehensive inspection program.

## **Mercury**

Mercury is used in small quantities in research and teaching laboratories at the institution' and, in limited cases in some of the older instrumentation such as blood pressure monitoring devices. The University replaced roughly 90% of all of the mercury thermometers in 2005 and those that exist are used in processes that require greater accuracy. Currently, there is a policy in place that requires the use of alcohol based thermometers. There is no loose mercury. All mercury is contained in the instrument or the thermometer. As a result, the potential for releases is limited to a broken thermometer or instrument. The limit of this type of potential release to the stormwater from this scenario is through:

1. Implementation of a hazardous spill response program in which EHSRM personnel respond immediately to a spill.
2. Regulated waste disposal program. Any mercury containing equipment, spill material or residue is mandated to be disposed of via an offsite contractor.
3. Training regarding spill response is included in all Laboratory Safety training.

The University does not have any onsite sewage Disposal Systems.

## PUBLIC NOTICE

The UTRGV under this general permit will publish, at least once, in the UTRGV Newspaper entitled The Rider <http://www.utrgvrider.com/> information pertaining to the SWMP and NOI. The notice will be published after UTRGV receives written instructions from the TCEQ's Office of Chief Clerk regarding the submitted NOI and SWMP. This information will also be included on the UTRGV Website. The published notice will include the following information regarding the TCEQ's preliminary decision on the NOI and SWMP and at a minimum the following items:

1. The legal name of the MS4 operator.
2. Indication of whether the NOI is for a new authorization or is a renewal of an existing authorization.
3. The address of the applicant for the MS4.
4. A brief summary of the information included in the NOI, such as the general location of the small MS4 and a description of the classified receiving waters that receive the discharges from the small MS4.
5. The location and mailing address where the public may provide comments to the TCEQ.
6. The public location where copies of the NOI and SWMP, as well as the executive director's general permit and fact sheet, may be reviewed.

## **SECTION IV: STORMWATER CONTROLS**

Stormwater management controls, which include Best Management Practices (BMPs) will be developed, implemented and enforced to prevent pollution to the stormwater discharged from the UTRGV campus. Texas State TPDES General Permit TXR 40000 mandate the establishment of six minimum control measures. The six control measures addressed by this MS4 plan include:

1. Public Education, Outreach, and Involvement
2. Illicit Discharge Detection and Elimination
3. Construction Site Stormwater Runoff Control
4. Post-Construction Stormwater Management in New Development and Redevelopment.
5. Pollution Prevention and Good Housekeeping for Municipal Operations

A description of the respective Minimum Control Measures to be implanted are described in the following pages.



## **MCM 1 - Public Education, Outreach, and Involvement**

The university will implement and revise, if necessary, within two years of the permit being issued a comprehensive storm water education/outreach program designed to educate the campus community of the respective commercial and residential activities that can impact the storm water run-off, the potential impact on water quality, the hazards associated with illegal discharges and improper disposal of waste, and the steps that they can take to reduce pollutants in storm water runoff. Public education will be facilitated through the use of direct action, educational, and volunteer programs for the campus community.

### Types of Activities

The university has essentially three types of activities that have the potential to impact the storm water either on the immediate campus or the community population. The Public relation effort will vary based on target populations identified with the following activities:

1. **UTRGV Municipal and Construction Activities** - Information will be directed towards those activities that can directly result in the release of contaminants into the storm drain, primarily facilities and construction related activities.
2. **UTRGV General Population** – the majority of the students are commuters thus the storm water information will be directed towards control measures that can be implemented at their respective households including the reporting of illicit discharges. This will also serve to support the MS4 programs from the neighboring districts to include the Cities located in Hidalgo, Willacy, and Cameron counties where the majority of the students originate.
3. **UTRGV Residential Population (Student Housing)** – The University has a small residential community of approximately 700 students. Stormwater information will be directed towards control measures that address the release of contaminants in student housing.

### Distribution to Campus Population

The MS-4 plan will be distributed to the campus population via the following methods.

1. Department of Environmental Health, Safety and Risk Management Website.
2. Email Distribution to all high priority stakeholders – facilities.
3. Email to campus community including faculty, staff and students with a link to the EHSRM website.

The following outline those different mechanisms for each of the respective stakeholders.

1. **Stakeholder – General Public to include Staff, Faculty, Students and the General Public.**

This public information campaign will target all personnel and will be more of a general awareness mechanisms to include the following.

#### Brochures

Develop brochures that promote understanding of storm water pollution impacts on water quality and promote good management practices and distribute to stakeholders using a variety of different mechanisms.

#### T shirts and Coffee Cups

An “Only Rain to the Drain “campaign will be implemented to remind the campus community he importance of complying with the requirement. The “Only Rain to the Drain “ will be emblazoned

on a variety of items and distributed to key members of the community. The items include T shirts and Coffee cups.

#### UTRGV Rider Student Newspaper.

This information will concentrate primarily on residential based awareness specifically the storm water control measures they can take to protect the stormwater at their households. Included in the information will be information regarding reporting an illicit discharge.

#### Storm Water Webpage

The UTRGV webpage will be used as a tool for broadcasting information regarding the MS4 mandates for both the municipal and residential populations. The main web page will be used primarily for the residential populations. The UTRGV EHSRM webpage will be used for primarily for commercial based information (policies and procedures), but also include the residential based operation. Included on the webpage will be information for public input. A link on the webpage will afford persons reading the information the ability report an illicit discharge or simply ask a question.

#### Storm Drain Signage

Key storm drains on the UTRGV campus will be posted with “Do not dump – flows to the Laguna Madre!” stencil or the “Only Rain to the Drain” signage targeting the campus community. Signage will also be visible on the main roads that border the campus to target the larger Edinburg community.

## **2. Stakeholder - UTRGV Employees General**

#### New Employee Orientation

All new employees are required to attend New Employee Orientation (NEO) within 30 days of their first day of employment. At this time, as part of a broad presentation that outlines the EHSRM department, information regarding the MS4 will be included in the form a brochure and a slide that is included in the presentation. The information included will make recommendations to the employees regarding what they can do at both a university level and at their respective households to eliminate the release of contaminants to the storm water. Also included in both the presentation and the brochure is the information regarding reporting illicit discharges.

## **3. Stakeholder - UTRGV Facility Employees.**

In recognition of the importance that Facilities employees have in the reduction of storm water pollutants, extra attention will be directed towards this respective group of employees. The primary groups targeted include the supervisors who are charged with ensuring compliance at all levels, and those groups whose activities are most likely to affect the ground water to include Grounds, Custodians, and Construction. Stormwater education classes for physical plant employees will be conducted targeting specific practices to reduce contaminants to the stormwater, primarily those specified in the Pollution Prevention /Good Housekeeping measures for Municipal Operations.

#### **a. Formal training**

Formal training will be provided in the form of a PowerPoint presentation geared towards

their respective activities. Refresher training will be provided on an annual basis.

b. Toilet Tales

One mechanism that has proven to be effective in reaching out to certain employees on the campus is the form of Toilet Tales. This program consists of posting important information in latrines in restrooms located in the Facilities Bldg. and the EHSRM department. Toilet Tale information regarding protection of the storm water will be posted on an annual basis in these respective locations and is expected to reach 100% of the targeted groups.

4. **Stakeholder – Construction Contractors**

Formal Training

The majority of the major construction projects conducted on the campus are conducted by offsite contractors and subcontractors who are expected to comply with the mandates applicable to the MS4. All Job Order Contractor and major Sub contractor representatives are required to attend an annual orientation that outline expectations related to a variety of subjects related to compliance with Environmental Health, Safety rules and regulations. Included in this presentation will be specific MS4 information. In addition, formal documentation of a Storm Water Management Plan will requested from a major construction contractor prior to work being conducted at the University.

5. **Stakeholders – Academic Community**

EHSRM Information Table

The EHSRM has an information table that is present at various campus wide functions to include New Student Orientation and the Student Health Fair among others. Brochures and informational materials will be included at these events.

Stormwater education materials, brochures, will distributed at the specific events in order to reach the student population. Though the majority of the students are commuters, the institution are confident that principals of storm water management outlined in the presentation will be brought to their respective residences.

Academic Instruction

The EHSRM will incorporate MS4 information through guest lectures presented to the academic classes in the college of Science and Engineering. In addition, MS4 information will be included in all safety related classes taught at the institution.

The implementation schedule including documentation and measurable goals are included in the following table.

**Table 4. MCM -1 Program Implementation Schedule**

<b>BMP</b>	<b>Description / Measurable Goal</b>	<b>Target Date</b>	<b>Frequency</b>
<b>Stakeholders – ALL Campus Community</b>			
MS-4 Plan Distribution	MS4 plan will be distributed to the campus community via email either through a direct email for high priority stakeholders, or through email with link to the website.	06/17	Initial and annual thereafter
	Goal is 100% of the campus community and high priority stakeholders to be verified by email documentation.		
<b>Stakeholder – General Public-Staff, Faculty, Students and the General Public.</b>			
T-shirts / Coffee Cups	Develop logo and emblazon 300 T-Shirts and 300 coffee cups with “Only Rain to the Drain” logo	06/17	Annual
	Documentation verifying distribution of T-Shirts and coffee cups to 100% of all new employees and 10% of the campus community on an annual basis.		
Brochures	Develop brochures that promote understanding of storm water pollution impacts on water quality and promote good management practices.	06/17	Continuous
	Distribute brochures to 10% of the campus community verified by number of brochures printed out.		
UTRGV Rider Newspaper	The student newspaper will be used as a mechanism to inform the campus community MS4 information to include illicit reporting information.	06/17	Four times a year
	The goal is to include information 4 times a year. The estimated circulation for this paper is 4000 or 25% of the student population to include a small percentage of the staff and faculty.		
Storm Drain Signage	Place storm drain signage on local storm drain inlets to increase awareness and prevent dumping into storm water system.		Annual
	Identify number and location of all storm drain inlets. Place signage on 25 % of the inlets		
Storm Water Webpage	Develop and maintain a page on UTRGV EHSRM webs sight for review by public employees, residents, local businesses, and visitors. Post the SWMP, city contact information for making inquiries and/or reporting concerns, and links to additional resources	06/17	Maintain page continually
	Maintain records of web site usage, content updates, as well as summary of public input to include in the Annual Report.		
<b>Stakeholder - UTRGV Employees General</b>			
New Employee Orientation	MS-4 Training will be included in all New Employee Orientation	06/17	Weekly
	Identify number of staff members trained at New Employee Orientation. Target is 100% of all new employees.		
Formal Training	Formal training will be provided in the form of a PowerPoint presentation geared towards their respective activities for those high priority facilities employees specifically grounds, plumbers and supervisors. Refresher training will be provided on an annual basis.	06/17	Annual
	The goal is 100% of all priority facilities employees verified by sign in sheets.		
Toilet Tales	This program consists of posting important information in latrines in restrooms located in the Facilities Bldg. and the EHSRM department	03/17	Four times year
	The goal is 100% of all facilities employees and EHSRM employees verified by empirical survey data.		
<b>Stakeholder – Construction Contractors</b>			

Formal Training	All contractors are required to attend an annual orientation that outline expectations related to a variety of subjects related to Environmental Health and Safety.	06/17	Annual
	The goal is 100% of all JOC contractors and major subcontractors on an annual basis, verified by sign in sheets.		
<b>Stakeholders – Academic Community</b>			
EHSRM Informational Table	The EHSRM is routinely included in major events to include New Student Orientation and Annual Student Health Fair. Both include a table and an opportunity to speak.	06/17	Summer; Spring; Fall semesters (three times a year)
	The goal is 100% of all new students and the approximate 2400 persons who attend the Health Service fair on an annual basis. This is verified by the number of students who participate in both of the functions and verification of those numbers that participated in the function.		
Academic Instruction	The EHSRM routinely guest lectures in environmental science based classes based and Environmental classes on annual basis.	06/17	Annually
	Documentation will include sign in sheets of persons who participate in the class.		

## **MCM 2 - Illicit Discharge Detection and Elimination (IDDE)**

The UTRGV will develop, implement, and enforce a program to detect and eliminate illicit discharges. An illicit discharge is defined as “any discharge to a municipal separate storm sewer system that is not composed entirely of storm water” except allowable discharges pursuant to an NPDES permit (40 CFR 122.26(b)(2)). The Illicit Discharge Detection and Elimination (IDDE) Program requires updated MS4 maps, identification of all stormwater system outfalls, the names and locations of receiving waters, training of MS4 staff, a means for the public to report illicit discharges and spills, procedures for tracing illicit discharges, and procedures for removing the sources of illicit discharges. The University has authority to enforce actions on illicit discharges arising from discharges that are related to releases arising from internal activities. The Illicit discharge program consists of the following:

1. The utilization of an MS4 map to conduct a risk assessment of institutional activities for prioritization..
2. Enactment of internal policies to establish legal authority for enforcement of the IDDE program.
3. Correct the actions allowing the illegal discharges with most effective methods.
4. Establish and maintain phone line and web page for reporting illicit discharges.
5. Respond to all complaints.

### **Risk Assessment**

Because of the nature of the institutional activities as it relates to storm water discharges , the priority areas for any illicit discharge is expected to be municipal related operations (facilities), or contractors not familiar with the regulations applicable to the disposal of any regulated waste streams associated with contractor activities as well as construction sites. However, the principals identified in this section are expected to be significant in the reporting of any illicit discharges for the commuting students. The institution will team up with the neighboring MS-4, the City of Edinburg, and report all illicit discharges. **It is also important to notice that UTRGV does not have any on-site sewage disposal systems.**

### List of non-stormwater discharges that will not be considered illicit

The UTRGV will construct a list of discharges into the stormwater/sewer system that are allowable. This list includes occasional, incidental non-stormwater discharges that the university does not expect to be a significant contributor of pollutants to the stormwater/sewer system. The list includes the following releases which will be included in the educational related classes for the campus community:

1. water line flushing
2. landscape irrigation
3. uncontaminated groundwater infiltration
4. uncontaminated pumped groundwater
5. discharges from potable water sources
6. water feature blowdown leaks
7. foundation drains
8. roof drainage from precipitation
9. air conditioning/steam condensate
10. water from crawl space/tunnel pumps
11. water from external pumps and pumps in support of loading docks
12. footing drains
13. small scale vehicle washing
14. discharges from fire sprinkler system maintenance

15. discharges from fire extinguisher related classes
16. swimming/exercise pool discharges
17. sidewalk/street wash sweeping water
- 18. discharges or flows from emergency firefighting activities**
19. discharges from fire pump testing
20. insignificant losses from cooling tower operation and maintenance

The following BMPs will be followed to accomplish this MCM:

### **1. Storm Water Map**

A storm water sewer system, showing the location of all outfalls and the names and location of all waters of the United States that receive discharges from those outfalls will be developed and housed at the UTRGV facilities and EHSRM locations. . The map will be updated, as needed, and any revisions will be included in the annual report. Priority areas will be identified on the map and will be based on the following:

- a. Industrial, commercial, or mixed use areas;
- b. Areas with a history of past illicit discharges;
- c. Areas with older sewer lines or with a history of sewer overflows or cross-connections.

### **2. Source Reduction Programs**

The residential community currently does not have many options for the disposal of household waste that has the potential to be released to the storm sewer. These waste streams include household hazardous waste such as paint thinners, paints, fluorescent light bulbs and universal wastes such as batteries, oil, pesticides and antifreeze. The primary mechanism for eliminating the potential for release to the storm water is to provide easy access for disposal. The UTRGV will utilize the following mechanisms for source reduction to eliminate the possibility of illicit discharges from the campus residential community.

#### **a. Used Oil Collection Center**

The UTRGV will establish a Used Oil Collection Center where members of the campus community can dispose of used oil from their respective residences free of charge. This will eliminate the potential for disposal of used oil to the storm sewer. The used oil will be disposed of by the institution's Universal Waste contractor.

#### **b. Household Hazardous Waste/BOPA Programs**

The UTRGV EHSRM will sponsor a household hazardous waste collection project in conjunction with groups such as the local boy scouts to encourage the UTRGV community to dispose of their waste streams in a responsible manner. The Household hazardous waste program will concentrate on Batteries, Oil, Paint, Antifreeze (BOPA) waste streams. The EHSRM will, in turn use a hazardous waste disposal vendor to dispose of the collected waste streams. Disposal of Household Hazardous Waste such as fluorescent light bulbs, paint waste will be available to the campus community on a continual basis.

### 3. Inclusion into MCM Public Outreach

Illicit discharge and detection will be incorporated into the majority of the Public Outreach methods included in the Minimum Control Method entitled **MCM 1 - Public Education, Outreach, and Involvement**. All those personnel that are in the position to identify an illicit discharge will be trained within one year of the permit being issued. Included in the training is information regarding what constitutes an illicit discharge, and the proper procedures for the identification and reporting. Typical groups include the grounds who are on campus on a continual basis. Follow-up training will be conducted on an annual basis. A program to promote, publicize, and facilitate public reporting of illicit discharges, primarily through the distribution of outreach materials will be developed. This aspect of the program will identify what constitutes an illicit discharge. **All information included in the following subsection, specifically the method for reporting an illicit discharge will be incorporated in the training materials referenced in MCM 1.**

### 4. Illicit Discharges Reporting Program

UTRGV will implement Investigation and mitigation measures to identify possible sources of illicit discharge, to prevent or reduce adverse impacts to storm water runoff and the environment. Procedures for tracing the source of an illicit discharge; removing the source of the discharge; and procedures for program evaluation and assessment will be developed. Discovery and reporting methods include the following:

#### a. Routine Inspections of Storm Drains

The inspection program will include the following:

a visual screening of the outfalls during dry weather and , if necessary, conducting field tests of selected pollutants as part of the procedures for locating priority areas.

The routine screening will be conducted on weekly basis for those storm drains likely to be impacted by a construction project and monthly for all other storm drains. Construction related storm drains will be inspected after each significant rainfall.

Quantification of items found in storm drains for assessment and source discovery.

#### b. Hotline

A hotline will be developed for the reporting of illicit discharges (UTRGV EHSRM number) and will be included in the training and all of the outreach materials

### 5. Illicit Discharge Response

In the event that an illicit discharge is discovered, the following actions will occur:

- a. Within 72 hours, an investigation will be conducted to identify the location and source of the contaminant.
- b. Any discharges believed to be an immediate threat to human health or the environment will be reported immediately to the TCEQ spill reporting hotline (1-800-832-8224). Significant discharges will be reported to the City of Edinburg MS4 program. .



- c. UTRGV will track all investigations to document at a minimum the date(s) the illicit discharge was observed; the results of the investigation; any follow-up of the investigation; and the date the investigation was closed.
- d. If an illicit discharge is found, but within six (6) months of the beginning of the investigation neither the source nor the same non storm water discharge has been identified/observed, then the permittee must maintain written documentation for review by the permitting authority.
- e. If the observed discharge is intermittent, UTRGV will document that a minimum of three (3) separate investigations were made to observe the discharge when it was flowing. If these attempts are unsuccessful, the Permittee must maintain written documentation for review by the permitting authority. However, since this is an ongoing program, the Permittee should periodically recheck these suspected intermittent discharges.
- f. Once the source of the illicit discharge has been determined, the permittee must immediately notify the responsible party of the problem, and require the responsible party to conduct all necessary corrective actions to eliminate the non-stormwater discharge within 24 hours.
- g. A follow-up investigation and field screening will then be conducted to verify that the discharge has been eliminated.

**4. Enforcement Actions / Cessation of Activities**

For those storm water discharges that the result of a UTRGV Employee or Student, Enforcement of storm water violations will be conducted in accordance with the current internal disciplinary policies involving students and employees. Enforcement actions consistent with 1) STU 02-100 entitled Student Conduct and Discipline and ADM 04-303 entitled Discipline and Dismissal of Classified Employees will be implemented . For any activities that require immediate cessation the HOP ADM-10-901 entitled Campus Environmental Health, Safety and Risk Management will be implemented.

Illicit discharges that are reported which involve discharges that are outside UTRGV’s storm drain system (e.g. City of McAllen) will be reported to the appropriated permitting authority having jurisdiction

The following table is a description, implementation schedule and measurable goals for MCM-2.

**Table 5. MCM-2 Program Implementation Schedule.**

BMP	Description / Measurable Goals	Target Date	Target Date / Frequency
Storm Water Map	Storm water map will be developed and updated as needed to include new development or other changes. Maintain records of revisions or updates to the map. Submit any revised map with Annual Report.	06/17	Continuous
	Documentation will include the physical existence of a storm water map for the UTRGV campus. Measurable goal will be the inclusion of all storm drains.		
	Documentation will be the number of illicit discharges on reported.		
Source Reduction Programs	Implement methods for source reduction of storm water pollutants to include a Used Oil Collection Center at the EHSRM facility.	06/17	Continuous
	EHSRM will keep records for the disposal of used oil from campus community.		
	Implement Hazardous waste/ and Batteries Oil Pesticide Antifreeze (BOPA) collection program on an annual basis.	06/17	Annual
	Documentation will include the number and volume of materials collected from these respective programs.		
Illicit Discharge Detection Program (IDDE)	Develop program to detect and eliminate illicit discharges.	06/17	Continuous
	UTRGV will routinely inspection storm drains and take corrective action to address any illegal discharges.		
	Documentation will include the number of inspections conducted. Goal is 100% reconciliation of all illegal discharges.		
	UTRGV will designate a phone line for receiving inquiries and complaints related to stormwater issues, illicit discharges, and illegal dumping. Number will be posted on UTRGV's stormwater web page.	06/17	Continuous
	All illicit discharges will be Investigated to determine the source of illicit discharges and/or illegal dumping activities and reduce the number of illicit connections or incidents.		
	Documentation will include the record of the number of complaints and response actions. Goal is 100% response to all complaints.		
Enforcement Action	Enforcement of storm water violations will be conducted in accordance with the current internal disciplinary HOP policies for faculty, staff and students.	06/17	Continuous
	Enforcement of any activities that require the cessation of activities will be enforced through the HOP policy ADM-10-901.		
	Documentation includes records of the number of enforcement action related activities related to illicit storm water discharges and reporting. Goal is 100% reconciliation of all reported activities.		

### **MCM 3 - Construction Site Storm Water Runoff Control**

A program will be developed and implemented to comply with TCEQ General Permit 15000 entitled General Permit to Discharge under the Texas Pollutant Discharge Elimination System effective March 2013. The goal is to reduce pollutants in stormwater runoff from construction activities that result in a land disturbance of greater than or equal to one acre, including construction activities disturbing less than one acre if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more.

#### Background

Construction activities are either managed in house, or through the UT System Office of Facilities Planning and Construction (OFPC). All of the construction sites to date which have exceeded more than one acre have been designed and managed by an outside contractor and utilize offsite contractors for construction projects over one acre: The following outlines the operating responsibilities associated with the size of the site.

<b>Construction Project Size</b>	<b>Primary Operator</b>	<b>Secondary Operator</b>
Less than one acre	UTRGV	UTRGV
Greater than or equal than one acre	Contractor	UTRGV
Equal to or greater than 5 acres	Contractor	UTRGV

All contractors in which projects are greater than or equal to one acre will be contractually obligated to assume the role of the primary operator and the MS4 responsibilities associated with that designation.

The plan includes the establishment of the following BMP's in order to limit the release of contaminants to the storm drain associated with construction activities on the UTRGV campus

#### **1. Inventory**

UTRGV will maintain an inventory of all construction sites that result in a total land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale. The inventory will be continuously updated and include the following information:

- a. name of the project
- b. primary operator
- c. the size of the project and area of disturbance, and
- d. any relevant permit information. UTRGV will make the list available to the permitting authority upon request.

#### **2. Contractual Requirements**

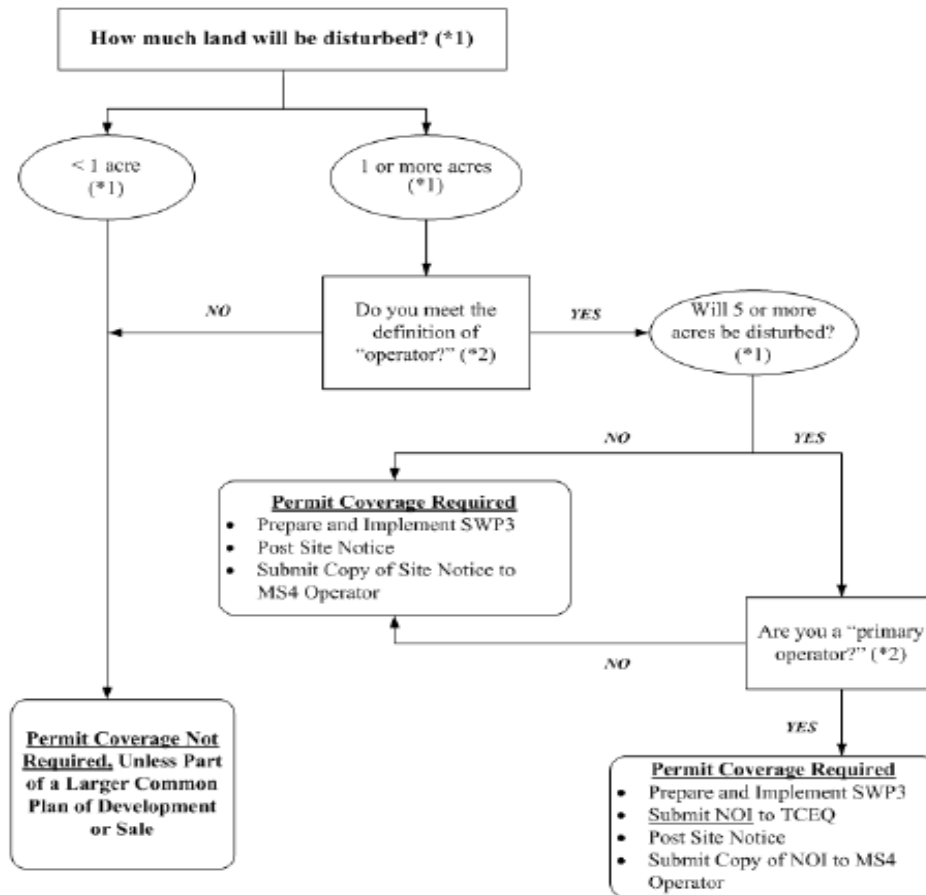
UTRGV will insure that construction site operators have developed a stormwater pollution prevention plan that is in accordance with TPDES TXR150000 entitled Construction General Permit through the institution's Job Order Contract bidding process. This document is used as part of the evaluation process. Any contractor who fails to provide a written SWMP plan will be excluded from conducting any work from for UTRGV. The annual renewal of the Job Order Contract will include criteria regarding compliance with the MS4 mandate.

### 3. Construction Plan Review Procedures

On a project basis, all proposed construction activities will be evaluated for permitting requirements by the EHSRM department in conjunction with the Facilities Planning and Construction group based on the flowchart referenced in the document entitled TCEQ General Permit 15000 entitled General Permit to Discharge under the Texas Pollutant Discharge Elimination System, effective March 2013.

#### Part I. Flow Chart and Definitions

##### Section A. Flow Chart to Determine Whether Coverage is Required



(\*1) To determine the size of the construction project, use the size of the entire area to be disturbed, and include the size of the larger common plan of development or sale, if the project is part of a larger project (refer to Part I.B., "Definitions," for an explanation of "common plan of development or sale").

(\*2) Refer to the definitions for "operator," "primary operator," and "secondary operator" in Part I., Section B. of this permit.

### 4. Site Specific Storm Water Management Plan

For those construction projects that are more than one or more acres, or that results in a total land disturbance of less than one acre if part of a larger common plan or development or sale, a site specific Storm Water Management Plan will have to be submitted by the Primary Operator. The

plan is to be submitted prior to the disturbance of any land, and contain the following minimum requirements

#### Erosion and Sediment Controls.

Design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, such controls must be designed, installed and maintained to:

- (1) Control stormwater volume and velocity within the site to minimize soil erosion;
- (2) Control stormwater discharges, including both peak flowrates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel and streambank erosion;
- (3) minimize the amount of soil exposed during construction activity;
- (4) Minimize the disturbance of steep slopes;
- (5) Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site;
- (6) Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration, unless infeasible; and
- (7) Minimize soil compaction and, unless infeasible, preserve topsoil.

#### Soil Stabilization.

Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. Stabilization must be completed within a period of time determined by the permittee. In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed as specified by the permittee.

#### Dewatering.

Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited unless managed by appropriate controls.

#### Pollution Prevention Measures.

Pollution Prevention Control methods will be designed, installed, and implemented, to maintain to minimize the discharge of pollutants. At a minimum, the operator will be install pollution prevention measures that designed to :

- (1) Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters.
- (2) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater; and

(3) Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.

(4) All construction site operators are required to comply with the applicable BMPs and they are prohibited to conduct any illicit discharges such as wash out wastewater, fuels, oils, soaps, and solvents.

Plan Review

All Storm Water Management Plans will be reviewed by the construction team and the EHSRM for adherence to TCEQ General Permit 15000 entitled General Permit to Discharge under the Texas Pollutant Discharge Elimination System effective March 2013. The plan reviews will be conducted by qualified individuals, knowledgeable in the technical review of [construction and stormwater controls, and will document the review of each project with a written checklist.

**5. Inspections**

All sites requiring permitting will be inspected by the primary operator in accordance with the schedule outlined in the following table. In UTRGV’s capacity as a secondary operator, routine inspections will be conducted to ensure that inspections are being conducted. Inspection Frequency for permitted sites:

**Inspection Frequency**

Site	Inspection Frequency
All sites > 5 acres	Bi weekly Inspections
All sites one acre or more	Monthly
All sites < 1 acre	On an as needed basis, based on the evaluation of factors that are a threat to water quality.

Inspections of the construction site will be conducted 1) Prior to Land disturbance to ensure that all sediment and erosion controls are in place 2) During Active Construction to ensure compliance with BMP’s related to erosion and sediment controls are maintained, and 3) following active construction to ensure that graded areas have reached final stabilization. **In light of the importance of Bacteria as a Pollutant of Concern, a unique line item will be included specifically for the porta potties.**

Violation Procedures

Written notices of violations (NOV’s) stipulating the nature of the violation and the required corrective action will be submitted to the Primary Operator and a copy will be provided to the Project Manager and the Associate Vice President for Facilities Planning and Operations. In the event that the NOV’s are not addressed within the specified time frame, or there are repeat violations the EHSRM department will exercise its authority under the Job Order Contract Number 17-MR -01 and take the appropriate measures including ceasing construction related activities until items are addressed.

**6. Training**

UTRGV will ensure that all staff whose primary job duties are related to implementing the construction

stormwater program, including permitting, plan review, construction site inspections, and enforcement, are trained to conduct these activities. Initial training will be conducted and refresher training will be conducted on bi-annual basis.

#### **7. Training – JOC Contractors**

UTRGV will provide annual training to all JOC construction operators and their primary subcontractors to ensure that they are abreast of the requirements associated with UTRGV's storm water management plan. The training will include outreach tools (i.e. brochures, posters, website, plan notes, manuals etc.) aimed at educating construction operators on appropriate selection, installation, implementation, and maintenance of stormwater controls, as well as overall program compliance.

**Special emphasis on porta potties and the potential release of bacterial effluents will be included in the training.**

**Table 6. MCM- 3 Program Implementation Schedule**

<b>BMP</b>	<b>Description / Measurable Goals</b>	<b>Target Date</b>	<b>Frequency</b>
Inventory	UTRGV will maintain an inventory of all construction sites that are subject to TCEQ General Permit 15000 requirements	06/17	Routine updates based on frequency.
	Documentation in the form of inventory. Goal is to ensure that 100% of the construction sites are included in the inventory.		
Contractual Requirements	All of the contractors that submit a proposal for the institutional Job Order Contract will be required to provide a written Storm Water Management Plan (SWMP).	08/2017	Initial and annual renewal.
	Documentation will be in the form of the JOC requirements and the SWMP submitted by those awarded the contract. Goal is to have all JOC contractors comply with mandates regarding SWMP submission.		
Site Specific Storm Water Management Plan	Site plan to incorporate all of the appropriate BMP's including but not limited to erosion and sediment control, soil stabilization; dewatering, and pollution prevention measures.	06/17	Continuous based on projects
	Documentation will be in the form of a site specific plan and compliance with BMP mandates documented with routine inspections.		
Inspections	Inspections of construction sites that fall under the general permit will be conducted at those intervals identified in the plan. Special emphasis will be for those potential activities that have the potential to release bacterial effluents to the storm sewer, specifically porta potties.	06/17	Schedule referenced in MS4 plan.
	Documentation is in the form of routine inspections will be maintained at the EHSRM office. Goal is 100% compliance with inspection schedule and 100% compliance with SWMP plan requirements.		
Enforcement	Enforcement of stormwater violations will be enforced in compliance with procedures outlined in MS4 Plan to include written notice of violations and stepped up enforcement action.	06/17	Based on construction activity
	Documentation in the form of documented enforcement plan. Goal is enforce 100 % of all non-compliant activities.		
Training	Training of staff members involved in the construction process.	06/17	Initial and Bi-Annual
	Documentation in the form of sign in sheets. Goal is 100% of all construction related staff members trained.		
Training – JOC Contractors	UTRGV will provide annual training to all JOC construction operators and their primary subcontractors.	06/17	Annual
	Documentation in the form of sign in sheets. Goal is 100% of the contractors		



## **MCM 4 - Post-Construction Stormwater Management in New Development and Re-development.**

The UTRGV has developed and implemented a plan to address post construction discharges from new development and redevelopment projects that disturb greater than or equal to one acre of land, including projects less than one acre that are part of a larger common plan of development or sale that will result in disturbance of one or more acres. In the plan is incorporated steps to ensure controls are in place to address run-off, based on both structural and non-structural BMPs, compliance with the City of Edinburg ordinances, as well as long term operation of the BMPs. The UTRGV utilizes the following BMPs to achieve this MCM:

### **1. Construction Planning Phases**

Stormwater runoff from new development and new redevelopment projects is addressed in the planning and design phases of all University projects. Initial planning is guided by the University Master Drainage Plan and the University's Manual of Design and Specification Standards which is based on the UT Systems. The design of University projects is reviewed by planning, risk management, design, and construction and maintenance departments, a committee made up of representatives from all these departments, to ensure that appropriate BMPs are incorporated into projects. Input is also provided by the institution's sustainability group, the ultimate goal of reducing stormwater runoff and reducing the amount of water used in irrigation.

Stormwater discharges from such new development and redevelopment sites are managed to ensure that the post-development hydrology does not exceed the pre-development hydrology at the site.

All projects are planned in conjunction with the local permitting authority, The City of Edinburg, in order to ensure adherence to the City of Edinburg's, and Hidalgo Counties Master Drainage Plan.

### **2. Long term Operation and Maintenance of BMPs**

Once the project is completed, the UTRGV's Campus Facilities Operations team is charged with ensuring that structural and non-structural BMPs are included into the maintenance program to ensure long term operation and maintenance.

Any changes to the structural BMP's are evaluated by Facilities Planning and Construction to ensure that structural BMP's are not impacted in a manner that affects the Hydrology.

### **Inspections**

The UTRGV will conduct inspections of each project to ensure that the specifications included in the design of the projects were met. The inspections will be conducted by the Storm Water Management team and include the following information:

1. Inspection date
2. Name and signature of inspector
3. Project Location
4. A description of the condition of stormwater control measures
5. Photographic documentation.

The UTRGV will also evaluate BMP's after any significant rainfall to ensure that BMPs' were affective.

**Table 7 .MCM 4. Program Implementation Schedule.**

<b>BMP</b>	<b>Description / Measurable Goals</b>	<b>Target Date</b>	<b>Frequency</b>
Project Design	Structural BMP's are incorporated into the design phase of all projects to reduce stormwater migration to the storm drain in conjunction with local flood districts and Permitting authorities.	08/17	Update list as needed
	Documentation in the form of design documents. Goal is 100% of all projects to include this design aspect.		
Long term operation and maintenance of BMPs	Long term maintenance of BMPs will be maintained by the Facilities Operation Group.	06/17	Annual basis.
	Documentation in the form of this requirement into Facilities Work Order System (TMA). Goal is to inspect all construction projects on an annual basis.	06/17	Annual Basis
Inspections	Inspections of Construction Sites will be conducted initially and post development and after significant rain events to ensure that structural BMP's are maintained.	06/17	Initially and after every significant rainfall.
	Documentation in the form of an inspection document and after each rainfall. Goal is 100% of all construction projects.	06/17	

## **MCM 5 - Pollution Prevention and Good Housekeeping for Municipal Operations**

A Pollution Prevention and Good Housekeeping Operation and Maintenance (O&M) program will be implemented for the ultimate goal of preventing or reducing pollutant runoff from municipal operations associated with an institutional environment. Specific to UTRGV are operations conducted by the UTRGV's physical plant and, on occasion, subcontractors and include activities such as ground, fleet and building maintenance. Maintenance of the roads are the responsibility of the City of Edinburg. In addition, housekeeping measures are to be incorporated. The following is included in the plan:

### **1. UTRGV Facilities Inventory**

The UTRGV will maintain a campus map and list all areas associated with municipal operations. This list will serve as a basis for establishing a list of facilities subject to applicable MCM's and establish priorities. The map is maintained by Facilities.

### **2. Training and Education**

A training program will be developed to insure that all appropriate employees involved in implementing pollution prevention and good housekeeping practices are reminded that they are responsible to follow and comply with the applicable BMPs. All personnel associated with activities that have the potential for releases to the stormwater will be trained on an annual basis. **Special training will be included that targets the Pollutants of concerns – specifically mercury and bacteria.**

### **3. Assessment and Implementation of BMPs for Maintenance Activities**

UTRGV will evaluate its operations and maintenance (O&M) with the goal of identifying those activities which have a potential to result in a discharge of pollutants to the stormwater. This will consist of :

- a. Identifying pollutants of concern that could be discharged from O&M activities.
- b. Develop and implement a set of pollution prevention measures that will reduce the discharge of pollutants in stormwater from O&M activities.
- c. Inspection of pollution prevention measures on a routine basis.

The following Best Management Practices (BMP) will be implemented to minimize releases of contaminants to the storm sewer.

#### Trash control

Trash and litter control measures continues to be one of the major efforts of the Grounds Maintenance personnel and will addressed in the following manner:

- a. Trash cans and dumpsters are placed at strategic locations throughout the campus to encourage the use of trash cans and reduce the possibility of trash placed on the ground and potentially into the stormwater.
- b. Trash cans are collected in a timely manner to ensure that trash cans are not overfilled.
- c. Trash cans and dumpsters are routinely inspected to ensure the integrity.
- d. Litter is picked up throughout the campus on a daily basis. . Informal inspections of the storm sewers will be conducted by trained staff during the routine inspections.

- e. Recently UTRGV has been officially recognized as a Non-Smoking campus as a result cigarette butts disposal is not an issue anymore

#### Fleet Vehicle Maintenance

Fleet vehicle maintenance can result in the release of fluids to the storm sewer of fluids are not contained to the shop area and addressed through routine housekeeping and spill procedures. The following BMPs will be used to ensure that spills associated with fleet vehicle maintained are not released:

- a. Vehicle maintenance work such as fluid changes are conducted indoors.
- b. Vehicles are monitored for leaks and fixed immediately. Pans are placed under leaks to collect the fluids for proper disposal or recycling.
- c. All used fluids (oil, antifreeze; hydraulic fluid) are placed immediately into recycling containers for collection and disposal by the EHSRM staff. Containers are placed on secondary containment at all times and collected on a routine schedule to ensure that containers are not overfilled.
- d. Pouring of waste down floor drains, sinks, or outdoor storm drain inlets is strictly prohibited.
- e. Batteries are placed in leak proof secondary containment.
- f. Parts are cleaned in standalone centralized solvent recycler with secondary containment.
- g. Spill kits with absorbent containment materials and instructions will be placed in the vicinity of the car wash so that spills can be immediately contained.

#### Fleet Vehicle Fueling

- a. Fleet vehicle fueling operations are conducted offsite at local gas stations.
- b. Golf cart / small utility vehicle operations are conducted in accordance with the following recommended practices:
  - i. There is a designated covered fuel area specifically designed to prevent stormwater runoff and spills. It is paved with concrete. There is a berm that provides secondary containment.
  - ii. All persons who refuel vehicles are trained in Hazard Communication and emergency response and asked to immediately report spills or overfills, failure of the piping system, and leaks or spills during pumping of fluids.

#### Fleet Vehicle Washing

A designated wash area will be designated to contain and direct wash water to a sump connected to the sanitary sewer or to a holding tank, process treatment system, or enclosed recycling system. The designated area will be designed to recycle wash water. Detergents will be avoided whenever possible. If detergents are necessary, a phosphate-free, non-toxic, biodegradable soap will be used.

#### Landscaping and Lawn Care

The UTRGV has developed a landscape plan that recognizes the property's natural conditions, taking into consideration the site's topography and existing vegetation, the sites intended use, and

efficient group planting based on water needs. The landscape plan will promote natural vegetation growth and minimize water loss and contamination. The UTRGV chooses local or regional plants when developing an environmentally friendly landscape.

#### Lawn Maintenance Activities

- a. Grass clippings and leaves will be prohibited from being discharged to the storm sewer. Storm drains will be covered while using riding lawn mowers to ensure grass clippings are not released to the storm drain.
- b. Maintenance of storm drains will be routinely conducted and any debris, grass clippings or leaves will be removed.
- c. Efficient Irrigation. Low-volume watering approaches such as drip-type or sprinkler systems are used at the UTRGV when possible.
- d. Use of Mulches. Plant materials from grounds maintenance activities are converted to mulch and used on the UTRGV campus to replace fertilizers.
- e. Fertilizers. The UTRGV use fertilizer sparingly to ensure that they are not over applied. Additionally, less toxic alternatives are used such as composting materials. Strategies such as using slow-release organic fertilizers, and tilling fertilizers into moist soil to move the chemicals directly into the root zone are used to reduce mobilization by the ground water. Care is taken to ensure that fertilizer is not applied on windy day or immediately before a heavy rain.
- f. Debris generated from landscaping and lawn care are stored in a manner to reduce contaminants to the storm drain and when applicable control measures will be installed.
- g. Areas where there is long term storage of debris will be designed in a manner to reduce the potential for contaminants to be released to the storm sewer.
- h. Practical Turf Areas. UTRGV grounds will plant turfs with a type of grass that can withstand drought and that becomes dormant in hot, dry seasons. In addition, the grass will not be cut shorter than 3 to 4 inches in height. Mulched clippings are left on the lawn as a natural fertilizer.
- i. **Personnel will be apprised to report all potential sewage leaks to their supervisor for subsequent investigation and action.**

#### Pest Management

Pesticides. Pesticides are used sparingly on UTRGV grounds and only when necessary. When using pesticides, the least toxic pesticide that targets the specific pest in question is chosen.

Pesticide application is managed to ensure that pesticides are not applied with expectancy of rain to ensure that excess pesticides are not released to the storm drain.

#### **4. Contractor Requirements and Oversight**

Contractors hired by UTRGV to perform maintenance activities on university owned facilities will be contractually required to comply with all of the storm water control measures, good housekeeping practices, and facility-specific storm water management operating procedures. The university will provide project manager oversight of contractor activities to ensure they are using appropriate control measures and complying with university MS4 procedures. All major contractors which comprise the majority of maintenance related projects will be trained on an annual basis on MS4 policies along with basic safety related training.

## 5. Regulated Waste Material

All regulated waste streams from the MS4 are removed and properly disposed in an efficient, timely manner in compliance with all rules and regulations applicable to the workplace and the environment. Employees will continued to be informed proper procedure and oversight when reporting or removing waste from job sites.

- a. All regulated waste streams (Hazardous Waste, Universal Waste, Biological Waste, and Solid Waste are managed by the EHSRM and collected, stored, treated, and disposed of in accordance with any and all applicable rules and regulations. UT System or local contracts for the disposal of regulated waste streams including, but not limited to hazardous waste, batteries, oil and pesticides and antifreeze are in place to ensure compliance
- b. Generators of waste are afforded an efficient mechanism for the disposal of all regulated waste streams. Requests for the collection of waste are via a hazardous waste line, email or by the phone. In areas where large volumes of recurring waste are generated, are conducted on a routine basis
- c. The EHSRM department has a facility specifically designed to store waste streams until ultimate disposal to a TSDF. The facility has secondary containment. Any waste streams that are stored outside have secondary containment.

## 6. Inspection of Municipal/Facilities

All sights included in the inventory of Municipal/Facilities related operations will be inspected on a monthly basis. In addition, activities related to Municipal/Facilities operations will be conducted on a monthly basis. These activities are related to field activities that are not conducted at the specific facilities identified in the inventory. **A specific line item will include those activities/facilities that can result in bacteria and mercury releases and how to identify those releases.**

Results of the inspection will be submitted to the Operations and Maintenance Director, the Assistant Director specific to that Trade, and the Storm Water Protection Committee.

**Table 8. MCM 5 - Program Implementation Schedule**

BMP	Description / Measurable Goals	Target Date	Frequency
Facility and Control Activity	The UTRGV maintains a campus map and a list of all properties that are categorized as municipal operations.	06/17	Update list as needed
	Documentation in the form of a maintained and updated list.		
Training and Education	All personnel associated with activities that have the potential for releases to the stormwater will be training on an annual basis.	06/17	Annual basis.
	Documentation in the form of training records. Goal is 100% of all personnel requiring training. <b>Special training will be included that targets the Pollutants of concerns – specifically mercury and bacteria.</b>		
Assessment of Maintenance Operations/ Activities	UTRGV will evaluate its operations and maintenance (O&M) activities for their potential to discharge pollutants to the storm water and implementation of the appropriate BMPS.	06/17	Initial and updated to address any changes.
	Documentation in the form of formal implementation of the BMP's , and verification through routine inspections. Goal is 100% compliance.		
Contractor oversight	Contractors involved in facilities maintenance will be inspected on a routine basis to ensure SWMP requirements are being maintained.	06/17	Continua. Based on contractor activity.
	Documentation will be in the form of the number those written violations maintained at the EHSRM offices. Goal is 100 compliance		
Regulated Waste Disposal	All regulated waste streams, primarily those stored outside are collected and disposed of in a timely and compliant manner.	06/17	Based on regulated waste disposal activity
	Documentation in the form of waste manifests generated from the disposal of regulated waste activities.		
Contractor oversight	Contractors involved in facilities maintenance will be inspected on a routine basis to ensure SWMP requirements are being maintained.	06/17	Continua. Based on contractor activity.
	Documentation will be in the form of the number those written violations maintained at the EHSRM offices. Goal is 100 compliance		
Assessment of Maintenance Operations/ Activities	UTRGV will evaluate its operations and maintenance (O&M) activities for their potential to discharge pollutants to the storm water and implementation of the appropriate BMPS .	06/17	Initial and updated to address any changes.
	Documentation in the form of formal implementation of the BMP's , and verification through routine inspections. Goal is 100% compliance.	06/17	
Inspections	Routine Inspections of Municipal/Facilities related sites that have the potential for contaminants to be released to the storm sewer. <b>Specific line item will include those activities/facilities that can result in bacteria and mercury releases and how to identify them</b>	06/17	Monthly
	Documentation in the form of inspections. Goal is 100% compliance. Special attentaio		

## **SECTION VII : SUMMARY**

### **Annual Review**

The MS4 plan will be evaluated on an annual basis by the UTRGV Stormwater Committee. At this time, the Team will evaluate the appropriateness of the selected Best Management Practices and submit any modification requests to the TCEQ stormwater Management and Pre-treatment team by written notification. The request will include

1. an analysis of why the BMP is ineffective or infeasible (including cost prohibitive)
2. expectations on the effectiveness of the replacement BMP, and
3. an analysis of why the replacement BMP is expected to achieve the goals of the BMP to be replaced.

### **Record Keeping**

All records required by this permit will be kept for a minimum period of three years. Records include information used in the development of the storm water management program, any monitoring, copies of reports, and all data used in the development of the notice of intent. Records will be made available to the available to the public, including the storm water management program. The records will be maintained at the following location

1. Environmental Health, Safety and Risk Management Offices

Edinburg Environmental Health and Safety Building (EEHSB)  
The University of Texas Rio Grande Valley  
1201 West University Dr.  
Edinburg, Texas 78539