



STORMWATER MANAGEMENT PROGRAM

Developed in accordance with the requirements of TEXAS COMMISSION ON ENVIRONMENTAL QUALITY - TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM - TPDES GENERAL PERMIT TXR040000

Permit Term:

August 13, 2007 - July 13, 2012

Prepared February 2008







Prepared by: Lower Rio Grande Valley TPDES Stormwater Task Force, South Texas Environmental Institute www.stei.org

ABSTRACT

The Lower Rio Grande Valley (LRGV), comprised of Hidalgo, Starr, Cameron and Willacy Counties, is located in South Texas along the United States-Mexico border. The region is facing a daunting task associated with complying with the Texas Commission on Environmental Quality (TCEQ) Texas Pollutant Discharge Elimination System (TPDES) Phase II Municipal Separate Storm Sewer Systems (MS4) Program. The Phase II MS4 Program, which regulates stormwater runoff, is mandated by the Environmental Protection Agency (EPA) through the agency's National Pollutant Discharge Elimination System (NPDES) program. Stormwater management includes, but is not necessarily limited to, public outreach and education, soil erosion control, non-point source (NPS) pollution prevention, and construction and municipal activity best management practices (BMPs). Currently, stormwater management is not at the forefront of environmental topics in the LRGV, as local resources are targeting floodplain concerns, groundwater issues, solid waste management and surface water shortages. However, stormwater runoff, NPS pollution, agricultural pollutant runoff, and construction soil erosion prevention are rapidly becoming important topics, and municipalities are being forced to seek innovative and forward-looking solutions to address stormwater management. One of the innovative solutions to the TPDES MS4 stormwater management regulations is being undertaken by a coalition of LRGV cities. This coalition, called the LRGV TPDES Stormwater Task Force (LTSTF), is comprised of numerous LRGV cities and is developing a regional approach to address the compliance issues of the TPDES program. The stormwater management plan (SWMP) herein is the result of this coalition's regional strategy and cooperation.

ACKNOWLEDGMENTS

The Lower Rio Grande Valley (LRGV) Texas Pollutant Discharge Elimination System (TPDES) Stormwater Task Force (LTSTF) project idea was born from a 2002 local stormwater brainstorming round table held in La Feria, Texas. Several preliminary meetings continued at various cities until the coalition was formally organized. Local government officials and qualified professionals representing various communities in the LRGV region attended these meetings. The group agreed to develop a way to achieve a regional SWMP, and create stormwater quality management approaches to comply with the TPDES regulations. The group formalized the organization by contractually empowering Texas A&M University-Kingsville (TAMUK) to facilitate the group and by developing a system of by-laws that included election of board members.

The LTSTF uses a unique, collaborative regional approach to involve various levels of government, including the TCEQ and the EPA, in developing cost-effective solutions that will achieve compliance with the TPDES rules. The LTSTF project embodies the spirit of the mutually beneficial relationships between local governments and embellishes this relationship with academia and regulators. The overall impact of this organization has yet to be fully realized.

The primary goal of the LTSTF project is to implement a regional SWMP not only to comply with Phase II regulations, but also to address broader water quality and watershed issues. The project has already enjoyed side benefits of increased communication and cooperation, and created a collaborative process for discussing water quality issues. In addition, this collaboration has enabled the participating communities and TAMUK to successfully secure over \$300,000 of grant funding since its inception. The LTSTF membership is detailed in Appendix A.

In 2003, LTSTF participants began entering into local government interlocal agreements with TAMUK, which outlined the desire to address stormwater quality issues on a regional basis and named TAMUK as its facilitator. Fourteen (14) of the seventeen (17) LTSTF participants entered into additional interlocal agreements with TAMUK authorizing the development of Municipal Separate Storm Sewer System (MS4) Storm Water Management Plan (SWMPs). In executing these interlocal agreements, emphasis was placed on developing programs that met Phase II MS4 stormwater regulations, studying existing successful programs, addressing community goals, providing technical assistance and training, and promoting regional approaches.

In addition to the municipalities listed in Appendix A, the following organizations and individuals have been involved in LTSTF project planning and training: the Cities of Laredo, Corpus Christi and San Antonio, the Arroyo Colorado Watershed Partnership, TCEQ Water Quality Division and Small Business Group, EPA Region 6 Stormwater Division and Border 2012 Group, South Texas Environmental Institute, Texas Department of Transportation, Texas Sea Grant, Lower Rio Grande Valley Development Council (LRGVDC), University of Texas Brownsville and University of Texas-Pan American.

TAMUK is providing facilitation and management assistance for the LTSTF project, initiating this effort through a National Science Foundation (NSF) grant and from annual membership fees collected from the membership municipalities. The funds

provide resources for staff to facilitate the group's efforts in formulating LTSTF project goals and developing LTSTF programs. Funds are also used to host workshops, expert panel discussions, conferences, seminars and training sessions.

The LTSTF extends a special acknowledgement to the founders of this coalition, Andrew Ernest, Ph.D., P.E. and Javier Guerrero, E.I.T., M.S., Ph.D. Student, and to the faculty and staff of TAMUK including Associate Professor Lee Clapp, Ph.D., Engineering Associate Dean, Kuruvilla John, Ph.D., Environmental Engineering Department Chairperson Kim Jones, Ph.D., P.E., and Abel Garza. Also acknowledged for their work is Ni Bin Chang, P.E., Ph.D. and former students Eric Davila, E.I.T., M.S., Shankar Parvathinathan, Ph.D., and Annette Hernandez, Ph.D., E.I.T.

TABLE OF CONTENTS

ABSTRACTi
ACKNOWLEDGEMENTSii
TABLE OF CONTENTSiv
LIST OF FIGURESvii
LIST OF TABLESviii
ACRONYMS xiii
DEFINITIONS xiv
1.0 INTRODUCTION1
1.1 - BACKGROUND 5
2.0 OBJECTIVES 6
3.0 APPROACH TO STORMWATER MANAGEMENT PLAN DEVELOPMENT 7
4.0 BEST MANAGEMENT PRACTICES, MEASURABLE GOALS,
IMPLEMENTATION SCHEDULE, AND MEASUREABLE GOAL EVALUATION
PROCESS 12
4.1 - MCM #1 - PUBLIC EDUCATION AND OUTREACH
4.2 - MCM #2 - PUBLIC INVOLVEMENT AND PARTICIPATION 16
4.3 - MCM #3 - ILLICIT DISCHARGE DETECTION AND ELIMINATION 18
4.4 - MCM #4 - CONSTRUCTION SITE STORMWATER RUNOFF
CONTROL 21
4.5 - MCM #5 – POST-CONSTRUCTION STORMWATER MANANGEMENT
22

4.6 - MCM #6 - POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR
MUNICIPAL OPERATIONS
4.7- MCM #7 - AUTHORIZATION FOR MUNICIPAL CONSTRUCTION
ACTIVITIES
5.0 STORMWATER MANAGEMENT PROGRAM 28
5.1 - PUBLIC EDUCATION AND OUTREACH BMPS
5.2 - PUBLIC INVOLVEMENT AND PARTICIPATION BMPS
5.3 - ILLICIT DISCHARGE DETECTION AND ELIMINATION BMPS 40
5.4 - CONSTRUCTION SITE STORMWATER RUNOFF CONTROL BMPS. 48
5.5 - POST-CONSTRUCTION STORMWATER MANANGEMENT BMPS 54
5.6 - POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR
MUNICIPAL OPERATIONS BMPS
5.7- AUTHORIZATION FOR MUNICIPAL CONSTRUCTION ACTIVITIES
BMPS66
CHAPTER 6 – CITY PERMITTED FACILITIES
CHAPTER 7 – ASSESSMENT OF NON-STORMWATER DISCHARGES 71
CHAPTER 8 – RECORDKEEPING AND RECORDING
CHAPTER 9 – SUMMARY
REFERENCES
APPENDIX A- MEMBERSHIP
APPENDIX B – BY LAWS AND MISSION STATEMENT
APPENDIX C – BMP CHECKLISTS
APPENDIX D – TYPICAL INTERLOCAL AGREEMENT

APPENDIX E – OUTREACH VENUES

APPENDIX F - TPDES PERMITS

APPENDIX G – URBANIZED AREAS

APPENDIX H - GENERAL PERMIT TXR040000

APPENDIX I – NOI

LIST OF FIGURES

FIGURE 1- The LRGV study area	1
FIGURE 2- The TWDB Region M	2
FIGURE 3- Arroyo Colorado Watershed	4
FIGURE 4- Dirt in Drain Campaign	8
FIGURE 5- Chucho Salva el Dia Campaign	8
FIGURE 6- Stormwater Stencil	18

LIST OF TABLES

TABLE 0 - SWMP MCM DEVELOPMENT APPROACH	9
TABLE 1 - PUBLIC EDUCATION AND OUTREACH BMPS	29
TABLE 2 - IMPLEMENTATION SCHEDULE – UTILITY INSERTS/MASS MAII OUT	
TABLE 3 - BMP RESPONSIBILITY – UTILITY INSERTS/MASS MAIL-OUT	30
TABLE 4- IMPLEMENTATION SCHEDULE – WEB SITE	31
TABLE 5- BMP RESPONSIBILITY – WEB SITE	31
TABLE 6- IMPLEMENTATION SCHEDULE – CLASSROOM PRESENTATIONS	S31
TABLE 7- BMP RESPONSIBILITY – CLASSROOM PRESENTATIONS	32
TABLE 8- IMPLEMENTATION SCHEDULE – STENCILING	32
TABLE 9- BMP RESPONSIBILITY – STENCILING	32
TABLE 10- IMPLEMENTATION SCHEDULE – VIDEOS	33
TABLE11- BMP RESPONSIBILITY – VIDEOS	33
TABLE 12- IMPLEMENTATION SCHEDULE – SIGNAGE	34
TABLE 13- BMP RESPONSIBILITY – SIGNAGE	34
TABLE 14- IMPLEMENTATION SCHEDULE – COMMUNITY OUTREACH	35
TABLE 15- BMP RESPONSIBILITY – COMMUNITY OUTREACH	35
TABLE 16- BMP RESPONSIBILITY – EDUCATION, ARROYO COLORADO WATERSHED PROTECTION PLAN	35
TABLE 17- BMP RESPONSIBILITY – EDUCATION, ARROYO COLORADO WATERSHED PROTECTION PLAN	35
TABLE 18- PUBLIC INVOLVEMENT AND PARTICIPATION BMPS	36
TABLE 19- EXAMPLE TABULATION OF PUBLIC MEETINGS	36
TABLE 20- IMPLEMENTATION SCHEDULE – PUBLIC MEETINGS	37

TABLE 21- BMP RESPONSIBILITY – PUBLIC MEETINGS	37
TABLE 22- IMPLEMENTATION SCHEDULE – STENCILING	37
TABLE 23- BMP RESPONSIBILITY – STENCILING	38
TABLE 24- IMPLEMENTATION SCHEDULE – CITIZEN ADVISORY COMMITTEE	38
TABLE 25- BMP RESPONSIBILITY – CITIZEN ADVISORY COMMITTEE	38
TABLE 26- IMPLEMENTATION SCHEDULE – HOTLINE	39
TABLE 27- BMP RESPONSIBILITY – HOTLINE	39
TABLE 28- ILLICIT DISCHARGE DETECTION AND ELIMINATION BMPS	41
TABLE 29- IMPLEMENTATION SCHEDULE – SEWER MAP	41
TABLE 30- BMP RESPONSIBILITY – SEWER MAP	41
TABLE 31- IMPLEMENTATION SCHEDULE – ILLICIT DISCHARGE ELIMINATION ORDINANCE	42
TABLE 32- BMP RESPONSIBILITY – ILLICIT DISCHARGE ELIMINATION ORDINANCE	42
TABLE 33- IMPLEMENTATION SCHEDULE – ILLICIT DISCHARGE ELIMINATION ORDINANCE	43
TABLE 34- BMP RESPONSIBILITY – BUSINESS EDUCATION	43
TABLE 35- IMPLEMENTATION SCHEDULE – GENERAL ORDINANCE	44
TABLE 36- BMP RESPONSIBILITY – GENERAL ORDINANCE	44
TABLE 37- IMPLEMENTATION SCHEDULE – LID AND SMART GROWTH	45
TABLE 38- BMP RESPONSIBILITY – LID AND SMART GROWTH	45
TABLE 39 - IMPLEMENTATION SCHEDULE – ILLICIT DISCHARGE INSPECTIONS	45
TABLE 40- BMP RESPONSIBILITY – ILLICIT DISCHARGE INSPECTIONS	45

TABLE 41- IMPLEMENTATION SCHEDULE – COMMUNITY OUTREACH46
TABLE 42- BMP RESPONSIBILITY – COMMUNITY OUTREACH46
TABLE 43- IMPLEMENTATION SCHEDULE – HOUSEHOLD HAZARDOUS WASTE
TABLE 44- BMP RESPONSIBILITY – HOUSEHOLD HAZARDOUS WASTE47
TABLE 45- CONSTRUCTION SITE STORM WATER CONTROLS BMPS49
TABLE 46- IMPLEMENTATION SCHEDULE – EROSION CONTROL ORDINANCE
TABLE 47- BMP RESPONSIBILITY – EROSION CONTROL ORDINANCE50
TABLE 48- IMPLEMENTATION SCHEDULE – CONSTRUCTION SITE PLAN REVIEW AND OVERSIGHT
TABLE 49- BMP RESPONSIBILITY – CONSTRUCTION SITE PLAN REVIEW AND OVERSIGHT
TABLE 50- IMPLEMENTATION SCHEDULE – SITE INSPECTION AND POLICY ENFORCEMENT
TABLE 51- BMP RESPONSIBILITY – SITE INSPECTION AND POLICY ENFORCEMENT
TABLE 52- IMPLEMENTATION SCHEDULE – CONTRACTOR CERTIFICATION
TABLE 53- BMP RESPONSIBILITY – CONTRACTOR CERTIFICATION
TABLE 54- IMPLEMENTATION SCHEDULE – CONSTRUCTION SITE WASTE MANAGEMENT
TABLE 55- BMP RESPONSIBILITY – CONSTRUCTION SITE WASTE MANAGEMENT
TABLE 56- IMPLEMENTATION SCHEDULE – DEVELOPMENT OF BMP MENUS53
TABLE 57- BMP RESPONSIBILITY – DEVELOPMENT OF BMP MENUS

TABLE 58- POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT BMPS54
TABLE 59- IMPLEMENTATION SCHEDULE – POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT BMPS
TABLE 60- BMP RESPONSIBILITY – POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT BMPS55
TABLE 61- IMPLEMENTATION SCHEDULE – DRAINAGE DESIGN POLICY56
TABLE 62- BMP RESPONSIBILITY – DRAINAGE DESIGN POLICY56
TABLE 63 - IMPLEMENTATION SCHEDULE – BMP INSPECTION AND MAINTENANCE
TABLE 64- BMP RESPONSIBILITY – BMP INSPECTION AND MAINTENANCE .56
TABLE 65- IMPLEMENTATION SCHEDULE – LAND USE
TABLE 66- BMP RESPONSIBILITY – LAND USE
TABLE 67- POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS BMPS
TABLE 68- IMPLEMENTATION SCHEDULE – STORMWATER SEWER SYSTEM O & M
TABLE 69- BMP RESPONSIBILITY – STORMWATER SEWER SYSTEM O & M61
TABLE 70- IMPLEMENTATION SCHEDULE – STREET SWEEPING
TABLE 71- BMP RESPONSIBILITY – STREET SWEEPING
TABLE 72- IMPLEMENTATION SCHEDULE – CITY EMPLOYEE TRAINING PROGRAM
TABLE 73- BMP RESPONSIBILITY – CITY EMPLOYEE TRAINING PROGRAM .62
TABLE 74- IMPLEMENTATION SCHEDULE – O&M CERTIFICATION AND SOP PROGRAM
TABLE 75-BMP RESPONSIBILITY – O&M CERTIFICATION AND SOP PROGRAM

TABLE 76- IMPLEMENTATION SCHEDULE – SITE VISITS	63
TABLE 77- BMP RESPONSIBILITY – SITE VISITS	63
TABLE 78 - IMPLEMENTATION SCHEDULE – STORM SYSTEM MAINTENANC AND CLEANING	
TABLE 79- BMP RESPONSIBILITY – STORM SYSTEM MAINTENANCE AND CLEANING	64
TABLE 80- IMPLEMENTATION SCHEDULE – PESTICIDES, HERBICIDE AND FERTILIZER MANAGEMENT	64
TABLE 81- BMP RESPONSIBILITY – PESTICIDES, HERBICIDE AND FERTILIZER MANAGEMENT	64
TABLE 82- IMPLEMENTATION SCHEDULE – COLLECTION AND DISPOSAL O STORMWATER WASTE	
TABLE 83- BMP RESPONSIBILITY – COLLECTION AND DISPOSAL OF STORMWATER WASTE	65
TABLE 84- AUTHORIZATION FOR MUNICIPAL CONSTRUCTION ACTIVITIES BMPS	
TABLE 85- IMPLEMENTATION SCHEDULE – SWP3 BMPS	69
TABLE 86- BMP RESPONSIBILITY – SWP3 BMPS	69
TABLE 87- IMPLEMENTATION SCHEDULE – CONTRACTOR, ENGINEER, AN ARCHITECT SURVEY	
TABLE 88- BMP RESPONSIBILITY – CONTRACTOR, ENGINEER, ARCHITEC	
TABLE 89- CITY OWNED MULTI SECTOR PERMITTED FACILITIES	70

ACRONYMS

BMP - Best Management Practice

CWA - Clean Water Act

EPA - Environmental Protection Agency

LRGV - Lower Rio Grande Valley

LTSTF - LRGV TPDES Stormwater Task Force

MCM - Minimum Control Measure

MEP – Maximum Extent Practical

MS4 - Municipal Separate Storm Sewer System

NOI – Notice of Intent

NPDES - National Pollutant Discharge Elimination System

SWMP - Storm Water Management Plan

SWP3 - Storm Water Pollution Prevention Plan

TCEQ - Texas Commission on Environmental Quality

TPDES - Texas Pollutant Discharge Elimination System

UA – Urbanized Area

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.

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.

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

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

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 storm water, except discharges pursuant to this general permit or a separate authorization and discharges resulting from emergency fire fighting activities.

Industrial Activities - manufacturing, processing, material storage, and waste material disposal areas (and similar areas where storm water 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.

Maximum Extent Practicable (MEP) - The technology-based discharge standard for municipal separate storm sewer systems to reduce pollutants in storm water discharges that was established by CWA § 402(p). A discussion of MEP as it applies to small MS4s is found at 40 CFR § 122.34.

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.

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 storm water runoff.

Redevelopment - Alterations of a property that changed the "footprint" 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 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, storm water, 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 storm water; (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.

Storm Water and Storm Water Runoff - Rainfall runoff, snow melt runoff, and surface runoff and drainage.

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

Storm Water 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 storm water runoff. Structural controls and practices may include but are not limited to: wet ponds, bioretention, infiltration basins, storm water 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 (MHWM) 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 nonnavigable, 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.

1.0 INTRODUCTION

The Lower Rio Grande Valley (LRGV) is growing at an incredible rate and by the year 2020 it is estimated that the population will exceed 1.6 million people (LRGVDC, 2003). The 2000 U.S. Census indicated that the population of the LRGV (Figure 1) was 924,772, and according to the Texas Water Development Board (TWDB), the population of the Rio Grande Region M (Figure 2) will increase by 142% by the year 2060. The population boom in South Texas has forced decision-makers to prioritize environmental concerns due to lack of local, state and federal resources. The top three concerns identified by the Texas Commission on Environmental Quality (TCEQ) in the Lower Rio Grande Subregion are water quantity, water quality, and illegal dumping of municipal solid waste (TCEQ, 2002).



Figure 1: Lower Rio Grande Valley Project Area (LRGVDC, 2003)

Because the LRGV over recent years has confronted environmental issues associated with lack of and diminishing solid waste facilities, deterioration of wastewater treatment plants, lack of resources for rehabilitating civil infrastructure, and widespread flooding concerns, surface water quality discussions have not emerged until recently. However, with the publication of the TCEQ's Phase II Municipal Separate Storm Sewer System (MS4) regulations in August 2007, there will be a significant increase in the development of stormwater management plans (SWMPs).

Overview of water quality regulations. Since 1948, with passage of the *Water Pollution Control Act* (WPCA), the federal government has attempted to regulate water quality, but it was not until between 1956 and 1966 that the United States Congress aggressively promoted water pollution control. Although water pollution control was mainly in the form of financial assistance to municipalities for the construction of wastewater treatment plants, an additional thrust by Congress in 1965 established the first water quality standards in the country with the passage of the *Water Quality Act* of 1965

(EPA, 2000). It was not until 1972 that water quality based controls were established with passage of the comprehensive *Federal Water Pollution Control Act (FWPCA) Amendments* (now called the *Clean Water Act*). During the 1970s the National Pollutant Discharge Elimination System (NPDES) permitting program was created to regulate discharges of all pollutants to navigable waters from any point source. However, during the 1970s and 1980s the NPDES program primarily targeted discharges of municipal and industrial wastewater. It was not until 1990 that the U.S. Environmental Protection Agency (EPA) promulgated NPDES regulations that established today's municipal stormwater program (EPA, 2005).

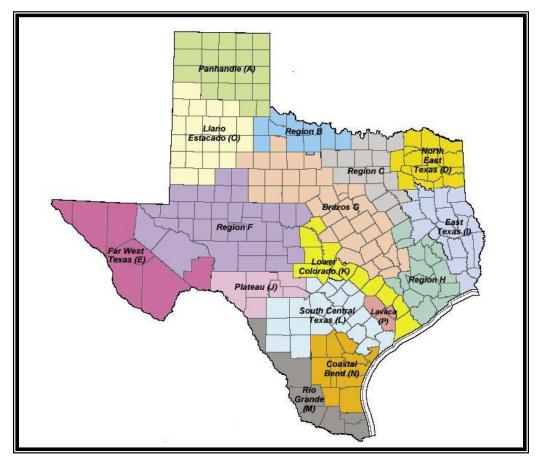


Figure 2: Region M (TCEQ, 2003)

The NPDES Stormwater Regulations. Since the passage of these water pollution prevention laws our nation's waters have improved significantly. However, the EPA reports in its annual national Water Quality Inventory that as of 2000, 40% of our surface waters remain impaired. Of this, 13% of impaired rivers, 18% of impaired lake acres, and 32% of impaired estuaries are affected by urban/suburban stormwater runoff. Polluted stormwater runoff is typically transported by municipal separate storm sewer systems (MS4s) and discharged into local waterways without treatment (EPA, 2005).

In 1987, Congress amended the CWA to require the EPA to establish phased NPDES requirements for stormwater discharges. In 1990, the EPA published the initial permit application requirements that included: (a) 11 categories of stormwater discharges

associated with industrial activity and, (b) discharges from MS4s that serviced a population of 100,000 or more (Federal Register Vol. 55, 1990). In South Texas, only Laredo, Corpus Christi and San Antonio were designated as Phase I MS4s (EPA, 1996). Although the LRGV cities of Brownsville and McAllen exceed this population today, both fell under that threshold at that time, as did every other city in the region. In Texas, the NPDES program was renamed the Texas Pollutant Discharge Elimination System (TPDES) in 2001 when the EPA, through a memorandum of understanding, gave the TCEQ authority to administer the program (Federal Register, Vol 68, 1998).

The TCEQ established the Phase II MS4 program in 2003 to extend the Phase I program to include all municipalities in urbanized areas. Urbanized areas are defined as land areas with an overall population density of more than 1,000 people per square mile. As part of the Phase II MS4 program, in August 2007 the TCEQ issued TPDES General Permit Number TXRO40000. A unique attribute of the Phase II program is that federal and state operated MS4s are also regulated. This means small MS4s can include universities, hospitals, prisons, roads, parks and office buildings (EPA, 2005).

Under the Phase II MS4 regulations, regulated municipalities must prepare a SWMP that shall include, at a minimum, the following technical requirements (TCEQ, August 2007).

- o Implement a SWMP that includes the following minimum control measures (MCMs):
 - Public education and outreach on storm water impacts
 - Public involvement/participation
 - Illicit discharge detection and elimination
 - Construction site storm water runoff control
 - Post-construction storm water management in new development and redevelopment
 - Pollution prevention/good housekeeping for municipal operations
 - Optional 7th MCM in lieu of obtaining separate construction general permits (CGPs), MS4 operators could authorize discharges from construction activities in the regulated area where the MS4 operator is a construction site operator
- o Reduce discharge of pollutants from the MS4 to the maximum extent practicable (MEP).
- o Protect water quality.
- o Include structural BMPs for each MCM.
- o For each MCM, establish measurable goals and assess efforts to meet goals.
- o Fully implement the SWMP by August 12, 2012 (5 years from issuance date).
- o Notice of Change (NOC) required for any changes to the SWMP.
- o Waivers available where the MS4 serves less than 1,000 people within UA(s).

Arroyo Colorado Watershed Protection Plan. The LRGV municipalities' first taste of regional water quality regulations associated with stormwater runoff has not been the NPDES MS4 program, but rather the EPA's Total Maximum Daily Loading (TMDL) program. Many LRGV municipalities use the Arroyo Colorado as a receiving waterway for treated sanitary sewer wastewater and stormwater runoff (Figure 3).

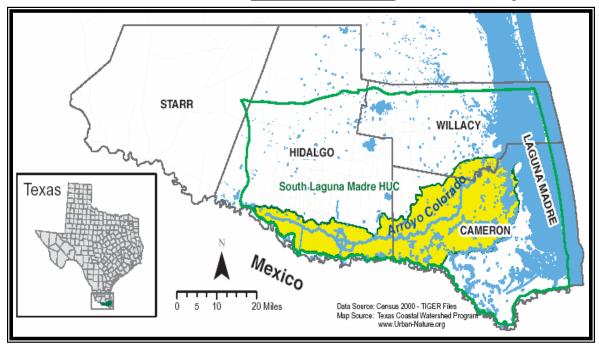


Figure 3: Arroyo Colorado Watershed (ACWP, 2007)

The Arroyo Colorado has been constantly assessed since 1974 by different entities. Of note, in 2002, the TCEQ completed a TMDL assessment that demonstrated that parts of the Arroyo Colorado did not meet water quality standards for dissolved oxygen. Consequently, the TCEQ initiated the Arroyo Colorado Watershed Protection Partnership (ACWPP) to facilitate local efforts to develop a watershed protection plan (WPP) to improve conditions in the Arroyo Colorado. The LRGV municipalities impacted by this project have been actively cooperating with the ACWPP, knowing that the ramifications of the watershed protection plan will affect water quality standards for their regulated water outfalls into the Arroyo Colorado (ACWP, 2007). However, in contrast to the NPDES stormwater regulations facing LRGV cities today, the ACPPP's watershed protection plan is currently a voluntary compliance effort.

The LRGV TPDES Stormwater Task Force. In 2002, facilitated by Texas A&M University –Kingsville (TAMUK), a coalition of seventeen LRGV municipalities joined to form the LRGV TPDES Stormwater Task Force (LTSTF) in a joint effort to develop a proactive regional approach to comply with the TPDES Phase II MS4 rules. With the exception of the City of Rio Grande City and Sullivan City, all of the municipalities that comprise the LTSTF are designated as small MS4s.

Final Promulgation of the Phase II MS4 Stormwater Regulations. In August of 2007, the TCEQ finally published the Phase II MS4 regulations after a legal challenge of the rules by several environmental groups was ruled in favor of the EPA in 2005. The legal battle delayed the issuance of permits from 2003 to 2008. The TCEQ MS4 general permit is designated as TXR040000. Regulated MS4 operators must submit notice of intent (NOI) along with developed SWMPs by February 11, 2008.

1.1 BACKGROUND

The City of Weslaco was incorporated in 1919. The City's incorporated area covers approximately 14 square miles and its extraterritorial jurisdiction comprises approximately 69 square miles. Geographical coordinates are 26 degrees 9.6 minutes N and 97 degrees 59.4 minutes W. The mean elevation is 79 feet above sea level. The City is part of the LRGV region. The City has approximately 51 miles of storm water sewer lines and ditches. The storm water sewer system is maintained by Public Works Division. The storm water sewer system discharges into an unnamed ditch thence to the Main Floodway and to the Laguna Madre.

According to U.S. Census data, the population of the City in 2000 was 26,935. The LRGV is characterized by its relatively flat topography, agricultural-rich land, and grassland natural vegetation. The area is characterized by a humid, subtropical climate with hot summers and mild winters. The average maximum temperature in the LRGV occurs in August (92.6 F) the average minimum temperature occurs in January (48.2 °F) with an annual average temperature of 73.7 °F. Rainfall is the predominant type of precipitation. It is well distributed throughout the calendar year, and reaches a distinct peak in late fall and early winter.

The City of Weslaco has been a member of the LTSTF since 2003 and will continue to participate in the coalition throughout the permit period. The City supports a regional approach in complying with the TPDES regulations and will continue to effectively implement, assess, evaluate and update this SWMP by cooperating with neighboring cities, by forging partnerships with academia, regulators and the regulated community, and by investigating and seeking resources to maintain compliance.

2.0 OBJECTIVES

The overall goal of the SWMP is to develop a cost-effective approach to enhance and improve water quality through stormwater management to protect public and environmental health and to assure compliance with the TPDES Phase II MS4 rules. The objective of this document is to accomplish the following:

- Present a brief review of recent literature on the EPA Phase II Stormwater Rules.
- Identify and describe regulatory requirements of small MS4s pursuant to the TCEQ TPDES General Permit Number TXR040000.
- Develop a SWMP to include:
 - o common stormwater education programs to raise public awareness and increase public participation in water quality protection.
 - o training and inspection programs for erosion control.
 - o implementation of best management practices (BMPs) to mitigate impacts of stormwater runoff.
 - O Share and coordinate resources to monitor stormwater quality throughout the LRGV watersheds.
 - common Phase II programs to ensure cost-effective compliance strategies for LTSTF communities.
 - o a forum for coordination of stormwater quality TPDES concerns.
- Develop a general BMP menu.
- Prepare a cost estimate of the conceptual SWMP (not included in the SWMP)
- demonstrate a LRGV regional approach in complying with the TPDES rules

3.0 APPROACH TO STORMWATER MANAGEMENT PLAN DEVELOPMENT

In October of 2006 during a LTSTF meeting held in Mission, TX, the organization formed three (3) committees: 1) ordinance development committee 2) grant committee and 3) the MS4 SWMP development committee. TAMUK has been working closely with the MS4 committee in selecting the BMPs which will be included in the SWMPs. Between Oct 2003 and August 2007, the committee met on seven (7) different occasions at the TAMUK Citrus Center in Weslaco to brainstorm, identify, evaluate and select BMPs for each minimum control measure (MCM). A checklist was adopted for each MCM and is found in Appendix C.

Required Minimum Control Measures. The LTSTF's main mission is the development of programs to meet the Phase II MS4 stormwater regulations. The regulations call for the implementation of six (6) MCMs to address the impact of stormwater runoff on water quality and stream health. These MCMs include: 1) public education and outreach, 2) public participation and involvement, 3) illicit discharge detection and elimination, 4) construction site stormwater runoff control, 5) post-construction stormwater management, and 6) pollution prevention and good housekeeping for municipal operations. The local TPDES program includes a seventh optional MCM that allows for the development of a BMP that will exempt municipalities from obtaining a general construction permit (GCP) using Permit TX0150000 for each construction site owned by the MS4 owner (TCEQ, Aug 2007). The following briefly describes each of the seven MCMs.

MCM #1: Public Education and Outreach

Individuals play a key role in reducing stormwater impacts in their daily activities. To successfully achieve water quality goals, a public education program must first educate the public on the extent and nature of the problems associated with urban stormwater runoff. In addition, the public must be instructed on what they can do to help solve the problem, and a successful program must provide opportunities for hands-on activities. The education program will use a variety of public outreach methods, new and existing programs like the Lower Rio Grande Development Council's (LRGVDC) "Dirt in the Drain" campaign (Figure 4), Texas Sea Grant's "No La Riegues" program(www.nolariegues.com), EPA's "After the Storm and "Chucho Salva el Dia"(Figure 5) and the Valley Proud Environmental Council's "Captain Crab" program (www.valleyproud.org/).

MCM #2: Public Participation and Involvement

To ensure buy-in and support from the public, private and commercial industries, public participation is critical. This includes providing information and seeking public input on stormwater management issues. Committees formed from key individuals representing a diverse group of stakeholders are planned. These groups will provide input and evaluation. The SWMP's BMPs include participatory programs such as neighborhood storm drain stenciling, illicit discharge reporting and regular public meetings.



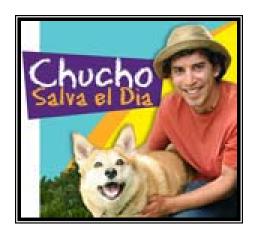


Figure 5: Chucho (http://epa.gov/region6/6xa/childrens health video.htm#jump)

Figure 4: Dirt in the Drain Campaign (www.lrgvdc.org)

MCM #3: Illicit Discharge Detection and Elimination

A cost-effective way to reduce some of the worst stormwater pollutants is to identify and eliminate illicit connections and discharges. The SWMP's BMPs include public and municipal education, illicit discharge detection methods, inspections and ordinance language to control these discharges. In addition, public information material will be developed discussing the impacts of spills on water quality and a hotline for reporting illicit discharges.

MCM #4: Construction Site Stormwater Runoff Control

Effective construction site pollution prevention can dramatically reduce sediment loading to receiving water ecosystems. An effective erosion control program must include adequate ordinance language, effective inspection and enforcement, and appropriate development and construction standards. The SWMP's BMPs include all of these components. In addition, the SWMP's BMPs include contractor training and implementation of a certification program. These program elements will ensure consistent region-wide education and minimum standards.

MCM #5: Post-Construction Stormwater Management

It is estimated that when a basin becomes 10 to 20 percent impervious there are significant ecological stresses on the aquatic ecosystem (Schueler, 2003) Therefore, the most important strategy for addressing stormwater is to focus on land use and development. One of the best strategies is to address the aggregate amount of new impervious surfaces and disconnecting impervious areas. Other strategies include

implementing practices for the control and treatment of site runoff, such as stormwater detention facilities or grass swales. The SWMP's BMPs for post construction include the development of programs and ordinances that address runoff from new development and redevelopment. Again, the City will use a successful, existing program by adopting a well established BMP or a manual like the California Stormwater Quality Construction Handbook, California Department of Transportation Stormwater Quality Handbook, International Erosion Control Association Erosion Prevention & Sediment Control Field Guide or other similar manual.

MCM #6: Pollution Prevention and Good Housekeeping for Municipal Operations

A surprising number of municipal operations can affect water quality and quantity. These range from the storage and handling of harmful chemicals in the maintenance of municipal properties and vehicles, the maintenance and cleaning of roads, and storm sewer systems. Activities such as integrated pest management, water conservation, recycling and education programs can prove to be very effective in addressing these pollutant sources. The City selected BMPs for MCM #6 that will provide for an education and certification program through Texas Engineering Extension Service (TEEX) and TAMUK resources. In addition, other partners will be empowered to provide this type of training, like the Wal-Mart Contractor certification program.

Optional MCM #7 - Authorization for Municipal Construction Activities

The operator may include a MCM similar to the six listed above for municipal construction activities, as an alternative to obtaining coverage under TPDES general permit TX150000 (General Permit to Discharge Waste for Construction Sites). This is a detailed process, and more information may be found on page 27 in the language of the rule (TCEQ, Mar 2003).

Overall Approach for Developing Stormwater Minimum Control Measures.

The LTSTF is an innovative, collaborative approach to address stormwater quality issues in the LRGV. The project emphasizes cost effectiveness by using existing programs and developing new programs that can be applied throughout the region. The LTSTF project includes the development of the seven (7) MCMs required under the TPDES Phase II stormwater regulations. A "Needs Assessment" approach to developing the seven MCMs was used. Table 0 below outlines this general approach. This approach was adopted from the City of Boulder, Colorado SWMP (City of Boulder, 2003).

Table 0. SWMP MCM Development Approach

	NEEDS		<u>ALTERNATIVES</u>		<u>IMPLEMENTATION</u>
	<u>ASSESSMENT</u>		<u>IDENTIFICATION</u>		<u>STRATEGIES</u>
✓	Identify stormwater	✓	<u>Identify existing programs</u>	✓	Establish administrative
	problems or management	✓	Identify data or program		<u>structure</u>
	needs		<u>gaps</u>	✓	Estimate costs and identify
✓	Identify regulatory and	✓	Identify new programs		funding options
	policy requirements			✓	Establish coordination and
✓	Identify important resources				evaluation strategies

Community water quality goals and BMPs were developed using a series of panel discussions and presentations with and from experts, respectively, in the field of stormwater and watershed management provided by TAMUK during a series of seminars, workshops and conferences. These goals are the basis of the LTSTF project and address mitigating the impacts of urbanization on the quantity and quality of stormwater runoff. Programs focus on pollution prevention (rather than treatment), ease of implementation and enforcement, and cost effectiveness.

Jurisdictional issues relating to land-use control, development policies, and jurisdictional authority were considered when developing BMPs. To allow for this flexibility, the program structure was based on a format developed by the City of Boulder, Colorado, which uses three (3) approaches as follows: (City of Boulder, 2003)

- 1. *INDIVIDUAL BMPs*: These BMPs are exclusively the responsibility of individual LTSTF cities to implement. Examples are the mapping of a city's stormwater system using geographical information system (GIS) software and the enforcement of soil erosion control regulations.
- 2. *COMMON BMPs*: These BMPs have policy and implementation procedures that will be common to all LTSTF participants. An example is the development of universal ordinance language for a number of programs.
- 3. *SHARED BMPs*: These BMPs are shared and funded by all member cities but administered by the LTSTF. Examples of shared programs include the Public Education Program and components of Pollution Prevention and Good Housekeeping for Municipal Operations Program.

The BMP programs developed for the LTSTF project were base on the following criteria:

- Consistent with TPDES Phase II regulations, all programs provided training, outreach and education needed to comply with state guidance for the six minimum control measures.
- The BMP programs were developed based on the strengths of BMPs used in successful existing Phase I MS4 programs.
- Jurisdictional issues relating to land-use control, development policies, and jurisdictional authority were considered when developing the BMPs to allow for flexibility within existing jurisdictional oversight.
- All LTSTF participants agreed on preliminary BMPs developed for the LTSTF MS4 SWMP plan.

Approach for Identifying and Selecting BMPs. When identifying and selecting BMPs for inclusion in the SWMP, the following components for each of the seven MCMs were considered (City of Boulder, 2003):

- *Plan Perspective*: a statement of BMP goals as developed through a needs assessment.
- *Regulatory Compliance*: requirements listed in the TCEQ General Permit TX040000, published in August 2007.
- *Community Standards*: developed from LTSTF consensus after implementing five years of technical outreach and educational programs.

- Local and National Existing Resources: list of existing exemplary programs in watershed and stormwater management.
- Shared, Common, and/or Individual Programs: BMPs selected based on criteria listed above.
- Coordination/Responsible Agencies: description of where BMPs and staff resource will reside and description of which entity is responsible for what BMP.
- *Annual Report*: outlines possible annual report elements.
- *Target Date and Measurable Goals*: list of activities and BMP elements to be completed in each of the five SMP years

The intent of the BMPs developed for the SWMP is to reduce stormwater pollution, protect the natural environment and benefit the community. The SWMP BMPs were developed to address LTSTF goals and community standards. In addition, BMPs were identified that will mitigate the impacts of urbanization on the quantity and quality of storm runoff. This includes the BMPs that address sediment loading, illicit discharges, and erosion. The selected BMPs focus on prevention rather than treatment, and were chosen to be easily implemented, enforceable, and be cost effective. It is important to note that during the first year of the permit period, the BMPs will be further evaluated. Assessment of BMPs will occur regardless of whether it is scheduled for implementation. A Notice of Change (NOC) will be submitted to the TCEQ if a BMP is deemed ineffective or improbable based on existing circumstances.

In Texas, Phase II stormwater discharge permits are issued by the TCEQ. Such permits are part of the TPDES program. Municipalities subject to the Phase II Stormwater Regulations will be covered under the TCEQ's General Permit TXRO40000 for stormwater discharges. A General Permit is a single permit that is written to cover multiple permittees. Under an interlocal agreement between STEI and a municipality, STEI, in association with the LTSTF, will submit individual NOIs for each municipality and an accompanying regional conceptual MS4 SWMP.

4.0 BEST MANAGEMENT PRACTICES, MEASURABLE GOALS, IMPLEMENTATION SCHEDULE, AND MEASUREABLE GOAL EVALUATION PROCESS

Task Force Accomplishments to Date. From 2002 and through 2007, the LTSTF participants completed the following work products:

- A Mission Statement was developed that outlines the goals and objectives for the LTSTF Project (see Appendix B).
- Interlocal agreements were entered into between LTSTF members and TAMUK (see Appendix C).
- Organization by-laws were developed that govern the LTSTF's procedures (see Appendix D).
- Tables were developed that outline the seven MCMs required by the Phase II MS4 regulations and additional stormwater programs
- A MS4 SWMP was developed for individual municipalities to achieve compliance with the TPDES requirements
- The LTSTF participants developed public outreach and educational seminars and numerous educational outreach events were developed, funded and hosted, including conferences in the LRGV, Coastal Bend area, City of Laredo, City of Monterrey, Mexico and San Antonio (see Appendix G).
- With funding provided by the member cities, the LTSTF operating budget was developed based on estimated costs for program implementation

Overview of Conceptual SWMP. In 2002, the LTSTF partners began laying the foundation for the development of the five-year SWMPs, which outline the BMP programs. Emphasis was placed on developing BMPs that meet the Phase II stormwater regulations. Development of the SWMPs was accomplished with input from the individual municipalities, the LTSTF MS4 committee, and TAMUK. By-laws were executed on January 23, 2003 (Appendix H). The by-laws identify the LTSTF as the managing entity made up of one voting representative from each member community. The LTSTF utilizes and directs TAMUK personnel, who provide administrative and management support to develop the SWMPs. The interlocal agreements between TAMUK and the member municipalities identify TAMUK as the contracting fiscal agent of the LTSTF. The LTSTF members also participate in workgroups, one of which directly assists TAMUK with the development of the SWMPs.

The SWMPs BMPs are divided into two main categories: Priority One activities are those required to comply with Phase II stormwater regulations and Priority Two activities are those that address broader stormwater and water quality management issues. The Priority One activities will be submitted in each city's application for a Phase II municipal stormwater permit with the TCEQ in February 2008; permits will be issued shortly thereafter by the TCEQ. Priority Two programs are those that augment programs to meet community standards and/or are already included in existing, comprehensive programs (City of Boulder, 2003).

The Phase II regulations call for MCMs to address the impact of stormwater runoff on water quality. These programs are described in detail in the conceptual SWMP.

The conceptual SWMP was developed in part, by incorporating existing BMP programs found in various SWMP templates into the methodology used by this project. The SWMP templates are listed in the reference section of this report. Selected BMPs, in the conceptual SWMP template for each required MCM are listed below, but not necessarily limited to those listed and described below:

1) MCM 1 - Public Education and Outreach

- School-Based Education Program (water quality curriculum and classroom programs)
- Business Education Program (see MCM 3)

Note: TAMUK will facilitate many of these programs through the LTSTF.

2) MCM 2 - Public Participation and Involvement

- Storm Drain Stenciling Program
- Illicit Discharge Hotline (see MCM 3)
- Annual Public Meetings to Solicit Input

Note: TAMUK will facilitate many of these programs through the LTSTF.

3) MCM 3 - Illicit Discharge Detection and Elimination

- Legal Prohibition of Illicit Discharges (ordinances and other code development)
- Illicit Discharge Enforcement (spill response plan, inspections and enforcement)
- Community-Based Education Program (brochures, fact sheets and other materials)
- Business Education
- Storm Sewer System Mapping

4) MCM 4 - Construction Site Stormwater Runoff Control

- Training and Education for Construction Site Operators and Inspectors
- Erosion Control Ordinance (required erosion control for construction sites)
- Erosion Control Standard Operating Procedures (SOPs) (outline application and approval procedures for construction site stormwater management plan submittals)
- Erosion Control Inspection and Enforcement (implementation of erosion control ordinance)
- Public Input

5) MCM 5 - Post-Construction Stormwater Management

- Post-Construction Ordinance (required treatment of stormwater runoff)
- Design Criteria and Standards (outline type of stormwater treatment or BMPs required)
- Development Review (ensures application of BMPs)
- BMP Operation and Maintenance (requires long-term maintenance of BMPs)

6) MCM 6 - Pollution Prevention and Good Housekeeping for Municipal Operations

• Training and Certification for Municipal Employees (site-specific water pollution prevention activities)

Note: TAMUK will work with LTSTF to develop appropriate training curricula.

7) MCM 7 – Authorization for Municipal Construction Activities

- General SWP3 developed for permittee owned projects to be used by all contractors, architects and engineers
- MCM will apply in all urbanized areas, all non-urbanized areas within the city limits, and within the one (1) mile of city extraterritorial jurisdiction (ETJ);

8) General Requirements

The main objective of this section is to develop a method of "grading" the contents of the SWMP. TAMUK will work with the LTSTF in developing checklists, reports, surveys, quantitative and qualitative data, and evaluation techniques to assure the annual report provides effective feedback to the TCEQ and the permittee on the success of or on the shortcomings of the SWMP. Some of the tasks are as follows:

- Good Recordkeeping program
- Performance Measures
- Evaluation will determine changes to SWMP
- Annual Report

The LTSTF communities will fund the common and shared program costs within their respective jurisdictions. Cost allocation will be based on each member's urbanized population. Costs to implement the individual community programs will be the responsibility of each individual community.

Planned Year 1 SWMP tasks. The conceptual SWMP template requires the LTSTF to do the following by the end of 2009:

- Produce and distribute brochures addressing prevention of stormwater pollution.
- Stencil stormwater drains with the message, "No Waste, Drains to Arroyo Colorado" or "No Waste, Drains to the Laguna Madre."
- Implement a school-based education program for reaching students.
- Develop ordinance templates to regulate potential stormwater pollutants from commercial, industrial, municipal and residential sources, and from local, private and public construction activity.
- Further evaluate agricultural and publicly-owned activities (e.g., TxDOT and counties).
- Develop erosion control training programs and a certification program for public employees and private contractors and conduct training sessions.
- Develop stormwater runoff pollution prevention materials for businesses, residences and municipal operations and make materials will be available at City Halls.
- Work with Chambers of Commerce, Economic Development Corporations, and municipal operations staff in developing pollution prevention plans for restaurants, vehicle services facilities, and industrial sites.
- Organize focus groups comprised of employees from the LTSTF communities to facilitate discussions of maintenance practices for public works, parks, airports, solid waste facilities, wastewater and water treatment plants, and storm sewers.

 Apply for 319 Non-Point Source, Border 2012, and other funding from the TCEQ and EPA.

Planned Year 2 SWMP tasks. In 2009, the primary responsibility for the LTSTF members will be to adopt the ordinances developed in 2008, to develop Standard Operating Procedures (SOPs) to outline requirements for erosion control plans, to develop SOPs for site plan review and inspection, to develop SOPs for BMP selection guidance, and to prepare storm sewer system and outfall maps for their communities that will be completed by August 2009. The LTSTF will continue to implement the shared and common programs (conferences, workshops, seminars) at the benefit of all the communities. The mapping of the sewer systems will be expanded in some cities and initiated in others beginning in 2009.

The following sections describe in detail the plans incorporated into the conceptual SWMP template for each of the seven minimum control measures (MCMs).

Planned Years 3-5 SWMP tasks. In 2010, the LTSTF and TAMUK will work together to gradually phase in all the SWMP BMPs until fully implemented by 2012.

4.1 MCM #1 - Public Education and Outreach

To satisfy the regulatory requirements for this MCM, public education and outreach on stormwater impacts is required. The permittee must implement a public education program to include the following:

- I. Distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff; and
- II. Inform businesses and the general public of the impacts associated with illegal discharges and improper disposal of waste.

Program Objective. The objective of MCM #1 is to increase the public's awareness of stormwater issues. To achieve this, a public education program must first educate the public on the definition of urban stormwater runoff. Next, the public must be made aware of the problems that are associated with stormwater and then be educated on what they can do to help solve the problems. Finally, a successful program must provide opportunities for hands-on activities and buy in from the community. The conceptual SWMP template's Education Program uses a variety of methods to "get the word out."

Priority One Activities. The activities planned to comply with Phase II MS4 MCM #1 are outlined below.

<u>Public Education and Outreach.</u> Brochures or fact sheets will be distributed with municipal water utility bills and by other appropriate means. Brochures equivalent to the number of households in each LTSTF partner's permitted area will be produced. Each partner will be responsible for distributing the materials. Other examples of outreach are explained below. The *After the Storm* brochure was developed, produced and made available for distribution to both residential and commercial audiences in certain cities by the LTSTF in 2005. This program will continue be expanded to include the entire

LTSTF membership. A new brochure will be developed that includes additional information on the impacts of illicit discharges and other water quality issues In addition, the No La Riegues campaign (http://www.epa.gov/weatherchannel/). developed by Texas Sea Grant and adopted by the LTSTF in 2005, will be revitalized and promoted again. The LRGVDC provided a \$10,000 grant to the LTSTF in 2005 to showcase the campaign (www.nolariegues.com). The Chucho Salva el Dia campaign initiated by the EPA will also be adopted by the LTSTF in 2008. TAMUK will facilitate the development and distribution of these materials (http://epa.gov/region6/6xa/childrens health video.htm#jump).

Water Quality Curriculum. A watershed information curriculum with associated materials and training will be made available and advertised to all elementary classroom teachers in the LTSTF member's school districts. Program materials will include curriculum on water quality and water conservation, stormwater pollution prevention, and promotion of the ACWPP. The SWMP education will also include mailing of post-cards promoting the stormwater education program to all school district teachers, and creation of a comprehensive brochure listing K-12 programs to be printed and distributed in 2008.

LTSTF Web Site. Background information on the LTSTF project, including the seven (7) MCMs along with specific information promoting the stormwater education program, storm drain stenciling program, and annual meetings, will be developed and provided on a web site www.stormwater.stei.org. This web site will be updated frequently. The website is currently under construction.

Priority Two Activities. The activities planned to address broader stormwater and water quality management issues related to the Phase II MS4 MCM #1 are outlined below.

Annual Events. Each municipality will include a stormwater pollution prevention outreach program in various annual community events. Booths, brochures, childrenfriendly materials, and other similar approaches shall be used. Each City shall consider designated a day or a week for stormwater pollution prevention awareness,

Signage. Stormwater pollution prevention signs will be designed, produced and installed along major intersections in each LTSTF city. The signs will bear the logos from the LTSTF, the ACWPP and the respective city. Each community will place signs at locations where pedestrians and vehicle drivers will recognize the sign as an indicator of a local water body that should be protected.

<u>Performance Measures</u>. The SWMP MCM #1 goals and programs will be measured for success by tabulating households reached, number of outreach events conducted, quantity of specific materials produced, tabulating web site "hits", grants obtained, and tracking the number of teachers and students that participate in events.

4.2 MCM #2 - Public Involvement and Participation

To satisfy the regulatory requirements for this MCM public involvement and participation is required. The permittee must implement a public involvement program to include the following:

- I. The permittee, must at a minimum, comply with Federal, State and local public notice requirements when implementing the SWMPs required under the TPDES program.
- II. Notice of all public hearings should be published in a community publication or newspaper of general circulation, to provide opportunities for public involvement that reach a majority of citizens through the notification process.
- III. Public Committees are recommended to act as a buffer between the LTSTF and the elected officials and the community. These committees shall represent a cross section of the regulated community and should be an active component of the SWMP during the implementation process.

Program Objective. The objective of MCM #2 is to promote public participation as a means of ensuring buy-in and support from the public. This includes providing information and seeking public input on stormwater management issues. The MCM #2 programs include participatory programs such as neighborhood storm drain stenciling, illicit discharge reporting and annual public meetings. The individual LTSTF partners will be responsible for scheduling and hosting annual public meetings in each of their communities. In addition, partners are responsible for ensuring that a significant number of the storm drains are stenciled in their communities.

Priority One Activities. The activities planned to comply with Phase II MS4 MCM #2 are outlined below.

Annual Public Meetings. Annual public meetings will be conducted to provide citizens with the opportunity to discuss various viewpoints and provide input concerning stormwater quality issues. Meetings will be publicized in accordance with public notification requirements in each jurisdiction, such as a local newspaper or appropriate publication of wide circulation. Records of the meetings will be tabulated as shown in Table 19 in Section 5 and kept in the SWMP.

Storm Drain Stenciling Program. A Storm Drain Stenciling Program will be initiated and incorporated into the MCM #1 Public Education Program. A minimum of number of storm drains will be stenciled per year in each LTSTF city. This criterion will be used to evaluate the program. Municipal staff will provide stormwater education programs and facilitate storm drain stenciling activities with youth and citizens organizations. LTSTF and TAMUK will facilitate the development of partnerships with local youth service groups to perform a significant portion of the storm drain stenciling work. These groups may include the Boys & Girls Clubs, Boy Scouts of America, and local environmental groups. Recordkeeping of stenciling of storm drains is important and shall be a key part of the program. Recordkeeping will include locations, type of storm drain, and volunteer group information. Figure 6 shows an example of a storm drain stencil template.



Figure 6. Example storm drain stencil.

<u>Public Steering Committee</u>. One of the first tasks of the LTSTF and TAMUK is to work with individual member cities in selecting representatives from their communities to form a steering committee comprised of a cross section of the regulated community. The group shall include, but will not be necessarily limited to, representation from the following industries: home building, engineering, academia, general contracting, developers, non-profit organizations, elected officials, municipal staff, environmental groups, regulators, industrial, residential and commercial. Each city shall have such a committee. The role of the group will be to provide input in the development and implementation of the SWMP.

<u>Performance Measures.</u> The SWMP MCM #2 goals and programs will be measured for success by achieving stenciling program goals, assuring significant attendance in meetings, and tallying the number of meetings held.

4.3 MCM #3 - Illicit Discharge Detection and Elimination

To satisfy the regulatory requirements for this MCM the following is required:

- I. The permittee must develop, implement and enforce a program to detect and eliminate illicit discharges into the permittee's MS4 and/or neighboring MS4.
- II. Develop, if not already completed, a storm sewer system map, showing the location of all municipal storm sewer outfalls and the names and location of all state waters that receive discharges from those outfalls. In order to assure an effective illicit discharge elimination program, it is anticipated that the mapping should include the entire stormwater conveyance system (manholes, joints, inlets, and pipes).
- III. To the extent practical and allowable under federal, State, County or local law, effectively prohibit, through ordinance or other regulatory mechanism, non-stormwater discharges into the storm sewer system, and implement appropriate planning, enforcement procedures and actions.

- IV. Develop and implement a plan to detect and address non-stormwater discharges, including illicit discharges and illegal dumping, to the system. The plan must include the following three components:
 - i. procedures for locating priority areas likely to have illicit discharges;
 - ii. procedures for tracing the source of an illicit discharge;
 - iii. procedures for removing the source of the discharge.

Program Objective. The objective of MCM #3 is to detect and eliminate improper or illegal connections and discharges. A cost-effective way to reduce some stormwater pollutants is to identify and eliminate illicit connections and discharges. The SWMPs will include public and municipal education programs and spill response and ordinance requirements to control these discharges. In addition, public information materials will be developed, which will discuss the impacts of spills on water quality, and a hotline for reporting illicit discharges will be advertised.

Priority One Activities. The activities planned to comply with Phase II MS4 MCM #3 are outlined below.

<u>Municipal Separate Storm Sewer System (MS4) Mapping</u>. Each individual community, as required, will develop or enhance existing storm sewer maps, which will show the locations of municipal storm sewer outfalls, the conveyance system as warranted, and the names and locations of state waters that receive discharges from those outfalls, to assure compliance with TPDES.

Ordinance Development and Spill and Enforcement Response Plan. The LTSTF will develop draft Stormwater Pollution Prevention Ordinance templates (Appendix D) for various activities and to comply with TPDES goals. The LTSTF MS4 Ordinance Committee will be empowered to develop ordinances, to accept input from the public committees, and to work with TAMUK in evaluating and implementing them. All of the individual partners' city attorneys will be required to review the ordinance language. The templates will also be submitted to neighboring Phase I cities, the TCEQ and the EPA for review. Their comments, if any, will be review by the workgroup and distributed to the membership.

<u>Business Education Program.</u> The LTSTF and TAMUK will work together to provide stormwater pollution prevention education and/or materials to the commercial sectors identified as potentially significant contributors of pollutants to the MS4s. These sources include restaurants and vehicle service facilities.

Certification Criteria for Automotive Businesses and Restaurants. The LTSTF and TAMUK will work together to conduct internet research and communicate with staff from model stormwater programs across the U.S. to collect and review BMPs and outreach materials developed for these sectors (this research will overlap with research for municipal operations as part of MCM #6). The LTSTF and TAMUK will also develop draft stormwater criteria to be required of all businesses, and solicit input from existing businesses regarding feasibility and appropriateness of the new criteria. A Criteria Checklists will be developed for vehicle repair shops, auto body shops, and restaurants.

Incorporate Stormwater Education in Landscaping, Subdivision Development and Commercial Planning. The LTSTF and TAMUK will work together to conduct internet research and work with the ACWPP to develop a fact sheet on stormwater protection for landscape professionals, and to develop smart growth, green engineering and low impact development programs. In addition, the three groups will share information on potential stormwater impacts from pressure-washing sidewalks, shopping carts, etc., with the retail store focus group. A brochure and outreach plan regarding pressure washing and window washing BMPs will be developed in 2009.

Conduct Site Visits to Educate Businesses and Assess Stormwater Impacts. The LTSTF members will visit major businesses in their respective cities and review stormwater criteria during the site visits. Educational materials, such as EPA's *After the Storm* brochure, will also be mailed to businesses. Detailed recordkeeping of activities performed will be maintained by each LTSTF member city.

Coordinate Materials Development with TAMUK and ACWPP. The *After the Storm* brochure and other materials will be jointly developed by the LTSTF, TAMUK, and the ACWPP for use with both residential and business audiences. Door stickers will be developed to educate business staff (restaurants, groceries, auto facilities, etc.) to never dump wastes on the ground, and to help individuals understand that the storm drain connects directly to surface water. A stormwater fact sheet will be developed specifically for automotive businesses. Stormwater information will be added to any existing restaurant permitting fact sheets. All of the activities will be conducted in coordination with the activities performed to comply with the MCM #6 requirements so that one educational fact sheet would meet the needs for municipal fleet maintenance operations and vehicle repair and auto body businesses.

Respond to Illicit Discharge Incidents as Appropriate. The LTSTF will assist cities to develop a program to conduct inspections to identify the presence and determine the source of illicit connections and illegal dumping activities. The LTSTF will assist member cities in training their building inspectors and their engineering and utility inspectors to implement this BMP.

Priority Two Activities. The activities planned to address broader stormwater and water quality management issues related to the Phase II MS4 MCM #3 are outlined below.

<u>Household Hazardous Waste Disposal (HHW) Program</u>. All LTSTF members will develop a Household Hazardous Waste Program facilitated by TAMUK, ACWPP and various municipal recycling programs. The LTSTF will develop a regional program to support the local programs.

<u>Performance Measures</u>. The SWMP MCM #3 goals and programs will be measured for success by assigning levels of completion to the required mapping BMP, targeting a set number of ordinances per time period, keeping track of the number of illicit discharges detected and eliminated, measuring pounds of household waste recovered, tallying number of business meetings and site visits, and other similar measures.

4.4 MCM #4 - Construction Site Stormwater Runoff Control

To satisfy the regulatory requirements for this MCM the following is required:

- I. The permittee must develop, execute, and enforce a construction site stormwater runoff control ordinance that reduces pollutants in stormwater runoff. The ordinance must regulate construction activities that result in land disturbance of greater than or equal to one (1) acre pursuant to the TPDES regulations. Reduction of pollutants in stormwater discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development that would disturb one (1) acre or more. This includes a construction site on a lot that measures one-quarter (1/4) acre that exists within a ten (10) acre forty (40) lot subdivision development. (TCEQ, 2007).
- II. The construction site stormwater runoff control program must be developed and implemented to assure adequate design, implementation, and maintenance of BMPs at construction sites within the MS4 service area to reduce pollutant discharges and protect water quality. The program must include the development and implementation of:
 - i. An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under Federal, State or local law;
 - ii. Requirements for construction site operators to implement appropriate erosion and sediment control BMPs;
 - iii. Requirements for construction site operators to control waste such as discarded building materials, refueling, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;
 - iv. Procedures for site plan review during planning and permitting which incorporate consideration of potential water quality impacts;
 - v. A policy that defines responsibility for the on-site Stormwater Pollution Prevention Plan (SWP3) pursuant to TPDES regulations. It is conceivable that each contractor working at the same job site, whether simultaneously or not, may be required to obtain its own TPDES permit, unless the developer allows for use of one (1) overall TPDES permit under the developers authority.
 - vi. Procedures for site inspection and enforcement of control measures.

Program Objective. The objective of MCM #4 is to minimize construction site stormwater runoff. Effective construction site stormwater pollution prevention can dramatically reduce sediment loading to receiving surface waters. An effective erosion control program must include adequate ordinance language, consistent and reasonable inspection and enforcement, and appropriate development and construction standards. The SWMP will include all of these components. In addition, the SWMP will include a contractor training and a certification program. These program elements will ensure consistent city-wide and region-wide education and minimum standards.

Priority One Activities. The activities planned to comply with Phase II MS4 MCM #4 are outlined below.

<u>Erosion Control Ordinance</u>. A template construction and post-construction ordinance that focuses on erosion control will be developed. A model ordinance is shown in Appendix C. The template will be distributed to the public steering committees and to the LTSTF membership. The public committees will provide input to the LTSTF Ordinance Development Committee.

Priority Two Activities. The activities planned to address broader stormwater and water quality management issues related to the Phase II MS4 MCM #4 are outlined below.

Contractor Certification Program. With EPA Border 2012 grant funding, the LTSTF introduced the membership to the Texas A&M University Engineering Extension Service (TEEX) stormwater contractor certification course during a conference held in 2005 at South Padre Island. The TEEX course provides a curriculum that complies with the "competent individual" requirement of the TPDES rules. Approximately 50 individuals were trained during the training session. The LTSTF and TAMUK will continue to develop an effective education and training program to be utilized by the membership.

<u>Performance Measures</u>. The SWMP MCM #4 goals and programs will be measured for success by tabulating and tracking permits and citations issued, inspections conducted, number of training events conducted, certifications issued, ordinances adopted, and accounting for revenue generated.

4.5 MCM #5 - Post-Construction Stormwater Management

To satisfy the regulatory requirements for this MCM, the following is required:

- I. The permittee must develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one (1) acre, including projects less than one (1) acre that are part of a larger common plan of development, that discharge into the MS4. The program must ensure that controls are in place that would prevent or minimize water quality impacts.
- II. The permittee must develop and implement strategies which include a combination of structural and/or non-structural BMPs appropriate for the community, including the use of an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under Federal, State or local law. The permittee must also ensure adequate long-term operation and maintenance of BMPs.

Program Objective. The objective of this MCM is to address stormwater runoff pollution in new development and redevelopment of lands within the permittee's jurisdiction and extra territorial jurisdiction (ETJ). It is estimated that when the surface area of a drainage basin of a receiving waterbody becomes ten (10) to twenty (20) percent impervious, significant ecological stresses result that adversely impact the aquatic ecosystem of that waterbody (Schueler, 2003).

Therefore, the most important strategy for addressing stormwater pollution prevention is to develop effective land use and development management strategies. One of the best strategies is to address the aggregate amount of new impervious surfaces. This can be done with developed land vegetation requirements, drainage policies and use of innovative BMPs like smart growth and low impact development (LID). Other strategies include implementing effective BMPs for the control and treatment of site stormwater runoff, such as stormwater detention ponds, vegetative buffer zones or grass swales. The SWMPs for post-construction include the development of programs and ordinances that address stormwater runoff from new development and redevelopment. The SWMP will use a successful, existing BMP manual as part of its program. TAMUK will conduct a comprehensive search for these type of manuals during development of the SWMP.

Priority One Activities. The activities planned to comply with Phase II MS4 MCM #5 are outlined below.

<u>Post-Construction Ordinance</u>. A template construction and post-construction ordinance will be drafted and adopted by each LTSTF member. A template is found in Appendix C. As a matter of policy, the template will be distributed to the public committees and the membership for input.

<u>Performance Measures</u>. The SWMP MCM #5 goals and programs will be measured for success by ordinances adopted, developing a measurable post construction inspection program, assuring allocation of funds annually to operation and maintenance of these BMPs, and tracking education outreach in this area of interest.

4.6 MCM #6 - Pollution Prevention/Good Housekeeping for Municipal Operations

To satisfy the regulatory requirements for this minimum control measure the following is required:

- I. The permittee must develop and implement a stormwater pollution prevention operation and maintenance program. The program must prevent and/or reduce stormwater pollution from facilities such as landfills, airports, streets, roads, right-of-ways, alleys, highways, municipal parking lots, maintenance and storage yards, fleet or maintenance shops with outdoor storage areas, caliche, soil, and compost storage locations, recycling centers, disposal areas operated by the permittee, and waste transfer stations. The program will also regulate activities such as park and open space maintenance, fleet and building maintenance, street maintenance, new construction of municipal facilities, and stormwater system maintenance, as applicable.
- II. The permittee must implement a training program that includes an employee component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. The program must also inform public employees of the impacts associated with illegal discharges and improper disposal of waste from municipal operations.

Program Objective. The objective of MCM #6 is to implement pollution prevention programs for municipal operations. A significant number of municipal operations can adversely affect water quality and quantity. Municipal activities ranging from the storage and handling of harmful chemicals, pickup, transportation and disposal of solid waste, to the routine maintenance of municipal properties, vehicles, roads, and storm sewer appurtenances can be stormwater pollution contributors. Activities such as integrated pest management, water conservation, recycling and education programs are proven BMPs in addressing these pollutant sources.

Priority One Activities. The activities planned to comply with Phase II MS4 MCM #6 are outlined below.

<u>Develop an Inventory of All Potential Sources of Stormwater Pollution.</u> A template will be developed for each city to identify municipal operations that are potential sources of stormwater pollution.

- In 2005, civil engineering students visited with city staff of each LTSTF member and developed inventories. These inventories will be reviewed by TAMUK and updated.
- TAMUK will contact municipal departments to fill gaps and expand upon information provided by the inventories.
- Data needed from the inventories may include:
 - Source or type of operation
 - Location of facility/operation
 - Contact information
 - Activities conducted on-site
 - Proximity to stormwater or surface water
 - Potential impact to stormwater or surface water
 - Percent of site with impervious surface
 - Existing and needed control measures
 - The inventory of all municipal operations by LTSTF members can be represented as a breakdown of potential sources by jurisdiction, type location

<u>Identify Priority Operations</u>. TAMUK will use the inventory to prioritize municipal operations based on number of facilities, number of stormwater polluting activities identified, acreage affected, distance to surface water or to conveyance structure and the percent of impervious surface on-site. Municipal operations that will be scrutinized include:

- Vehicle repair or fleet maintenance
- Street and road maintenance
- Right of way mowing
- Storm drain system maintenance including regional detention facilities, on site detention ponds, and outfalls within MS4 jurisdictions from neighboring communities
- Parks maintenance
- Golf course maintenance
- Landfill maintenance
- Transfer station and recycling center operations

- Municipal curb side solid waste activities
- Wastewater and water treatment facility operations
- Operation and maintenance of intermediate receiving waterways owned by the permittee
- Operation and maintenance of lift stations

<u>Certification Program</u>. The LTSTF will develop a certification program for municipal operations. The SWMP will develop policy, SOPs, and certification programs that will be evaluated annually.

<u>Develop BMPs and SOPs</u>. The LTSTF will develop BMPs for stormwater pollution runoff control for municipal activities or operations. A BMP table will also be created to help determine what BMPs would likely apply to which activities. In addition, focus group meetings will be conducted to get input from municipal employees on the draft BMPs. The attendees will be asked what activities they perform each day that impact stormwater and whether or not the BMPs are reasonable or attainable. After the focus group meetings, the BMPs will be modified to reflect input received from the focus groups.

<u>Develop Educational Materials and Certification Criteria</u>. The LTSTF will develop criteria checklists for the priority operations that specify required BMPs. Staff will use these checklists to gather data on-site to determine if an operation is a concern. The LTSTF will also develop resource sheets for BMPS for the priority municipal operations. These sheets will list the required BMPs for effective management of stormwater runoff from municipal operations.

<u>Conduct Site Visits</u>. The LTSTF members will conduct site visits of at the municipal operations to determine the practicality of the BMPs and certification criteria and also to give provide staff with a better understanding of operations.

Edit The BMPs and certification criteria will be edited based on the site visit experiences.

Send follow-up letters will be sent to each operation after the each visit, noting the practices that were already in place to protect stormwater and the potential stormwater impacts that need to be corrected to achieve effective management.

Identify Common Deficiencies.

Good recordkeeping is essential for an effective housekeeping program. All information required for BMP evaluation should will be kept for the annual SWMP evaluation.

<u>Developing Elements of a Municipal Stormwater Pollution Control Plan.</u> TAMUK will recommend designing a generic Stormwater Pollution Control Plan that will include the elements listed below. The plan will provide a central location for copies of required BMPs and resource sheets.

- Employee training plan and logs
- Implementation and tracking of BMPs
- Run-off control plans
- Map of facility
- Spill Prevention and Response Plan
- Recordkeeping

- BMP lists, resource sheets, stormwater messages, and other resources
- Tracking of inspections (copies of site visit checklists, follow-up letters, etc.)

Develop Training Messages and Videos. Continuous outreach and education must be provided to employees. LTSTF can work with TAMUK to develop key training messages for stormwater pollution prevention for municipal activities. Site visits will also be conducted to photograph local operations and practices. A PowerPoint presentation will be developed containing photographs and text to show good and bad practices and "what is wrong with this picture" scenarios. The slides will be used to train supervisors and employees on BMPs and common activities that impact stormwater. TAMUK and the LTSTF will also develop a training video from the actual information, data, and media from the site visits.

<u>Performance Measures</u>. The SWMP MCM #6 goals and programs will be measured for success by recordkeeping of the following:

- Pounds of fertilizer applied.
- Pounds of pesticide applied.
- Capital expenditures for BMPs.
- Number of spills/leaks/discharges greater than 1 gallon and corrective actions taken.
- Number of catch basins cleaned.
- Tons or cubic yards of debris collected.
- Number of contaminated or suspected contaminated basins.
- Number of curb miles swept.

4.7 MCM #7 – Authorization for Municipal Construction Activities

The development of a MCM for municipal construction activities is an optional measure and is an alternative to the MS4 operator seeking coverage under TPDES general permit TXR150000. To satisfy the regulatory requirements for this MCM the following are required:

- I. The permittee must describe how construction activities will generally be conducted so as to take into consideration local conditions of weather, soils, and other site specific considerations;
- II. The permittee must describe the area that this MCM will address and where the permittee's construction activities are covered (e.g., within the boundary of the urbanized area, the corporate boundary, a special district boundary, an extra territorial jurisdiction, or other similar jurisdictional boundary);
- III. The permittee must either provide a description of how the permittee will supervise or maintain oversight over contractor activities to ensure that the Storm Water Pollution Prevention Plan (SWP3) requirements are properly implemented at the construction site; or how the permittee will make certain that contractors have a separate authorization for storm water discharges.
- IV. The permittee must provide a general description of how a SWP3 shall be developed, according to Part VI.E of general permit TXR040000, for each construction site.

Program Objective. The objective of MCM #7 is to exempt the permittee from having to use TPDES GCP TXR150000 for each construction site owned by the permittee. This will save the local governments a considerable amount of revenue. Contractors working for the permittee will not be required to obtain a separate authorization and will be authorized to use MCM #7 for authorization to discharge stormwater runoff into the MS4.

Priority One Activities. The activities planned to comply with Phase II MS4 MCM #6 are outlined below.

Storm Water Pollution Prevention Plan (SWP3). TAMUK will assist the MS4 Planning Committee in developing a general SWP3 to meet the requirements of MCM #7. The SWP3 will include the following:

- A site or project description
- A description of the BMPs that will be used to minimize pollution in runoff. The description must identify the general timing or sequence for implementation.
- A description of permanent storm water controls.
- Other required controls and BMPs.
- Documentation of compliance with approved state and local plans.
- Maintenance requirements.
- Inspections of controls.
- The SWP3 must identify and ensure the implementation of appropriate pollution prevention measures for all eligible non-storm water components of the discharge, as listed in Part II.A.3 of General Construction Permit (GCP) TXR150000.
- The SWP3 must include the information required in Part III.B of GCP TXR150000.

Priority Two Activities. The activities planned to address broader stormwater and water quality management issues related to the Phase II MS4 MCM #7 are outlined below.

<u>Annual Evaluation</u>. The SWP3 and MCM #7 will be evaluated each year and changes proposed for increasing effectiveness of the program. The SWMP will include development of a method of evaluating the SWP3s for a random selection of various types of projects.

<u>Contractor, Engineer, Architect Survey.</u> Each contractor, engineer and architect involved in a construction project will be required to submit a survey to the permittee upon completion of the project. The survey will be developed to evaluate MCM #7.

<u>Performance Measures</u>. The SWMP MCM #7 goals and programs will be measured for success by evaluating permits issued, inspections conducted, citations issued, success of BMPs used, and results of contractor surveys.

5.0 STORMWATER MANAGEMENT PROGRAM

The City of Weslaco SWMP has been developed to meet the following regulatory requirements from the TCEQ TPDES General Permit TXR40000:

To the extent allowable under state and local law, a SWMP must be developed and implemented according to the requirements of Part III of this general permit, for storm water discharges that reach waters of the United States, regardless of whether the discharge is conveyed through a separately operated storm sewer. The SWMP must be developed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act and the Texas Water Code. Existing programs or best management practices (BMPs) may be used to fulfill the requirements of this general permit. The MS4 operator must develop the SWMP to include the six minimum control measures described in Part III.A.1. through 6, and the operator may develop and include the optional seventh minimum control measure in Part III.A.7. Small MS4s have five years from the date of issuance of this general permit to fully implement their SWMP. A discharger's compliance with its approved SWMP will be deemed compliance with Part III of this permit.

This Section describes the City of Weslaco's SWMP and the Best Management Practices (BMPs) selected to comply with the TPDES program's six (6) Minimum Control Measures (MCMs) and is organized in the following outlined format:

- Section 5.1 Public Education and Outreach
- Section 5.2 Public Involvement in Storm Water Management Program Development
- Section 5.3 Illicit Discharge Detection and Elimination
- Section 5.4 Construction Site Storm Water Controls
- Section 5.5 Post Construction Storm Water Management for New Development/ Redevelopment
- Section 5.6 Pollution Prevention/Good Housekeeping for Municipal Operations
- Section 5.7 Authorization for Municipal Construction Activities

Each of these sections includes a brief description of the BMPs selected for each MCM, a proposed implementation schedule for each BMP, performance measures for the programs, and identifies the municipal departments assigned to each BMP.

5.1 Public Education and Outreach BMPs

The BMPs listed in this section were selected to meet the following regulatory requirement (Minimum Control Measure #1):

Public Education and Outreach on Storm Water Impacts

- (a) A public education program must be developed and implemented to distribute educational materials to the community or conduct equivalent outreach activities that will be used to inform the public. The MS4 operator may determine the most appropriate sections of the population at which to direct the program. The MS4 operator must consider the following groups and the SWMP shall provide justification for any listed group that is not included in the program:
- (1) residents;
- (2) visitors;
- (3) public service employees;
- (4) businesses:
- (5) commercial and industrial facilities; and
- (6) construction site personnel.

The outreach must inform the public about the impacts that storm water run-off can have on water quality, hazards associated with illegal discharges and improper disposal of waste, and steps that they can take to reduce pollutants in storm water runoff.

The following table lists BMPs that meet the requirements of MCM 1.

Table 1: Public Education and Outreach BMPs

Section	Description of BMP	BMP* Type	IMPLEMENTATION SCHEDULE (YEAR)				
			1	2	3	4	5
5.1.1	Utility Bill Inserts/Mass Mail-out	I	X	X	X	X	X
5.1.2	Web Site	S	X	X	X	X	X
5.1.3	Classroom Presentations	I, S	X	X	X	X	X
5.1.4	Stenciling	C, S	X	X	X	X	X
5.1.5	Videos	S	X	X	X	X	X
5.1.6	Signage	C	X	X	X	X	X
5.1.7	Community outreach	C, S	X	X	X	X	X
5.1.8	Education - ACWPP	S	X	X	X	X	X

I - INDIVIDUAL BMP

C - COMMON BMP

S - SHARED BMP

*see page 10 of this SWMP for explanation of the BMP Type

X – notes activity, see Section for details

5.1.1 <u>Utility Inserts/Mass Mailout</u>

Inserts in the forms of small brochures, informative handouts or fact sheets will be distributed with municipal water utility bills or in a mail-out. Brochures equivalent to the number of households within the City's permitted area will be produced. Inserts shall include information on various topics like waste oil disposal, use of pesticides and fertilizers on landscaping, household hazardous waste, water quality, and the SWMP in general.

The City of will develop a utility insert or a mass mail out program using existing outreach materials developed by the TCEQ, EPA and other organizations. Inserts and mass mail-outs are inexpensive tools that can be used for outreach to residential homes and commercial establishments effectively.

Table 2: Implementation Schedule – Utility Inserts/Mass Mail-out

Permit Period	Measurable Goal
Year 1	City will develop an annual budget and assign city departments to oversee this BMP.
Year 2	Delegated department will develop a comprehensive program to include acquiring existing outreach materials, and developing a consistent and regular schedule of disbursement.
Years 3-5	

Table 3: BMP Responsibility – Utility Inserts/Mass Mail-out

Primary Department	Support Groups			
City Public	LRGV TPDES Stormwater Task Force (LTSTF)			
Works Dept.	Texas A&M University-Kingsville (TAMUK)			
	South Texas Environmental Institute (STEI)			
	Lower Rio Grande Valley Development Council (LRGVDC)			
	Arroyo Colorado Watershed Partnership (ACWP)			
	City Engineering Department			
	City Planning Department			
	City Public Utilities Board			

5.1.2 Web Site

Background and other information on the SWMP, including the seven (7) MCMs along with specific information promoting the stormwater education program, storm drain stenciling program, meetings, and other general information will be developed and provided on a web site www.stormwater.stei.org. This web site will be updated frequently. The website is currently under construction.

The City's objective is to provide real time SWMP information to the public, including data, updates, policy and meeting schedules via a website. The website will provide outreach materials, training schedules, downloadable information and an email address for

feedback. Ultimately, a list server may be developed to engage professionals, educators and regulators. The website will specifically target the TPDES Phase II program.

Table 4: Implementation Schedule – Web Site

Permit Period	Measurable Goal
Year 1	City will develop an annual budget and assign city webmaster to oversee this BMP.
Year 2	Delegated department will develop a comprehensive program to acquire existing outreach materials, develop a consistent and regular schedule for updating the website, coordinate links between stakeholders and support groups, and develop and develop and implement the final website design.
Years 3-5	Develop an on-line feedback mechanism and a possible list server.

Table 5: BMP Responsibility – Web Site

Primary Department	Support Groups
City Public	LRGV TPDES Stormwater Task Force (LTSTF)
Works Dept.	South Texas Environmental Institute (STEI)
	Arroyo Colorado Watershed Partnership (ACWP)
	City Engineering Department
	City Public Utilities Board

5.1.3 Classroom Presentations

A watershed information curriculum with associated materials and training will be made available and advertised to all elementary classroom teachers in the City's school district. Program materials will include a curriculum on water quality and water conservation, stormwater pollution prevention, and promotion of the SWMP. Post-cards promoting the stormwater education program will be mailed to all school district teachers, and a comprehensive brochure listing K-12 programs will also be printed and distributed.

The City will also promote the Arroyo Colorado Watershed Protection Plan (ACWPP) and work with the ACWP to promote mutually beneficial goals. A watershed model developed by the ACWP will be made available to the City and the school district.

Table 6: Implementation Schedule – Classroom Presentations

Permit Period	Measurable Goal
Year 1	City will meet with school district officials to coordinate and agree on curriculum.
	City will develop a schedule.
Year 2	City will perform two (2) pilot classroom presentations to solicit feedback from
	teachers and students. Feedback data will be used to evaluate effectiveness and to
	adjust curriculum. Cost of classroom presentations BMP will be determined.
Year 3	Refined curriculum will be tested on four (4) additional schools.
Years 4-5	Budget developed for full implementation. Perform four (4) presentations per year.

Table 7: BMP Responsibility – Classroom Presentations

Primary Department	Support Groups
City Public	Local School District
Works Dept.	Texas A&M University-Kingsville (TAMUK)
	South Texas Environmental Institute (STEI)
	Arroyo Colorado Watershed Partnership (ACWP)
	City Engineering Department
	Region 1 Education Service Center

5.1.4 Stenciling

A Storm Drain Stenciling Program will be initiated and incorporated into the MCM #1 Public Education Program. A minimum number of storm drains will be stenciled per year in the City. This criterion will be used to evaluate the program. Municipal staff will provide stormwater education programs and facilitate storm drain stenciling activities with youth and citizens' organizations. The City will facilitate the development of partnerships with local youth service groups to perform a significant portion of the storm drain stenciling work. These groups may include the Boys & Girls Clubs, Boy Scouts of America, and local environmental groups. Records of stenciled storm drains, including locations, types of storm drain, and volunteer group information, will be maintained. The stencil will include the logo of the LRGV TPDES Task Force, the ACWP, and the City.

Table 8: Implementation Schedule – Stenciling

Permit Period	Measurable Goal		
Year 1	Inventory manhole covers, inlets and other structures.		
	Establish partnerships, seek grants, and develop final stencil design.		
	Develop budget and program.		
Years 2-5	Establish goals and policies.		
	Attempt to stencil 25% of existing inventory each year and stencil all new		
	installations.		

Table 9: BMP Responsibility – Stenciling

Primary Department	Support Groups	
City Public	Local Environmental Groups	
Works Dept.	Texas A&M University-Kingsville (TAMUK)	
	South Texas Environmental Institute (STEI)	
	Lower Rio Grande Development Council (LRGVDC)	
	Arroyo Colorado Watershed Partnership (ACWP)	
	City Engineering Department	
	Local Youth Organizations	

5.1.5 Brochures and Videos

The *After the Storm* brochure created by the EPA (http://www.epa.gov/weatherchannel/) was developed, produced and made available for distribution to both residential and commercial audiences in certain cities by the LTSTF in 2005. This program will continue to be expanded by the City. A new brochure will be developed that will include additional information on the impacts of illicit discharges and other water quality issues. In addition, the *No La Riegues* campaign developed by Texas Sea Grant and adopted by the LTSTF in 2005 (www.nolariegues.com) will be revitalized and promoted. The websites to these materials will be linked to the City's website. In addition, the *Chucho Salva el Dia* video campaign initiated by the EPA will also be adopted by the LTSTF in 2008 (https://epa.gov/region6/6xa/childrens_health_video.htm#jump). The City will facilitate the development and distribution of these materials. The City will also identify other videos readily available and use local public air time, libraries, and other outreach tools to promote this BMP.

Table 10: Implementation Schedule – Videos

I WOIL IVE IMPROMENTATION CONTRACTOR (1 MOU)			
Permit Period	Measurable Goal		
Year 1	City will identify stormwater videos.		
	Develop a video program, budget allowances, and a schedule of production.		
	Develop partnerships with local cable access entities.		
	Identify environmental groups that can assist.		
Years 2-5	Broadcast three (3) videos to public access channels within the City's viewing area		
	and/or		
	provide copies of videos to local school and public libraries.		

Table 11: BMP Responsibility – Videos

Table 11. Divil Responsibility videos				
Primary Department	Support Groups			
City Public	Local School District			
Works Dept.	Texas A&M University-Kingsville (TAMUK)			
	South Texas Environmental Institute (STEI)			
	Lower Rio Grande Development Council (LRGVDC)			
	Public Access Cable Entity			
	Neighboring city with public access channel capability			
	Arroyo Colorado Watershed Partnership (ACWP)			
	Local Cable Network			
	Public Library			
	Local Environmental Groups			

5.1.6 Signage

Stormwater pollution prevention signs will be designed, produced and installed along major intersections within the City. The signs will bear the logos from the LTSTF, the ACWP and the City. The City will place signs at locations where pedestrians and vehicle drivers will recognize the sign as an indicator of a local water body that should be protected, the importance of water quality, and the potential effects of stormwater pollution. Attractive graphics and brief messages or captions along roadsides can be very effective. Messages can be conveyed in English and Spanish.

Table 12: Implementation Schedule – Signage

Permit Period	Measurable Goal		
Year 1	City will identify design of signs and locations for posting.		
	Develop an installation program, budget allowances, and a schedule.		
	Develop partnerships with local entities; identify environmental groups that can help.		
	Develop a signage program for new construction, development and greenspace areas.		
	Review pet walking ordinances and other related policies and ordinances.		
Years 2-5	Install 25% of total locations identified each year. Promote new installations.		
	Implement any ordinances during the second year.		

Table 13: BMP Responsibility – Signage

Primary Department	Support Groups
City Public	City Parks and Recreation Department
Works Dept.	City Engineering Department
	City Planning Department
	South Texas Environmental Institute (STEI)
	Arroyo Colorado Watershed Partnership (ACWP)

5.1.7 Community Outreach

City will provide educational and outreach materials to the community, including brochures, fact sheets and handouts. These materials will be made available at City Hall and throughout municipal facilities. Materials will also be made available to developers, businesses, and contractors during the planning and permitting processes. The City will include a stormwater pollution prevention outreach program in various annual community events. Booths, brochures, children-friendly materials, and other similar approaches shall be used. The City shall consider designating a day or a week for stormwater pollution prevention awareness. The City will also develop a partnership with various regional entities and help coordinate an annual conference that promotes the SWMP of the City and various SWMPs in the region.

Table 14: Implementation Schedule – Community Outreach

Permit Period	Measurable Goal			
Year 1	Develop a program and budget.			
Years 2-5	Provide educational materials to the public. Establish locations for self service			
	distribution.			
	Help organize an annual conference in the region.			
	Contribute and participate at various annual events.			
	Promote outreach to businesses, engineers, contractors, developers, and the general			
	public at least once a year.			

Table 15: BMP Responsibility – Community Outreach

Primary Department	Support Groups
City Public	LRGV TPDES Stormwater Task Force (LTSTF)
Works Dept.	City Engineering Department
	City Chamber of Commerce
	Professional organizations
	South Texas Environmental Institute (STEI)
	Arroyo Colorado Watershed Partnership (ACWP)

5.1.8 Education - Arroyo Colorado Watershed Protection Plan

A watershed information curriculum with associated materials and training will be made available and advertised to the businesses and the general community. Program materials will promote the ACWP. The City will work closely with the ACWP to implement this BMP.

Table 16: BMP Responsibility – Education, Arroyo Colorado Watershed Protection Plan

Permit Period	Measurable Goal
Year 1	City will develop an annual budget and assign a city department to oversee this BMP.
Year 2	Delegated department will develop a comprehensive program to include acquiring
	existing outreach materials, and developing a consistent and regular schedule.
Years 3-5	Full implementation and annual review conducted.

Table 17: BMP Responsibility - Education, Arroyo Colorado Watershed Protection Plan

Primary Department	Support Groups		
City Public	LRGV TPDES Stormwater Task Force (LTSTF)		
Works Dept.	South Texas Environmental Institute (STEI)		
	City Public Utilities Board		
	Arroyo Colorado Watershed Partnership (ACWP)		

5.2 Public Involvement and Participation BMPs

The BMPs listed in this section were selected to meet the following regulatory requirement:

The MS4 operator must, at a minimum, comply with any state and local public notice requirements when implementing a public involvement/participation program. It is recommended that the program include provisions to allow all members of the public within the small MS4 the opportunity to participate in SWMP development and implementation.

The following table lists BMPs that meet the requirements of MCM 2.

Table 18: Public Involvement and Participation BMPs

Section	Description of BMP	BMP Type	IMPL S	CHE		_	N
			1	2	3	4	5
5.2.1	Public Meetings	I	X	X	X	X	X
5.2.2	Stenciling	C, S	X	X	X	X	X
5.2.3	Citizen Advisory Committee	I	X	X	X	X	X
5.2.4	Hotline	I	X	X	X	X	X

I - INDIVIDUAL BMP

5.2.1 Public Meetings

Annual public meetings will be conducted to provide citizens with the opportunity to discuss various viewpoints and provide input concerning stormwater quality issues. Meetings will be publicized in accordance with public notification requirements in each jurisdiction, such as a local newspaper or appropriate publication of wide circulation. Records of the meetings will be tabulated as shown in Table 19 and maintained by the City.

Table 19. Example Tabulation of Public Meetings.

Location	Date of meeting	Public Notice Method	Attendees
Museum	Month/Day/Year	Brochures, Public Ad	12
Chamber of Commerce	Month/Day/Year	Newspaper, Agency Flyer	15
City Hall	Month/Day/Year	City Council Agenda Posting	100

C - COMMON BMP

S - SHARED BMP

^{*}see page 10 of this SWMP for explanation of the BMP Type X – notes activity, see Section for details

Table 20: Implementation Schedule – Public Meetings

Permit Period	Measurable Goal			
Year 1	City will develop an annual budget and assign a city department to oversee this BMP.			
Years 2-5	Conduct an annual public meeting. Full implementation.			

Table 21: BMP Responsibility – Public Meetings

Primary Department	Support Groups
City Public	City Webmaster
Works Dept.	Texas A&M University-Kingsville (TAMUK)
	South Texas Environmental Institute (STEI)
	Lower Rio Grande Development Council (LRGVDC)
	Arroyo Colorado Watershed Partnership (ACWP)

5.2.2 Stenciling

The City's Storm Drain Stenciling Program will be incorporated into the MCM #2 Public Participation BMP by promoting volunteer groups to assist with not only stenciling, but also by simultaneously conducting a cleanup campaign near the target inlets, and by having the groups note maintenance-deprived areas. These activities will help educate the public about the synergy between water quality and stormwater runoff. Additionally, stenciling projects can provide a lead-in to volunteer monitoring projects and increase community participation in a variety of stormwater related activities.

Table 22: Implementation Schedule – Stenciling

Permit Period	Measurable Goal	
Year 1	Inventory manhole covers, inlets and other structures.	
	Establish partnerships, seek grants, and develop final design.	
	Develop budget and program.	
Years 2-5	Establish goals and policy.	
	Attempt to stencil 25% of existing inventory each year and stencil all new	
	installations.	

Table 23: BMP Responsibility – Stenciling

Primary Department	Support Groups
City Public	Local Environmental Groups
Works Dept.	Texas A&M University-Kingsville (TAMUK)
	South Texas Environmental Institute (STEI)
	Lower Rio Grande Valley Development Council (LRGVDC)
	City Engineering Department
	Local Youth Organizations
	Arroyo Colorado Watershed Partnership (ACWP)

5.2.3 Citizen Advisory Committee

One of the first tasks required under this SWMP is for the City to select representatives from its communities to form a steering committee comprised of a cross-section of the regulated community. The steering committee shall include, but will not be necessarily limited to, representation from the following sectors: home building, engineering, academia, general contracting, developers, non-profit organizations, elected officials, municipal staff, environmental groups, regulators, industrial, residential and commercial. The role of the steering committee will be to provide input in the development and implementation of the SWMP.

Table 24: Implementation Schedule – Citizen Advisory Committee

Permit Period	Measurable Goal		
Year 1	Organize the committee by contacting various organizations and individuals of the		
	regulated community.		
	Develop a selection policy and a meeting schedule.		
Year 2	Conduct meetings as needed.		
Years 3-5	Conduct at least two (2) meetings per year.		

Table 25: BMP Responsibility – Citizen Advisory Committee

Primary Department	Support Groups
City Public	City Webmaster
Works Dept.	Texas A&M University-Kingsville (TAMUK)
	South Texas Environmental Institute (STEI)
	Lower Rio Grande Valley Development Council (LRGVDC)
	City Engineering Department
	Local regulated community (i.e. ASCE, AGC, AHBA) *

^{*} American Society of Civil Engineers, Associated General Contractors, and American Homebuiliders Association

5.2.4 Hotline

A Stormwater Hotline will be developed and implemented to promote outreach, enforce policy and to facilitate public involvement. The hotline will be used for reporting illicit and illegal connections and discharges, illegal dumping, emergency and non-emergency incidents and other stormwater related activities. The hotline operator will provide readily-available information and direction for further communication if warranted, direct notifications to the proper authorities, and record feedback, comments and recommendations.

Table 26: Implementation Schedule – Hotline

Permit Period	Measurable Goal
Year 1	Develop a hotline capability and/or provide resources to an existing service.
	Advertise the hotline.
	Establish policy for response to calls.
Years 2-5	Conduct evaluations to obtain data and statistics, and develop reporting formats.

Table 27: BMP Responsibility – Hotline

Primary Department	Support Groups	
City Public	City Health Department	
Works Dept.	Planning Department, Code Enforcement Division	
	City Police Department	
	Fire Department and Emergency Services	

5.3 Illicit Discharge Detection and Elimination BMPs

The BMPs listed in this section were selected to meet the following regulatory requirement:

Illicit Discharge Detection and Elimination

(a) Illicit Discharges

A section within the SWMP must be developed to establish a program to detect and eliminate illicit discharges to the small MS4. The SWMP must include the manner and process to be used to effectively prohibit illicit discharges. To the extent allowable under state and local law, an ordinance or other regulatory mechanism must be utilized to prohibit and eliminate illicit discharges. Elements must include:

(1) Detection

The SWMP must list the techniques used for detecting illicit discharges; and

(2) Elimination

The SWMP must include appropriate actions and, to the extent allowable under state and local law, establish enforcement procedures for removing the source of an illicit discharge.

(b) Allowable Non-Storm Water Discharges

Non-storm water flows listed in Part II.B and Part VI.B. do not need to be considered by the MS4 operator as an illicit discharge requiring elimination unless the operator of the small MS4 or the executive director identifies the flow as a significant source of pollutants to the small MS4. In lieu of considering non-storm water sources on a case-by-case basis, the MS4 operator may develop a list of common and incidental non-storm water discharges that will not be addressed as illicit discharges requiring elimination. If developed, the listed sources must not be reasonably expected to be significant sources of pollutants either because of the nature of the discharge or the conditions that are established by the MS4 operator prior to accepting the discharge to the small MS4. If this list is developed, then all local controls and conditions established for these listed discharges must be described in the SWMP and any changes to the SWMP must be included in the annual report described in Part IV.B.2. of this general permit, and must meet the requirements of Part II.D.3. of the general permit.

- (c) Storm Sewer Map
- (1) A map of the storm sewer system must be developed and must include the following:
 - (i) the location of all outfalls;
- (ii) the names and locations of all waters of the U.S. that receive discharges from the outfalls; and
- (iii) any additional information needed by the permittee to implement its SWMP.
- (2) The SWMP must include the source of information used to develop the storm sewer map, including how the outfalls are verified and how the map will be regularly updated.

The following table lists BMPs that meet the requirements of MCM 3.

Table 28: Illicit Discharge Detection and Elimination BMPs

Section	MCM #3: Illicit Discharge Detection and Elimination Description of BMP	BMP* Type	YEAR SCHEDULE (YEAR)				
			1	2	3	4	5
5.3.1	Sewer Map	I	X	X	X	X	X
5.3.2	Illicit Discharge Elimination Ordinance	C	X	X	X	X	X
5.3.3	Business Education	C, S	X	X	X	X	X
5.3.4	General Ordinances	C	X	X	X	X	X
5.3.5	LID and Smart Growth Planning	C	X	X	X	X	X
5.3.6	Illicit Discharge Inspections	I	X	X	X	X	X
5.3.7	Business Site Inspections	I	X	X	X	X	X
5.3.8	Household Hazardous Waste	I	X	X	X	X	X

I - INDIVIDUAL BMP

C - COMMON BMP

S - SHARED BMP

5.3.1 Sewer Map

The City will develop or enhance existing storm sewer maps, which will show the locations of municipal storm sewer outfalls, the conveyance system as warranted, and the names and locations of state waters that receive discharges from those outfalls, to assure compliance with the TPDES requirements. During the first year, city staff will decide the level of precision, the degree of detail, and the software that will be used to map the City's Municipal Separate Storm Sewer System (MS4). At this time, the City is contemplating using Arcview GIS software to map its MS4. After analysis of resources, funding, and staffing, the City will determine its final course of action.

Table 29: Implementation Schedule – Sewer Map

Permit Period	Measurable Goal
Year 1	City will develop an annual budget and assign city departments to oversee this BMP. Staff will develop a strategy to complete this BMP in five (5) years.
Years 2-5	Mapping of the City MS4 will continue and/or start and will try to complete at least
	20% of the mapping each year until BMP is fully implemented

Table 30: BMP Responsibility – Sewer Map

Primary Department	Support Groups
City Public	City Engineering Department
Works Dept.	South Texas Environmental Institute (STEI)
	City Planning Department

^{*}see page 10 of this SWMP for explanation of the BMP Type

X – notes activity, see Section for details

5.3.2 <u>Illicit Discharge Elimination Ordinance</u>

The City will develop an Illicit Discharge Elimination Ordinance for various activities to comply with the TPDES requirements. The City is empowered to develop an ordinance, to accept input from public and municipal committees, and to work with local partnerships in evaluating and implementing this ordinance. The City attorney will be required to review the ordinance language. The ordinance will be evaluated based on historical efforts by neighboring Phase I MS4 cities, TCEQ guidelines and the EPA sources. All comments and feedback will be reviewed by the City's workgroup.

Table 31: Implementation Schedule – Illicit Discharge Elimination Ordinance

Permit Period	Measurable Goal
Year 1	Evaluate existing ordinances to compare applicability.
	Develop ordinance.
	Develop outreach program specifically for this BMP.
	Work with partnerships and public advisory committees.
	Train inspectors and regulated community.
Year 2	Adopt ordinance.
	Start Enforcement program.
Years 3-5	Develop a feedback mechanism and a possible list server.

Table 32: BMP Responsibility – Illicit Discharge Elimination Ordinance

Primary Department	Support Groups
City Public	LRGV TPDES Stormwater Task Force (LTSTF)
Works Dept.	Texas A&M University-Kingsville (TAMUK)
	South Texas Environmental Institute (STEI)
	Lower Rio Grande Development Council (LRGVDC)
	City Engineering Department
	City Planning Department
	Arroyo Colorado Watershed Partnership (ACWP)
	City Legal Department
	Citizen Advisory Groups
	City Commission

5.3.3 Business Education

The City will work together with its various partners to provide stormwater pollution prevention education materials to the commercial sectors identified as potentially significant contributors of pollutants to the MS4, including restaurants and vehicle service facilities. The City will conduct internet research of model stormwater programs across the U.S. to collect and review BMPs and outreach materials developed for these sectors (this research will overlap with research for municipal operations as part of MCM #6 – Pollution Prevention/Good

Housekeeping for Municipal Operations). Educational materials, such as EPA's *After the Storm* brochure, will also be mailed to businesses. Detailed recordkeeping of activities performed will be maintained by the City.

The *After the Storm* brochure and other materials will be jointly developed by the LTSTF, the City, and the ACWP for use with both residential and business audiences. Door stickers will be developed to educate business staff (restaurants, groceries, auto facilities, etc.) to never dump wastes on the ground, and to help individuals understand that the storm drain connects directly to surface water. A stormwater fact sheet will be developed specifically for automotive businesses. Stormwater information will be added to any existing restaurant permitting fact sheets. All of the activities will be conducted in coordination with the activities performed to comply with the MCM #6 requirements so that one educational fact sheet will meet the needs for municipal fleet maintenance operations and vehicle repair and auto body businesses.

Table 33: Implementation Schedule – Business Education

Permit Period	Measurable Goal			
Year 1	City will develop a strategy for providing outreach to businesses that impact the			
	MS4.			
	Fact sheets, checklists and other materials will be developed.			
	A target number of business will be identified.			
Year 2	City will perform two (2) pilot workshop presentations to solicit feedback from			
	businesses. Data will be used to evaluate effectiveness and to adjust curriculum.			
	Fact sheets and other materials will be distributed. Cost of BMP will be determined.			
	Site Visits will be conducted. 25% of targeted businesses will be contacted each year,			
	starting this year.			
Year 3	Refined curriculum will be tested with four (4) workshops.			
Years 4-5	Budget developed for full implementation. Perform four (4) presentations per year			
	targeting various businesses.			

Table 34: BMP Responsibility – Business Education

Primary Department	Support Groups
City Public	Local Business Organizations
Works Dept.	TCEQ Small Business Program
	South Texas Environmental Institute (STEI)
	City Planning Department
	City Engineering Department
	Arroyo Colorado Watershed Partnership (ACWP)

5.3.4 General Ordinances

The City will develop ordinances, accept input from the public committees, and work with the LTSTF in evaluating and implementing the ordinances. The City Attorney will review the ordinance language. The templates will also be submitted to the citizen advisory group for review.

The City will use TCEQ and EPA guidance and model ordinances to facilitate this BMP. Some of the ordinances that may be developed and implemented include:

- Erosion and sediment control
- Greenspace preservation
- Hazardous material control
- Commercial litter prevention
- Concrete catch truck onsite washout
- Water pollution prevention

Table 35: Implementation Schedule – General Ordinance

Permit Period	Measurable Goal
Year 1	Evaluate existing ordinances to compare applicability.
	Develop ordinance and adopt.
	Develop outreach program specifically for this BMP
	Work with partnerships and public advisory committees.
	Train inspectors and educate regulated community.
Years 2-5	Enforce ordinance.
	Develop a feedback potential and a possible list server.

Table 36: BMP Responsibility – General Ordinance

Primary Department	Support Groups
City Public	LRGV TPDES Stormwater Task Force (LTSTF)
Works Dept.	South Texas Environmental Institute (STEI)
	City Engineering Department
	City Legal Department
	Citizen Advisory Group
	City Commission

5.3.5 LID and Smart Growth Planning

The City will work together with the LTSTF to conduct internet research and work with the ACWP to develop a fact sheet on stormwater protection for landscape professionals, and to develop smart growth, green engineering and low impact development (LID) programs. In addition, the City will obtain and/or develop information on potential stormwater impacts from pressure-washing sidewalks, discarded shopping carts, window washing, concrete activities, and other business related activities. A brochure and outreach plan regarding BMPs for the aforementioned activities will be developed in 2009.

Table 37: Implementation Schedule – LID and Smart Growth

Permit Period	Measurable Goal
Years 1-5	Provide educational materials and/or training for developers, builders, and engineers.
	Develop a construction site erosion control training program for developers.

Table 38: BMP Responsibility – LID and Smart Growth

Primary Department	Support Groups
City Public	Local Business Organizations
Works Dept.	City Chamber of Commerce
	South Texas Environmental Institute (STEI)
	City Planning Department
	City Engineering Department
	Arroyo Colorado Watershed Partnership (ACWP)
	LRGV TPDES Stormwater Task Force (LTSTF)

5.3.6 <u>Illicit Discharge Inspections</u>

The City will develop a program to conduct inspections to identify the presence and determine the source of illicit connections and illegal dumping activities. The City will develop a program incorporating policy, response, inspections, auditing and training. The City will train their building inspectors and their engineering staff. If necessary, the City will entertain privatization of this BMP, in part, or in its entirety.

Table 39: Implementation Schedule – Illicit Discharge Inspections

Permit Period	Measurable Goal
Year 1	City will assess regulatory authority and infrastructure.
	Develop a comprehensive program, and ordinances if necessary.
	Start a training program.
Years 2-5	Develop program until fully implemented.

Table 40: BMP Responsibility – Illicit Discharge Inspections

Primary Department	Support Groups
City Public	City Engineering Department
Works Dept.	City Planning Department, Inspections Division
	South Texas Environmental Institute (STEI)
	Arroyo Colorado Watershed Partnership (ACWP)

5.3.7 Business Site Inspections

The City will also develop draft stormwater criteria to be required of all businesses, and solicit input from existing businesses regarding feasibility and appropriateness of the new criteria. A Criteria Checklist will be developed for vehicle repair shops, auto body shops, restaurants and other similar businesses. The City will visit major businesses and review stormwater criteria during the site visits.

Table 41: Implementation Schedule - Community Outreach

Permit Period	Measurable Goal
Year 1	City will develop an outreach strategy for businesses that impact the MS4.
	Fact sheets, checklists and other materials will be developed.
	A target number of business will be identified.
Year 2	City will perform two (2) business inspections per month.
	City will conduct a workshop to solicit feedback from businesses.
	Data will be used to evaluate effectiveness and to adjust curriculum.
	Cost of BMP will be determined.
Years 3-5	25% of targeted businesses will be inspected each year, starting in Year 3.

Table 42: BMP Responsibility – Community Outreach

Primary Department	Support Groups
City Public	Local Business Organizations
Works Dept.	TCEQ Small Business Program
	South Texas Environmental Institute (STEI)
	City Planning Department
	Arroyo Colorado Watershed Partnership (ACWP)

5.3.8 Household Hazardous Waste

The City will develop a Household Hazardous Waste Program. At the very least, it will comprise an outreach task that will be incorporated into MCM #1 - Public Education and Outreach. The City will seek partnerships with the LTSTF and ACWP to possibly expand the program.

Table 43: Implementation Schedule – Household Hazardous Waste

Permit Period	Measurable Goal
Year 1	City will assess regulatory authority and infrastructure.
	Analyze potential of a comprehensive program.
	Start the outreach program.
	Identify data that can be used to develop a good program, including quantity of waste
	produced, minimization goals, costs, benefits, and waste disposal quantities.
	Determine target community, number of residents, businesses, etc.
Years 2-5	Achieve a 25% outreach goal of total target community.
	Develop program until fully implemented.

Table 44: BMP Responsibility – Household Hazardous Waste

Primary Department	Support Groups
City Public	City Planning Department, Inspections Division
Works Dept.	City Engineering Department
	South Texas Environmental Institute (STEI)
	Arroyo Colorado Watershed Partnership (ACWP)

5.4 Construction Site Storm Water Controls BMPs

The BMPs listed in this section were selected to meet the following regulatory requirement:

Construction Site Storm Water Runoff Control

The MS4 operator, to the extent allowable under State and local law, must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre or if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more of land. The MS4 operator is not required to develop, implement, and/or enforce a program to reduce pollutant discharges from sites where the construction site operator has obtained a waiver from permit requirements under NPDES or TPDES construction permitting requirements based on a low potential for erosion.

- (a) The program must include the development and implementation of, at a minimum, an ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under state and local law.
- (b) Requirements for construction site contractors to, at a minimum:
 - (1) implement appropriate erosion and sediment control BMPs; and
 - (2) control waste such as discarded building materials, concrete truck washout water, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality.
- (c) The MS4 operator must develop procedures for:
 - (1) site plan review which incorporate consideration of potential water quality impacts;
 - (2) receipt and consideration of information submitted by the public; and
 - (3) site inspection and enforcement of control measures to the extent allowable under state and local law.

The following table lists BMPs that meet the requirements of MCM 4.

YEAR MCM #4: Construction Site Storm Water BMP* **SCHEDULE Section Controls** (YEAR) **Type Description of BMP** 3 1 4 5 X X **Erosion Control Ordinance** C X X X 5.4.1 Construction Site Plan Review and Oversight 5.4.2 I X X X X Site Inspection and Policy Enforcement X 5.4.3 Ţ X X X X 5.4.4 **Contractor Certification** C X X X X X 5.4.5 Construction Site Waste Management C X X X X Development of BMP menus X X 5.4.6

Table 45: Construction Site Storm Water Controls BMPs

I - INDIVIDUAL BMP

C - COMMON BMP

S - SHARED BMP

*see page 10 of this SWMP for explanation of the BMP Type

X – notes activity, see Section for details

5.4.1 Erosion Control Ordinance

The City will develop an Erosion Control Ordinance for various activities to comply with TPDES requirements. The City is empowered to develop the ordinance, to accept input from public and municipal committees, and to work with local partnerships in evaluating and implementing this ordinance. The ordinance will include engineering, construction and post-construction requirements that focus on erosion control. Furthermore, the ordinance will regulate construction site stormwater runoff controls that reduce pollutants in stormwater runoff. Moreover, the ordinance must stipulate sanctions to ensure compliance, to the extent allowable under Federal, State or local law. The ordinance must regulate construction activities that result in land disturbance of greater than or equal to one (1) acre pursuant to the TPDES regulations. Reduction of pollutants in stormwater discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development that would disturb one (1) acre or more. This includes a construction site on a lot that measures one-quarter (1/4) acre that exists within a ten (10) acre forty (40) lot subdivision development. The City attorney will be required to review the ordinance language. The ordinance will be evaluated based on historical efforts by neighboring Phase I cities, TCEQ guidelines and EPA sources. All comments and feedback will be reviewed by the City's workgroup.

Table 46: Implementation Schedule – Erosion Control Ordinance

Permit Period	Measurable Goal
Year 1	Evaluate existing ordinances to compare applicability.
	Develop ordinance and adopt.
	Develop outreach program specifically for this BMP.
	Work with partnerships and public advisory committees.
	Train inspectors and educate regulated community.
Years 2-5	Enforce ordinance.
	Develop a feedback mechanism and a possible list server.

Tuble 171 Bivil	responsibility Erosion Control Ordinance
Primary Department	Support Groups
City Public	LRGV TPDES Stormwater Task Force (LTSTF)
Works Dept.	City Engineering Department
	Arroyo Colorado Watershed Partnership (ACWP)
	City Legal Department
	Citizen Advisory Group
	City Commission

Table 47: BMP Responsibility – Erosion Control Ordinance

5.4.2 <u>Construction Site Plan Review and Oversight</u>

A construction site stormwater runoff control program will be developed and implemented to assure adequate design, implementation, and maintenance of BMPs at construction sites within the MS4 service area to reduce pollutant discharges and protect water quality. The program will include the development and implementation of:

- i. Requirements for construction site operators to implement appropriate erosion and sediment control BMPs;
- ii. Procedures for site plan review during planning and permitting which incorporate consideration of potential water quality impacts;
- iii. City TPDES permitting process to include fee, fact sheet, and BMP menu;
- iv. A policy that defines responsibility for the on-site Stormwater Pollution Prevention Plan (SWP3) pursuant to TPDES regulations. It is conceivable that each contractor working at the same job site, whether simultaneously or not, may be required to obtain its own TPDES permit, unless the developer allows for use of one (1) overall TPDES permit under the developer's authority.

Table 48: Implementation Schedule - Construction Site Plan Review and Oversight

Permit Period	Measurable Goal
Year 1	Review and revamp existing construction plan review process. Develop a public awareness program.
	Implement the review process and permitting process. Track city issued TPDES permits.
Years 2-5	y 1

Primary Department	Support Groups			
City	LRGV TPDES Stormwater Task Force (LTSTF)			
Engineering	Texas A&M University-Kingsville (TAMUK)			
Dept.	South Texas Environmental Institute (STEI)			
	City Engineering Department			
	City Public Works Department			
	City Planning Department			

5.4.3 Site Inspection and Policy Enforcement

The construction site stormwater runoff control program shall have an inspection and enforcement component. City will develop procedures for site inspection and enforcement of control measures. The City shall evaluate in house staff to determine resources to implement this BMP. City shall consider privatization of this BMP.

Table 50: Implementation Schedule - Site Inspection and Policy Enforcement

Table 50. Implementation Senedule Site inspection and I oney Emoleciment				
Permit Period	Measurable Goal			
Year 1	Start developing site inspection program.			
	Bring utility construction, commercial, residential and other building TPDES			
	inspections under one authority.			
	Train city staff.			
	Develop enforcement policy.			
	Implement inspection program.			
Years 2-5	Implement enforcement policy.			
	Continue inspections.			

Table 51: BMP Responsibility - Site Inspection and Policy Enforcement

Primary Department	Support Groups			
City Public	LRGV TPDES Stormwater Task Force (LTSTF)			
Works Dept.	Texas A&M University-Kingsville (TAMUK)			
	South Texas Environmental Institute (STEI)			
	City Engineering Department			
	City Planning Department			
	City Inspection Department			

5.4.4 Contractor Certification

The City will develop a contractor certification program that will require all contractors

regulated under the SWMP TPDES program to become certified TPDES professionals. The City will work with the LTSTF to develop education requirements, course curricula, continuing education classes, training, and other activities that will assure competent project managers will oversee TPDES regulated activities within construction sites within the City's permitted area. The City will review and approve training providers and educational materials.

Table 52: Implementation Schedule – Contractor Certification

Permit Period	Measurable Goal			
Year 1	Develop partnerships with professional education providers.			
	Develop a certification program.			
	Provide awareness and outreach.			
	Provide one (1) certification course.			
	Obtain feedback from regulated community, evaluate program, and update as			
	necessary.			
Years 2-5	Provide two (2) certification courses per year within the permitted area.			

Table 53: BMP Responsibility – Contractor Certification

Primary Department	Support Groups			
City Public	LRGV TPDES Stormwater Task Force (LTSTF)			
Works Dept.	South Texas Environmental Institute (STEI)			
	City Engineering Department			
	Texas A&M University-Kingsville (TAMUK)			
	City Planning Department			
	City Webmaster			

5.4.5 Construction Site Waste Management

The City will develop requirements for construction site operators to control waste such as discarded building materials, refueling, concrete truck washout, chemicals, litter, and sanitary waste at construction site that may cause adverse impacts to water quality.

Table 54: Implementation Schedule – Construction Site Waste Management

Permit Period	Measurable Goal			
Year 1	Develop Program.			
	Implement awareness program.			
	Start inspections.			
Years 2-5	Update as needed, continue with program.			

Table 55: BMP Responsibility – Construction Site Waste Management

City Public	Local Business Organizations			
Works Dept.	City Planning Department			
	City Engineering Department			
	Arroyo Colorado Watershed Partnership (ACWP)			
	LRGV TPDES Stormwater Task Force (LTSTF)			
	City Webmaster			

5.4.6 Development of BMP menus

The City will develop a menu of BMPs that will be pre approved for use within its permitted area. City will research existing municipal programs, internet resources, EPA and TCEQ libraries and evaluate existing City BMPs.

Table 56: Implementation Schedule – Development of BMP menus

Permit Period	Measurable Goal			
Year 1	Develop BMP menus for various activities.			
	Provide awareness program.			
	Use website for outreach.			
Years 2-5	Fully implement BMP menu.			
	Update as needed.			

Table 57: BMP Responsibility – Development of BMP menus

Primary Department	Support Groups			
City Public	City Inspections Department			
Works Dept.	City Engineering Department			
	City Planning Department			
	South Texas Environmental Institute (STEI)			
	Arroyo Colorado Watershed Partnership (ACWP)			

5.5 Post-Construction Stormwater Management in New Development and Redevelopment BMPs

The BMPs listed in this section were selected to meet the following regulatory requirement:

Post-Construction Storm Water Management in New Development and Redevelopment

To the extent allowable under state and local law, the MS4 operator must develop, implement, and enforce a program to address storm water runoff 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, that discharge into the small MS4. The program must ensure that controls are in place that would prevent or minimize water quality impacts. The permittee shall:

- (a) Develop and implement strategies which include a combination of structural and/or non-structural BMPs appropriate for the community;
- (b) Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under state and local law; and
- (c) Ensure adequate long-term operation and maintenance of BMPs.

The following table lists BMPs that meet the requirements of MCM 5.

Table 58: Post-Construction Stormwater Management in New Development and Redevelopment BMPs

	Redevelopment Bivii s						
Section	Description of BMP	BMP* SCHEDULE Type (YEAR))N		
			1	2	3	4	5
5.5.1	Post-Construction Ordinance	С	X	X	X	X	X
5.5.2	Drainage Design Policy	С	X	X	X	X	X
5.5.3	BMP Inspection and Maintenance	С	X	X	X	X	X
5.5.4	Land Use Plan	I	X	X	X	X	X

I - INDIVIDUAL BMP

C - COMMON BMP

S - SHARED BMP

*see page 10 of this SWMP for explanation of the BMP Type

X – notes activity, see Section for details

5.5.1 Post-Construction Ordinance

The management of stormwater runoff from sites after the construction phase is vital to controlling the impacts of development on urban water quality. The increase in impervious surfaces such as rooftops, roads, parking lots, and sidewalks due to land development can have a detrimental effect on aquatic systems. Increased areas of impervious cover have been associated with stream warming and loss of aquatic biodiversity in urban areas. Runoff from impervious areas can also contain a variety of pollutants that are detrimental to water quality, including sediment, nutrients, road salts, heavy metals, pathogenic bacteria, and petroleum hydrocarbons.

The main goal of the post-construction ordinance for existing development is to limit surface runoff volumes and reduce water runoff pollution loadings. There are other ideas that can be included in an ordinance to improve its ability to control stormwater runoff. The ordinance could include what nonstructural and structural stormwater practices are allowed within the community. Communities may also wish to add language regarding on-site stormwater requirements and whether off-site treatment is an option. The City will review examples of existing ordinances including language dealing with each of the issues above. The City will examine each ordinance for the language that is appropriate for the stormwater program (EPA, 2008).

Table 59: Implementation Schedule – Post-Construction Stormwater Management in New Development and Redevelopment BMPs

Development una reactelopment Bitt g				
Permit Period	Measurable Goal			
Year 1	Evaluate existing ordinances to compare applicability.			
	Develop ordinance and adopt.			
	Develop outreach program specifically for this BMP			
	Work with partnerships and public advisory committees.			
	Train inspectors, regulated community.			
Years 2-5	Enforce ordinance.			
	Develop a feedback potential and a possible list server.			

Table 60: BMP Responsibility – Post-Construction Stormwater Management in New Development and Redevelopment BMPs

Development and Redevelopment Divil 9	
Primary Department	Support Groups
City Public	LRGV TPDES Stormwater Task Force (LTSTF)
Works Dept.	Texas A&M University-Kingsville (TAMUK)
	South Texas Environmental Institute (STEI)
	Lower Rio Grande Valley Development Council (LRGVDC)
	City Engineering Department
	City Planning Department
	City Public Utilities Board
	Arroyo Colorado Watershed Partnership (ACWP)

5.5.2 <u>Drainage Design Policy</u>

The City will update its existing drainage design policy to include provisions for the implementation of proper erosion and sediment controls and waste management on applicable construction sites.

Table 61: Implementation Schedule – Drainage Design Policy

Permit Period	Measurable Goal
Year 1	Review drainage policy. Update if necessary.
Year 2	Prepare awareness program.
Years 3-5	

Table 62: BMP Responsibility – Drainage Design Policy

Primary Department	Support Groups
City Public	LRGV TPDES Stormwater Task Force (LTSTF)
Works Dept.	South Texas Environmental Institute (STEI)
	City Engineering Department
	City Inspection Department
	Arroyo Colorado Watershed Partnership (ACWP)

5.5.3 <u>BMP Inspection and Maintenance</u>

The City will develop a program to establish regular and routine inspections and maintenance procedures for structural post construction BMPs. This BMP will assure post construction BMPs are in good working order, aesthetically pleasing, and repaired as soon as possible.

Table 63: Implementation Schedule – BMP Inspection and Maintenance

Permit Period	Measurable Goal	
Year 1	Develop BMP inspection program.	
Years 2-5	Perform inspections and maintenance of structural BMPs according to an approved	
	program.	

Table 64: BMP Responsibility – BMP Inspection and Maintenance

Tuble 01. Bill Responsibility Bill Inspection and illumentative		
Primary Department	Support Groups	
City Public	City Inspections Department	
Works Dept.	Texas A&M University-Kingsville (TAMUK)	
	South Texas Environmental Institute (STEI)	
	City Engineering Department	

5.5.4 <u>Land Use</u>

The City will incorporate stormwater management measures into its existing land use policies and zoning requirements.

Table 65: Implementation Schedule – Land Use

Permit Period	Measurable Goal
Year 1	Review and update land use policy.
	Review zoning laws and subdivision policy.
Year 2	Establish an awareness program.
Years 3-5	Update the land use policy at least once during the permit period.

Table 66: BMP Responsibility – Land Use

Primary Department	Support Groups
City Public	City Planning Department
Works Dept.	South Texas Environmental Institute (STEI)
	City Engineering Department
	Arroyo Colorado Watershed Partnership (ACWP)

5.6 Pollution Prevention/Good Housekeeping for Municipal Operations BMPs

The BMPs listed in this section were selected to meet the following regulatory requirement:

Pollution Prevention/Good Housekeeping for Municipal Operations

A section within the SWMP must be developed to establish an operation and maintenance program, including an employee training component, that has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.

(a) Good Housekeeping and Best Management Practices (BMPs)

Housekeeping measures and BMPs (which may include new or existing structural or non-structural controls) must be identified and either continued or implemented with the goal of preventing or reducing pollutant runoff from municipal operations. Examples of municipal operations and municipally owned areas include, but are not limited to:

- (1) street, road, or highway maintenance;
- (2) park and open space maintenance;
- (3) fleet and building maintenance;
- (4) storm water system maintenance;
- (5) new construction and land disturbances;
- (6) municipal parking lots;
- (7) vehicle and equipment maintenance and storage yards;
- (8) waste transfer stations; and
- (9) salt/sand storage locations.

(b) Training

A training program must be developed for all employees responsible for municipal operations subject to the pollution prevention/good housekeeping program. The training program must include training materials directed at preventing and reducing storm water pollution from municipal operations. Materials may be developed, or obtained from the EPA, states, or other organizations and sources. Examples or descriptions of training materials being used must be included in the SWMP.

(c) Structural Control Maintenance

If BMPs include structural controls, maintenance of the controls must be performed at a frequency determined by the MS4 operator and consistent with maintaining the effectiveness of the BMP. The SWMP must list all of the following:

- (1) maintenance activities; to reduce floatables and other pollutants
- (2) maintenance schedules; and long-term inspection procedures for controls used.

(d) Disposal of Waste

Waste removed from the small MS4 and waste that is collected as a result of maintenance of storm water structural controls must be properly disposed. A section within the SWMP must be developed to include procedures for the proper disposal of waste, including:

- (1) dredge spoil;
- (2) accumulated sediments; and
- (3) floatables.
- (e) Municipal Operations and Industrial Activities

The SWMP must include a list of all:

- (1) municipal operations that are subject to the operation, maintenance, or training program Pollution Prevention/Good Housekeeping for Municipal Operations (cont.)
 - developed under the conditions of this section; and
- (2) municipally owned or operated industrial activities that are subject to TPDES industrial storm water regulations.

The following table lists BMPs that meet the requirements of MCM 6.

Table 67: Pollution Prevention/Good Housekeeping for Municipal Operations BMPs

Section	MCM #6: Pollution Prevention/Good Housekeeping for Municipal Operations Description of BMP Type		YEAR SCHEDULE (YEAR)				
	Description of BM1		1	2	3	4	5
5.6.1	Stormwater Sewer System O&M	I		X	X	X	X
5.6.2	Street Sweeping	I		X	X	X	X
5.6.3	City Employee Training	S	X	X	X	X	X
5.6.4	O&M Certification and SOP program	C	X	X	X	X	X
5.6.5	Site Visits	I	X	X	X	X	X
5.6.6	Storm System Maintenance and Cleaning	I	X	X	X	X	X
5.6.7	Pesticides, Herbicide and Fertilizer Management						
5.6.8	Collection and Disposal of Stormwater Waste						

I - INDIVIDUAL BMP

5.6.1 Stormwater Sewer System O & M

The permittee must develop and implement a stormwater pollution prevention operation and maintenance program. The program must prevent and/or reduce stormwater pollution from facilities such as landfills, airports, streets, roads, right-of-ways, alleys, highways, municipal parking lots, maintenance and storage yards, fleet or maintenance shops with outdoor storage areas, caliche, soil, and compost storage locations, recycling centers, disposal areas operated by the permittee, and waste transfer stations. The program will also regulate activities such as park and open space maintenance, fleet and building maintenance, street maintenance, new construction of municipal facilities, and stormwater system maintenance, as applicable.

The City will develop an inventory of all potential sources of stormwater pollution. A template will be developed to identify municipal operations that are potential sources of stormwater pollution. The City designated department will contact all municipal departments to fill gaps and expand upon information provided by the inventories. Data needed from the inventories may include:

- Source or type of operation
- Location of facility/operation
- Contact information
- Activities conducted on-site
- Proximity to stormwater or surface water
- Potential impact to stormwater or surface water

C - COMMON BMP

S - SHARED BMP

^{*}see page 10 of this SWMP for explanation of the BMP Type

X – notes activity, see Section for details

• Percent of site with impervious surface

The City will use the inventory to prioritize municipal operations based on number of facilities, number of stormwater polluting activities identified, acreage affected, distance to surface water or to conveyance structure and the percent of impervious surface on-site. Municipal operations that will be scrutinized include:

- Vehicle repair or fleet maintenance
- Street and road maintenance, street sweeping (presented as a separate BMP)
- Right of way mowing
- Storm system maintenance and cleaning, including detention facilities, on site detention ponds, and outfalls (presented as a separate BMP)
- Parks maintenance
- Stormwater waste removal and disposal (presented as a separate BMP)
- Golf course maintenance
- Landfill maintenance
- Transfer station and recycling center operations
- Municipal curbside solid waste activities
- Wastewater and water treatment facility operations
- Operation and maintenance of intermediate receiving waterways owned by the permittee
- Operation and maintenance of lift stations

The City will recommend designing a generic Stormwater Pollution Control Plan that may include the elements listed below:

- Employee training plan (presented as a separate BMP)
- Implementation and tracking of BMPs
- Run-off control plans
- Map of facility
- Spill Prevention and Response Plan
- Recordkeeping
- BMP lists, resource sheets, stormwater messages, and other resources
- Tracking of inspections (copies of site visit checklists, follow-up letters, etc.)

The plan will provide a central location for copies of required BMPs and resource sheets.

Table 68: Implementation Schedule – Stormwater Sewer System O & M

Permit Period	Measurable Goal		
Year 1	Develop O&M program.		
	Develop Inventory and prioritize activities.		
	Develop mitigation programs.		
	Develop a BMP for each activity.		
	Develop target performance measures.		
Year 2	Implement O&M program.		
	Target 25% of activities.		
	Amend SWMP as needed.		
Years 3-5	Target 25 % of activities each year until fully implemented.		

Table 69: BMP Responsibility – Stormwater Sewer System O & M

Primary Department	Support Groups
City Public	City Municipal Departments
Works Dept.	Public Utilities Board Departments

5.6.2 Street Sweeping

The City will evaluate its street sweeping program the first year and based on its assessment will continue or improve its program.

Table 70: Implementation Schedule – Street Sweeping

Permit Period	Measurable Goal		
Year 1	Evaluate existing street sweeping program.		
	Develop performance measures or continue with existing program		
Years 2-5	Continue or Improve program.		
	Implement performance measures		

Table 71: BMP Responsibility – Street Sweeping

Primary Department	Support Groups
City Public	City Utility Maintenance Department
Works Dept.	City Street Maintenance Department

5.6.3 City Employee Training Program

The City will implement a training program that includes an employee component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. The program will also inform public employees of the impacts associated with illegal discharges and improper disposal of waste from municipal operations.

Table 72: Implementation Schedule – City Employee Training Program

Permit Period	Measurable Goal	
Year 1	Develop training program. Develop training record tracking system.	
Years 2-5		

Table 73: BMP Responsibility – City Employee Training Program

Primary Department	Support Groups	
City Public	LRGV TPDES Stormwater Task Force (LTSTF)	
Works Dept.	City Utility Maintenance Department	

5.6.4 O&M Certification and SOP program

The City will develop a certification program for municipal operations. The SWMP will develop policy, SOPs, and certification programs that will be evaluated annually.

The City will develop BMPs and SOPs for Municipal activities. The BMPs will target stormwater pollution runoff control for municipal activities or operations. A BMP table will also be created to help determine what BMPs would likely apply to which activities. In addition, focus group meetings will be conducted to get input from municipal employees on the draft BMPs. The attendees will be asked what activities they perform each day that impact stormwater and whether or not the BMPs are reasonable or attainable. After the focus group meetings, the BMPs will be modified to reflect input received from the focus groups.

The City will develop criteria checklists for the priority operations that specify required BMPs. Staff will use these checklists to gather data on-site to determine if an operation is a concern. The City will also develop resource sheets for BMPS for the priority municipal operations. These sheets will list the required BMPs for effective management of stormwater runoff from municipal operations.

Table 74: Implementation Schedule – O&M Certification and SOP program

1 abic 74. Implementation Schedule – Octor Certification and SO1 program					
Permit Period	Measurable Goal				
Year 1	Start developing certification program.				
	Research existing programs using internet, other MS4 permittee programs.				
	Assign staff to focus groups.				
	Develop BMPs.				
	Develop fact sheets, checklists and recordkeeping procedures.				
Year 2	Implement program at Public Works.				
Years 3-4	Expand program to other departments.				
	Update as needed.				
Year 5	Implement program in all appropriate departments.				

Table 75: BMP Responsibility – O&M Certification and SOP program

Primary Department	Support Groups	
City Public	City Utility Department	
Works Dept.	City Parks and Recreation Department	

5.6.5 Site Visits

The City will conduct site visits of various municipal operations to determine the practicality of the BMPs and certification criteria and also to provide staff with a better understanding of operations.

The BMPs and certification criteria will be edited based on the site visit experiences. Follow-up letters will be sent to each operation after the each visit, noting the practices that were already in place to protect stormwater and the potential stormwater impacts that need to be corrected to achieve effective management.

Table 76: Implementation Schedule – Site Visits

Permit Period	Measurable Goal				
Year 1	Develop a Site Inspection Protocol.				
	Develop a list of target activities.				
	Develop inspection checklist.				
Year 2	Implement site visit program, conduct quarterly visits to targeted activities.				
Years 3-5	Conduct annual visits.				
	Use feedback from previous year to update program.				

Table 77: BMP Responsibility – Site Visits

Primary Department	Support Groups		
City Public	City Engineering Department		
Works Dept.	City Parks and Recreation Department		
	Public Utilities Board Maintenance Department		

5.6.6 Storm system maintenance and cleaning

The City already conducts routine maintenance of its stormwater system throughout the year to remove floatables, debris, sediment and litter. The City also responds to illegal dumping into its sewer system. The City will develop a program that will detect areas requiring attention, assess potentially detrimental conditions, and conduct inspections. The program will prioritize areas in need of maintenance.

Table 78: Implementation Schedule – Storm system maintenance and cleaning

Permit Period	Measurable Goal				
Year 1	Develop a schedule for visual inspections and routine maintenance.				
	Clean system in response to reporting.				
	Develop inspection process and recordkeeping process.				
Years 2-5	Continue program and update as needed.				

Table 79: BMP Responsibility – Storm system maintenance and cleaning

Primary Department	Support Groups		
City Public	City Engineering Department.		
Works Dept.	City Parks and Recreation Department.		
	Public Utilities Board Maintenance Department.		
	City Health Inspections Department.		

5.6.7 Pesticides, Herbicide and Fertilizer Management

The City will develop procedures to manage use of pesticides, herbicides, and fertilizers for different municipal activities. The presence of landscaping chemicals in stormwater runoff has a direct impact on the health of aquatic organism and can present a threat to humans through contamination of drinking water supplies.

Table 80: Implementation Schedule – Pesticides, Herbicide and Fertilizer Management

Permit Period	Measurable Goal				
Year 1	Identify activities.				
	Develop management procedures for each activity.				
	Identify water quality friendly products.				
Year 2	Implement program.				
	Evaluate and adjust program.				
Years 3-5	Implement fully.				

Table 81: BMP Responsibility – Pesticides, Herbicide and Fertilizer Management

Primary Department	Support Groups	
City Public	City Engineering Department.	
Works Dept.	City Parks and Recreation Department.	
	Public Utilities Board Maintenance Department.	

5.6.8 Collection and Disposal of Stormwater Waste

Dredge spoil, sediment, and floatables collected through the implementation of stormwater sewer system maintenance BMPs will be disposed of properly. Materials collected will be tracked and evaluated

Table 82: Implementation Schedule - Collection and Disposal of Stormwater Waste

Permit Period	Measurable Goal			
Year 1	Develop a program that identifies sources.			
	Identify proper procedures for handling and disposal.			
	Develop a budget.			
	Develop a tracking procedure.			
	Develop performance measures.			
Years 2-5	Implement program using performance measures.			

Table 83: BMP Responsibility - Collection and Disposal of Stormwater Waste

Primary Department	Support Groups	
City Public	City Parks and Recreation Department.	
Works Dept.	Public Utilities Board Maintenance Department.	

5.7 Authorization for Municipal Construction Activities BMPs

The BMPs listed in this section were selected to meet the following regulatory requirement:

Authorization for Municipal Construction Activities

The development of a MCM for municipal construction activities is an optional measure and is an alternative to the MS4 operator seeking coverage under TPDES general permit TXR150000. Additionally, contractors working for the permittee are not required to obtain a separate authorization if they do not meet the definition of a construction site operator, as long as the permittee meets the status of construction site operator. Permittees that choose to develop this measure will be authorized to discharge storm water and certain non-storm water from construction activities where the permittee can meet the definition of construction site operator in Part I of this general permit. The authorization to discharge under this MCM is limited to the regulated area, such as the portion of the MS4 located within an urbanized area or the area designated by TCEQ as requiring coverage. However, an MS4 operator may also utilize this MCM over additional portions of their MS4 that are also in compliance with all of the MCMs listed in this general permit. This MCM must be developed as a part of the SWMP that is submitted with the NOI for permit coverage. If this MCM is developed after submitting the initial NOI, a NOC must be submitted notifying the executive director of this change, and identifying the geographical area or boundary where the activities will be conducted under the provisions of this general permit. Utilization of this MCM does not preclude a small MS4 from obtaining coverage under the TPDES Construction General Permit, TXR150000, or under an individual TPDES permit.

- (a) The MCM must include:
 - (1) a description of how construction activities will generally be conducted by the permittee so as to take into consideration local conditions of weather, soils, and other site specific considerations;
 - (2) a description of the area that this MCM will address and where the permittee's construction activities are covered (e.g. within the boundary of the urbanized area, the corporate boundary, a special district boundary, an extra territorial jurisdiction, or other similar jurisdictional boundary); and
 - (3) either a description of how the permittee will supervise or maintain oversight over contractor activities to ensure that the SWP3 requirements are properly implemented at the construction site; or how the permittee will make certain that contractors have a separate authorization for storm water discharges.
 - (4) a general description of how a SWP3 shall be developed, according to Part VI.E. of the general permit, for each construction site.

Authorization for Municipal Construction Activities (cont.)

Part VI.E:

Operators of municipal construction activities that qualify for coverage under this general permit and that discharge storm water associated with construction activities that reach waters of the U.S. must:

- 1. develop a SWP3 according to the provisions of this general permit that covers the entire site and begin implementation of that plan prior to commencing construction activities;
- 2. post a signed copy of the notice contained in Attachment 1 of this general permit in a location at the construction site where it is readily available for viewing prior to commencing construction activities and maintain the notice in that location until completion of the construction activity and final stabilization of the site;
- 3. ensure the project specifications allow or provide that adequate BMPs may be developed and modified as necessary to meet the requirements of this general permit and the SWP3;
- 4. ensure all contractors are aware of the SWP3 requirements, are aware that municipal personnel are responsible for the day-to-day operations of the SWP3, and who to contact concerning SWP3 requirements; and
- 5. ensure that the SWP3 identifies the municipal personnel responsible for implementation of control measures described in the plan.

The following table lists BMPs that meet the requirements of MCM 7.

Table 84: Authorization for Municipal Construction Activities BMPs

Section	Optional MCM #7 - Authorization for Municipal Construction Activities Description of BMP	BMP* Type	IMPLEMENTATION SCHEDULE (YEAR)				
	Description of Bivil		1	2	3	4	5
5.7.1	Stormwater Pollution Prevention Plan (SWP3)	С	X	X	X	X	X
5.7.2	Contractor, Engineer, Architect Survey	C	X	X	X	X	X

I - INDIVIDUAL BMP

C - COMMON BMP

S - SHARED BMP

*see page 10 of this SWMP for explanation of the BMP Type

X – notes activity, see Section for details

5.7.1 Storm Water Pollution Prevention Plan (SWP3)

The development of a MCM for municipal construction activities is an optional measure and is an alternative to the MS4 operator seeking coverage under TPDES general permit TXR150000. The objective of MCM #7 is to exempt the permittee from having to use TPDES GCP TXR150000 for each construction site owned by the permittee. This will save the local governments a considerable amount of revenue. Contractors working for the permittee will not be required to obtain a separate authorization and can use MCM #7 for authorization to discharge stormwater runoff into the MS4. The City will develop a comprehensive SWP3 to meet the requirements of this MCM

The permittee will develop a general SWP3 to meet the requirements of MCM #7. The SWP3 will include the following:

- A site or project description.
- A description of the BMPs that will be used to minimize pollution in runoff that must identify the general timing or sequence for implementation.
- A description of permanent storm water controls.
- Other required controls and BMPs.
- Documentation of compliance with approved state and local plans.
- Maintenance requirements.
- Inspections of controls.
- Identification and implementation plan for appropriate pollution prevention measures for all eligible non-storm water components of the discharge, as listed in Part II.A.3 of General Construction Permit (GCP) TXR150000.
- The information required in Part III.B of GCP TXR150000.

The SWP3 will include:

- (1) a description of how construction activities will generally be conducted by the permittee so as to take into consideration local conditions of weather, soils, and other site specific considerations;
- (2) a description of the area that this MCM will address and where the permittee's construction activities are covered;
- (3) either a description of how the permittee will supervise or maintain oversight over contractor activities to ensure that the SWP3 requirements are properly implemented at the construction site; or how the permittee will make certain that contractors have a separate authorization for storm water discharges.

Table 85: Implementation Schedule – SWP3 BMPs

Permit Period	Measurable Goal			
Year 1	Develop SWP3 to include ordinances, inspection policy, enforcement, and planning			
	review.			
	Develop feedback program.			
Years 2-5	Implement program.			
	Evaluate feedback and update program.			

Table 86: BMP Responsibility – SWP3 BMPs

Primary Department	Support Groups
City Public	LRGV TPDES Stormwater Task Force (LTSTF)
Works Dept.	Texas A&M University-Kingsville (TAMUK)
	South Texas Environmental Institute (STEI)
	Lower Rio Grande Development Council (LRGVDC)
	City Engineering Department
	City Planning Department

5.7.2 Contractor, Engineer, Architect Survey

The City will update its existing drainage design policy to include provisions for the implementation of proper erosion and sediment controls and waste management on applicable construction sites.

Table 87: Implementation Schedule – Contractor, Engineer, and Architect Survey

Permit Period	Measurable Goal	
Year 1	Develop Survey	
Years 2-5	Submit an annual Survey to regulated community	

Table 88: BMP Responsibility – Contractor, Engineer, Architect Survey

Primary Department	Support Groups
Public Works	LTSTF STEI

6.0 CITY PERMITTED FACILITIES – CITY OF WESLACO

The General Permit requires the City to list all municipally owned industrial facilities that are subject to the TPDES stormwater regulations. Cities often operate several types of facilities that are subject to the industrial storm water permitting requirements. Landfills, wastewater treatment plants, airports, recycling facilities, and compost facilities are examples of regulated industrial facilities commonly operated by municipalities. The following municipal facilities are currently covered by the TPDES general permits for industrial activities according to TCEQ's central registry query system (TCEQ, 2008).

Table 88: City owned Multi Sector Permitted Facilities

Facility	Location	General Permit	Individual Permit
South Waste Water Treatment Plant RN104589866	Hidalgo County on Mile 4.5 N and 7 West, Weslaco, TX		STORMWATER TXR05R609 (active)
SOUTH WASTEWATER TREATMENT FACILITY RN101612166	0.2 mile west and 0.6 mile north of the confluence of the South Donna Drain and Llano Grande Lake and 3.2 miles south of the Missouri-Pacific Railroad		WASTEWATER TX0116394 (active)
North Waste Water Treatment Plant ¹	Hidalgo Co. on Mile 8 N & 4.5 N Weslaco, TX		STORMWATER TXR05R635 (active)
CITY OF WESLACO WATER PLANT RN101614394	2500 N Texas Blvd		WASTEWATER TX0022471 (active)
MID VALLEY AIRPORT RN100527621	1909 JOE STEPHENS DRIVE		STORMWATER TXR05P423 (denied) TXR05P465 (expired)
WESLACO PLANT RN101607943	Northeast of the City approximately 4000 east of Hwy 88 & 4000 feet north of Pike Blvd		WASTEWATER TX0052787 (active)
OTFL 002 RN103215117	500 S Kansas Ave (mailing address)		WASTEWATER TX0052787000 (active)

¹ Not listed in TCEQ's Central Registry Query system.

A copy of the TPDES multi-sector stormwater general permit for each of the listed facilities is included in Appendix F.

7.0 ASSESSMENT OF NON-STORMWATER DISCHARGES

In accordance with the requirements of the Phase II MS4 permit, the following non-storm water discharges will be assessed in order to determine whether they are known to be significant contributors of pollutants to the City's water bodies:

- (a) water line flushing (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life);
- (b) runoff or return flow from landscape irrigation, lawn irrigation, and other irrigation utilizing potable water, groundwater, or surface water sources;
- (c) discharges from potable water sources;
- (d) diverted stream flows;
- (e) rising ground waters and springs;
- (f) uncontaminated ground water infiltration;
- (g) uncontaminated pumped ground water;
- (h) foundation and footing drains;
- (i) air conditioning condensation;
- (j) water from crawl space pumps;
- (k) individual residential vehicle washing;
- (l) flows from wetlands and riparian habitats;
- (m) dechlorinated swimming pool discharges;
- (n) street wash water;
- (o) discharges or flows from fire fighting activities (fire fighting activities do not include washing of trucks, run-off water from training activities, test water from fire suppression system, and similar activities);
- (p) other allowable non-storm water discharges listed in 40 CFR § 122.26(d)(2)(iv)(B)(1);
- (q) non-storm water discharges that are specifically listed in the TPDES Multi Sector General Permit (MSGP) or the TPDES Construction General Permit (CGP); and
- (r) other similar occasional incidental non-storm water discharges, unless the TCEQ develops permits or regulations addressing these discharges.

Non-storm water discharges from the list above must be evaluated by the City to determine if any known, significant, water quality impacts were created as a result of the discharges. There is no knowledge of adverse impacts to the City's water quality from any of the listed discharges at this time. Comprehensive evaluation is beyond the scope of the development of this SWMP at this time. Assessment of the non-storm water discharges listed herein will be undertaken by the City as part of the MCM #3, more specifically, the illicit discharge BMP identified in Section 5.3.6.

8.0 RECORDKEEPING AND REPORTING

Recordkeeping. The City will maintain, store and make available all records, a copy of the TPDES general permit and all information used to complete the Notice of Intent (NOI) for the term of this permit period. The SWMP will be maintained at City Hall and/or at additional locations identified in the NOI. The City will make all records, including the NOI and SWMP, available for public viewing at City Hall and/or at additional locations identified in the NOI. The SWMP will be available for viewing during normal operating hours and can be viewed pursuant to the Public Information Act. Reasonable charges and reasonable time, in accordance with Texas law, may be levied and taken, respectively, by the City for researching availability and preparing requested materials.

Annual Report. The City will submit an annual report to the TCEQ pursuant to the TPDES regulations. The City will incorporate the reports into the SWMP and maintain copies of the annual report for public viewing as aforementioned. The annual report, typically will document the City's SWMP-related activities and events for the target year, assess and evaluate the success and effectiveness of each BMP undertaken during the target year, compare the success of the BMP to the measurable goals of the SWMP, and provide conclusions and recommendations, including modifications to the SWMP. Modifications may include replacement of existing BMPs, adjustment of the SWMP implementation schedule for specific BMPs, or other changes allowed by the TPDES regulations.

Notice of Change (NOI) Updates. This plan may be updated by the City at any time and for any reason pursuant to and within the limits of the TPDES regulations. As part of the Notice of Change (NOC) process, when the City contemplates eliminating a BMP from the SWMP without replacement, the City will review the SWMP Cover Sheet and the SWMP to assure that elimination of the specific BMP will not violate compliance requirements. If the City becomes non-compliant if a BMP is removed, a replacement BMP must be suggested and included in the NOC.

9.0 SUMMARY

Inception of the LTSTF. Not having a Phase I NPDES municipality or entity in the LRGV, the onset of the TPDES Phase II program presented the region with many questions and concerns. Having overcome the initial reaction of resistance, the region has accepted the fact that the TPDES mandates are real and must be confronted and complied with. The cities of Pharr, Weslaco and McAllen were members of a statewide group of cities, named the Texas Coalition of Cities, that was one of many groups that sued the EPA NPDES program in 2002. The litigation was responsible, in part, for the delay in the promulgation of the State's MS4 permit. There were many reasons why the lawsuit was filed, one being the lack of funding being provided by the federal government (EPA Court Petition, 2003). Municipalities were being asked to shift a significant amount of revenue to a program that could possibly be costly. The cost study performed by the EPA in 1998 (EPA, 1998) had estimates that were far ranging and the law's ambiguity compounded the problem. Most of the municipalities in the LRGV are small with less than 50,000 in population, and many smaller than 10,000. The City of Mission, with a population of about 45,000 was the first to contact TAMUK in an attempt to obtain information about the TPDES program. Mission asked if TAMUK could prepare its SWMP plan, and if TAMUK could accomplish this task as a graduate student research project. Soon thereafter the LTSTF was created.

A Regional Approach to Stormwater Management. TAMUK's South Texas Environmental Institute (STEI), in the midst of its inception in 2002, took on the challenge of attempting to organize a region that lacked resources and technical expertise in complying with the TPDES rules. TAMUK convinced many cities in the LRGV to regionalize their efforts in dealing with the regulations of the TPDES program, since both the TCEQ and the EPA advocate regionalization as a favorable approach in almost every arena of environmental regulation. During 2003 and 2004, during the period that membership was solicited, TAMUK presented the EPA's cost estimates for implementing a Phase II SWMP to each LTSTF city. Cities are no strangers to the concept of regionalization, and sharing the costs to comply with environmental mandates was received favorably. During LTSTF meetings it was evident that the primary role of local governments in stormwater management is to address local problems and needs, and at the same time comply with state and federal regulations in the most cost-effective manner. Creating a regional task force responsible for assisting cities with storm water management was viewed as a proactive idea because the collaboration promotes cooperation and dissemination of ideas. A coordinated, regionalized program can also produce economies of scale, resulting in significant cost benefits. For example, in a similar effort in Kentucky, a stormwater district that oversees thirty-three (33) municipal storm water systems conducted a study that compared the cost of developing a SWMP on a municipality-by-municipality basis with the cost associated with a regional effort. The study showed a cost two (2) to five (5) times more if each municipality prepared its own SMWP versus having a regional entity oversee the task (Woolpert, 1998). Moreover, a regional entity, with a facilitator like TAMUK, can objectively address the cause of a stormwater concern rather than just the symptoms of the problem, which often happens in the regions like the LRGV where political boundaries drive decision-making and funding allocation.

Regionalization also means that enforcement of TPDES regulations and requirements are more consistent. Developers, engineers, and others will be less likely to violate stormwater-related policies if they know that a well-managed regional entity, rather than a small municipality, is responsible for the TPDES programs. Moreover, regionalization minimizes varying interpretations of the regulations and thus provides for consistent policies from city to city. LRGV municipalities facing TPDES Phase II permitting requirements recognize that stormwater management must become a top priority, but they demand innovative and cost-effective programs. The LTSTF realizes that an innovative funding approach for stormwater management will save money.

Cost Effectiveness of a Regional Approach. The community leaders of the LTSTF membership determined that the most cost effective and efficient approach for addressing local storm water management issues, including compliance with the TPDES Phase II MS4 requirements, was to develop and implement a regional task force approach under the guidance of a single entity. This approach has been formalized through the development and execution of Interlocal Agreements between TAMUK and the LTSTF members. Although, the LRGV region has not conducted a study to determine the cost effectiveness of a regional program, TAMUK found that the Kentucky study (Woolpert, 1998) supported the need for a regional approach to address NPDES Phase II rules. This document provides the details of a program that was developed for thirty-three (33) cities and three counties to comply with the federal Storm Water Phase II regulations. Estimates calculated by this study suggest that, by using a regional approach, the communities could achieve a cost savings of between 30 % to 70 % over the next five years). Similarly, in his report Estimating Costs for Phase II Stormwater Management Program (2000), Andrew Reese documents that a regional approach can reduce the costs of developing brochures, ordinances, billboards, web sites, and bulk PR materials.

In the LRGV, the communities share similar demographics and similar environmental concerns. Most residents live in low- or fixed-income households and cannot afford to pay fees to support the TPDES requirements. Thus, there is a strong case for any type of collaboration that would keep Phase II SWMP implementation costs down. In the LRGV, each community is contiguous to other communities, with some cities bordered by four (4) other cities. Thus, the LRGV appears as one urbanized metropolitan region. Although all these communities experience similar stormwater problems, none had in place a stormwater program or ordinance as required by the TPDES MS4 regulations. Since the creation of the LTSTF, stormwater tasks were generally viewed as "add-on" responsibilities for departments and staff that have other primary responsibilities. To varying degrees, with the exception of McAllen and Brownsville, the communities had existing staff (such as sanitary sewer, code enforcement, or road department personnel) handling stormwater operations, maintenance, regulation and enforcement. None of the communities could maintain a person, much less a department, to handle stormwater administration, planning, design, and engineering; water quality planning and monitoring; and capital improvements and expenditures. The regional approach taken by the LTSTF allows the LRGV communities to share these responsibilities, which results in a much more cost-effective program for compliance with the Phase II MS4 stormwater regulations.

Development of a regional template SWMP. The LTSTF's regional approach complying with the Phase II MS4 stormwater regulations and successfully resulted in a coordinated cooperative effort to develop a template SWMP for the region. The template LTSTF SWMP is tailored to meet any unique requirements of the LRGV cities. Some of the collaborative tasks that the LTSTF has incorporating into the City BMP menu this SWMP are:

- Construction site runoff control
- Outreach and education
- Prevention of illegal dumping
- Pollution prevention
- Public participation

Finally, the LTSTF members anticipate that the regional approach used to develop a regional template SWMP will also carry over into the implementation phase over the following five years.

REFERENCES

- Arroyo Colorado Watershed Protection Plan, Arroyo Colorado Watershed Partnership (ACWP), Texas Sea Grant (2007)
- City of Corpus Christi Phase I Stormwater Quality Management Guidance Document, City of Corpus Christi, May 1997.
- City of McAllen Draft SWMP, Freese & Nichols, Inc., Jan 2003.
- Citry of McKinney Draft SWMP, City of McKinney, 2002
- City of Boulder SWMP, WASH Plan, City of Boulder, et al., 2003
- Designing and Implementing an Effective Stormwater Management Program, American Public Association (APWA) Feb 2000.
- Galveston Bay and City of Pearland Draft SWMP, Turner, Collie & Braden, 2002.
- Lower Rio Grande Valley Development Council (LRGVDC), 2002. Regional Solid Waste Management Plan Amendment 2002–2020. June 30, 2003.
- Luken, K. M., Swenson, S. A, Stormwater Management Plan, Stormwater Journal, 2001.
- Northern Kentucky Storm Water Feasibility Study, Boone, Campbell and Kenton counties, Woolpert, LLP, 1998.
- Phase II Rule, Federal Register / Vol. 55, No. 222 / Friday, November 16, 1990. Page 48065.
- Reese, AJ, E. Treadway and D. Noel (2000). Estimating Costs for the Phase II Stormwater Management Program, *Water Environment Federation.*, April 2000, pp. 33-39.
- State of Rio Grande and Environment of the Border Region Strategic Plan 2003-2007 Vol. 3, TCEQ (2002)
- The National Association of Flood and Stormwater Management Association (NAFSMA), 1999a, Phase II Survey Raw Data Report, 1299 Pennsylvania Ave. NW, Washington DC 2004.
- Texas Commission Environmental Quality (TCEQ), MS4 Permit, TCEQ TXR040000, August 2007.
- Texas Commission Environmental Quality (TCEQ), GCP Permit, TCEQ TXR1500000, March 2003.

- Texas Commission Environmental Quality (TCEQ), Central Registry Query System, http://www4.tceq.state.tx.us/crpub/index.cfm?fuseaction=cust.CustSearch&CFID =147837&CFTOKEN=36802680 (Accessed: Feb 8, 2008)
- T. Schueler, Impacts of Impervious Cover on Aquatic Systems, Center for Watershed Protection (CWA), March 2003.
- United States Environmental Protection Agency (U.S. EPA) (1996), Overview of Stormwater Program, EPA/833/R-96/008.
- United States Environmental Protection Agency (U.S. EPA) Model Ordinances to Protect Local Resources, http://www.epa.gov/nps/ordinance/ (Accessed: Jan, 12, 2008)
- United States Environmental Protection Agency (U.S. EPA) Court Petition 9th Circuit Court of Appeals (2003), Environmental Defense Center, et al. v. EPA, No. 00-70014 & consolidated cases.
- United States Environmental Protection Agency (U.S. EPA) (2005), Stormwater Phase II Rule, EPA/833/F-00/004.
- United States Environmental Protection Agency (U.S. EPA) (1998), *Economic Analysis of the Final Phase II Rule*, EPA Guidance.



THE LOWER RIO GRANDE VALLEY TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM STORMWATER TASK FORCE (LRGV TPDES TASK FORCE)

City of Brownsville
Joe Hinojosa or Sandra de Leon
P.O. Box 911
Brownsville, Texas 78520
johino@cob.us
(956) 542-7511 cell: (956) 459-1757

City of Weslaco
David Salinas
500 S. Kansas
Weslaco, Texas 78596
dsalinas@weslacotx.gov
(956) 973-3146 cell: (956) 463-1101

City of Alamo Luciano Ozuna 432 N. Tower Road Alamo, Texas 78516 lozuna@alamotexas.org (956) 787-8321/8413 cell: (956) 330-3088

City of La Feria Darla A. Jones 115 E. Commercial Avenue La Feria, Texas 78559 dajones68@rgv.rr.com (956) 797-2261

City of San Juan John Avilez 709 S. Nebraska San Juan, Texas 78589 <u>JAvilez1993@yahoo.com</u> (956) 702-6945

*City of Sullivan City Rolando Gonzalez P.O. Box 249 Sullivan City, Texas 78595 rgonzalez@cityofsullivancity.com (956) 485-2828 City of Donna Leo Villareal 307 S. 12th Street Donna, Texas 78537 <u>lvillareal@donna.lib.tx.us</u> (956) 464-3314/3692

City of Harlingen
Dan Serna
Ramiro Gonzales
Ponciano Longoria, P.E.
P.O. 2207
Harlingen, Texas 78551-2207
dserna@myharlingen.us
rgonzales@myharlingen.us
plongoria@myharlingen.us
(956) 427-8825

City of La Joya Mike Alaniz P.O. Box H La Joya, Texas 78560 cityoflajoya@aol.com (956) 580-7029/583-7598

City of San Benito Hector Jalomo P.O. Box 1870 San Benito, Texas 78586 hjalomo@cityofsanbenito.com (956) 361-3812

City of Alton Steve Pena or David De Leon P.O. Drawer 9004 Alton, TX 78574 <u>steve.pena@alton-tx.gov</u> <u>david.deleon@alton-tx.gov</u> (956) 581-2733/519-1128

City of Santa Rosa Joe Lopez P.O. Box 326 Santa Rosa, Texas 78593 srjl@bizrgv.rr.com (956) 636-1113 City of Pharr
Roy Garcia, Fred Sandoval, Patricio Cruz
P.O. Box B
Pharr, Texas 78577
rgarcia@cityofpharr.com
fsandoval@cityfofpharr.com
pcruz@cityofpharr.com
(956) 787-7951

City of Mission Ruben Diaz 1201 E. 8th Street Mission, Texas 78572-5812 <u>rdiaz@mission.lib.tx.us</u> (956) 580-8662/8780

*City of Rio Grande City Juan Zuniga 101 S. Washington St. Rio Grande City, Texas 78582 (956) 716-8899 fax jfzuniga1@yahoo.com

City of McAllen Carlos Sanchez P.O. Box 220 McAllen, TX 78501 (956)-972-7000 csanchez@mcallen.net

*City of Palmhurst Lori Lopez 4417 North Shary Road Palmhurst, Texas 78572 956-583-8697 fax 956-581-4630 palmhurst@bizrgv.rr.com

^{*}non active



Mission Statement – Promote Municipal and Storm Water Public Outreach and Education related to the TCEQ TPDES program, Urban Non-Point Source Pollution,, construction activities and soil erosion, and other environmental-related issues within the Lower Rio Grande Valley through the dissemination of information.

BYLAWS OF LOWER RIO GRANDE VALLEY TPDES STORMWATER TASK FORCE

ARTICLE I ORGANIZATION

Section 1.01 <u>Name.</u> The name of the entity is Lower Rio Grande Valley TPDES Stormwater Task Force (Task Force). The official acronym for the Task Force shall be LRGVSTTF.

Section 1.02 <u>Purposes and Limitations.</u> The specific purpose of the Task Force is to assist municipalities in complying with state and federal environmental regulations and to assist stakeholders with environmental protection goals that are best served by a regional approach. In addition, the Task Force will provide an avenue for students to gain knowledge and experience in process, procedures, supervisory, organizational, and executive skills.

Section 1.03 **Logo.** The Task Force official logo shall be as follows:



ARTICLE II OFFICES

Section 2.01 **Principal Office.** The members will determine the principal office for the activities and affairs of the Task Force.

Section 2.02 <u>Other Offices.</u> The Task Force may at any time establish branch or subordinate offices at any place or places within the South Texas Region where the Task Force is qualified to conduct its activities.

ARTICLE III MEMBERSHIP

Section 3.01 **Qualifications and Classes of Membership.** The Task Force shall have three (3) classes of members, designated as regular members, affiliate members and institutional members.

- (a) Regular Member. Any municipality in charge of meeting state and federal environmental protection goals. Regular members shall be voting members of the Task Force. Each municipality shall appoint one representative and one alternate representative to the Task Force. The representatives must be city employees. The membership fee will be determined by the Task Force.
- (b) <u>Affiliate Member.</u> Any interested non-public entity (consulting firm, trade association, individual, etc.) not eligible for regular membership is eligible to become an affiliate member. Affiliate members shall be non-voting members of the Task Force and each of them shall be required to pay an annual membership fee of \$1000.
- (c) <u>Institutional Member.</u> Any public entity in charge of meeting state and federal environmental protection goals and not eligible for regular membership is eligible to become an institutional member. Institutional members shall be non-voting members of the Task Force and each of them shall be required to pay an annual membership fee of \$500.00.
- (d) <u>Members At Large</u>. Any interested party selected by the task force for membership. Solely two (2) members at large shall serve in the Task Force at any one time. No membership fee. Members at Large shall be a voting member and cannot be a staff member of a city or an elected official of a city.

TAMUK will be a non-voting member of the Task Force and will not be subjected to membership fees.

Section 3.02 Members' Fees and Administration. Each member must pay an annual fee for membership during a calendar year, with conditions and fees to be fixed from time-to-time by the Task Force. The Task Force may, in its discretion, set different fees for each class and sub-class of members. Fees collected by the Task Force shall be used for, but not necessarily limited to, funding the administration of the Task Force (including staff used by TAMUK to develop agendas, to prepare and distribute correspondence, and to perform other administrative tasks), to develop and to maintain a website, and to assist the membership in developing stormwater management plans pursuant to the TCEQ Phase II Stormwater guidelines. TAMUK will be the fiscal agent for the Task Force. TAMUK in cooperation with the Task Force membership will submit an annual budget to the Task Force for approval if grant or other types of funds are obtained by the Task Force A treasurer shall be appointed by the Board of Directors at that time.

Section 3.03 <u>Members in Good Standing.</u> Members who have paid the required fees in accordance with these Bylaws and who are not suspended shall be members in good standing.

Section 3.04 <u>Termination of Membership.</u> A membership shall terminate on occurrence of any of the following events:

- (a) Resignation of the member;
- (b) Expiration of the period of membership, unless the member is renewed on the renewal terms fixed by the Board of Directors;
- (c) The member's failure to pay fees as set by the Board of Directors within thirty (30) days after they are due and payable;
- (d) Any event that renders the member ineligible for membership, or failure to satisfy membership qualifications; or
- (e) Termination of membership under Section 3.05 of these Bylaws based on the good faith determination by the Board of Directors.

Section 3.05 <u>Suspension of Membership.</u> A member may be suspended, under Section 3.06 of these Bylaws, based on the good faith determination by the Board of Directors, that the member has failed in a material and serious degree to observe the Board of Directors rules of conduct, or has engaged in conduct materially and seriously prejudicial to the Task Force purposes and interests. A person whose membership is suspended shall not be a member during the period of suspension.

- Section 3.06 <u>Termination or Suspension of Membership.</u> If grounds appear to exit for suspending or terminating a member under Section 3.05 of these By Laws, the following procedure shall be followed.
- (a) The Board of Directors shall give the member at least fifteen (15) days' prior notice of the proposed suspension or termination and the reasons for the proposed suspension or termination. Notice shall be given by first class mail, registered mail to the member's last address as shown on the Task Force records.
- (b) The member shall be given an opportunity to be heard, either orally or in writing, at least five (5) days before the effective date of the proposed suspension or termination. The hearing shall be held, or the written statement considered, by the Board of Directors to determine whether the suspension or termination should occur.
- Section 3.07 <u>Transfer of Membership.</u> No memberships or right arising from Membership shall be transferred.
- Section 3.08 <u>Meetings.</u> A meeting of members shall be held as needed during each year, unless the Board of Directors fixes another date or time and so notifies the members.
- Section 3.09 <u>Meeting Date and Time.</u> Each regular meeting of members shall be held at a time and place as needed by the Board of Directors and TAMUK.
- Section 3.10 <u>Place of Meeting.</u> Meetings of the members shall be held at any place designated by the Board of Directors or by consent of all members entitled to vote at the meeting, given before or after the meeting. In the absence of any designation, member's meetings shall be held at the Task Force principal office. Any meeting may be held by conference telephone, email, or similar communication equipment.
- Section 3.11 **Quorum.** A majority of the voting power shall constitute a quorum for the transaction of business at any meeting of the members.
- Section 3.12 <u>Manner of Voting.</u> Voting may be by voice or written communication.
- Section 3.13 <u>Number of Votes.</u> Each regular member municipality shall be entitled to cast one (1) vote on each matter submitted to a vote of the members.
- Section 3.14 <u>Additional Members.</u> The Task Force may enroll additional members with approval of the Task Force.
- Section 3.15 <u>TAMUK Representative.</u> The Task Force will require at least one (1) individual employed by TAMUK to be assigned to the Task Force.

Representative shall be fully qualified to represent TAMUK and to assist the Task Force in conducting business. TAMUK will assign representation as needed.

Section 3.16 **TAMUK Role.** TAMUK will be contracted by the Task Force via individual interlocal agreements with each member city to maintain records, administer the Task Force, maintain a website, to coordinate meetings times and places, and to perform other duties as designated by the Task Force.

ARTICLE IV BOARD OF DIRECTORS

Section 4.01 <u>Powers and Responsibilities.</u> The Board of Directors shall be responsible for, among other duties; adopting an annual budget, adopting the fee and assessment schedule and adopting policies and positions concerning regulations, legislation and litigation. The Board of Directors may delegate the management of the activities to Texas A&M University-Kingsville, provided all is under the ultimate direction of the Board of Directors. In addition, the Board of Directors shall have the power to:

(a) To conduct, manage and control the affairs and activities of the Task Force (includes meetings, budgeting, and all efforts pertaining to meeting state, federal and stakeholder driven environmental protection goals).

Section 4.02 <u>Number and Qualification of Directors.</u> Commencing with the first annual meeting of the members, the authorized number of Directors shall note exceed seven (7) until changed by amendment to this bylaw.

Section 4.03 <u>Election</u>, <u>Designation</u>, <u>and Term of Office of Directors</u>. Directors shall be elected by the voting representatives at a regular meeting of the members. Henceforth, elections shall be held one (1) month prior to termination of respective term or as determined by the Task Force. Directors shall serve two (2) year terms.

Section 4.04 <u>Vacancies; Removal; Resignation of Directors.</u> A vacancy or vacancies on the Board of Directors will exist on the occurrence of any of the following: (a) the death or resignation of any Director (b) the declaration by resolution of the Board of Directors of a vacany in the office of a Director who has been declared or unsound mind by an order of court, convicted of a felony at set by the State of Texas (c) the increase of the authorized number of Directors; or (d) the removal of a Director in accordance with these Bylaws.

A Director may be removed, either with or without cause, by three-fourths (3/4) vote of all other Directors at the time in office at any regular or special meeting of the Board of Directors. Specific guidelines are at the discretion of the Board regarding removal for failure to attend Board of Director meetings.

Except as provide, any Director may resign by giving written notice to the Chair of the Board of Directors and shall be effective when the notice is given unless it specifies a later time for the resignation to become effective.

Vacancies of the Board of Directors may be filled by a majority of the Directors then in office, whether or not less than a quorum, or be a sole remaining Director.

Section 4.05 <u>Annual Meeting of Directors.</u> The Board of Directors shall hold meetings as needed within each year. Each meeting shall be held for purposes or organization, the election of officers, and the transaction of other business. Notice of the time and place of this meeting will be required.

Section 4.06 <u>Other Regular Meetings.</u> Other regular meetings may be open or closed to the members depending on the nature of the subject matter discussed at such meeting.

Section 4.07 <u>Special Meetings.</u> Special meetings of the Board of Directors for any purpose may be called at any time by the Chair of the Board, the Vice-Chair, Secretary or any two (2) Directors.

Section 4.08 **Quorum.** A majority of the authorized number of Directors shall constitute a quorum for the transaction of any business, except to adjourn.

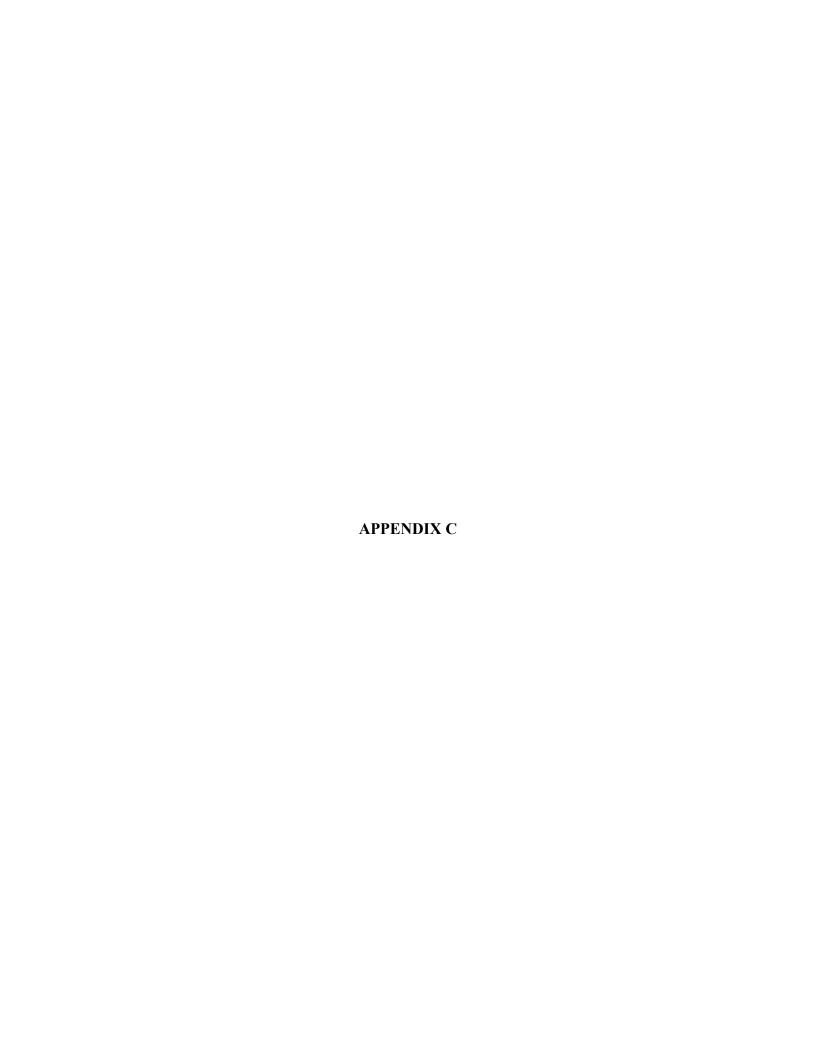
Section 4.09 **Reimbursement of Directors.** Directors and members of committees may receive reimbursement of expenses as determined by a resolution of the Board of Directors.

ARTICLE V OFFICERS

Section 5.01 <u>Officers of the Task Force.</u> The officers of the Task Force shall consist of a Chair, a Vice Chair, a Secretary, a Reporter and a Treasurer. Any number of offices may he held concurrently except that neither the Secretary nor the Treasurer may serve concurrently as the Chair or Vice Chair of the Board of Directors.

Section 5.02 <u>Election of Officers.</u> The officers of the Task Force shall be chosen annually by the Board of Directors. Officers shall serve one (1) year terms. An officer must be a member of the elected Board of Directors.

- Section 5.03 **Removal and Resignation of Officers.** Any officer may be removed with or without just cause by the Board of Directors. Any officer may resign at any time by giving written notice to the Board of Directors. The resignation shall be effective when the notice is given unless it specifies a later time for the resignation to become effective.
- Section 5.04 <u>Vacancies in Office.</u> A vacancy in any office because of death, resignation, removal, disqualification, or any other cause shall be filled in the manner prescribed in these Bylaws for regular appointments to that office, provided, however, that vacancies need not be filled on an annual basis.
- Section 5.05 <u>Chair of the Board.</u> Subject to the control of the Board of Directors, the Chair of the Board of Directors shall direct, and control the activities and affairs of the Board and its officers.
- Section 5.06 <u>Vice-Chair.</u> If the Chair is absent or disabled, the Vice Chair shall perform all duties of the Chair.
- Section 5.07 <u>Secretary.</u> The Secretary shall keep or cause to be kept, a book of minutes or all meetings, proceedings, and actions of the Board of Directors. The minutes of the meetings shall include the time and place that the meeting was held, whether the meeting was annual, regular, or special and if special, how authorized, the notice given, and the names of those present at the Board. In addition, the Secretary shall keep a copy of the Bylaws, as amended to date. TAMUK will provide administrative support to the Secretary.
- Section 5.08 <u>Treasurer.</u> The Treasurer shall keep and maintain, or cause to be kept and maintained, adequate and correct books and accounts of the Task Force. TAMUK will provide administrative support to the Treasurer. This position shall not be filled until the Task Force directly obtains grant or other type of funding.
- Section 5.09 **Reporter.** The Reporter shall promote the Task Force to the media, to public affairs departments, and to publications.



Public Education and Outreach on Storm Water Impacts

Regulatory Text

40 CFR 122.34 (b)(1)(i) You must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.

Guidance

You may use storm water educational materials provided by your state, tribe, EPA, environmental, public interest, or trade organizations, or other MS4s. The public education program should inform individuals and households about the steps they can take to reduce storm water pollution, such as ensuring proper septic system maintenance, ensuring the proper use and disposal of landscape and garden chemicals including fertilizers and pesticides, protecting and restoring riparian vegetation, and properly disposing of used motor oil and household hazardous wastes. EPA recommends that the program inform individuals and groups how to become involved in local stream and beach restoration activities, as well as activities that are coordinated by youth service and conservation corps or other citizen groups. EPA recommends that the public education program be tailored, using a mix of locally appropriate strategies, to target specific audiences and communities. Examples of strategies include distributing brochures or fact sheets, sponsoring speaking engagements before community groups. providing public service announcements, implementing educational programs targeted at school age children, and conducting community-based projects such as storm drain stenciling and watershed and beach cleanups. In addition, EPA recommends that some of the materials or outreach programs be directed toward targeted groups of commercial, industrial, and institutional entities likely to have significant storm water impacts. For example, providing information to restaurants on the impact of grease clogging storm drains, and to garages on the impact of oil discharges. You are encouraged to tailor your outreach program to address the viewpoints and concerns of all communities, particularly minority and disadvantaged communities, as well as any special concerns relating to children.

From the BMPs listed in the following pages, please check off those BMPs your City is already implementing. Include the name of your staff member and department that oversees the implementation of this BMP.

On February 16, 2007, at the Citrus Center, the MS4 Plan Development Committee will meet to finalize the BMP menu for the first minimum measure (Public Education and Outreach) requirements of the MS4 Plan. Committee members please bring this form with you. Non-committee members please try and forward this form filled out to me via email by February 8, 2007. Committee members try and email me your final comments on this form prior to the meeting.

BMP Description

Contact/Information

La	wn and Garden Activities: Encourage and implement good landscape practices.
	Distribute materials about good landscaping
	Landscaping of municipal grounds
	Distributing Texas Smartscape CD
	Tree Farm program
	Compost program
	Christmas tree mulch program
	Encourage reduced fertilizer/pesticide use
	Encourage and practice soil testing
	Encourage efficient irrigation practices
	Library programs/seminars
	Ordinance to protect exposed soils w/vegetation
	Ordinance to control pesticide usage
	Participation w/NCTCOG, other agencies/cities
	Other
Wa	ter Conservation Practices for Homeowners: Public education and outreach
pro	grams about water conservation.
	Water conservation utility insert
	Conservation programs aimed at adults/children
	Check For Leaks program
	Distribute flyers, brochures, manuals
	Provide seminars, presentations, videos
	Encourage efficient irrigation practices
	Participation w/NCTCOG, other agencies/cities
	Other

	BMP Description	Contact/Information
Pro	oper Disposal of Household Hazardous Waste	es
	Household Hazardous Waste (HHW) program	
	Keep Texas Beautiful programs about HHW	
	Brochures, pamphlets, etc., about HHW	
_	Provide presentations, seminars, videos	
	Participation w/NCTCOG, other agencies/citie	
	Other	
Pe	t Waste Management: Practices to reduce effec	ts of pet waste on local waterbodies.
	"Pooper Scooper" Law	
	Educational materials (brochures, flyers)	
	Posting signs	
	Pet waste stations at public parks	
	Participation w/NCTCOG, other agencies/citie	es
	Other	
Tra	ash Management: Practices to reduce trash and	floating debris in waterways.
	Keep Texas Beautiful programs	
	Texas Recycles Day program	
	Public notice of trash pickup/recycling option	ns
	Citizen awareness campaign	
	Flyers, bumper stickers, etc., about littering	
	Polycart trash receptacles	
	Optimizing trash/recycling bin locations	
	Encourage commercial use of less packaging	
	Cleanup campaigns, <i>Adopt-a-Stream</i> , etc.	
	Physical filtering of drainage structures	

	BMP Description	Contact/Information
	Participation w/NCTCOG, other agencies/citi	es
	Other	
	Other	
Ed	ucation/Outreach for Commercial Activities	s: Targeting storm water pollution
me	essages at specific industries and businesses.	
	Incentives for corporate cleanup campaigns	
	(e.g. Corporate Challenge, Adopt-A-Highway/S	Stream, sponsorships for community
	cleanup campaigns)	
	Distribute flyers, posters, magnets, calendar	s
	Presentations/seminars for businesses	
	Distribute vehicle washing procedures mater	rial
	Property maintenance procedures	
	Plan to eliminate illicit discharges	
	Campaigns aimed at auto service centers	
	(i.e. developing and providing information about	t recycling oil, storing and disposing
	of wastes, battery storage, preventing/cleaning I	eaks and spills, etc.)
	Participation w/NCTCOG, other agencies/cities	es
	Other	
Та	iloring Outreach Programs to Minority and	Disadvantaged Communities and
Ch	ildren	
	Bilingual printed pollution prevention materi	als
	Messages in minority-focused newspapers	
	Educational materials aimed at children	
	Partnership with school district	
	Involving children's organization	
	(e.g. Boy Scouts, Girl Scouts, etc.)	

		BMP Description	Contact/Information
		Storm Drain Stenciling	
	_	Wetlands plantings	
		Waterway cleanup campaigns	
	_	articipation w/NCTCOG, other agencies/cities	
		her	
_	<u> </u>		
Cla	assı	room Education on Storm Water Impacts	
	Pa	artnership with the school district	
	Sto	orm water treatment demonstration project _	
	Gr	rade specific educational programs	
	Sp	peaking engagements at schools	
	Mc	odels or Displays for the classroom	
	Pa	articipation w/NCTCOG, other agencies/cities	s
	<u>Otl</u>	her	
Sto	orm	Water Educational Materials: Outreach store	m water pollution materials targeted
at	spe	cific audiences identifying sources of pollution a	and correction activities.
	Sto	orm water quality publications, posters, etc.	
	Au	uto maintenance and car care brochure	
	Au	udience specific distribution methods	
	(e.	g. mail, door-to-door, public locations, business	ses, etc.)
	Pre	esentations at schools, libraries, clubs, etc.	
	То	ourism publication _	
	Me	edia presentations (videos, radio or T.V.)	
	Но	ome pollution flyer	
	Pa	articipation w/NCTCOG, other agencies/cities	s

	BMP Description	Contact/Information
	Other	
Lo	w Impact Development (LID): Tec	hniques for new development and existing
		act on the natural environment (e.g. reduced
	·	of storm drain, grassed swales instead of curb
•		ouffer strips, natural landscaping techniques)
		techniques
	Provide LID design standards	
	Educate property owners about LID	
		uirements
	•	ncies/cities
_	Other Other	
_		
He	ing the Media: Delivering education	nal, promotional, or motivational messages
	ough the news media about storm wate	
	News conference/press advisory	1 100000.
	Television/cable coverage	
	Newspaper coverage	
	Magazine articles	
	Radio spots	
	Internet/web messages	
	•	ncies/cities
	0.11	
	Otner	_

BMP Description

Contact/Information

Pr	omotional Giveaways: Develop storm water education slogans and graphics to
ma	arket the outreach program and display them on promotional giveaways.
	Household Haz. Waste (HHW) program magnets
	Keep Texas Beautiful promotions
	Develop storm water program logo
	Product giveaways
	(e.g. magnets, shirts, hats, stickers, frisbees, coffee mugs, keychains, etc.)
	Participation w/NCTCOG, other agencies/cities
	Other
Ро	ollution Prevention for Businesses: Adopt of Pollution Prevention (P2) Plan (Plan
ain	ned at businesses' efficient source raw material usage, reuse/recycling alternatives
an	d energy recovery)
	Encourage business P2 programs
	Attend or plan a P2 conference
	Maintain database of P2 information
	Provide P2 workshops, newsletters, fact sheets
	Participation w/NCTCOG, other agencies/cities
	Other

BMP Description

Contact/Information

Regulatory Text

40 CFR 122.34 (b)(2)(i) You must, at a minimum, comply with state, tribal, and local public notice requirements when implementing a public involvement/participation program.

Guidance

EPA recommends that the public be included in developing, implementing, and reviewing your storm water management program, and that the public participation process should make efforts to reach out and engage all economic and ethnic groups. Opportunities for members of the public to participate in program development and implementation include serving as citizen representatives on a local storm water management panel, attending public hearings, working as citizen volunteers to educate other individuals about the program, assisting in program coordination with other preexisting programs, or participating in volunteer monitoring efforts. (Citizens should obtain approval where necessary for lawful access to monitoring sites.)

	BMP Description	Contact/Information
Pu	iblic Notice	
	Publish permit requirement in newspaper	
	Hold public hearing about permit requiremen	
	Provide presentations about permit requirem	
	Other	
Sto	orm Drain Stenciling: Labeling storm drain in	lets with painted messages warning
citi	izens to not dump pollutants into the system.	
	Implement volunteer stenciling program	
	Incentives for stenciling (badges, T-shirts, etc.)	
	Advertising the stenciling program	
	Participation w/NCTCOG, other agencies/citi	es
	Other	
St	ream Cleanup and Monitoring:	
	Implement volunteer stream cleanup program	
	Distribute information about program	
	Publicize the program (newspaper, T.V., etc.)	
	Provide participation incentives	
	Participation w/NCTCOG, other agencies/cities	
	Other	
۷n	olunteer Monitoring	
	Implement volunteer monitoring program	
	Provide workshops/technical support	

	BMP Description	Contact/Information
	Advertise the program	
	Provide funding or volunteer incentives	
	Participation w/NCTCOG, other agencies/cities	
	Other	
ш	Other	
Re	forestation programs	
	Implement a volunteer tree planting program	
	Advertise the program	
	Provide funding or volunteer incentives	
	Participation w/NCTCOG, other agencies/cities	
	Other	
We	etland Plantings	
	Implement a volunteer tree planting program	
	Advertise the program	
	Provide funding or volunteer incentives	
	Provide required permitting	
	Participation w/NCTCOG, other agencies/cities	
	Other	
Ad	lopt-A-Stream Programs	
	Implement an Adopt-a-Stream program	
	Advertise the program	
	Provide "how to" packets to volunteers	
	Provide funding or volunteer incentives	

	BMP Description	Contact/Information
_ _	Participation w/NCTCOG, other agencies/cities Other	
Ad	opt-A-Highway/Median Programs	
	Implement an Adopt-a-Highway/Median program	1
	Advertise the program	
	Provide "how to" packets to volunteers	
	Provide funding or volunteer incentives	
	Participation w/NCTCOG, other agencies/cities	
	Other	
	atershed Organization: An organization com	
COI	mmon purpose to restore, protect, and promote the	ne natural resources of a watershed.
	Implement/join a watershed organization	
	Advertise and promote the organization	
	Organize public meetings	
	Provide representation and structure	
	Sponsor volunteer activities	
	Provide private/public funding	
	Collect and analyze data	
	Participation w/NCTCOG, other agencies/cities	es
	Other	

BMP Description

Contact/Information

Sta	akeholder Meetings: Meetings by individuals or groups most affected by a
mu	nicipality's storm water program and have vested interest in the waterbody.
	Identify affected stakeholders by watershed
	Distribute materials about meetings
	Organize meetings
	Inform the public about the meetings
	Participation w/NCTCOG, other agencies/cities
	<u>Other</u>
Att	itude Surveys: Surveys of how the public perceives storm water management to
fos	ter better planning and management programs.
	Determine the survey audience
	Determine survey method (mail, phone, etc.)
	Provide survey questions
	Compile and analyze survey data
	Participation w/NCTCOG, other agencies/cities
	Other
Со	mmunity Hotlines: Provide a means for concerned citizens and agencies to contact
the	appropriate authority when they see water quality problems.
	Determine the need for a hotline
	Telephone or e-mail hotline
	Determine responsible party for hotline
	Distribute hotline information (signs, flyers, etc.)
	Participation w/NCTCOG, other agencies/cities

Regulatory Text

40 CFR 122.34 (b)(3)

(i) You must develop, implement and enforce a program to detect and eliminate illicit discharges (as defined at Sec. 122.26(b)(2)) into your small MS4.

(ii) You must:

- (A) Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and location of all waters of the United States that receive discharges from those outfalls;
- (B) To the extent allowable under State, Tribal or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into your storm sewer system and implement appropriate enforcement procedures and actions;
- (C) Develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to your system; and
- (D) Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.
- (iii) You need address the following categories of non-storm water discharges or flows (i.e., illicit discharges) only if you identify them as significant contributors of pollutants to your small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water (discharges or flows from fire fighting activities are excluded from the effective prohibition against non-storm water and need only be

addressed where they are identified as significant sources of pollutants to waters of the United States).

Guidance

EPA recommends that the plan to detect and address illicit discharges include the following four components: procedures for locating priority areas likely to have illicit discharges; procedures for tracing the source of an illicit discharge; procedures for removing the source of the discharge; and procedures for program evaluation and assessment. EPA recommends visually screening outfalls during dry weather and conducting field tests of selected pollutants as part of the procedures for locating priority areas. Illicit discharge education actions may include storm drain stenciling; a program to promote, publicize, and facilitate public reporting of illicit connections or discharges; and distribution of outreach materials.

	BMP Description	Contact/Information
Sto	orm Sewer System Map	
	Map of the municipal storm system	
	Map format (e.g. hand drawn, CAD, GIS)	
	Identify storm sewer structures and sizes	
	Topography included on map	
	Location of all outfalls identified	
	Location/name of receiving streams identifie	d
	Other	
Or	dinances	
	Ordinances prohibiting illicit discharges	
	Enforcement procedure for ordinances	
	Sanctions to ensure compliance	
	<u>Other</u>	
	ucation: Distribute informational materials abo	out hazards associated with illegal
dis	charges and improper disposal of wastes.	
	Distribute materials to public employees	
	Distribute materials to businesses	
	Distribute materials to public	
	Hold public/private seminars or presentation	s
	Provide videos to schools	
	Storm drain stenciling program	
	Public reporting hotline	
	Participation w/NCTCOG, other agencies/citie	es

	BMP Description	Contact/Information
	Other	
:	eit Die ekenne Detection Dien	
	cit Discharge Detection Plan	
	Develop an Illicit Discharge Detection Plan	
	Designate department responsibility	
	Identify and prioritize potential problem area	ns
	Develop methods to find the source	
	Remove/correct Illicit connections	
	Document corrective actions taken	
	Procedure to evaluate plan's effectiveness	
	Other	
Fa	iling Septic Systems: Prevent new septic s	ystems from failing and detect and
	rect existing systems that have been failing.	·
	Provide system design regulations	
	Provide system location restrictions	
	Postconstruction inspection requirements	
	Septic system management program	
	Field screening techniques	
	Ordinance mandating routine inspections	
	Other	

BMP Description Contact/Information Industrial/Business Connections: Identification and elimination of illegal or inappropriate connections of industrial and business wastewater sources to the storm drain system. □ Field testing dry weather discharges □ Visual inspections □ Piping schematic reviews □ Smoke testing Dye testing New construction inspections □ Other Recreational Sewage: Regulate wastewater generated from outdoor activities such as boating or camping. Directed at municipalities adjacent to recreational lakes. □ Public education about recreational sewage Pumpout stations for boating activities □ No-discharge area designations (i.e. aquatic recreational zones where it is illegal to discharge from a vessel) □ Laws granting local enforcement authority □ Signage □ Other Sanitary Sewer Overflows: Protecting against sanitary sewer overflow occurrences, usually caused by infiltration during heavy storm events or illicit connections. □ Routine sanitary sewer cleaning/maintenance

Routine inspection of sanitary sewer system____

Sanitary sewer maintenance/inspection records

□ Detecting illicit connections to sanitary sewer_____

BMP Description Contact/Information (e.g. smoke testing, dye water flooding, closed circuit TV inspection) □ Ordinance for inspections on private property______ □ Incentives to correct illicit connections □ Other Identifying Illicit Connections: Identifying illegal and/or improper connections to the storm drainage system. □ Building and plumbing codes/ordinances □ Develop prioritized inspection schedule □ Map sanitary and storm sewer locations Mandatory inspections for new development Dye testing □ TV inspections □ Smoke testing Dry weather flow monitoring □ Infrared, aerial and thermal photography □ Other **Illegal Dumping** Public education about illegal dumping □ Signage to report dumping and penalties □ Reporting hotline or website (e.g. Dallas County Illegal Dumping Hotline) Incentives for reporting illegal dumping □ Local Enforcement Monitoring targeted dumping sites □ Storm Drain Stenciling

	BMP Description	Contact/Information
	Citizen cleanup campaign	
	Participation w/NCTCOG, other agencies/citie	S
	Other	
Po	otential BMPs: Other municipal practices targeted	d at reducing locating or eliminating
	cit discharges to the storm sewer system.	a at reducing, locating or eliminating
	Interlocal agreements between cities – sharing TV, sewer camera., etc.)	of equipment, resourcres (i.e. cable

Regulatory Text

40 CFR 122.34 (b)(4)

- (i) You must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre must be included in your program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. If the NPDES permitting authority waives requirements for storm water discharges associated with small construction activity in accordance with Sec. 122.26(b)(15)(i), you are not required to develop, implement, and/or enforce a program to reduce pollutant discharges from such sites.
- (ii) Your program must include the development and implementation of, at a minimum:
 - (A) An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State, Tribal, or local law;
 - (B) Requirements for construction site operators to implement appropriate erosion and sediment control (ESC) best management practices;
 - (C) Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;
 - (D) Procedures for site plan review which incorporate consideration of potential water quality impacts;
 - (E) Procedures for receipt and consideration of information submitted by the public, and

(F) Procedures for site inspection and enforcement of control measures.

Guidance

Examples of sanctions to ensure compliance include nonmonetary penalties, fines, bonding requirements, and/or permit denials for non-compliance. EPA recommends that procedures for site plan review include the review of individual pre-construction site plans to ensure consistency with local (ESC) requirements. Procedures for site inspections and enforcement of control measures could include steps to identify priority sites for inspection and enforcement based on the nature of the construction activity, topography, and the characteristics of soils and receiving water quality.

You are encouraged to provide appropriate educational and training measures for construction site operators. You may wish to require a storm water pollution prevention plan for construction sites within your jurisdiction that discharge into your system. See Sec. 122.44(s) (NPDES permitting authorities' option to incorporate qualifying State, Tribal and local erosion and sediment control programs into NPDES permits for storm water discharges from construction sites). Also see Sec. 122.35(b) (The NPDES permitting authority may recognize that another government entity, including the permitting authority, may be responsible for implementing one or more of the minimum measures on your behalf).

	BMP Description	Contact/Information
Ord	dinance/Regulatory Mechanism	
	Ordinance to regulate construction	
	activities > 1 acre	
	Erosion and sediment control ordinance	
	Grading ordinance for requirements to	
	 Use good site planning 	
	 Minimize soil movement 	
	 Capture sediment runoff 	
	 Implement good housekeeping 	
	Required Storm Water Pollution Prevention	
	Plan (SWP3)	
	Sanctions to ensure compliance	
	Construction site waste ordinance	
	Provide/adopt technical manual for	
	construction site storm water controls	
	Other	
Со	nstruction Site Plan Review Program	
	Develop a site plan review program	
	Procedures for City review of construction plans	
	Pre-construction site visits and meetings	
	Requirement for erosion control plan/SWPPP	
	Require use of technical manual for	
	construction site storm water controls	
	Erosion control/construction sequencing	
	Requirement for site trash/waste control	
	NOI submittal requirement	
	Contractor training seminars	

	BMP Description	Contact/Information
	Other	
Pu	blic Input Mechanism: Develop a means to r	receive public input concerning local
COI	nstruction activities.	
	Develop format for public input (e-mail, form)	
	Provide reporting hotline	
	Inform the public about the input mechanism	
	Develop tracking process	
	Develop response procedures	
	Other	
Ins	spections and Penalties	
	Develop site inspection requirements	
	Develop procedures for site inspection	
	Enforcement mechanism for failed inspection	
	Penalty assessment	
	Other	
Co	nstruction Site Good Housekeeping Practic	es: Develop construction site waste
COI	ntrol, education and awareness programs.	
	Construction site waste management policy	
	Spill prevention and control plan	
	Require vehicle maintenance and washing area	s
	Contractor certification and inspector training	
	Erosion control inspection and maint. schedule	

	BMP Description	Contact/Information
	Other	
-	anian and Cadimant Cantral DMDs. Duneff	
	osion and Sediment Control BMPs: Runoff, el	•
•	Ordinance or recommended by municipal construction sites	
	Provide technical manual with construction site	
	storm water control practices/requirements	
	Dunaff a sufue la sua casa de la minima de suina de	
•	Runoff controls are used to minimize clearing	and stabilize drainage ways.
_	Site fingerprinting (minimize <u>cleared</u> area)	
_	Permanent diversions	
	Preserving natural vegetation	
	Stabilized construction entrances/exits	
	Check dams	
	Filter berms	
	Grass-lined channels	
	Rock Riprap protection	
	Other	
		_
	_	_
•	Erosion controls are used to stabilize expo	sed soils, protect steep slopes and
	waterways.	
	Chemical stabilization	
	Mulching for stabilization	
	Permanent seeding	
	Sodding	
	Soil roughening	
	Geotextiles	
	Gradient terraces	

	BMP Description	Contact/Information
	Soil retention structures (retaining walls)	
	Temporary slope drain	
	Temporary stream crossings	
	Vegetated buffer	
	Dust control	
	Other	
•	Sediment controls are used to control or filte	r out and trap sediment to prevent it
	from entering the storm system or natural draina	age way.
	Temporary diversion dikes	
	Wind fences and sand fences	
	Brush barrier	
	Silt fence	
	Sediment basins and rock dams	
	Sediment filters and sediment chambers	
	Sediment trap	
	Storm drain inlet protection	
	Other	

BMP Description	Contact/Information
Potential BMPs: Other municipal practice construction sites.	s developed to reduce polluted runoff from

Regulatory Text

40 CFR 122.34 (b)(5)

(i) You must develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb 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, that discharge into your small MS4. Your program must ensure that controls are in place that would prevent or minimize water quality impacts.

(ii) You must:

- (A) Develop and implement strategies which include a combination of structural and/or non-structural best management practices (BMPs) appropriate for your community;
- (B) Use an ordinance or other regulatory mechanism to address postconstruction runoff from new development and redevelopment projects to the extent allowable under State, Tribal or local law;
- (C) Ensure adequate long-term operation and maintenance of BMPs.

Guidance

If water quality impacts are considered from the beginning stages of a project, new development and potentially redevelopment provide more opportunities for water quality protection. EPA recommends that the BMPs chosen: be appropriate for the local community; minimize water quality impacts; and attempt to maintain pre-development runoff conditions. In choosing appropriate BMPs, EPA encourages you to participate in locally-based watershed planning efforts which attempt to involve a diverse group of stakeholders including interested citizens. When developing a program that is consistent with this measure's intent, EPA recommends that you adopt a planning process that identifies the municipality's program goals (e.g., minimize water quality impacts resulting from post-construction runoff from new development and redevelopment),

implementation strategies (e.g., adopt a combination of structural and/or non-structural BMPs), operation and maintenance policies and procedures, and enforcement procedures. In developing your program, you should consider assessing existing ordinances, policies, programs and studies that address storm water runoff quality. In addition to assessing these existing documents and programs, you should provide opportunities to the public to participate in the development of the program. Nonstructural BMPs are preventative actions that involve management and source controls such as: policies and ordinances that provide requirements and standards to direct growth to identified areas, protect sensitive areas such as wetlands and riparian areas, maintain and/or increase open space (including a dedicated funding source for open space acquisition), provide buffers along sensitive water bodies, minimize impervious surfaces, and minimize disturbance of soils and vegetation; policies or ordinances that encourage infill development in higher density urban areas, and areas with existing infrastructure; education programs for developers and the public about project designs that minimize water quality impacts; and measures such as minimization of percent impervious area after development and minimization of directly connected impervious areas. Structural BMPs include: storage practices such as wet ponds and extendeddetention outlet structures; filtration practices such as grassed swales, sand filters and filter strips; and infiltration practices such as infiltration basins and infiltration trenches. EPA recommends that you ensure the appropriate implementation of the structural BMPs by considering some or all of the following: pre-construction review of BMP designs; inspections during construction to verify BMPs are built as designed; postconstruction inspection and maintenance of BMPs; and penalty provisions for the noncompliance with design, construction or operation and maintenance. Storm water technologies are constantly being improved, and EPA recommends that your requirements be responsive to these changes, developments or improvements in control technologies.

	BMP Description	Contact/Information
Or	dinance/Regulatory Mechanism	
	Ordinance to regulate construction	
	activities > 1 acre	
	Ordinance for development runoff controls	
	Erosion and sediment control ordinance	
	Required Storm Water Pollution Prevention	
	Plan (SWP3)	
	Grading ordinance for requirements to	
	 Use good site planning 	
	 Minimize soil movement 	
	 Capture sediment runoff 	
	 Implement good housekeeping 	
	Sanctions to ensure compliance	
	Construction site waste ordinance	
	Provide/adopt technical manual for	
	construction site storm water controls	
	Other	
Str	ructural Controls - Constructed ponds, infilt	ration practices, filtration practices,
veç	getative practices and runoff pretreatment practic	es.
	Detention ponds	
	Retention ponds (a.k.a. wet ponds)	
	Infiltration basin	
	Infiltration trench	
	Porous pavement	
	Bioretention	
	Sand and organic filters	
	Storm water wetlands	

		BMP Description	Contact/Information
	Gr	assed swales	
	Gr	assed filter strips	
	Ca	atch basins	
	In-	line storage	
	Αlι	um Injection	
	Me	echanical filters (e.g. hydrodynamic	
	str	uctures, swirl separators)	
	<u>Ot</u>	her	
Lo	w	Impact Development (LID): Techniques	for new development and existing
de	/elc	opments that have a reduced impact on the na	atural environment.
	En	acourage developers to adopt LID techniques	
	Pr	ovide LID design standards	
		Reduced paving width options	
		Curb cuts instead of storm drain	
		Cul-de-sacs with pervious island	
		Eliminating curb and gutter	
		Green parking (pervious surface parking)	
		Alternative permeable pavers	
		Indigenous landscaping techniques	
		Filter and buffer strips	
	Ed	lucate property owners about LID	
	Сс	ommunicate LID maintenance requirements	
	Pa	articipation w/NCTCOG, other agencies/cities	
	<u>Ot</u>	her	

	BMP Description	Contact/Information
	n-Lot Treatment Practices: Treatment practice	es for citizens that reduce runoff and
•	Illutants in storm water.	
_	Rain barrels to collect & reuse rooftop runoff	
	Rooftop runoff infiltration techniques	
	Lot bioretention practices	
	Distribute information on treatment techniques	
	Incentives for on-lot treatment	
	Other	
Sit	e Design Techniques/Planning	
	Buffer zones along wetlands or streams	
	Regulations for open space design	
	Urban forestry (tree ordinance, tree farm)	
	Conservation easements for open space	
	Infrastructure planning for redevelopment	
	Ordinances controlling postconstruction runoff	
	Other	
Zo	ning Techniques	
	Watershed based zoning	
	Overlay zoning	
	Impervious Overlay zoning	
	Floating zones	
	Incentive zoning for amenities	
	Performance zoning	

□ Urban growth boundaries

	BMP Description	Contact/Information
	Large lot zoning	
_	Infill/Community Redevlopment	
_	Transfer of Development Rights (TDRs)	
_	Limiting Infrastructure Extensions	
	Other	
_		
En	sure Long-Term BMP Operation and Maintena	ince
	Ordinance requiring permanent post-	
	construction runoff controls	
	HOA maintenance agreements	
	Transfer of maintenance requirements	
	Procedure for post-construction inspection	
	Enforcement actions	
	Other	
	tential BMPs: Other municipal practices or policality conditions after an area has been developed	-

Pollution Prevention/Good Housekeeping for Municipal Operations

Regulatory Text

40 CFR 122.34 (b)(6)(i) You must develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. Using training materials that are available from EPA, your State, Tribe, or other organizations, your program must include employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance.

Guidance

EPA recommends that, at a minimum, you consider the following in developing your program: maintenance activities, maintenance schedules, and long-term inspection procedures for structural and nonstructural storm water controls to reduce floatables and other pollutants discharged from your separate storm sewers; controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, fleet or maintenance shops with outdoor storage areas, salt/sand storage locations and snow disposal areas operated by you, and waste transfer stations; procedures for properly disposing of waste removed from the separate storm sewers and areas listed above (such as dredge spoil, accumulated sediments, floatables, and other debris); and ways to ensure that new flood management projects assess the impacts on water quality and examine existing projects for incorporating additional water quality protection devices or practices. Operation and maintenance should be an integral component of all storm water management programs. This measure is intended to improve the efficiency of these programs and require new programs where necessary. Properly developed and implemented operation and maintenance programs reduce the risk of water quality problems.

Pollution Prevention/Good Housekeeping for Municipal Operations

BMP Description

Contact/Information

Mι	unicipal Employee Training: Training for munic	cipal employees through seminars, in-
ho	use training sessions, new employee training, v	videos, manuals, handbooks or other
me	eans to prevent and reduce storm water pollu	tion from municipal activities. Such
tra	ining activities include:	
	Stormwater quality	
	Public park maintenance (pools, grounds)	
	Street, road and highway maintenance	
	Vehicle fleet maintenance	
	Building maintenance	
	New construction techniques	
	Erosion control for land disturbance	
	Storm system maintenance	
	Hazardous waste handling	
	Recycling techniques	
	Waste transfer/disposal	
	Spill prevention	
	Spill notification and response	
	Other	
St	ockpiled Materials Program: Proper protection	of usable stockpiled materials and/or
	oper removal and disposal of unusable materials	·
	Identify all stockpiled materials and intended us	
	Recycle or dispose of unusable materials	
	Erosion control for usable materials	
	Covered salt/sand stockpiles for deicing roads	
	Training on stockpiling and protection	
_	Other	
٠		

Pollution Prevention/Good Housekeeping for Municipal Operations

BMP Description

Contact/Information

Mu	nicipal Vehicle Fleet		
	Vehicle inspection and maintenance plan/procedure		
	Covered vehicle/equipment parking and storage		
	Paved and covered fueling area		
	Vehicle washing methods		
	Alternative fuel vehicles		
	Used oil recycling program		
	Other		
Sp	ill Response and Prevention Plans		
	Identify potential spill or source areas		
	Provide spill response plan, handbook, signs		
	Document spill response equip. & procedures		
	Document spill response instructions		
	Install leak detection devices/overflow controls		
	Identify/disconnect drains connected to storm sewer		
	Preventative equipment maint. (tanks, valves)		
	Provide material transfer procedures		
	Recycling, reclaiming, reusing process materials		
	Substitute less toxic materials		
	Material inventory documentation		
	Accessible MSDS documentation		
	Other		

	BMP Description	Contact/Information
So	ource Controls	
	Program for street/parking lot sweeping	
	Storm drain system cleaning program	
	Vactor truck for storm drain cleaning	
	Park maintenance program	
	Discharge ordinance for chlorinated water	
	Provide alternative discharge options for pools	
	Safer alternative products options	
	Proper storage of hazardous materials	
	Other	
Ro	ad and Bridge Maintenance	
	Planning for resurfacing operations	
	Using erosion controls during repairs	
	Using porous asphalt for repairs	
	Regular sweeping or vacuuming	
	Proper application of road salt/sand	
	Maintenance of roadside vegetation	
	Reduce use of bridge scupper drains	
	Roadside litter controls	
	Other	
Μι	unicipal Construction Activities: Storm water	er quality practices for construction
pro	pjects performed or directed by the municipality.	
	Requirements for a SWP3	
	SWP3 development guidelines	
	Inspection procedures for SWP3	

	BMP Description	Contact/Information
	Other	
Pot	ential BMPs: Other practices, mainte	nance procedures or training programs that
	vent or reduce pollutant runoff from mun	

Public Involvement/Participation

From the BMPs listed in the following pages, please check off those BMPs your City is already implementing. Include the name of your staff member and department that oversees the implementation of this BMP.

On April 18, 2007, (10am) at the Citrus Center, the MS4 Plan Development Committee will meet to finalize the BMP menu for the second minimum measure (Public Participation) requirements of the MS4 Plan. Committee members please bring this form with you. Non-committee members please try and forward this form filled out to me via email by April 13, 2007. Committee members try and email me your final comments on this form prior to the meeting.

Regulatory Text

40 CFR 122.34 (b)(2)(i) You must, at a minimum, comply with state, tribal, and local public notice requirements when implementing a public involvement/participation program.

Guidance

EPA recommends that the public be included in developing, implementing, and reviewing your storm water management program, and that the public participation process should make efforts to reach out and engage all economic and ethnic groups. Opportunities for members of the public to participate in program development and implementation include serving as citizen representatives on a local storm water management panel, attending public hearings, working as citizen volunteers to educate other individuals about the program, assisting in program coordination with other preexisting programs, or participating in volunteer monitoring efforts. (Citizens should obtain approval where necessary for lawful access to monitoring sites.)

Pu	blic Notice	
	Publish permit requirement in newspaper	
	Hold public hearing about permit requirement	
	Provide presentations about permit requirement	
	Other	
Sto	orm Drain Stenciling: Labeling storm drain inl	ets with painted messages warning
citi	zens to not dump pollutants into the system.	
	Implement volunteer stenciling program	
	Incentives for stenciling (badges, T-shirts, etc.)	
	Advertising the stenciling program	
	Participation w/NCTCOG, other agencies/cities	
	Other	
Stı	ream Cleanup and Monitoring:	
	Implement volunteer stream cleanup program	
	Distribute information about program	
	Publicize the program (newspaper, T.V., etc.)	
	Provide participation incentives	
	Participation w/NCTCOG, other agencies/cities	
	Other	
	_	
	_	
Vo	lunteer Monitoring	
	Implement volunteer monitoring program	
	Provide workshops/technical support	
	Advertise the program	
	Provide funding or volunteer incentives	
	Participation w/NCTCOG, other agencies/cities	

	Other	
Re	forestation programs	
	Implement a volunteer tree planting program	
	Advertise the program	
	Provide funding or volunteer incentives	
	Participation w/NCTCOG, other agencies/cities	
	Other	
We	tland Plantings	
	Implement a volunteer tree planting program	
	Advertise the program	
	Provide funding or volunteer incentives	
	Provide required permitting	
	Participation w/NCTCOG, other agencies/cities	
	Other	
Ad	opt-A-Stream Programs	
	Implement an Adopt-a-Stream program	
	Advertise the program	
	Provide "how to" packets to volunteers	
	Provide funding or volunteer incentives	
	Participation w/NCTCOG, other agencies/cities	
	Other	

	Implement an Adopt-a-Highway/Median program
	Advertise the program
	Provide "how to" packets to volunteers
	Provide funding or volunteer incentives
	Participation w/NCTCOG, other agencies/cities
	Other
Wa	atershed Organization: An organization composed of different groups with a
CO	mmon purpose to restore, protect, and promote the natural resources of a watershed.
	Implement/join a watershed organization
	Advertise and promote the organization
	Organize public meetings
	Provide representation and structure
	Sponsor volunteer activities
	Provide private/public funding
	Collect and analyze data
	Participation w/NCTCOG, other agencies/cities
	Other

	nicipality's storm water program and have vested Identify affected stakeholders by watershed Distribute materials about meetings Organize meetings Inform the public about the meetings Participation w/NCTCOG, other agencies/cities Other	I intere	st in the	e waterl	body.	
	itude Surveys: Surveys of how the public per	ceives	storm	water	manager	nent to
	ter better planning and management programs.					
	Determine the survey audience					
_	Determine survey method (mail, phone, etc.)					
	Provide survey questions					
	Compile and analyze survey data					
	Other					
Co	mmunity Hatlinga, Dravida a magna for concer	nad ail	izono d	nd oao	noina ta	aantaat
	mmunity Hotlines: Provide a means for concer			inu age	ncies to	Contact
	appropriate authority when they see water qualit	y prob	ems.			
_	Determine the need for a hotline					
	Telephone or e-mail hotline					
	Determine responsible party for hotline					
	Distribute hotline information (signs, flyers, etc.)					
	Participation w/NCTCOG, other agencies/cities					
	Other					

Potential	BM	Ps:	Other	city	practi	ices	that	involv	e the	public	in	dev	eloping,
implement	ing,	and	reviev	ving	aspect	s of	stor	m wa	ter ma	anagem	ent	and	provide
opportuniti	ies fo	or pub	olic part	icipa	tion.								

Illicit Discharge Detection and Elimination

From the BMPs listed in the following pages, please check off those BMPs your City is already implementing. Include the name of your staff member and department that oversees the implementation of this BMP.

On May 17, 2007, (10am) at the Citrus Center, the MS4 Plan Development Committee will meet to finalize the BMP menu for the second minimum measure (Public Participation) requirements of the MS4 Plan. Committee members please bring this form with you. Non-committee members please try and forward this form filled out to me via email by April 30, 2007. Committee members try and email me your final comments on this form prior to the meeting.

Regulatory Text

40 CFR 122.34 (b)(3)

(i) You must develop, implement and enforce a program to detect and eliminate illicit discharges (as defined at Sec. 122.26(b)(2)) into your small MS4.

(ii) You must:

- (A) Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and location of all waters of the United States that receive discharges from those outfalls;
- (B) To the extent allowable under State, Tribal or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into your storm sewer system and implement appropriate enforcement procedures and actions;
- (C) Develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to your system; and

Illicit Discharge Detection and Elimination

(D) Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.

(iii) You need address the following categories of non-storm water discharges or flows (i.e., illicit discharges) only if you identify them as significant contributors of pollutants to your small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water (discharges or flows from fire fighting activities are excluded from the effective prohibition against non-storm water and need only be addressed where they are identified as significant sources of pollutants to waters of the United States).

Guidance

EPA recommends that the plan to detect and address illicit discharges include the following four components: procedures for locating priority areas likely to have illicit discharges; procedures for tracing the source of an illicit discharge; procedures for removing the source of the discharge; and procedures for program evaluation and assessment. EPA recommends visually screening outfalls during dry weather and conducting field tests of selected pollutants as part of the procedures for locating priority areas. Illicit discharge education actions may include storm drain stenciling; a program to promote, publicize, and facilitate public reporting of illicit connections or discharges; and distribution of outreach materials.

Sto	orm Sewer System Map	
	Map of the municipal storm system	
	Map format (e.g. hand drawn, CAD, GIS)	
	Identify storm sewer structures and sizes	
	Topography included on map	
	Location of all outfalls identified	
	Location/name of receiving streams identified	
	Other	
	_	
Or	dinances	
	Ordinances prohibiting illicit discharges	
	Enforcement procedure for ordinances	
	Sanctions to ensure compliance	
	Other	
Ed	ucation: Distribute informational materials at	oout hazards associated with illegal
dis	charges and improper disposal of wastes.	
	Distribute materials to public employees	
	Distribute materials to businesses	
	Distribute materials to public	
	Hold public/private seminars or presentations	
	Provide videos to schools	
	Storm drain stenciling program	
	Public reporting hotline	
	Participation w/NCTCOG, other agencies/cities	
	Other	

IIIi	cit Discharge Detection Plan						
	Develop an Illicit Discharge Detection Plan						
	Designate department responsibility						
	Identify and prioritize potential problem areas						
	Develop methods to find the source						
	Remove/correct Illicit connections						
	Document corrective actions taken						
	Procedure to evaluate plan's effectiveness						
	Other						
Fa	iling Septic Systems: Prevent new septic s	systems f	rom	failing	and	detect	and
CO	rrect existing systems that have been failing.						
	Provide system design regulations						
	Provide system location restrictions						
	Postconstruction inspection requirements						
	Septic system management program						
	Field screening techniques						
	Ordinance mandating routine inspections						
	Other						

Inc	dustrial/Business Connections: Identification and elimination of illegal o
ina	ppropriate connections of industrial and business wastewater sources to the storm
dra	ain system.
	Field testing dry weather discharges
	Visual inspections
	Piping schematic reviews
	Smoke testing
	Dye testing
	New construction inspections
	Other
Re	creational Sewage: Regulate wastewater generated from outdoor activities such as
bo	ating or camping. Directed at municipalities adjacent to recreational lakes.
	Public education about recreational sewage
	Pumpout stations for boating activities
	No-discharge area designations (i.e. aquatic recreational zones where it is illegal to
	discharge from a vessel)
	Laws granting local enforcement authority
	Signage
	Other
Sa	nitary Sewer Overflows: Protecting against sanitary sewer overflow occurrences
usi	ually caused by infiltration during heavy storm events or illicit connections.
	Routine sanitary sewer cleaning/maintenance
	Routine inspection of sanitary sewer system
	Sanitary sewer maintenance/inspection records
	Detecting illicit connections to sanitary sewer
	(e.g. smoke testing, dye water flooding, closed circuit TV inspection)
	Ordinance for inspections on private property

	Incentives to correct illicit connections	
	Other	
lde	entifying Illicit Connections: Identifying illegal	and/or improper connections to the
	orm drainage system.	
	Building and plumbing codes/ordinances	
	Develop prioritized inspection schedule	
	Map sanitary and storm sewer locations	
	Mandatory inspections for new development	
	Dye testing	
	TV inspections	
	Smoke testing	
	Dry weather flow monitoring	
	Infrared, aerial and thermal photography	
	Other	
IIIe	egal Dumping	
	Public education about illegal dumping	
	Signage to report dumping and penalties	
	Reporting hotline or website	
	(e.g. Dallas County Illegal Dumping Hotline)	
	Incentives for reporting illegal dumping	
	Local Enforcement	
	Monitoring targeted dumping sites	
	Storm Drain Stenciling	
	Citizen cleanup campaign	
	Participation w/NCTCOG, other agencies/cities	

□ Other
Potential BMPs: Other municipal practices targeted at reducing, locating or eliminating
illicit discharges to the storm sewer system.

Construction Site Storm Water Runoff Control

From the BMPs listed in the following pages, please check off those BMPs your City is already implementing. Include the name of your staff member and department that oversees the implementation of this BMP.

On May 17, 2007, (10am) at the Citrus Center, the MS4 Plan Development Committee will meet to finalize the BMP menu for the second minimum measure (Public Participation) requirements of the MS4 Plan. Committee members please bring this form with you. Non-committee members please try and forward this form filled out to me via email by April 30, 2007. Committee members try and email me your final comments on this form prior to the meeting.

Regulatory Text

40 CFR 122.34 (b)(4)

- (i) You must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre must be included in your program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. If the NPDES permitting authority waives requirements for storm water discharges associated with small construction activity in accordance with Sec. 122.26(b)(15)(i), you are not required to develop, implement, and/or enforce a program to reduce pollutant discharges from such sites.
- (ii) Your program must include the development and implementation of, at a minimum:
 - (A) An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State, Tribal, or local law;

Construction Site Storm Water Runoff Control

- (B) Requirements for construction site operators to implement appropriate erosion and sediment control (ESC) best management practices;
- (C) Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;
- (D) Procedures for site plan review which incorporate consideration of potential water quality impacts;
- (E) Procedures for receipt and consideration of information submitted by the public, and
- (F) Procedures for site inspection and enforcement of control measures.

Guidance

Examples of sanctions to ensure compliance include nonmonetary penalties, fines, bonding requirements, and/or permit denials for non-compliance. EPA recommends that procedures for site plan review include the review of individual pre-construction site plans to ensure consistency with local (ESC) requirements. Procedures for site inspections and enforcement of control measures could include steps to identify priority sites for inspection and enforcement based on the nature of the construction activity, topography, and the characteristics of soils and receiving water quality.

You are encouraged to provide appropriate educational and training measures for construction site operators. You may wish to require a storm water pollution prevention plan for construction sites within your jurisdiction that discharge into your system. See Sec. 122.44(s) (NPDES permitting authorities' option to incorporate qualifying State, Tribal and local erosion and sediment control programs into NPDES permits for storm water discharges from construction sites). Also see Sec. 122.35(b) (The NPDES permitting authority may recognize that another government entity, including the

Construction Site Storm Water Runoff Control

permitting authority, may be responsible for implementing one or more of the minimum measures on your behalf).

Oi	dinance/Regulatory Mechanism
	Ordinance to regulate construction
	activities > 1 acre
	Erosion and sediment control ordinance
	Grading ordinance for requirements to
	Use good site planning
	o Minimize soil movement
	o Capture sediment runoff
	Implement good housekeeping
	Required Storm Water Pollution Prevention
	Plan (SWP3)
	Sanctions to ensure compliance
	Construction site waste ordinance
	Provide/adopt technical manual for
	construction site storm water controls
	Other
Co	nstruction Site Plan Review Program
Co	nstruction Site Plan Review Program Develop a site plan review program
	-
	Develop a site plan review program
_ _	Develop a site plan review program Procedures for City review of construction plans
	Develop a site plan review program Procedures for City review of construction plans Pre-construction site visits and meetings
	Develop a site plan review program Procedures for City review of construction plans Pre-construction site visits and meetings Requirement for erosion control plan/SWPPP
	Develop a site plan review program Procedures for City review of construction plans Pre-construction site visits and meetings Requirement for erosion control plan/SWPPP Require use of technical manual for
	Develop a site plan review program Procedures for City review of construction plans Pre-construction site visits and meetings Requirement for erosion control plan/SWPPP Require use of technical manual for construction site storm water controls
	Develop a site plan review program Procedures for City review of construction plans Pre-construction site visits and meetings Requirement for erosion control plan/SWPPP Require use of technical manual for construction site storm water controls Erosion control/construction sequencing
	Develop a site plan review program Procedures for City review of construction plans Pre-construction site visits and meetings Requirement for erosion control plan/SWPPP Require use of technical manual for construction site storm water controls Erosion control/construction sequencing Requirement for site trash/waste control
	Develop a site plan review program Procedures for City review of construction plans Pre-construction site visits and meetings Requirement for erosion control plan/SWPPP Require use of technical manual for construction site storm water controls Erosion control/construction sequencing Requirement for site trash/waste control NOI submittal requirement

Publ	lic Input Mechanism: Develop a means to re-	ceive public input concerning local
cons	struction activities.	
_ C	Develop format for public input (e-mail, form)	
□ P	Provide reporting hotline	
□ Ir	nform the public about the input mechanism _	
	Develop tracking process _	
	Develop response procedures _	
□ <u>C</u>	Other	
_		
_		
-	pections and Penalties	
	Develop site inspection requirements	
	Develop procedures for site inspection	
_ E	Enforcement mechanism for failed inspection _	
□ P	Penalty assessment	
	Other Other	
_		
-		
_		5
	struction Site Good Housekeeping Practices	s: Develop construction site waste
	rol, education and awareness programs.	
	Construction site waste management policy	
	Spill prevention and control plan	
	Require vehicle maintenance and washing areas_	
_ E	•	
	Erosion control inspection and maint. schedule _	
□ <u>C</u>	·	
<u> </u>	Erosion control inspection and maint. schedule _	
<u> </u>	Erosion control inspection and maint. schedule _	
- -	Erosion control inspection and maint. schedule	
Eros	Erosion control inspection and maint. schedule _	sion and sediment controls required

	storm water control practices/requirements	
•	Runoff controls are used to minimize clearing	g and stabilize drainage ways.
	Site fingerprinting (minimize cleared area)	, ,
	Permanent diversions	
	Preserving natural vegetation	
	Stabilized construction entrances/exits	
	Check dams	
	Filter berms	
	Grass-lined channels	
	Rock Riprap protection	
	Other	
•	Erosion controls are used to stabilize exp	osed soils, protect steep slopes and
	waterways.	
	waterways. Chemical stabilization	
	·	
	Chemical stabilization	
	Chemical stabilization Mulching for stabilization	
	Chemical stabilization Mulching for stabilization Permanent seeding	
_ 	Chemical stabilization Mulching for stabilization Permanent seeding Sodding	
	Chemical stabilization Mulching for stabilization Permanent seeding Sodding Soil roughening	
	Chemical stabilization Mulching for stabilization Permanent seeding Sodding Soil roughening Geotextiles	
	Chemical stabilization Mulching for stabilization Permanent seeding Sodding Soil roughening Geotextiles Gradient terraces	
	Chemical stabilization Mulching for stabilization Permanent seeding Sodding Soil roughening Geotextiles Gradient terraces Soil retention structures (retaining walls)	
	Chemical stabilization Mulching for stabilization Permanent seeding Sodding Soil roughening Geotextiles Gradient terraces Soil retention structures (retaining walls) Temporary slope drain	
	Chemical stabilization Mulching for stabilization Permanent seeding Sodding Soil roughening Geotextiles Gradient terraces Soil retention structures (retaining walls) Temporary slope drain Temporary stream crossings	
	Chemical stabilization Mulching for stabilization Permanent seeding Sodding Soil roughening Geotextiles Gradient terraces Soil retention structures (retaining walls) Temporary slope drain Temporary stream crossings Vegetated buffer	
	Chemical stabilization Mulching for stabilization Permanent seeding Sodding Soil roughening Geotextiles Gradient terraces Soil retention structures (retaining walls) Temporary slope drain Temporary stream crossings Vegetated buffer Dust control	

•	Sediment controls are used to control or filter out and trap sediment to prevent it
	from entering the storm system or natural drainage way.
	Temporary diversion dikes
	Wind fences and sand fences
	Brush barrier
	Silt fence
	Sediment basins and rock dams
	Sediment filters and sediment chambers
	Sediment trap
	Storm drain inlet protection
	Other

Potential BMPs:	Other	municipal	practices	developed	to reduce	polluted	runoff fron
construction sites	·.						

From the BMPs listed in the following pages, please check off those BMPs your City is already implementing. Include the name of your staff member and department that oversees the implementation of this BMP.

On May 17, 2007, (10am) at the Citrus Center, the MS4 Plan Development Committee will meet to finalize the BMP menu for the second minimum measure (Public Participation) requirements of the MS4 Plan. Committee members please bring this form with you. Non-committee members please try and forward this form filled out to me via email by April 30, 2007. Committee members try and email me your final comments on this form prior to the meeting.

Regulatory Text

40 CFR 122.34 (b)(5)

(i) You must develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb 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, that discharge into your small MS4. Your program must ensure that controls are in place that would prevent or minimize water quality impacts.

(ii) You must:

- (A) Develop and implement strategies which include a combination of structural and/or non-structural best management practices (BMPs) appropriate for your community;
- (B) Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State, Tribal or local law;
- (C) Ensure adequate long-term operation and maintenance of BMPs.

Guidance

If water quality impacts are considered from the beginning stages of a project, new development and potentially redevelopment provide more opportunities for water quality protection. EPA recommends that the BMPs chosen: be appropriate for the local community; minimize water quality impacts; and attempt to maintain pre-development runoff conditions. In choosing appropriate BMPs, EPA encourages you to participate in locally-based watershed planning efforts which attempt to involve a diverse group of stakeholders including interested citizens. When developing a program that is consistent with this measure's intent, EPA recommends that you adopt a planning process that identifies the municipality's program goals (e.g., minimize water quality impacts resulting post-construction runoff from new development and redevelopment). from implementation strategies (e.g., adopt a combination of structural and/or non-structural BMPs), operation and maintenance policies and procedures, and enforcement procedures. In developing your program, you should consider assessing existing ordinances, policies, programs and studies that address storm water runoff quality. In addition to assessing these existing documents and programs, you should provide opportunities to the public to participate in the development of the program. Nonstructural BMPs are preventative actions that involve management and source controls such as: policies and ordinances that provide requirements and standards to direct growth to identified areas, protect sensitive areas such as wetlands and riparian areas, maintain and/or increase open space (including a dedicated funding source for open space acquisition), provide buffers along sensitive water bodies, minimize impervious surfaces, and minimize disturbance of soils and vegetation; policies or ordinances that encourage infill development in higher density urban areas, and areas with existing infrastructure; education programs for developers and the public about project designs that minimize water quality impacts; and measures such as minimization of percent impervious area after development and minimization of directly connected impervious areas. Structural BMPs include: storage practices such as wet ponds and extendeddetention outlet structures; filtration practices such as grassed swales, sand filters and filter strips; and infiltration practices such as infiltration basins and infiltration trenches.

EPA recommends that you ensure the appropriate implementation of the structural BMPs by considering some or all of the following: pre-construction review of BMP designs; inspections during construction to verify BMPs are built as designed; post-construction inspection and maintenance of BMPs; and penalty provisions for the noncompliance with design, construction or operation and maintenance. Storm water technologies are constantly being improved, and EPA recommends that your requirements be responsive to these changes, developments or improvements in control technologies.

	BMP Description	Contact/Information
Or	dinance/Regulatory Mechanism	
	Ordinance to regulate construction	
	activities > 1 acre	
	Ordinance for development runoff controls	
	Erosion and sediment control ordinance	
	Required Storm Water Pollution Prevention	
	Plan (SWP3)	
	Grading ordinance for requirements to	
	 Use good site planning 	
	 Minimize soil movement 	
	 Capture sediment runoff 	
	 Implement good housekeeping 	
	Sanctions to ensure compliance	
	Construction site waste ordinance	
	Provide/adopt technical manual for	
	construction site storm water controls	
	Other	
Str	ructural Controls - Constructed ponds, infilt	ration practices, filtration practices,
veç	getative practices and runoff pretreatment practic	es.
	Detention ponds	
	Retention ponds (a.k.a. wet ponds)	
	Infiltration basin	
	Infiltration trench	
	Porous pavement	
	Bioretention	
	Sand and organic filters	
	Storm water wetlands	

		BMP Description	Contact/Information
	Gr	assed swales	
	Gr	assed filter strips	
	Ca	atch basins	
	In-	line storage	
	Αlι	um Injection	
	Me	echanical filters (e.g. hydrodynamic	
	str	uctures, swirl separators)	
	<u>Ot</u>	her	
Lo	w	Impact Development (LID): Techniques	for new development and existing
de	/elc	opments that have a reduced impact on the na	atural environment.
	En	acourage developers to adopt LID techniques	
	Pr	ovide LID design standards	
		Reduced paving width options	
		Curb cuts instead of storm drain	
		Cul-de-sacs with pervious island	
		Eliminating curb and gutter	
		Green parking (pervious surface parking)	
		Alternative permeable pavers	
		Indigenous landscaping techniques	
		Filter and buffer strips	
	Ed	lucate property owners about LID	
	Сс	ommunicate LID maintenance requirements	
	Pa	articipation w/NCTCOG, other agencies/cities	
	<u>Ot</u>	her	

	BMP Description	Contact/Information			
	On-Lot Treatment Practices: Treatment practices for citizens that reduce runoff and				
•	Ilutants in storm water.				
_	Rain barrels to collect & reuse rooftop runoff				
	Rooftop runoff infiltration techniques				
	Lot bioretention practices				
	Distribute information on treatment techniques				
	Incentives for on-lot treatment				
	Other				
Sit	e Design Techniques/Planning				
	Buffer zones along wetlands or streams				
	Regulations for open space design				
	Urban forestry (tree ordinance, tree farm)				
	Conservation easements for open space				
	Infrastructure planning for redevelopment				
	Ordinances controlling postconstruction runoff				
	Other				
Zo	ning Techniques				
	Watershed based zoning				
	Overlay zoning				
	Impervious Overlay zoning				
	Floating zones				
	Incentive zoning for amenities				
	Performance zoning				

□ Urban growth boundaries

	BMP Description	Contact/Information
	Large lot zoning	
_	Infill/Community Redevlopment	
_	Transfer of Development Rights (TDRs)	
_	Limiting Infrastructure Extensions	
	Other	
_		
En	sure Long-Term BMP Operation and Maintena	ince
	Ordinance requiring permanent post-	
	construction runoff controls	
	HOA maintenance agreements	
	Transfer of maintenance requirements	
	Procedure for post-construction inspection	
	Enforcement actions	
	Other	
	tential BMPs: Other municipal practices or policality conditions after an area has been developed	-

From the BMPs listed in the following pages, please check off those BMPs your City is already implementing. Include the name of your staff member and department that oversees the implementation of this BMP.

On June 28, 2007, (10am) at the Citrus Center, the MS4 Plan Development Committee will meet to finalize the BMP menu for the sixth minimum measure (Housekeeping) requirements of the MS4 Plan. Committee members please bring this form with you. Non-committee members please try and forward this form filled out to me via email by June 21, 2007. Committee members try and email me your final comments on this form prior to the meeting.

Regulatory Text

40 CFR 122.34 (b)(6)(i) You must develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. Using training materials that are available from EPA, your State, Tribe, or other organizations, your program must include employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance.

Guidance

EPA recommends that, at a minimum, you consider the following in developing your program: maintenance activities, maintenance schedules, and long-term inspection procedures for structural and nonstructural storm water controls to reduce floatables and other pollutants discharged from your separate storm sewers; controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, fleet or maintenance shops with outdoor storage areas, salt/sand storage locations and snow disposal areas operated by you, and waste

transfer stations; procedures for properly disposing of waste removed from the separate storm sewers and areas listed above (such as dredge spoil, accumulated sediments, floatables, and other debris); and ways to ensure that new flood management projects assess the impacts on water quality and examine existing projects for incorporating additional water quality protection devices or practices. Operation and maintenance should be an integral component of all storm water management programs. This measure is intended to improve the efficiency of these programs and require new programs where necessary. Properly developed and implemented operation and maintenance programs reduce the risk of water quality problems.

BMP Description

Contact/Information

Mι	unicipal Employee Training: Training for munic	cipal employees through seminars, in-
ho	use training sessions, new employee training, v	videos, manuals, handbooks or other
me	eans to prevent and reduce storm water pollu	tion from municipal activities. Such
tra	ining activities include:	
	Stormwater quality	
	Public park maintenance (pools, grounds)	
	Street, road and highway maintenance	
	Vehicle fleet maintenance	
	Building maintenance	
	New construction techniques	
	Erosion control for land disturbance	
	Storm system maintenance	
	Hazardous waste handling	
	Recycling techniques	
	Waste transfer/disposal	
	Spill prevention	
	Spill notification and response	
	Other	
St	ockpiled Materials Program: Proper protection	of usable stockpiled materials and/or
	oper removal and disposal of unusable materials	·
	Identify all stockpiled materials and intended us	
	Recycle or dispose of unusable materials	
	Erosion control for usable materials	
	Covered salt/sand stockpiles for deicing roads	
	Training on stockpiling and protection	
_	Other	
٠		

BMP Description

Contact/Information

Mu	nicipal Vehicle Fleet
	Covered area for fleet maintenance activities
	Vehicle inspection and maintenance plan/procedure
	Covered vehicle/equipment parking and storage
	Paved and covered fueling area
	Vehicle washing methods
	Alternative fuel vehicles
	Used oil recycling program
	Other
Sp	ill Response and Prevention Plans
	Identify potential spill or source areas
	Provide spill response plan, handbook, signs
	Document spill response equip. & procedures
	Document spill response instructions
	Install leak detection devices/overflow controls
	Identify/disconnect drains connected to storm sewer
	Preventative equipment maint. (tanks, valves)
	Provide material transfer procedures
	Recycling, reclaiming, reusing process materials
	Substitute less toxic materials
	Material inventory documentation
	Accessible MSDS documentation
	Other

	BMP Description	Contact/Information
So	ource Controls	
	Program for street/parking lot sweeping	
	Storm drain system cleaning program	
	Vactor truck for storm drain cleaning	
	Park maintenance program	
	Discharge ordinance for chlorinated water	
	Provide alternative discharge options for pools	
	Safer alternative products options	
	Proper storage of hazardous materials	
	Other	
Road and Bridge Maintenance		
	Planning for resurfacing operations	
	Using erosion controls during repairs	
	Using porous asphalt for repairs	
	Regular sweeping or vacuuming	
	Proper application of road salt/sand	
	Maintenance of roadside vegetation	
	Reduce use of bridge scupper drains	
	Roadside litter controls	
	Other	
Municipal Construction Activities: Storm water quality practices for construction		
pro	pjects performed or directed by the municipality.	
	Requirements for a SWP3	
	SWP3 development guidelines	
	Inspection procedures for SWP3	

Pollution Prevention/Good Housekeeping for Municipal Operations

	BMP Description	Contact/Information
□ <u>Ot</u>	her	
	# I DIID	
	tial BMPs: Other practices, maintenance proced nt or reduce pollutant runoff from municipal operation	



INTERLOCAL AGREEMENT by and between CITY OF XXXXXXXX

and

TEXAS A&M UNIVERSITY - KINGSVILLE for Representative Appointment to Regional Task Force

This Interlocal Agreement (hereafter termed "Agreement") is made pursuant to Chapter 791, Texas Government Code, *Interlocal Cooperation Contract*, and is entered into by and between the CITY OF XXXXXXXX (hereafter referred to as "CITY"), a home-rule municipality and TEXAS A&M UNIVERSITY (hereafter referred to as "TAMU"), a member of The Texas A&M University System, an entity of the State of Texas.

SECTION 1 PURPOSE

- **1.01 CITY** and **TAMU** agree to enter into this Agreement as a manner by which **CITY** and **TAMU** can actively participate in a Regional Task Force ("Task Force") formed to respond and aid compliance with the *Texas Commission on Environmental Quality Phase II Stormwater Rules* ("Rules") and other pertinent issues as needed.
- **1.02 CITY** and **TAMU** desire to accomplish the goals of responding and complying with the Rules through the formation of a Regional Task Force, established and managed by **TAMU**.
- **1.03 TAMU** desires to participate in the establishment and management of the Regional Task Force, since such participation will provide **TAMU** with an avenue for students to:
 - A. Gain knowledge and experience in the process and procedures of governmental environmental regulation, rule making, and committee process;
 - B. Gain supervisory, organizational, and executive skills through the creation of the Task Force body, the implementation of the Task Force by-laws and policies, creation and submission of Task Force agenda and minutes, and budget creation.
 - C. Gain experience about the interfacing, communication, and interaction between state agencies and local governments; thus, aiding the students in being at ease publicly speaking, presenting issues, and expounding opinions.

SECTION 2 TERM

- **2.01** Fixed Term: This Agreement commences on the date of execution of final signature, and will terminate exactly one (1) calendar year from date of execution, unless extended according to section 2.02 of this Agreement.
- **2.02** Extension: Upon written, mutual consent of **CITY** and **TAMU**, this Agreement may be extended for a maximum of one (1) calendar year, after the date of expiration of the Fixed Term.
- **2.03** Cancellation: This Agreement may be cancelled prior to the expiration of the Fixed Term of any Extension Term, upon thirty (30) calendar days written notice to the other party, sent to the address indicated in Section 5.01 of this Agreement.

SECTION 3 CONSIDERATION

3.01 Fee: CITY agrees to pay to TAMU a Task Force membership fee of \$\frac{\\$XXXX}\$. Payment of such fee is due in one single payment, tendered by check or wired transfer, payable to TAMU and delivered to the address indicated in Section 5.01 of this Agreement. Payment must be made within fourteen (14) days after execution of this Agreement. Failure of CITY to make such payment within the subscribed time, and without a written extension from TAMU, may result in this Agreement terminating.

SECTION 4 RIGHTS AND DUTIES

- **4.01** The following rights and duties will be held or performed by **CITY**:
 - A. **CITY** will provide one representative to the Task Force. Such representative must be chosen by majority vote of the City Council, as evidenced by an adopted resolution or other evidence of the appointment acceptable to **TAMU**.
 - B. The **CITY**'s representative will serve a term not to exceed one (1) calendar year or past December 31st, whichever occurs first, but may be reappointed by the **CITY** through written notification for an additional one (1) year term.
 - C. The **CITY**'s representative will be subject to the bylaws, policies, rules and procedures of the Task Force. Any breach or violation of such bylaws, etc., may result in expulsion of the representative from the Task Force. If expulsion occurs, the **CITY** will appoint another representative no later than thirty (30) calendar days after notice of the expulsion.
 - D. The **CITY**'s representative will act as the liaison between the **CITY** and the Task Force, apprising each entity of the other's objectives. The representative will

- brief the City Council, or other municipal entity responsible for Task Force participation, a minimum of once quarterly.
- E. Each **CITY** having representation on the Task Force will be responsible for paying a membership fee as detailed in Section 3.01 of this Agreement.
- F. The **CITY** may make recommendations to the Regional Task Force regarding the fee assessment, expenditures, or other financial matters; however, the Task Force is not bound by such recommendations.
- **4.02** The following rights and duties will be held or performed by **TAMU**:
 - A. **TAMU** will assign Javier Guerrero as representative to the Task Force.
 - B. **TAMU** will formulate the bylaws, policies, rules and procedures by which the Task Force will be governed. **TAMU** will provide **CITY** with a copy of such bylaws, policies, rules and procedures, as warranted.
 - C. **TAMU** will formulate and propose to the Task Force, methods and approaches for compliance with the *Texas Commission on Environmental Quality Phase II Stormwater Rules*. For each method or approach proposed, **TAMU** will provide educational outreach, training, and information to facilitate compliance.
 - D. **TAMU** will provide research and educational services and technical support to the Task Force, and for any adopted methods and approaches for compliance.
 - E. **TAMU** will manage the Task Force administration, including meetings, budgeting, and all efforts pertaining to the methods and approaches for compliances with the *Texas Commission on Environmental Quality Phase II Stormwater Rules*.
 - F. The Task Force will oversee the establishment and operation of all financial policies, requirements, and expenditures. As overseer of the Task Force, **TAMU** will be solely responsible for the financial management and policy of the Task Force.
 - G. **TAMU** will provide a written financial report to the **CITY** representative if requested by the **CITY**.
 - H. Fees paid to **TASK FORCE** will be earmarked in a separate **TAMU** account for use only by **TAMU** for the Task Force. Any unapproriated funds will be carried over.

SECTION 5 MISCELLANEOUS

5.01 Addresses: Fee payment or notices required under this Agreement may be sent by United States Postal Service regular surface mail, certified mail, registered mail, overnight delivery, or hand delivery. Written notice delivery is deemed made when the notice is deposited into a USPS mail receptacle, or deposited with an overnight carrier, or hand delivered. CITY and/or TAMU can change the notice address by sending to the other party written indication of the new address. Notices should be addressed as follows:

CITY: City of XXXXX

XXXXXXXXX P.O. XXXX

XXXXX, TX 785XX

TAMU: Texas A&M University

XXXXXXX, Ph.D.

MSC 213

Kingsville, TX 78363

- 5.02 <u>Force Majeure</u>: Any and all duties, obligations, and covenants of this Agreement will be suspended during time of natural disaster, war, acts of terrorism, or other "Acts of God", which prevent a party from fulfilling any and all duties, obligations, and/or covenants of this Agreement. If a party is prevented from fulfilling a duty, obligation, and/or covenant of this Agreement, due to Force Majeure, the party prevented from fulfilling will notify the other party in writing, sent pursuant to Section 5.01 Agreement, within fourteen (14) calendar business days of the Force Majeure event.
- 5.03 <u>Parties Relationship</u>: Nothing in the Agreement should be construed as creating a partnership, joint venture, agency relationship, or any other relationship other than, between **CITY** and **TAMU**.
- **5.04** Applicable Law: This Agreement is construed under and in accordance with the laws of the State of Texas.
- 5.05 <u>Cumulative Rights</u>: All rights, options, and remedies contained in this Agreement and held by CITY and TAMU are cumulative and the exercising of one will not exclude exercising another. CITY and TAMU each have the right to pursue any remedy or relief which may be provided by law, in equity, or by the stipulations of this Lease.
- 5.06 Non-waiver: A waiver by either CITY or TAMU, or both, of any obligation, duty, or covenant of this Agreement will not constitute a waiver of any other breach of any obligation, duty, or covenant of this Agreement.
- **5.07** Counterparts: This Agreement can be executed in multiple counterparts, each of which is declared an original.

- 5.08 Severability: If any clause of provision of this Agreement is illegal, invalid or unenforceable under present or future law, CITY and TAMU intend that the remaining clauses or provisions of this Agreement will not be affected and will remain in full force and effect.
- **5.09** Entire Agreement: This Agreement contains the final and entire agreement between CITY and TAMU, and will not be amended, explained, or superceded by any oral or written communications; unless done so in a subsequent, written, and mutually agreed upon amendment.
- 5.10 <u>Successors and Assigns</u>: All the obligations, duties, covenants, and rights contained in this Agreement and performable by **CITY** will be applicable and binding upon respective successors and assigns, including any successor by merger or consolidation; however, nothing in this provision shall be construed to be consent of Assignment of this Agreement.
- 5.11 <u>Nondiscrimination</u>: **CITY** and **TAMU**, and their agents or employees, are prohibited from discriminating on the basis of race, color, sex, age, religion, national origin, or handicap, in the performance of the terms, conditions, covenants and obligations of this Agreement.
- 5.12 <u>Dispute Resolution</u>: Any dispute between **CITY** and **TAMU** regarding this Agreement will be governed by Texas Government Code, Chapter 2009, *Alternative Dispute Resolution for Use by Governmental Bodies*, and any applicable Model Rules promulgated by the Office of the Attorney General, the State of Texas. Any notice of dispute tendered by **CITY** should be to Ralph Stevens, Director of Procurement, **TAMU**.

EXECUTED theauthorized agent, as e	day ofvidenced by the attached Resolu		 CITY, ncil.	by	its	duly
	"CITV	•				

CITY OF McALLEN

XXXXXXX	
Mayor/City Manager	

ACKNOWLEDGMENT

STATE OF TEXAS	§ §
COUNTY OF HIDALGO	§
day personally appearedsubscribed to the foregoing instrument as	hority a Notary Public for the State of Texas, on this, known to me to be the person whose name is nd acknowledged to me that he executed it for the ed, and in the capacity state in such instrument.
GIVE UNDER MY HAND AND S, 20	EAL OF OFFICE this day of 007.
	Notary Public, State of Texas My Commission Expires:
EXECUTED theday ofauthorized officer.	, 2007, by TAMU, by its duly
	"TAMU" TEXAS A&M UNIVERSITY
Ву:	
	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
RECOMMEND APPROVAL:	
XXXXXXXX, Ph.D. Principal Investigator Environmental Engineering	

ACKNOWLEDGMENT

STATE OF TEXAS	§
	§
COUNTY OF KLEBERG	§

BEFORE ME, the undersigned authority a Notary Public for the State of Texas, on this day personally appeared **SANDRA L. REXROAT**, Director of Research and Sponsored Programs, **TAMU**, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed it for the purposes and consideration therein expressed, and in the capacity state in such instrument.

(GIVE UNDER MY HAND AND SEAL OF OFFICE this	day of
	, 2007.	
	Notary Public, State of Texas	,
	My Commission Expires:	



THE LOWER RIO GRANDE VALLEY TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM (TPDES) STORMWATER TASK FORCE



500 South Kansas • Weslaco, Texas • 78596 • (956) 219-3686 • http://www.stormwater.stei.org



Environmental & Civil Engineering Department MSC 213 Kingsville, TX 78363

MEMBER CITIES

City of Pharr	City of McAllen	City of Alamo
City of Brownsville	City of San Benito	City of Donna
City of Sullivan City	City of Mission	City of San Juan
City of Rio Grande City	City of La Feria	City of Harlingen
City of Weslaco	City of Alton	City of La Joya



LOWER RIO GRANDE VALLEY -TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM – STORMWATER - TASK FORCE

500 South Kansas • Weslaco, Texas • 78596 • (361) 774-8185 • http://www.stormwater.stei.org

In January of 1998, the USEPA published proposed rules to control polluted runoff from municipal separate stormwater sewer systems of small (<100,000 population) municipal and county governments in urbanized areas. These proposed rules, finalized in March of 1999, constitute Phase II of EPA's NPDES (National Pollutant Discharge Elimination System) municipal stormwater program. Phase I rules governing all municipalities greater than 100,000 in population are already in effect. Texas A&M University Kingsville (TAMUK) is currently partnering with fifteen (15) Valley Phase II Cities to coordinate a regional strategy to address their stormwater permit requirements.

The Phase II Rules require impacted entities to develop management programs to address stormwater impacts through the following six (6) minimum measures:

- Public involvement/participation
- Public education and outreach
- Illicit discharge detection and elimination
- Construction site runoff pollution prevention
- Post-construction stormwater management in new development and redevelopment
- Pollution prevention/good housekeeping for municipal operations

In 2002, TAMUK formed a Task Force comprised of numerous Valley Cities in an effort to facilitate regional issues of concern associated with the Phase II NPDES rules. Although the Texas Commission on Environmental Quality (TCEQ) has yet to finalize the mandates that will directly affect municipalities in the Valley, TAMUK and the Task Force are recommending that activities start well ahead of the TCEQ deadlines. Our primary goal this year is to conduct an extensive outreach program that will educate Valley communities of the upcoming rules.

The Stormwater permit (TCEQ General Permit TXR040000 in Appendix) was due in March of 2003, but was delayed due to litigation filed against the EPA by various groups. In 2004, the 9th Court of Appeals ruled that the EPA did have the authority to initiate this unfunded mandate. Solely the issue of public hearings and how they would be conducted were revised (see memo in Appendix).

On August 2007, the TCEQ finally published the final TXR040000. All Municipal Separate Stormwater Sewer System (MS4) Plans are due on Feb 2008. It is important that the valley continue to demonstrate unity and cooperation in facing this environmental challenge. TAMUK is determined to assist your community in this endeavor.







LRGV TPDES TASK FORCE

Governing Board

Officers/Directors

Joe Hinojosa City of Brownsville Chairperson

Carlos Sanchez, P.E. City of McAllen Vice Chairperson

Ruben Diaz City of Mission Board Director

Luciano Ozuna City of Alamo Board Director

Steve Pena City of Alton Board Director

Darla Jones City of La Feria Board Director

John Avilez City of San Juan Board Director

<u>Members</u>

Hector Jalomo City of San Benito

Ramiro Gonzalez City of Harlingen

Bernard Rodriguez City of Weslaco

Patricio Cruz City of Pharr

Sergio Del Angel City of La Joya

Leo Villarreal City of Donna

Rolando Gonzalez City of Sullivan City

Juan Zuniga City of Rio Grande City

Task Force Liaison

Javier Guerrero Texas A&M University -Kingsville

LOWER RIO GRANDE VALLEY - TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM STORMWATER TASK FORCE

500 South Kansas • Weslaco, Texas • 78596 • (956) 219-3686 • www.stormwater.stei.org

October 5, 2007

To: TPDES Program Stakeholders From: Joe Hinojosa, Chairperson

Re: LRGV TPDES Stormwater Task Force

Stakeholders:

The impact of the upcoming TPDES Municipal Separate Stormwater Sewer System (MS4) permit is anticipated to be widespread, particularly on the construction industry and on local government enforcement capability. Although the MS4 municipal permit was not finalized until August 2007, in March 2003 the individual construction permit was issued by the TCEQ. This permit is required at construction sites that disturb soil in an area larger than one (1) acre in size. The permit requires that various best management practices (BMPs) be observed at construction sites to minimize soil erosion. For example, contractors can use bales of hay placed at stormwater inlets to serve as filters to remove soil that is carried by stormwater runoff. Of course, BMPs can be more elaborate and innovative.

Over the last four (4) years since the construction permit was finalized, the Task Force has observed that many of these rules are not being adhered to by the construction industry. This is primarily due to lack of outreach, but at times it is due to outright defiance. The enforcing agency for this permit is the TCEQ, and many cities are reluctant to enforce the construction permit due to lack of resources, but primarily, because the cities are not required to enforce these rules. The TCEQ maintains a limited staff at this time and they must cover an area that extends beyond the Valley boundaries.

Once the MS4 permits are issued (MS4 plans are due Feb 2008) cities will be required to implement BMPs that will address enforcement activities within their jurisdiction. The BMPs can be in the form of policy and/or ordinances, permit fees, citations for noncompliance and outreach. So, it is safe to say that the Task Force anticipates that in latter part of 2008, the Valley Phase II cities will have to start implementing their stormwater soil erosion prevention enforcement program.

Several of the Task Force member cities are currently contracted with TAMUK through interlocal agreements to help in developing these stormwater MS4 programs. TAMUK has been an asset to the Task Force and has assured us that they will continue to serve our communities. This manual serves to highlight the evolution of the Task Force and to inform your city of the events and activities that have occurred over the last five (5) years. If you have any questions please contact Javier Guerrero of TAMUK at (956) 219-3686 or me at (956) 542-7511.

Task Force Liaison

Javier Guerrero Texas A&M University – Kingsville



Informational seminar conducted in Palmhurst City Hall. Laura De La Garza, Arroyo Colorado Watershed Coordinator form Texas A&M University's Texas Sea Grant informs the Task Force representatives and guests about the findings of the Arroyo Colorado TMDL study.

The LRGV Task Force was formed to promote a regional approach to resolving the issues concerning the MS4 TCEQ TPDES program. The Task Force is working collectively to assure that each represented municipality is prepared to demonstrate a working knowledge of the regulations, to be prepared to respond to the unfunded mandate, and to implement strategies to facilitate the program within its jurisdiction.

Mission Statement – Promote Municipal and Storm Water Public Outreach and Education related to the TCEQ TPDES program, Urban Non-Point Source Pollution, , construction activities and soil erosion, and other environmental-related issues within the Lower Rio Grande Valley through the dissemination of information.

The Task Force accomplishes its mission by conducting and/or attending conferences, workshops, seminars, training sessions, round table discussions, and meetings. This manual attempts to highlight the activities of the Task Force over the last five (5) years.



CONFERENCES

The Task Force and TAMUK sponsored a series of conferences in the Coastal Bend area and the Lower Rio Grande Valley. Starting with the Coastal Bend Environmental Conference Series (CBEC), the Task Force used this forum to attract local and statewide municipalities, regulators and other professionals to share mutually beneficial experiences and knowledge with the representatives from the Valley. Topics ranged from stormwater, groundwater, reverse osmosis to forming stormwater utilities, GIS Systems and runoff pollution.



The Rio Grande/Rio Bravo Conference (REC) series brought together the local governmental communities, regulators like the TCEQ, and consultants. The panel of speakers included officials from the Cities of Laredo, San Antonio and Corpus Christi, regulators from the EPA, TCEQ, and TxDOT, and other guest speakers from Texas A&M University, UTPA, and UT-Brownsville. The success of the conferences culminated with an attendance of 600 individuals during the 5th annual REC event assures that the mission of the Task Force through the dissemination of information is succeeding.

The Task Force representatives comprised of Public Works Directors, City Engineers, City Managers, and other city officials attended these conferences and were exposed to various manners of addressing the MS4 regulations upcoming from the TCEQ.



The ability to network with experts and regulators will allow for a stronger relationship between city and regulatory agency. The Task Force also had the opportunity to travel to Laredo, Texas and attend Southwest Consortium Environmental research & policy (SCERP) Conference. The City of Laredo hosted the invited the Task and representatives to attend and to share the idea of the Task Force with attendees. Task Force attendees listened to NadBANK share ideas of funding, to the City of Nuevo Laredo officials on how they addressed several wastewater treatment problems, and



To City of Laredo officials on how they fund their stormwater department. The success of this conference will encourage the Task Force to attend others outside of the Valley.



Promoting Policies to Implement the Vision: Demonstrations and Prototypes of Sustainable Development in the U.S.-Mexican Border Region

February 1 1-1 3, 2004

Texas A&M International University, Laredo, Texas



Emerging Technologies for a Sustainable Environment











October 19 – 21, 2005 ♦ Sheraton Hotel ♦ South Padre Island

In 2005, the Task Force co-hosted the Emerging Technologies for a Sustainable Conference held at South Padre Island. The conference dedicated an entire track to the TPDES stormwater rules. Further, training was provided to the Task Force members by Texas A&M's TEEX program.



In November 2006, in partnership with the EPA, Monterey Tech, and NaDBank, the task Force co sponsored an international conference where our coalition introduced the idea of a stormwater program to our Mexican neighbors. It was amazing how similar obstacles and issues were presented by both sides of the border. The EPA Border 2012 group from Region 6 in Dallas, TX provided much needed validity to the efforts of the Task Force and to our overall initiative to share ideas.

<u>WORKSHOPS</u>

The Task Force mission also involves coordinating and conducting workshops and sponsoring events that allow representatives to discuss topics of interest and to obtain vital information to understand environmental regulations and concerns.

The following is a list of workshops conducted by the Task Force and TAMUK:

- "Construction Permit Requirements" Ms. Elda Espinoza of TCEQ La Feria, Texas
- "Construction Permit requirements" Ms. Elda Espinoza of TCEQ Weslaco, Texas
- "Status of Arroyo Colorado" Laura De La Garza Texas Sea Grant Palmhurst, Texas
- "Small Business Assistance Program" Neftali Buenrostro of TCEQ Donna, Texas
- "Stormwater Utility Program" Ed Latimer of AMEC Brownsville, Texas
- "Stormwater Utility Program LG Engineering Consultants Mission, Texas
- "Outreach Funding" Marcie Oveido of LRGVDC Mission, Texas
- "Construction Permit Requirements Ann Marie Callery of TCEQ Harlingen, Texas
- "Brownfield Program" Dr. S.J. Sethi of UTPA Donna, Texas

- "No La Riegues Campaign" Laura Sierra of Interlex and Dr. Jacob of TAMU La Joya, TX
- "No La Riegues Campaign" Laura Sierra of Interlex and Dr. Jacob of TAMU Santa Rosa, TX
- "No La Riegues Campaign" Laura Sierra of Interlex and Dr. Jacob of TAMU Donna, TX
- "MS4 permit" Javier Guerrero of TAMUK San Juan, Texas
- "MS4 permit" Javier Guerrero of TAMUK Harlingen, Texas
- "MS4 permit" Javier Guerrero of TAMUK Mission, Texas
- "Decentralized Wastewater Treatment Systems"-Eric Ellman of the Rensselaerville Inst.-Mission, TX
- "MS4 permit" Javier Guerrero of TAMUK Alton, Texas
- "Wastewater Treatment Plant Subsurface Treatment Strategy"- Jim W. Pounds, Jr., P.E. PMCM Intern.
- "Privatization of Wastewater and Water Treatment Plants", OMI Consultants
- "TPDES regulated sites using innovative BMPs", City of Alamo City Hall, Alamo, Texas
- "TPDES how it affects homebuilders, contractors, developers and engineers" -City of Weslaco City Hall Gulf Coast Border 2012 Task Force meeting, City of Brownsville
- "Lower Rio Grande Basin Advisory Committee Meeting" International Boundary and Water Commission, McAllen, Texas;
- "Arroyo Colorado Municipal Wastewater Steering Committee Meetings" Various locations
- "Arroyo Colorado Agriculture Steering Committee Meetings" Various locations
- "Border 2012 Seminar" Harlingen, TX

BORDER 2012 FRONTERA 2012

Texas - Coahuila - Nuevo León - Tamaulipas
Regional Group Grupo Regional

Gulf Task Force Equipo de Trabajo Golfo

GULF TASK FORCE MEETING MARCH 1, 2006 AGENDA



June 26 - 30, 2006

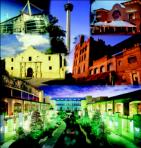
In Partnership with U. S. Environmental Protection Agency and the States of Region 6











San Antonio, Texas

Holiday Inn Riverwalk 217 North St. Mary's San Antonio, TX 78205 Your Wastewater Utility +
TCEQ's Sanitary Sewer Overflow (SSO) Initiative +
CH2M HILL's CMOM Services =

Effective & Efficient Wastewater Infrastructure

YOU ARE INVITED

What: A free CMOM Workshop, hosted by CH2M HILL

When: Wednesday, June 20, 2007

Where: Weslaco City Hall

TCEQ Session – Storm Water
May 2, 2006, Tuesday --- 9 a.m. to 1 p.m.
UTB/TSC-ITEC Campus
301 Mexico Boulevard• Suite H1A (Royalty Reception Hall)• Brownsville, TX

The workshops were conducted either at regular meetings or scheduled to accommodate the speaker. Each workshop provided Task Force members opportunities to learn specific items affecting our community and to adopt proven outreach programs.



OUTREACH

The Lower Rio Grande Valley Development Council (LRGVDC) provided the Task Force with its first significant outreach program by funding the "No La Riegues" campaign created by TAMU's Dr. John Jacob. The LRGVDC funded a \$10,000 outreach effort by placing billboards and advertisements throughout the Valley. The campaign is a Spanish outreach effort that promotes water quality and water conservation



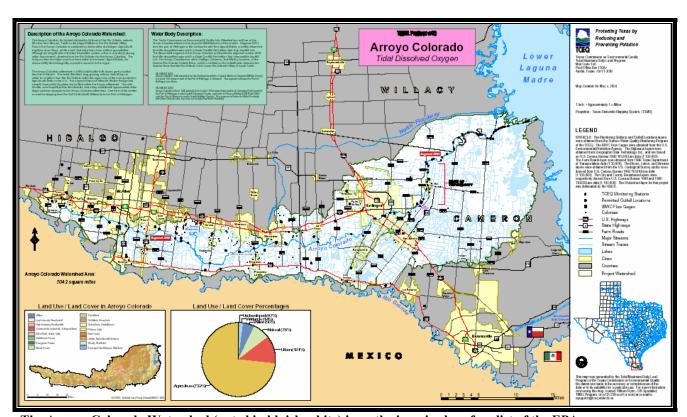


The television clips created by TAMU's Dr. Jacob can be seen airing on local television channels in the Valley. With the adoption of this campaign by the Task Force, the outreach strategy will be developed further in the future.

The Task Force and TAMUK have also sponsored other outreach efforts. In May 2003, TAMUK and the Task Force were asked to attend the Hidalgo County CDBG Leadership Conference in South Padre Island. As guest speakers, we were given the opportunity to engage other local governments. Our topic "New Storm Regulations Affecting Small Cities" was well received.

The Task Force also sponsored the "Brownfield Development" Conference held at SPI in September of 2003. The conference defined the idea of a brownfield and provided several speakers from the NadBank, Economic Development Administration, Small Business Administration, Housing and Urban Development and other regulatory agencies. Funding oppportunites was the main topic.





The Arroyo Colorado Watershed (noted in bluish-white) is on the impaired surface list of the EPA.

<u>APPOINTMENTS</u>

As of January 2006, the TCEQ has appointed Dr. Vinki Uddamerri of TAMUK and Joe Hinojosa, chairperson of the Task Force, to the Arroyo Colorado Steering Committee. The Task Force is continuously and actively involving itself with programs and organizations that will directly affect our member cities. Several Task Force representatives also serve on Arroyo Colorado working committees: Outreach, infrastructure, habitat, and agriculture.

REASEARCH

To further enhance the mission of the Task Force, TAMUK has used the Task Force as a platform to spearhead research opportunities in the Valley by performing contractual work with various Member Valley Cities. TAMUK recognizes the lack of resources in the area and will attempt to research and study various environmental issues including solid waste, recycling, wastewater alternatives, reverse osmosis and groundwater, and economics.

COMMITTEES

The Task Force is further divided into subgroups, committees:

Grant Committee – San Benito, Weslaco, Alton, Brownsville, McAllen and La Feria Ordinance Committee – Alamo, La Feria, Harlingen, Mission, McAllen, Brownsville, Donna MS4 Stormwater Plan Development Committee -San Juan, La Joya, Alamo, McAllen, Brownsville

GRANTS

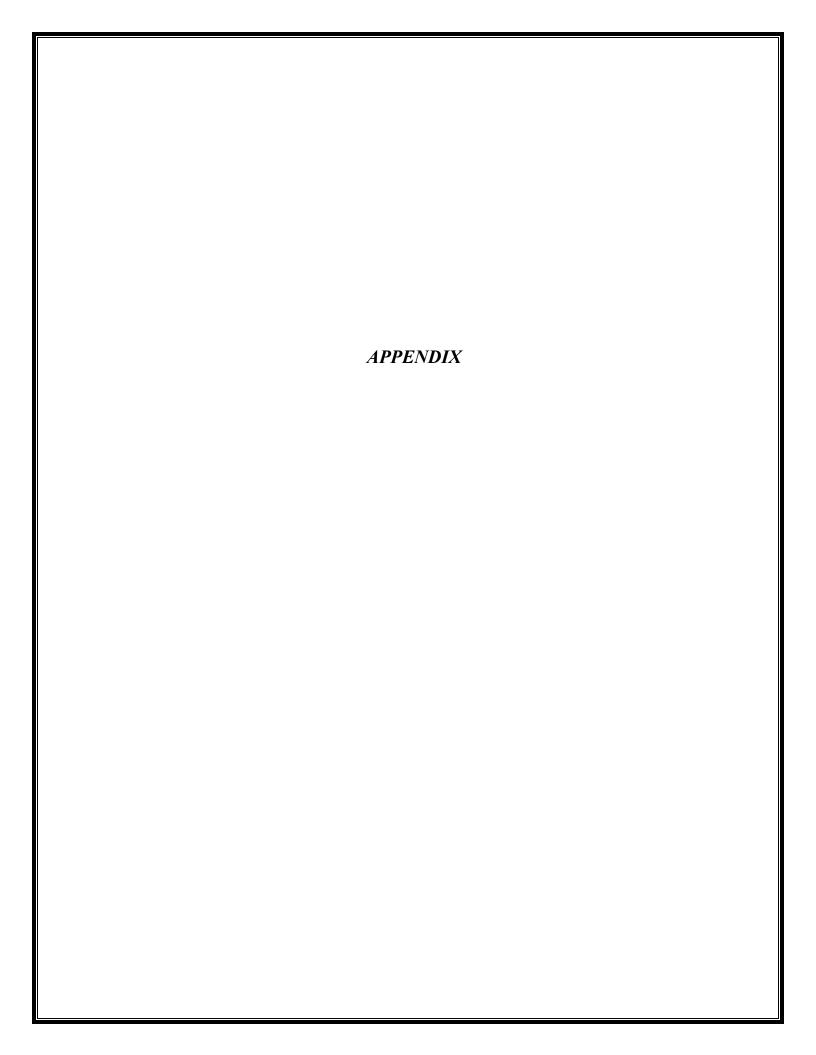
To continue to grow and prosper, the Task Force is also seeking a strategy to assign a non-profit designation to the organization. This year, one of the key roles of the Task Force is to develop a strategic plan that will enable the Task Force to become a viable self-sustaining organization. TAMUK will facilitate this endeavor and through the efforts of the coalition of cities, the university will seek grants to supplement the funding already provided by the member cities.

In its initial efforts, TAMUK joined forces with TAMU, Texas Sea Grant, the Cities of San Benito, Pharr and La Feria, and the Valley Proud Environmental Council in preparing and submitting the Task Force's first grant project. The grant application was sponsored by the TCEQ Clean Water Act program and was submitted to State for over \$300,000.00. Since then, our group has received funding from the LRGVDC, the EPA, TSSWCB and the TCEQ. Through the work of the Task Force, TAMUK and the Arroyo Colorado Partnership, Valley projects have received over \$1,000,000 in funding from grants.

FINAL REMARKS

As is with any other organization, the mission of the Task Force depends on the availability of funding. The grant effort in 2007 will be stepped up by the member cities and TAMUK to assure our organization continues to grow and evolve. To complement the funding provided by the member cities, TAMUK has readily invested heavily in the organization and will continue to do so.

This manual was provided to demonstrate the capability and the importance of the Task Force. The support of the Valley municipalities is vital for the success of our mission. The cooperation seen by the regional approach of this organization has served as an example of the strength the Valley maintains if it unites and directs its efforts in a mutual fashion.



BUDGET JUSTIFICATION

Personnel

Several graduate and undergraduate students will be working on this project in terms of web building and maintenance under the direct supervision of Dr. Lee Clapp. Students will also provide literature and data research for topic discussion. Students will provide administration and coordination of task force business, correspondences, and meeting agendas. This account will also be used to support the staff working in the task force committee.

Travel

Funds are being provided for travel project wide to support task force members/staff and the PI/students. Furthermore, in an effort to disseminate the information, funds are also needed to allow the project team members to travel to a local conference, which will promote collaboration with other South Texas regional professionals and educators.

Professional Development

The student support base will be provided with opportunities to attend continuing education courses, forums, and conferences to assure accurate and up to date information to task force committee in various areas of the environmental industry. Funds will be used for registration fees, course fees, and other fees.

Permanent Equipment

Funds may be requested for computer hardware/software if needed project wide.

Supplies/Materials

Students will require funding for miscellaneous supplies and materials for various extended projects.

Other Direct Cost

A request is also made for funds for the dissemination of the materials related to task force web server. This is for publication of web pages if required as well as for office supplies such as printing supplies.

MEMORANDUM

Subject: Implementing the Partial Remand of the Stormwater Phase II Regulations

Regarding Notices of Intent & NPDES General Permitting for Phase II MS4s

From: James A. Hanlon /s/

Director, Office of Wastewater Management

To: Water Management Division Directors, Regions I - X

The purpose of this memorandum is to provide guidance on implementing a partial remand of the Stormwater Phase II regulations. The U.S. Court of Appeals for the Ninth Circuit recently denied EPA's petition for rehearing in the Phase II litigation. Environmental Defense Center, et al. v. EPA, No. 70014 & consolidated cases (9th Cir., Sept. 15, 2003). The Department of Justice has informed us that further review by the U.S. Supreme Court is not available. This memorandum provides interim guidance to EPA and State NPDES permitting authorities pending a rulemaking to conform the Phase II rule to the court's order.

The Relevant Provisions of the Rules

This case challenged the NPDES stormwater regulations issued pursuant to Clean Water Act ("CWA") section 402(p)(6). That section directs EPA to "establish a comprehensive program to regulate" stormwater discharges designated by EPA. We commonly describe these regulations as stormwater "Phase II." The regulations require NPDES permits for discharges from certain municipal separate storm sewer systems ("MS4s") for which NPDES permits were not required under CWA section 402(p)(2) and the Phase 1 regulations.

The Phase II regulations require that MS4s reduce the discharge of pollutants "to the maximum extent practicable" (or "the MEP standard"). The regulations also require the MS4s to develop, implement and enforce a stormwater management program containing, among other things, best management practices ("BMPs") identified by the discharger. The regulations authorize the use of "general permits" and require that these BMPs (as well as measurable goals associated with these BMPs) be identified in the Notice of Intent ("NOI") filed by the MS4 in seeking authorization under a general permit. Relying on the "traditional" general permit model, the Agency did not require NOIs to be subject to public hearings.

TCEQ Docket No. 2006-0428-WQ TPDES GENERAL PERMIT No. TXR040000



This is a new general permit issued pursuant to Section 26.040 of the Texas Water Code and Section 402 of the Clean Water Act.

Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

GENERAL PERMIT TO DISCHARGE UNDER THE TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM

under provisions of Section 402 of the Clean Water Act and Chapter 26 of the Texas Water Code

Small Municipal Separate Storm Sewer Systems

located in the state of Texas

may discharge directly to surface water in the state

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

This general permit and the authorization contained herein shall expire at midnight five years after the date of issuance.

ISSUED AND EFFECTIVE DATE:

AUG 13 2007

For the Commission





TXR050000 is acknowledged. Your facility's TPDES multi-sector storm water general permit number is: activity under the terms and conditions imposed by the Texas Pollutant Discharge Elimination System (TPDES) storm water multi-sector general permit The Notice of Intent (NOI) for the facility listed below was received on December 12, 2006. The intent to discharge storm water associated with industrial TEXAS COMMISSION ON ENVIRONMENTAL QUALITY Lexas Pollutant Discharge Elimination System Storm Water Multi-Sector General Permit

TCEQ's storm water multi-sector general permit requires certain storm water pollution prevention and control measures, possible monitoring and reporting, and Coverage Effective: December 12, 2006

(SWP3) that is tailored to your industrial site. As a facility authorized to discharge under the storm water multi-sector general permit, all terms and conditions periodic inspections. Among the conditions and requirements of this permit, you must have prepared and implemented a storm water pollution prevention plan must be complied with to maintain coverage and avoid possible penalties

Storm Water Processing Team by telephone at (512) 239-3700 or e-mail at swpermit@tceq.state.tx.us. A copy of this document should be kept with your SWP3. This permit expires on August 14, 2011, unless otherwise amended. For additional information, see the TCEQ web site at www.tceq.state.tx.us, or contact the WESLACO, TX 78596 WESLACO, TX 78955

OPERATIONS MANAGEMENT INTERNATIONAL INC

PO BOX 8396

ON MILE B N & 4.5 N

PROJECT/SITE:
NORTH WASTE WATER TREATMENT PLANT
HIDALGO County



The Notice of Intent (NOI) for the facility listed below was received on December 11, 2006. The intent to discharge storm water associated with industrial TEXAS COMMISSION ON ENVIRONMENTAL QUALITY Texas Pollutant Discharge Elimination System Storm Water Multi-Sector General Permit

activity under the terms and conditions imposed by the Texas Pollutant Discharge Elimination System (TPDES) storm water multi-sector general permit TXR050000 is acknowledged. Your facility's TPDES multi-sector storm water general permit number is:

TXR05R609

periodic inspections. Among the conditions and requirements of this permit, you must have prepared and implemented a storm water pollution prevention plan TCEQ's storm water multi-sector general permit requires certain storm water pollution prevention and control measures, possible monitoring and reporting, and Coverage Effective: December 11, 2006

(SWP3) that is tailored to your industrial site. As a facility authorized to discharge under the storm water multi-sector general permit, all terms and conditions

ON MILE 4.5 N & 7 WES: PROJECT/SITE:
SOUTH WASTE WATER TREATMENT PLANT HIDALGO Count must be complied with to maintain coverage and avoid possible penalties. PO BOX 8396 OPERATIONS MANAGEMENT INTERNATIONAL INC WESLACO, TX 78955

Storm Water Processing Team by telephone at (512) 239-3700 or e-mail at swpermit@tceq.state.tx.us. A copy of this document should be kept with your SWP3 This permit expires on August 14, 2011, unless otherwise amended. For additional information, see the TCEQ web site at www.tceq.state.tx.us, or contact the

4581	sic	Airports	Y

Program Interests

ID Type	ID Number	ID Status
REGISTRATION	65839	ACTIVE
PERMIT	TXR05P423	ACTIVE
PERMIT	TXR05P465	ACTIVE
REGISTRATION	C86519	INACTIVE
	REGISTRATION PERMIT PERMIT	REGISTRATION 65839 PERMIT TXR05P423 PERMIT TXR05P465

Web Policies | Disclaimer | Site Help

.

Rules, Policy & Legislation | Permits, Licenses & Registrations | Compliance, Enforcement & Cleanups Drinking Water & Water Availability | Reporting | Environmental Quality | Assistance, Education & Participation Pollution Prevention & Recycling | Contracts, Funding & Fees

About TCEO | Contact Us



©2002-2005 Texas Commission on Environmental Quality.









PACTOR Customer Search Results

Central Registry Query - Regulated Entity Information Regulated Entity Information

RN Number:

RN100527621

Name:

MID VALLEY AIRPORT

Primary Business Description: AIRCRAFT REFUELING

Location Information

County: HIDALGO

1909 JOE STEPHENS AVE, WESLACO TX 78596 3701

Nearest City: State:

Physical Location:

Street Address:

WESLACO

Near ZIP Code: 78596

1909 JOE STEPHENS DRIVE

Affiliated Customers - Current

Your Search Returned 4 Current Affiliation Records (View History)

1-4 of 4 Record	15		
CN Number A	<u>Customer Name</u>	<u>Customer</u> <u>Role</u>	More Information
CN600520969	CITY OF WESLACO	OWNER	苡
CN601886187	WESLACO MID VALLEY AIRPORT	OWNER OPERATOR	②
CN602291221	WILSONS AIRCRAFT	OWNER OPERATOR	<u> </u>
CN602740185	MID VALLEY AIRPORT	OWNER OPERATOR	E)

Industry Type Codes:

Code	Classification	Name	Primary

TCEQ ePay Voucher Receipt

-Transaction Information -

Voucher Number:

41187

Trace Number:

582EA000031491

Date:

01/25/2008 01:41 PM

Payment Method:

CC - Authorization 0000025214

Amount:

\$100.00

Fee Type:

GENERAL PERMIT WASTEWATER DISCHARGE APPLICATION

ePay Actor:

David Salinas

– Payor Information —

Payor Name: Company; David Salinas City Of Weslaco

Company: Address:

255 South Kansas, Weslaco, TX 78596

Phone:

956-968-3181

-Site Information -

Site Name:

CITY OF WESLACO

Site Address:

255 SOUTH KANSAS, WESLACO, TX 78596

Site Location:

AREA LOACTE WITHIN THE CITY OF WESLACO LIMITS

– Customer Information —

Customer Name:

CITY OF WESLACO

Customer Address:

255 SOUTH KANSAS, WESLACO, TX 78596

State Tax ID:

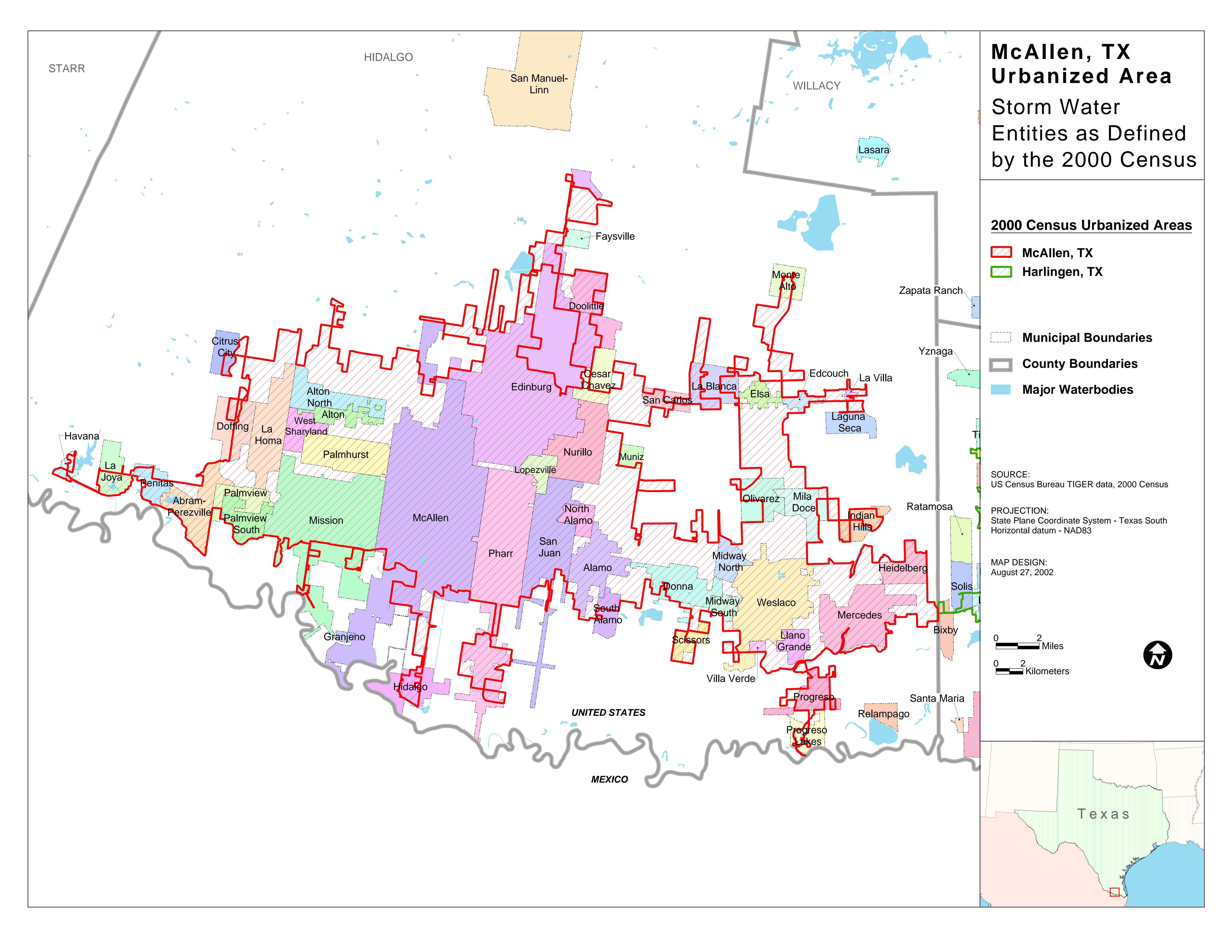
17460025442

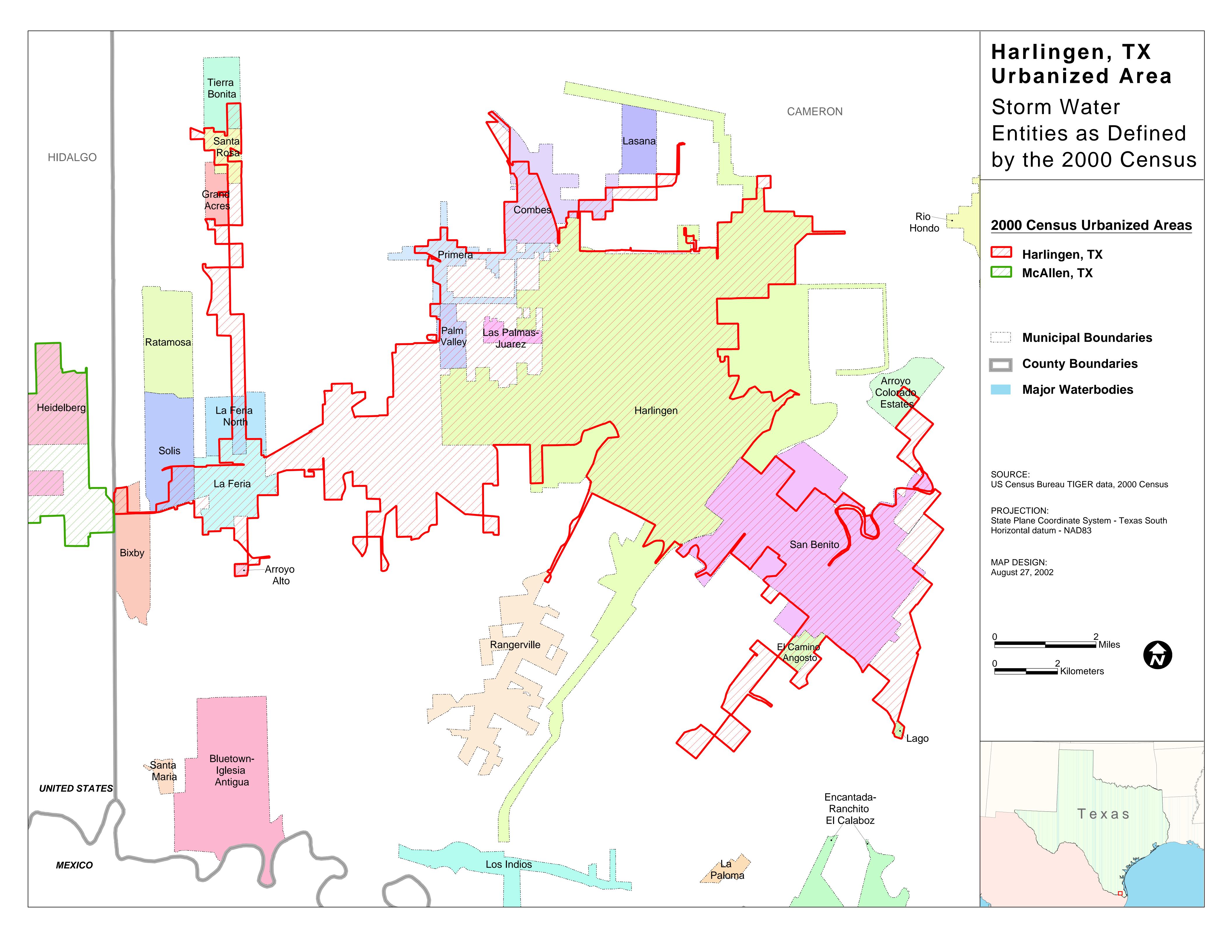
—Other Information —

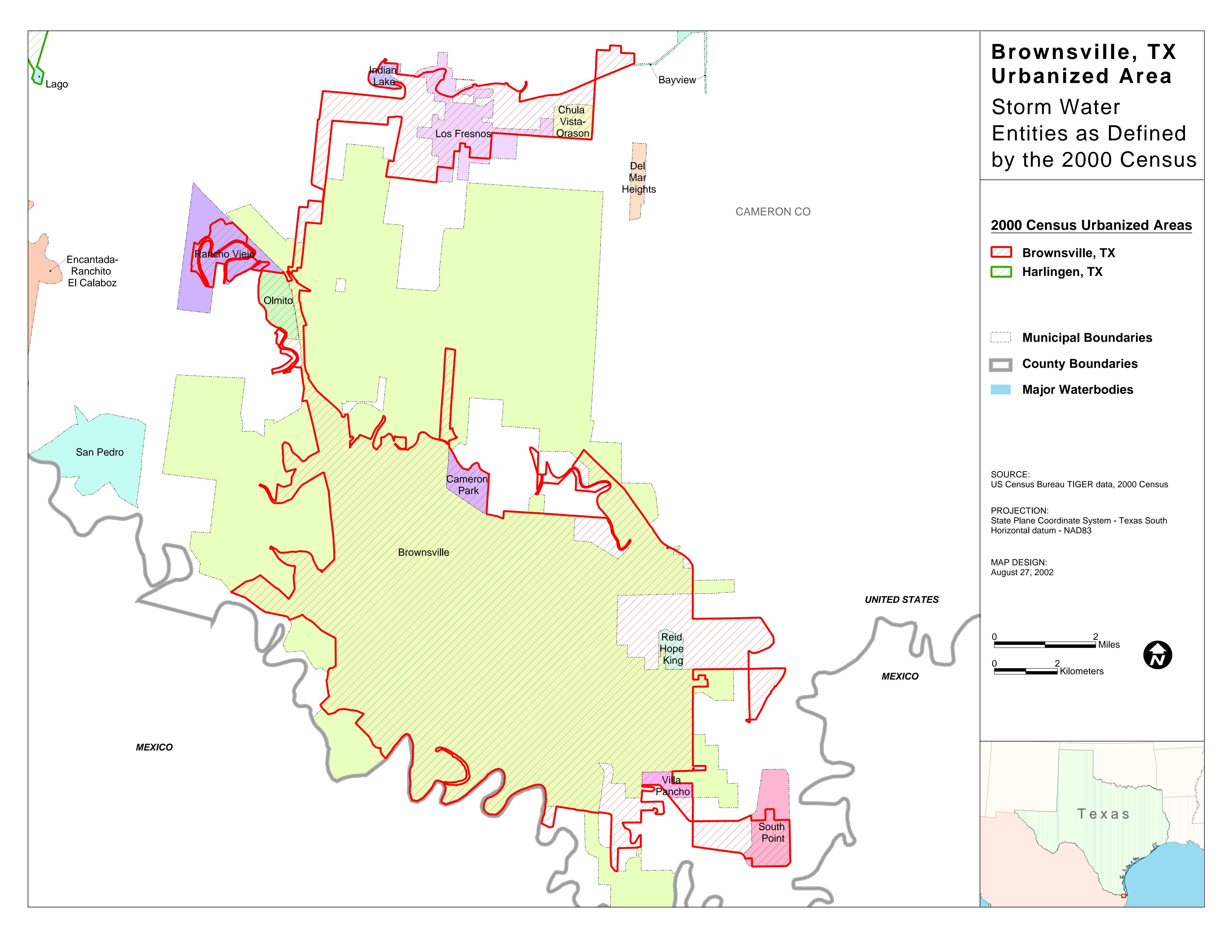
Comments:

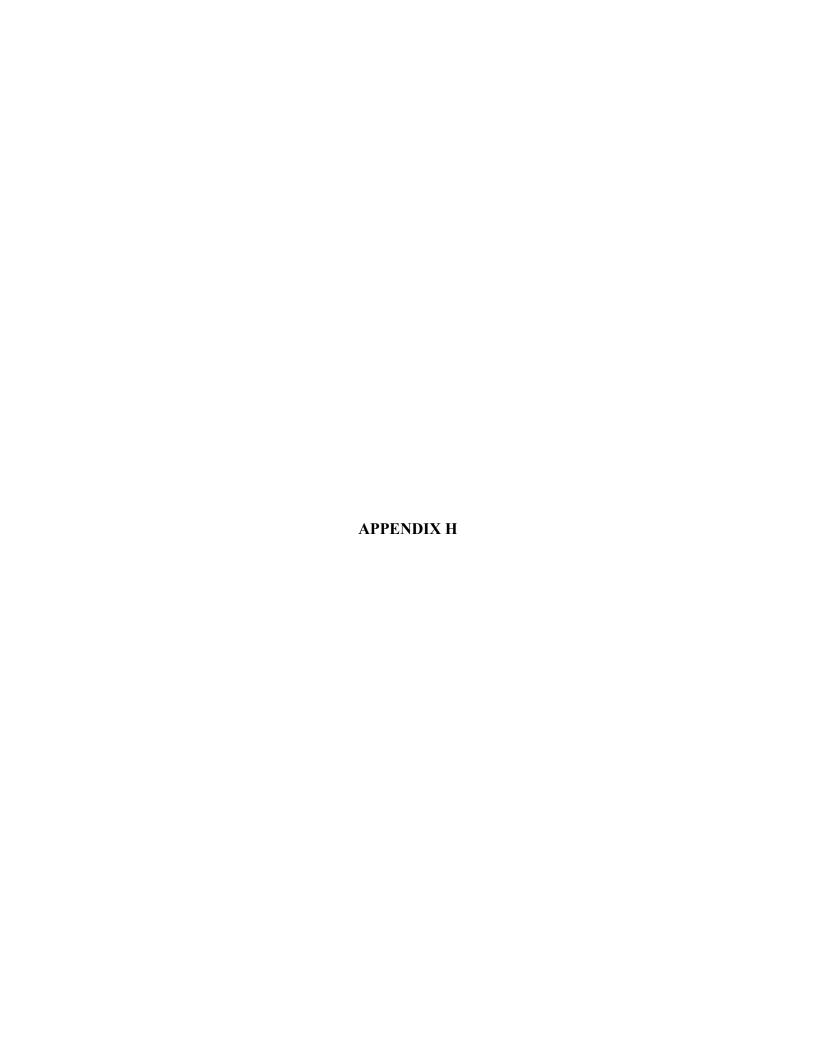
MS4











TPDES GENERAL PERMIT No. TXR040000



This is a new general permit issued pursuant to Section 26.040 of the Texas Water Code and Section 402 of the Clean Water Act.

Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

GENERAL PERMIT TO DISCHARGE UNDER THE TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM

under provisions of Section 402 of the Clean Water Act and Chapter 26 of the Texas Water Code

Small Municipal Separate Storm Sewer Systems

located in the state of Texas

may discharge directly to surface water in the state

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

This general permit and the authorization contained herein shall expire at midnight five years after the date of issuance.

ISSUED AND EFFECTIVE DATE:	
	For the Commission

TCEQ GENERAL PERMIT NUMBER TXR040000 RELATING TO STORM WATER DISCHARGES ASSOCIATED WITH SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS

Table of Contents

Part I.	Defini	tions and Terminology	Page 3
	A.	Definitions	Page 3
	B.	Commonly Used Acronyms	Page 8
Part II.	Permi	it Applicability and Coverage	
	A.	Small MS4s Eligible for Authorization by General Permit	Page 9
	B.	Allowable Non-Storm Water Discharges	Page 9
	C.	Limitations on Permit Coverage	Page 11
	D.	Obtaining Authorization	
	E.	Permitting Options	
	F.	Waivers	Page 20
Part III	. Stori	n Water Management Program (SWMP)	Page 21
	A.	Minimum Control Measures	Page 22
	B.	General Requirements	Page 28
Part IV	. Reco	rdkeeping and Reporting	Page 28
	A.	Recordkeeping	Page 28
	B.	Reporting	Page 29
Part V.	Stand	ard Permit Conditions	Page 31
Part VI	. Auth	orization for Municipal Construction Activities	Page 32
	A.	Eligible Construction Sites	Page 32
	B.	Discharges Eligible for Authorization	Page 32
	C.	Limitations on Permit Coverage	Page 34
	D.	Numeric Effluent Limitations	Page 34
	E.	Storm Water Pollution Prevention Plan (SWP3)	Page 34
	F.	Effective Date of Coverage	Page 35
	G.	Deadlines for SWP3 Preparation and Compliance	
	H.	Plan Review and Making Plans Available	
	I.	Keeping Plans Current	Page 35
	J.	Contents of SWP3	
	K.	Additional Retention of Records	Page 41
Attachn	nent 1	Construction Site Notice	Page 42
Attachn	nent 2	Discharge Monitoring Report for Concrete Batch Plants	Page 43

Part I. Definitions and Terminology

A 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:

- (a) 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
- (b) 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 storm water 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 Storm Water 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 storm water runoff.

Daily Maximum - For the purposes of compliance with the numeric effluent limitations contained in this permit, this is the maximum concentration measured on a single day, by grab sample, within a period of one calendar year.

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

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

- (a) 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.
- (b) For individual lots in a residential construction site by either:
 - (1) the homebuilder completing final stabilization as specified in condition (a) above; or
 - (2) 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 storm water, except discharges pursuant to this general permit or a separate authorization and discharges resulting from emergency fire fighting 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 storm water 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 storm water 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.

Maximum Extent Practicable (MEP) - The technology-based discharge standard for municipal separate storm sewer systems to reduce pollutants in storm water discharges that was established by CWA § 402(p). A discussion of MEP as it applies to small MS4s is found at 40 CFR § 122.34.

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.

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 storm water 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, 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 "footprint" 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 storm water 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, storm water, 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 storm water; (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.

Storm Water and Storm Water Runoff - Rainfall runoff, snow melt runoff, and surface runoff and drainage.

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

Storm Water 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 storm water runoff. Structural controls and practices may include but are not limited to: wet ponds, bioretention, infiltration basins, storm water 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 (MHWM) 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 nonnavigable, 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:

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

(g) wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (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.

B. 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 Storm Water Management Program

SWP3, Storm Water Pollution Prevention Plan

SWPPP

TAC Texas Administrative Code

TCEQ Texas Commission on Environmental Quality

TPDES Texas Pollutant Discharge Elimination System

TWC Texas Water Code

Part II. Permit Applicability and Coverage

This general permit provides authorization for storm water and certain non-storm water discharges from small municipal separate storm sewer systems (MS4) to surface water in the state. The general permit contains requirements applicable to all small MS4s that are eligible for coverage under this general permit.

A. Small MS4s Eligible for Authorization by General Permit

1. Small MS4s Located in an Urbanized Area

A small MS4 that is fully or partially located within an urbanized area, as determined by the 2000 Decennial Census by the U.S. Bureau of Census, must obtain authorization for the discharge of storm water runoff and is eligible for coverage under this general permit.

2. Designated Small MS4s

A small MS4 that is outside an urbanized area that is "designated" by TCEQ based on evaluation criteria as required by 40 CFR § 122.32(a)(2) or 40 CFR § 122.26(a)(1)(v) and adopted by reference in Title 30, Texas Administrative Code (TAC), § 281.25, is eligible for coverage under this general permit. Following designation, operators of small MS4s must obtain authorization under this general permit or apply for coverage under an individual TPDES storm water permit within 180 days of notification of their designation.

The portion of the small MS4 that is required to meet the conditions of this general permit are those portions that are located within the urbanized area, as well as any portion of the small MS4 that is designated.

B. Allowable Non-Storm Water Discharges

The following non-storm water sources may be discharged from the small MS4 and are not required to be addressed in the small MS4's Illicit Discharge and Detection or other minimum control measures, unless they are determined by the permittee or the TCEQ to be significant contributors of pollutants to the small MS4:

- 1. water line flushing (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life);
- 2. runoff or return flow from landscape irrigation, lawn irrigation, and other irrigation utilizing potable water, groundwater, or surface water sources;
- 3. discharges from potable water sources;
- 4. diverted stream flows;
- 5. rising ground waters and springs;
- 6. uncontaminated ground water infiltration;
- 7. uncontaminated pumped ground water;
- 8. foundation and footing drains;
- 9. air conditioning condensation;
- 10. water from crawl space pumps;
- 11. individual residential vehicle washing;
- 12. flows from wetlands and riparian habitats;
- 13. dechlorinated swimming pool discharges;
- 14. street wash water;
- 15. discharges or flows from fire fighting activities (fire fighting activities do not include washing of trucks, run-off water from training activities, test water from fire suppression systems, and similar activities);
- 16. other allowable non-storm water discharges listed in 40 CFR § 122.26(d)(2)(iv)(B)(1);
- 17. non-storm water discharges that are specifically listed in the TPDES Multi Sector General Permit (MSGP) or the TPDES Construction General permit (CGP); and
- 18. other similar occasional incidental non-storm water discharges, unless the TCEQ develops permits or regulations addressing these discharges.

C. Limitations on Permit Coverage

1. Discharges Authorized by Another TPDES Permit

Discharges authorized by an individual or other general TPDES permit may be authorized under this TPDES general permit only if the following conditions are met:

- (a) the discharges meet the applicability and eligibility requirements for coverage under this general permit;
- (b) a previous application or permit for the discharges has not been denied, terminated, or revoked by the executive director as a result of enforcement or water quality related concerns. The executive director may provide a waiver to this provision based on new circumstances at the regulated small MS4; and
- (c) the executive director has not determined that continued coverage under an individual permit is required based on consideration of an approved total maximum daily loading (TMDL) model and implementation plan, anti-backsliding policy, history of substantive non-compliance or other 30 TAC Chapter 205 considerations and requirements, or other site-specific considerations.
- 2. Discharges of Storm Water Mixed with Non-Storm Water

Storm water discharges that combine with sources of non-storm water are not eligible for coverage by this general permit, unless either the non-storm water source is described in Part II.B or Part VI.B. of this general permit or the non-storm water source is authorized under a separate TPDES permit.

3. Compliance with Water Quality Standards

Discharges to surface water in the state that would cause or contribute to a violation of water quality standards or that would fail to protect and maintain existing designated uses are not eligible for coverage under this general permit. The executive director may require an application for an individual permit or alternative general permit to authorize discharges to surface water in the state if the executive director determines that an activity will cause a violation of water quality standards or is found to cause or contribute to the impairment of a designated use of surface water in the state. The executive director may also require an application for an individual permit considering factors described in Part II.E.2.

4. Discharges to Water Quality-Impaired Receiving Waters

New sources or new discharges of the constituent(s) of concern to impaired waters are not authorized by this permit unless otherwise allowable under 30 TAC Chapter 305 and applicable state law. Impaired waters are those that do not meet applicable water quality standard(s) and are listed on the Clean Water Act § 303(d) list. Constituents of concern are those for which the water body is listed as impaired.

Discharges of the constituent(s) of concern to impaired water bodies for which there is a TMDL implementation plan are not eligible for this general permit unless they are consistent with the approved TMDL and the implementation plan. Permitted MS4 operators must incorporate the limitations, conditions and requirements applicable to their discharges, including monitoring frequency and reporting required by TCEQ rules, into their SWMP in order to be eligible for permit coverage. For discharges not eligible for coverage under this general permit, the discharger must apply for and receive an individual TPDES permit prior to discharging.

5. Discharges to the Edwards Aquifer Recharge Zone

Discharges of storm water from regulated small MS4s, and other non-storm water discharges, can not be authorized by this general permit where those discharges are prohibited by 30 TAC Chapter 213 (relating to Edwards Aquifer). New discharges located within the Edwards Aquifer Recharge Zone, or within that area upstream from the recharge zone and defined as the Contributing Zone, must meet all applicable requirements of, and operate according to, 30 TAC Chapter 213 (Edwards Aquifer Rule) in addition to the provisions and requirements of this general permit.

For existing discharges, the requirements of the agency-approved Water Pollution Abatement Plan under the Edwards Aquifer Rules are in addition to the requirements of this general permit. BMPs and maintenance schedules for structural storm water controls, for example, may be required as a provision of the rule. All applicable requirements of the Edwards Aquifer Rule for reductions of suspended solids in storm water runoff are in addition to the effluent limitation requirements found in Part VI.D. of this general permit. A copy of the agency-approved Water Pollution Abatement Plans that are required by the Edwards Aquifer Rule must either be attached as a part of the SWMP or referenced in the SWMP. For discharges located on or within ten stream miles upstream of the Edwards Aquifer recharge zone, applicants must also submit a copy of the NOI to the appropriate TCEQ regional office.

Counties: Contact:

Comal, Bexar, Medina, Uvalde, TCEQ

and Kinney Water Program Manager

San Antonio Regional Office

14250 Judson Road

San Antonio, Texas 78233-4480

(210) 490-3096

Williamson, Travis, and Hays TCEQ

Water Program Manager Austin Regional Office

1921 Cedar Bend Drive. Suite 150

Austin, Texas 78758-5336

(512) 339-2929

6. Discharges to Specific Watersheds and Water Quality Areas

Discharges of storm water from regulated small MS4s and other non-storm water discharges can not be authorized by this general permit where prohibited by 30 TAC Chapter 311 (relating to Watershed Protection) for water quality areas and watersheds.

7. Protection of Streams and Watersheds by Home Rule Municipalities

This general permit does not limit the authority of a home-rule municipality provided by § 401.002 of the Texas Local Government Code.

8. Indian Country Lands

Storm water runoff from MS4s or construction activities occurring on Indian Country lands are not under the authority of the TCEQ and are not eligible for coverage under this general permit. If discharges of storm water require authorization under federal NPDES regulations, authority for these discharges must be obtained from the U.S. Environmental Protection Agency (EPA).

9. Other

Nothing in Part II of the general permit is intended to negate any person's ability to assert the force majeure (act of God, war, strike, riot, or other catastrophe) defenses found in 30 TAC § 70.7.

This permit does not transfer liability for the act of discharging without, or in violation of, a NPDES or a TPDES permit from the operator of the discharge to the permittee(s).

D. Obtaining Authorization

1. Application for Coverage

When submitting an NOI and Storm Water Management Program (SWMP) as described in Parts II.D.3., II.D.4, and Part III for coverage under this general permit, the applicant must follow the public notice and availability requirements found in Part II.D.12. of this section.

Applicants seeking authorization to discharge under this general permit must submit a completed NOI, on a form approved by the executive director, and a SWMP as described in Part III. The NOI and SWMP must be submitted to the TCEQ Water Quality Division, at the address specified on the form. Discharge authorization begins when the applicant is notified by TCEQ that the NOI and SWMP have been administratively and technically reviewed and the applicant has followed the public participation provisions in Part II.D.12. Following review of the NOI and SWMP, the executive director may determine that: 1) the submission is complete and confirm coverage by providing a notification and an authorization number, 2) the NOI and/or SWMP are incomplete and deny coverage until a complete NOI and/or SWMP are submitted, 3) approve the NOI and/or SWMP with revisions and provide a written description of the required revisions along with any compliance schedule(s), or 4)

deny coverage and provide a deadline by which the MS4 operator must submit an application for an individual permit. Denial of coverage under this general permit is subject to the requirements of 30 TAC § 205.4(c). Application deadlines are as follows:

(a) Small MS4s Located in an Urbanized Area

Operators of small MS4s described in Part II.A.1 must submit an NOI and SWMP within 180 days following the effective date of this general permit.

(b) Designated Small MS4s

Operators of small MS4s described in Part II.A.2 must submit an NOI and SWMP within 180 days of being notified in writing by the TCEQ of the need to obtain permit coverage.

2. Late Submission of the NOI and SWMP

An NOI and SWMP are not prohibited from being submitted late or after the deadlines provided. If a late NOI and SWMP is submitted, authorization is only for discharges that occur after permit coverage is obtained. The TCEQ reserves the right to take appropriate enforcement actions for any unpermitted discharges.

3. Storm Water Management Program (SWMP)

A SWMP must be developed and submitted with the NOI for eligible discharges that will reach waters of the United States (U.S.), including discharges from the regulated small MS4 to other MS4s or privately-owned separate storm sewer systems that subsequently drain to waters of the U.S. according to the requirements of Part III of this general permit and submitted with the NOI. The SWMP must include a time line that demonstrates a schedule for implementation of the program throughout the permit term. The program must be completely implemented within five years of the issuance date of this general permit, or within five years of being designated for those small MS4s which are designated following permit issuance. Implementation of the SWMP is required immediately following receipt of written authorization from the TCEQ.

Changes may be made to the SWMP during the permit term. Changes that are made to the SWMP before the NOI is approved by the TCEQ must be submitted in a letter providing supplemental information to the NOI. Changes to the SWMP that are made after TCEQ approval of the NOI and SWMP may be made following written approval of the changes from the TCEQ, except that written approval is not required for the following changes:

- (a) Adding components, controls, or requirements to the SWMP; or replacing a BMP with an equivalent BMP, may be made by the permittee at any time upon submittal of a notice of change (NOC) form to the address specified on the form to the TCEQ.
- (b) Replacing a less effective or infeasible BMP specifically identified in the SWMP with an alternate BMP may be requested at any time. Changes must be submitted on

an NOC form to the address specified on the form. Unless denied in writing by the TCEQ, the change shall be considered approved and may be implemented by the permittee 60 days from submitting the request. Such requests must include the following:

- (1) an explanation of why the BMP was eliminated;
- (2) an explanation of the effectiveness of the replacement BMP; and
- (3) an explanation of why the replacement BMP is expected to achieve the goals of the replaced BMP.

4 Contents of the NOI

The NOI must contain the following minimum information:

- (a) MS4 Operator Information
 - (1) the name, mailing address, telephone number, and fax number of the MS4 operator; and
 - (2) the legal status of the MS4 operator (e.g., federal government, state government, county government, city government, or other government).

(b) Site Information

- (1) the name, physical location description, and latitude and longitude of the approximate center of the regulated portion of the small MS4;
- (2) county or counties where the small MS4 is located;
- (3) an indication if all or a portion of the small MS4 is located on Indian Country Lands;
- (4) if the applicant develops a seventh minimum control measure to obtain authorization for construction activities, the boundary within which those activities will occur;
- (5) the name, mailing address, telephone number, and fax number of the designated person(s) responsible for implementing or coordinating implementation of the SWMP;
- (6) a certification that a SWMP has been developed according to the provisions of this permit;
- (7) a statement that the applicant will comply with the Public Participation requirements described in Part II.D.12.;

- (8) the name of each classified segment that receives discharges, directly or indirectly, from the small MS4. If one or more of the discharge(s) is not directly to a classified segment, then the name of the first classified segment that those discharges reach shall be identified;
- (9) the name of any MS4 receiving the discharge prior to discharge into surface water in the state; and
- (10) the name of all surface water(s) receiving discharges from the small MS4 that are on the latest EPA-approved CWA § 303(d) list of impaired waters.

5. Notice of Change (NOC)

If the MS4 operator becomes aware that it failed to submit any relevant facts, or submitted incorrect information in the NOI, the correct information must be provided to the executive director in a NOC within 30 days after discovery. If any information provided in the NOI changes, an NOC must be submitted within 30 days from the time the permittee becomes aware of the change.

Any revisions that are made to the SWMP must be made in accordance with Part II.D.3. above. Changes that are made to the SWMP following NOI approval must be made using an NOC form, in accordance with Part II.D.3. above.

6. Change in Operational Control of a Small MS4

If the operational control of the regulated small MS4 changes, the present operator must submit a Notice of Termination (NOT) and the new operator must submit a NOI and SWMP. The NOT and NOI must be submitted concurrently no greater than 10 days after the change occurs.

7. Notice of Termination (NOT)

A permittee may terminate coverage under this general permit by providing a Notice of Termination (NOT) on a form approved by the executive director. Authorization to discharge terminates at midnight on the day that an NOT is postmarked for delivery to the TCEQ. If TCEQ provides for electronic submission of NOTs during the term of this permit, authorization to discharge terminates 24 hours following confirmation of receipt of the electronic NOT form by the TCEQ. An NOT must be submitted within 30 days after the MS4 operator obtains coverage under an individual permit.

8. Signatory Requirement for NOI, NOT, NOC, and Waiver Forms

NOI, NOT, NOC, and Waiver forms must be signed and certified consistent with 30 TAC § 305.44(a) and (b) (relating to Signatories to Applications).

9. Fees

An application fee of \$100 must be submitted with each NOI. A fee is not required for submission of a waiver form, an NOT, or an NOC.

A permittee authorized under this general permit must pay an annual Water Quality fee of \$100 under Texas Water Code, § 26.0291 and 30 TAC Chapter 205 (relating to General Permits for Waste Discharges).

10. Permit Expiration

- (a) This general permit is effective for five years from the date of issuance. Authorizations for discharge under the provisions of this general permit may continue until the expiration date of the general permit. This general permit may be amended, revoked, or canceled by the commission or renewed by the commission for an additional term or terms not to exceed five years.
- (b) If the Executive Director proposes to reissue this general permit before the expiration date, the general permit shall remain in effect after the expiration date for those existing discharges covered by the general permit in accordance with 30 TAC, Chapter 205. The general permit shall remain in effect for these dischargers until the date on which the commission takes final action on the proposal to reissue this general permit. No new NOIs will be accepted and no new authorizations will be processed under the general permit after the expiration date.
- (c) Upon issuance of a renewed or amended general permit, all permittees, including those covered under the expired general permit, may be required to submit an NOI according to the requirements of the new general permit or to obtain a TPDES individual permit for those discharges.
- (d) If the commission does not propose to reissue this general permit within 90 days before the expiration date, permittees must apply for authorization under a TPDES individual permit or an alternative general permit. If the application for an individual permit is submitted before the expiration date, authorization under this expiring general permit remains in effect until the issuance or denial of an individual permit.

11. Suspension of Permit Coverage

The executive director may suspend an authorization under this general permit for the reasons specified in 30 TAC § 205.4(d) by providing the discharger with written notice of the decision to suspend that authority, and the written notice will include a brief statement of the basis for the decision. If the decision requires an application for an individual permit or an alternative general permit, the written notice will also include a statement establishing the deadline for submitting an application. The written notice will state that the authorization under this general permit is either suspended on the effective date of the commission's action on the permit application, unless the commission expressly provides otherwise, or

immediately, if required by the executive director.

12. Public Participation

An applicant under this general permit must adhere to the following procedures:

- (a) The applicant must submit the NOI and a SWMP to the executive director.
- (b) After the applicant receives written instructions from the TCEQ's Office of Chief Clerk, the applicant must publish notice of the executive director's preliminary determination on the NOI and SWMP.
- (c) The notice must include:
 - (1) the legal name of the MS4 operator;
 - (2) identify whether the NOI is for a new small MS4 or is a renewal of an existing operation;
 - (3) the address of the applicant;
 - (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;
 - 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; and
 - (7) if required by the executive director, the date, time, and location of the public meeting.
- (d) This notice must be published at least once in the newspaper of largest circulation in the county where the small MS4 is located. If the small MS4 is located in multiple counties, the notice must be published at least once in the newspaper of largest circulation in the county containing the largest resident population. This notice shall provide opportunity for the public to submit comments on the NOI and SWMP. In addition, the notice shall allow the public to request a public meeting. A public meeting will be held if the TCEQ determines that there is significant public interest.
- (e) The public comment period begins on the first date the notice is published and ends 30 days later, unless a public meeting is held. If a public meeting is held, the comment period will end at the closing of the public meeting. The public may submit written comments to the TCEQ Office of Chief Clerk during the comment period detailing how the NOI or SWMP for the small MS4 fails to meet the

technical requirements or conditions of this general permit.

- (f) If significant public interest exists, the executive director will direct the applicant to publish a notice of the public meeting and to hold the public meeting. The applicant must publish notice of a public meeting at least 30 days before the meeting and hold the public meeting in a county where the small MS4 is located. TCEQ staff will facilitate the meeting.
- (g) If a public meeting is held, the applicant shall describe the contents of the NOI and SWMP. The applicant shall also provide maps and other data on the small MS4. The applicant shall provide a sign in sheet for attendees to register their names and addresses and furnish the sheet to the executive director. A public meeting held under this general permit is not an evidentiary proceeding.
- (h) The applicant must file with the Chief Clerk a copy and an affidavit of the publication of notice(s) within 60 days of receiving the written instructions from the Office of Chief Clerk.
- (i) The executive director, after considering public comment, shall approve, approve with conditions, or deny the NOI based on whether the NOI and SWMP meet the requirements of this general permit.
- (j) Persons whose names and addresses appear legibly on the sign in sheet from the public meeting and persons who submitted written comments to the TCEQ will be notified by the TCEQ's Office of Chief Clerk of the executive director's decision regarding the authorization.

E. Permitting Options

1. Authorization Under the General Permit

An operator of a small MS4 is required to obtain authorization either under this general permit, or under an individual TPDES permit if it is located in an urbanized area or if it is designated by the TCEQ. Multiple small MS4s with separate operators must individually submit an NOI to obtain coverage under this general permit, regardless of whether the systems are physically interconnected, located in the same urbanized area, or are located in the same watershed. Each regulated small MS4 will be issued a distinct permit number. These MS4 operators may combine or share efforts in meeting any or all of the SWMP requirements stated in Part III of this general permit. MS4 operators that share SWMP development and implementation must meet the following conditions:

(a) Participants

The SWMP must clearly list the name and permit number for each MS4 operator that contributes to development or implementation of the SWMP, and provide confirmation that the contributing MS4 operator has agreed to contribute. If a contributing MS4 has submitted an NOI and SWMP to TCEQ, but has not yet

received written notification of approval, along with the accompanying permit authorization number, a copy of the submitted NOI form must be made readily available or included in the SWMP.

(b) Responsibilities

Each permittee is entirely responsible for meeting SWMP requirements within the boundaries of its MS4. Where a separate MS4 operator is contributing to implementation of the SWMP, the SWMP must clearly define the contribution and clearly identify the contributing MS4 operator.

2. Alternative Coverage under an Individual TPDES Permit

An MS4 operator eligible for coverage under this general permit may alternatively be authorized under an individual TPDES permit according to 30 TAC Chapter 305 (relating to Consolidated Permits). The executive director may require an MS4 operator, authorized by this general permit, to apply for an individual TPDES permit because of: the conditions of an approved TMDL or TMDL implementation plan; a history of substantive non-compliance; or other 30 TAC Chapter 205 considerations and requirements; or other site-specific considerations.

F. Waivers

The TCEQ may waive permitting requirements for small regulated MS4 operators if the criteria are met for Waiver Option 1 or 2. To obtain Waiver Option 1, the MS4 operator must submit the request on a waiver form provided by the executive director. To obtain Waiver Option 2, the MS4 operator must contact the executive director and coordinate the activities required to meet the waiver conditions. A provisional waiver from permitting requirements begins two days after a completed waiver form is postmarked for delivery to the TCEQ. Following review of the waiver form, the executive director may: 1) determine that the waiver form is complete and confirm coverage under the waiver by providing a notification and a waiver number, 2) determine that the waiver form is incomplete and deny the waiver until a completed waiver form is submitted, or 3) deny the waiver and require that permit coverage be obtained.

If the conditions of either waiver are not met by the MS4 operator, then the MS4 operator must submit an application for coverage under this general permit or a separate TPDES permit application.

The TCEQ can, at any time, require a previously waived MS4 operator to comply with this general permit or another TPDES permit if circumstances change so that the conditions of the waiver are no longer met. Changed circumstances can also allow a regulated MS4 operator to request a waiver at any time.

- 1. Waiver Option 1: The system serves a population of less than 1,000 within an urbanized area and meets the following criteria:
 - (a) the system is not contributing substantially to the pollutant loadings of a physically interconnected MS4 that is regulated by the NPDES / TPDES storm water program

(40 CFR § 122.32(d)); and

- (b) if the system discharges any pollutant(s) that have been identified as a cause of impairment of any water body to which the small MS4 discharges, storm water controls are not needed based on wasteload allocations that are part of an EPA approved or established "total maximum daily load" (TMDL) that addresses the pollutant(s) of concern.
- 2. Waiver Option 2: The system serves a population under 10,000 and meets the following criteria:
 - (a) the TCEQ has evaluated all waters of the United States, including small streams, tributaries, lakes, and ponds, that receive a discharge from the small MS4;
 - (b) for all such waters, the TCEQ has determined that storm water controls are not needed based on wasteload allocations that are part of an approved or established TMDL that addresses the pollutant(s) of concern or, if a TMDL has not been developed or approved, an equivalent analysis that determines sources and allocations for the pollutant(s) of concern; and
 - (c) the TCEQ has determined that future discharges from the small MS4 do not have the potential to exceed Texas surface water quality standards, including impairment of designated uses, or other significant water quality impacts, including habitat and biological impacts.

Part III. Storm Water Management Program (SWMP)

To the extent allowable under state and local law, a SWMP must be developed and implemented according to the requirements of Part III of this general permit, for storm water discharges that reach waters of the United States, regardless of whether the discharge is conveyed through a separately operated storm sewer. The SWMP must be developed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act and the Texas Water Code. Existing programs or best management practices (BMPs) may be used to fulfill the requirements of this general permit. The MS4 operator must develop the SWMP to include the six minimum control measures described in Part III.A.1. through 6, and the operator may develop and include the optional seventh minimum control measure in Part III.A.7. Small MS4s have five years from the date of issuance of this general permit to fully implement their SWMP. A discharger's compliance with its approved SWMP will be deemed compliance with Part III of this permit.

Where the permittee lacks the authority to develop ordinances or to implement enforcement actions, the permittee shall exert enforcement authority as required by this general permit for its facilities, employees, and contractors. For discharges from third party actions, the permittee shall perform inspections and exert enforcement authority to the MEP.

If the permittee does not have enforcement authority and is unable to meet the goals of this general permit through its own powers, then, unless otherwise stated in this general permit, the permittee shall perform the

following action in order to meet the goals of the permit:

- Enter into interlocal agreements with municipalities where the small MS4 is located. These interlocal agreements must state the extent to which the municipality will be responsible for inspections and enforcement authority in order to meet the conditions of this general permit; or,
- if the permittee is unable to enter into inter-local agreements, notify the TCEQ's Field Operations Division as needed to report discharges or incidents that it can not itself enforce against.

The controls and Best Management Practices (BMPs) included in the SWMP constitute effluent limitations for the purposes of compliance with the requirements of 30 TAC Chapter 319, Subchapter B, related to Hazardous Metals.

A. Minimum Control Measures

- 1. Public Education and Outreach on Storm Water Impacts
 - (a) A public education program must be developed and implemented to distribute educational materials to the community or conduct equivalent outreach activities that will be used to inform the public. The MS4 operator may determine the most appropriate sections of the population at which to direct the program. The MS4 operator must consider the following groups and the SWMP shall provide justification for any listed group that is not included in the program:
 - (1) residents;
 - (2) visitors;
 - (3) public service employees;
 - (4) businesses:
 - (5) commercial and industrial facilities; and
 - (6) construction site personnel.

The outreach must inform the public about the impacts that storm water run-off can have on water quality, hazards associated with illegal discharges and improper disposal of waste, and steps that they can take to reduce pollutants in storm water runoff.

(b) The MS4 operator must document activities conducted and materials used to fulfill this control measure. Documentation shall be detailed enough to demonstrate the amount of resources used to address each group. This documentation shall be retained in the annual reports required in Part IV.B.2. of this general permit.

2. Public Involvement/Participation

The MS4 operator must, at a minimum, comply with any state and local public notice requirements when implementing a public involvement/participation program. It is recommended that the program include provisions to allow all members of the public within the small MS4 the opportunity to participate in SWMP development and implementation. Correctional facilities will not be required to implement this MCM.

3. Illicit Discharge Detection and Elimination

(a) Illicit Discharges

A section within the SWMP must be developed to establish a program to detect and eliminate illicit discharges to the small MS4. The SWMP must include the manner and process to be used to effectively prohibit illicit discharges. To the extent allowable under state and local law, an ordinance or other regulatory mechanism must be utilized to prohibit and eliminate illicit discharges. Elements must include:

(1) Detection

The SWMP must list the techniques used for detecting illicit discharges; and

(2) Elimination

The SWMP must include appropriate actions and, to the extent allowable under state and local law, establish enforcement procedures for removing the source of an illicit discharge.

(b) Allowable Non-Storm Water Discharges

Non-storm water flows listed in Part II.B and Part VI.B. do not need to be considered by the MS4 operator as an illicit discharge requiring elimination unless the operator of the small MS4 or the executive director identifies the flow as a significant source of pollutants to the small MS4. In lieu of considering non-storm water sources on a case-by-case basis, the MS4 operator may develop a list of common and incidental non-storm water discharges that will not be addressed as illicit discharges requiring elimination. If developed, the listed sources must not be reasonably expected to be significant sources of pollutants either because of the nature of the discharge or the conditions that are established by the MS4 operator prior to accepting the discharge to the small MS4. If this list is developed, then all local controls and conditions established for these listed discharges must be described in the SWMP and any changes to the SWMP must be included in the annual report described in Part IV.B.2. of this general permit, and must meet the requirements of Part II.D.3. of the general permit.

- (c) Storm Sewer Map
 - (1) A map of the storm sewer system must be developed and must include the following:
 - (i) the location of all outfalls;
 - (ii) the names and locations of all waters of the U.S. that receive discharges from the outfalls; and
 - (iii) any additional information needed by the permittee to implement its SWMP.
 - (2) The SWMP must include the source of information used to develop the storm sewer map, including how the outfalls are verified and how the map will be regularly updated.
- 4. Construction Site Storm Water Runoff Control

The MS4 operator, to the extent allowable under State and local law, must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre or if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more of land. The MS4 operator is not required to develop, implement, and/or enforce a program to reduce pollutant discharges from sites where the construction site operator has obtained a waiver from permit requirements under NPDES or TPDES construction permitting requirements based on a low potential for erosion.

- (a) The program must include the development and implementation of, at a minimum, an ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under state and local law.
- (b) Requirements for construction site contractors to, at a minimum:
 - (1) implement appropriate erosion and sediment control BMPs; and
 - (2) control waste such as discarded building materials, concrete truck washout water, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality.
- (c) The MS4 operator must develop procedures for:
 - (1) site plan review which incorporate consideration of potential water quality impacts;

- (2) receipt and consideration of information submitted by the public; and
- (3) site inspection and enforcement of control measures to the extent allowable under state and local law.
- 5. Post-Construction Storm Water Management in New Development and Redevelopment

To the extent allowable under state and local law, the MS4 operator must develop, implement, and enforce a program to address storm water runoff 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, that discharge into the small MS4. The program must ensure that controls are in place that would prevent or minimize water quality impacts. The permittee shall:

- (a) Develop and implement strategies which include a combination of structural and/or non-structural BMPs appropriate for the community;
- (b) Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under state and local law; and
- (c) Ensure adequate long-term operation and maintenance of BMPs.
- 6. Pollution Prevention/Good Housekeeping for Municipal Operations

A section within the SWMP must be developed to establish an operation and maintenance program, including an employee training component, that has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.

(a) Good Housekeeping and Best Management Practices (BMPs)

Housekeeping measures and BMPs (which may include new or existing structural or non-structural controls) must be identified and either continued or implemented with the goal of preventing or reducing pollutant runoff from municipal operations. Examples of municipal operations and municipally owned areas include, but are not limited to:

- (1) park and open space maintenance;
- (2) street, road, or highway maintenance;
- (3) fleet and building maintenance;
- (4) storm water system maintenance;
- (5) new construction and land disturbances;

- (6) municipal parking lots;
- (7) vehicle and equipment maintenance and storage yards;
- (8) waste transfer stations; and
- (9) salt/sand storage locations.

(b) Training

A training program must be developed for all employees responsible for municipal operations subject to the pollution prevention/good housekeeping program. The training program must include training materials directed at preventing and reducing storm water pollution from municipal operations. Materials may be developed, or obtained from the EPA, states, or other organizations and sources. Examples or descriptions of training materials being used must be included in the SWMP.

(c) Structural Control Maintenance

If BMPs include structural controls, maintenance of the controls must be performed at a frequency determined by the MS4 operator and consistent with maintaining the effectiveness of the BMP. The SWMP must list all of the following:

- (1) maintenance activities;
- (2) maintenance schedules; and
- (3) long-term inspection procedures for controls used to reduce floatables and other pollutants.

(d) Disposal of Waste

Waste removed from the small MS4 and waste that is collected as a result of maintenance of storm water structural controls must be properly disposed. A section within the SWMP must be developed to include procedures for the proper disposal of waste, including:

- (1) dredge spoil;
- (2) accumulated sediments; and
- (3) floatables.
- (e) Municipal Operations and Industrial Activities

The SWMP must include a list of all:

- (1) municipal operations that are subject to the operation, maintenance, or training program developed under the conditions of this section; and
- (2) municipally owned or operated industrial activities that are subject to TPDES industrial storm water regulations.

7. Authorization for Municipal Construction Activities

The development of a MCM for municipal construction activities is an optional measure and is an alternative to the MS4 operator seeking coverage under TPDES general permit TXR150000. Additionally, contractors working for the permittee are not required to obtain a separate authorization if they do not meet the definition of a "construction site operator," as long as the permittee meets the status of construction site operator. Permittees that choose to develop this measure will be authorized to discharge storm water and certain non-storm water from construction activities where the permittee can meet the definition of "construction site operator" in Part I of this general permit. The authorization to discharge under this MCM is limited to the regulated area, such as the portion of the MS4 located within an urbanized area or the area designated by TCEQ as requiring coverage. However, an MS4 operator may also utilize this MCM over additional portions of their MS4 that are also in compliance with all of the MCMs listed in this general permit. This MCM must be developed as a part of the SWMP that is submitted with the NOI for permit coverage. If this MCM is developed after submitting the initial NOI, a NOC must be submitted notifying the executive director of this change, and identifying the geographical area or boundary where the activities will be conducted under the provisions of this general permit. Utilization of this MCM does not preclude a small MS4 from obtaining coverage under the TPDES Construction General Permit, TXR150000, or under an individual TPDES permit.

(a) The MCM must include:

- (1) a description of how construction activities will generally be conducted by the permittee so as to take into consideration local conditions of weather, soils, and other site specific considerations;
- (2) a description of the area that this MCM will address and where the permittee's construction activities are covered (e.g. within the boundary of the urbanized area, the corporate boundary, a special district boundary, an extra territorial jurisdiction, or other similar jurisdictional boundary); and
- (3) either a description of how the permittee will supervise or maintain oversight over contractor activities to ensure that the SWP3 requirements are properly implemented at the construction site; or how the permittee will make certain that contractors have a separate authorization for storm water discharges.
- (4) a general description of how a SWP3 shall be developed, according to Part VI.E. of this general permit, for each construction site.

B. General Requirements

Permittees must provide documentation of the development, implementation, and evaluation of the SWMP. The documentation must be included in the SWMP and may be required to be submitted in the annual report required in Part IV.B.2. of this general permit. At a minimum, the documentation must include:

- 1. a list of any public or private entities assisting with the development or implementation of the SWMP;
- 2. a list of all BMPs and measurable goals for each of the MCMs;
- 3. a schedule for the implementation of all SWMP requirements;
- 4. a description of how each measurable goal will be evaluated;
- 5. a rationale statement that addresses the overall program, including how the BMPs and measurable goals were selected; and
- 6. if applicable, a list of all MS4 operators contributing to the development and implementation of the SWMP, including a clear description of the contribution.

Part IV. Recordkeeping and Reporting

A. Recordkeeping

- 1. The permittee must retain all records, a copy of this TPDES general permit, and records of all data used to complete the application (NOI) for this general permit and satisfy the public participation requirements, for a period of at least three years, or for the remainder of the term of this general permit, whichever is longer. This period may be extended by request of the executive director at any time.
- 2. The permittee must submit the records to the executive director only when specifically asked to do so. The SWMP required by this general permit (including a copy of the general permit) must be retained at a location accessible to the TCEQ.
- 3. The permittee must make the NOI and the SWMP available to the public if requested to do so in writing. Copies of the SWMP must be made available within 10 working days of receipt of a written request. Other records must be provided in accordance with the Texas Public Information Act. However, all requests for records from federal facilities must be made in accordance with the Freedom of Information Act.
- 4. The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that maybe instituted against the permittee.

B. Reporting

1. General Reporting Requirements

(a) Noncompliance Notification

According to 30 TAC § 305.125(9), any noncompliance which may endanger human health or safety, or the environment, must be reported by the permittee to the TCEQ. Report of such information must be provided orally or by electronic facsimile transmission (FAX) to the TCEQ regional office within 24 hours of becoming aware of the noncompliance. A written report must be provided by the permittee to the TCEQ regional office and to the TCEQ Enforcement Division (MC-224) within five working days of becoming aware of the noncompliance. The written report must contain:

- (1) a description of the noncompliance and its cause;
- (2) the potential danger to human health or safety, or the environment;
- (3) the period of noncompliance, including exact dates and times;
- (4) if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
- (5) steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.

(b) Other Information

When the permittee becomes aware that it either submitted incorrect information or failed to submit complete and accurate information requested in an NOI, NOT, or NOC, or any other report, it must promptly submit the facts or information to the executive director.

2. Annual Report

The MS4 operator must submit a concise annual report to the executive director within 90 days of the end of each permit year. The annual report must address the previous permit year. The first permit year for annual reporting purposes shall begin on the date of permit issuance, and shall last for one year. Subsequent calendar years will begin on the anniversary date of permit issuance and last for one year. The MS4 operator must also make a copy of the annual report readily available for review by TCEQ personnel upon request. The report must include:

(a) The status of the compliance with permit conditions, an assessment of the appropriateness of the identified BMPs, progress towards achieving the statutory

goal of reducing the discharge of pollutants to the MEP, the measurable goals for each of the MCMs, and an evaluation of the success of the implementation of the measurable goals;

- (b) Status of any additional control measures implemented by the permittee (if applicable);
- (c) Any MCM activities initiated before permit issuance may be included, under the appropriate headings, as part of the first year's annual report;
- (d) A summary of the results of information (including monitoring data) collected and analyzed, if any, during the reporting period used to assess the success of the program at reducing the discharge of pollutants to the MEP;
- (e) A summary of the storm water activities the MS4 operator plans to undertake during the next reporting cycle;
- (f) Proposed changes to the SWMP, including changes to any BMPs or any identified measurable goals that apply to the program elements;
- (g) The number of municipal construction activities authorized under this general permit and the total number of acres disturbed;
- (h) The number of non-municipal construction activities that occurred within the jurisdiction of the permittee (as noticed to the permittee by the construction operator); and
- (i) Notice that the MS4 operator is relying on another government entity to satisfy some of its permit obligations (if applicable).

An annual report must be prepared whether or not the NOI and SWMP has been approved by the TCEQ. If the permittee has either not implemented the SWMP or not begun to implement the SWMP because it has not received approval of the NOI and SWMP, then the annual report may include that information.

If permittees share a common SWMP, all permittees must contribute to a system-wide report (if applicable);

Each permittee must sign and certify the annual report in accordance with 30 TAC § 305.128 (relating to Signatories to Reports); and

The annual report must be submitted to the following address:

Texas Commission on Environmental Quality Storm Water & Pretreatment Team; MC - 148 P.O. Box 13087 Austin, Texas 78711-3087 A copy of the annual report must also be submitted to the TCEQ Regional Office that serves the area of the regulated small MS4.

If available, electronic submission of annual reports is encouraged. The Federal Waste Reduction Act and the Government Paperwork Elimination Act encourages governmental agencies to use electronic submission. See the TCEQ website at, www.tceq.state.tx.us for additional information and instructions.

Part V. Standard Permit Conditions

- A. The permittee has a duty to comply with all permit conditions. Failure to comply with any permit condition is a violation of the general permit and statutes under which it was issued, and is grounds for enforcement action, for terminating coverage under this general permit, or for requiring a discharger to apply for and obtain an individual TPDES permit.
- B. Authorization under this general permit may be suspended or revoked for cause. Filing a notice of planned changes or anticipated non-compliance by the permittee does not stay any permit condition. The permittee must furnish to the executive director, upon request and within a reasonable timeframe, any information necessary for the executive director to determine whether cause exists for revoking, suspending, or terminating authorization under this general permit. Additionally, the permittee must provide to the executive director, upon request, copies of all records that the permittee is required to maintain as a condition of this general permit.
- C. It is not a defense for a discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the permit conditions.
- D. Inspection and entry shall be allowed under Texas Water Code Chapters 26-28, Health and Safety Code §§ 361.032-361.033 and 361.037, and 40 Code of Federal Regulations (CFR) §122.41(i). The statement in Texas Water Code § 26.014 that commission entry of a facility shall occur according to an establishment's rules and regulations concerning safety, internal security, and fire protection is not grounds for denial or restriction of entry to any part of the facility or site, but merely describes the commission's duty to observe appropriate rules and regulations during an inspection.
- E. The discharger is subject to administrative, civil, and criminal penalties, as applicable, under Texas Water Code, Chapters 26, 27, and 28, and the Texas Health and Safety Code, Chapter 361 for violations including but not limited to the following:
 - a. negligently or knowingly violating CWA, §§ 301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under CWA, § 402; and
 - b. knowingly making any false statement, representation, or certification in any record or other document submitted or required to be maintained under a permit, including monitoring reports or reports of compliance or noncompliance.
- F. All reports and other information requested by the executive director must be signed by the person

and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).

- G. Authorization under this general permit does not convey property or water rights of any sort and does not grant any exclusive privilege.
- H. The permittee shall implement its SWMP on any new areas under its jurisdiction that are located in a UA or that are designated by the TCEQ. Implementation of the SWMP in these areas is required three (3) years from acquiring the new area, or five (5) years from the date of the original SWMP, whichever is later.

Part VI. Authorization for Municipal Construction Activities

The MS4 operator may obtain authorization under TPDES general permit TXR150000 to discharge storm water runoff from each construction activity performed by the MS4 operator that results in a land disturbance of one (1) or more acres of land. Alternatively, the MS4 operator may develop the SWMP to include this optional seventh (7th) storm water MCM if the eligibility requirements in Part VI.A. are met. If an MS4 operator decides to utilize this MCM, then the MS4 operator must include the MCM it in its SWMP submitted with the NOI or submit an NOC notifying the executive director of the addition of this MCM to its SWMP. The MS4 operator must identify the geographic area or boundary where the construction activities will be conducted under the provisions of this general permit. If the small MS4 meets the terms and requirements of this general permit, then discharges from these construction activities may be authorized under this general permit as long as they occur within the regulated geographic area of the small MS4. An MS4 operator may utilize this MCM over additional portions of their MS4 if those areas are also in compliance with all MCMs listed in this general permit. Even if an MS4 operator has developed this optional seventh storm water MCM, the MS4 operator may apply under TPDES general permit TXR150000 for authorization for particular municipal construction activities including those activities that occur during periods of low potential for erosion (for which no SWP3 must be developed).

A. Eligible Construction Sites

Discharges from construction activities within the regulated area where the MS4 operator meets the definition of construction site operator are eligible for authorization under this general permit. Discharges from construction activities outside of the regulated area, where the MS4 operator meets the definition of construction site operator, are only eligible for authorization under this general permit in those areas where the MS4 operator meets the requirements of Parts III.A.1. through III.A.6 of this general permit, related to MCMs.

B. Discharges Eligible for Authorization

1. Storm Water Associated with Construction Activity

Discharges of storm water runoff from small and large construction activities may be authorized under this general permit.

2. Discharges of Storm Water Associated with Construction Support Activities

Discharges of storm water runoff from construction support activities, including concrete batch plants, asphalt batch plants, equipment staging areas, material storage yards, material borrow areas, and excavated material disposal areas may be authorized under this general permit provided:

- (a) the activity is located within a 1-mile distance from the boundary of the permitted construction site and directly supports the construction activity;
- (b) a storm water pollution prevention plan is developed according to the provisions of this general permit and includes appropriate controls and measures to reduce erosion and discharge of pollutants in storm water runoff from the supporting industrial activity site; and
- (c) the construction support activity either does not operate beyond the completion date of the construction activity or obtains separate TPDES authorization for discharges as required.

3. Non-storm Water Discharges

The following non-storm water discharges from construction sites authorized under this general permit are also eligible for authorization under this MCM:

- (a) discharges from fire fighting activities (fire fighting activities do not include washing of trucks, run-off water from training activities, test water from fire suppression systems, and similar activities);
- (b) fire hydrant flushings;
- (c) vehicle, external building, and pavement wash water where detergents and soaps are not used and where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material is removed)
- (d) water used to control dust;
- (e) potable water sources including waterline flushings;
- (f) air conditioning condensate; and
- (g) uncontaminated ground water or spring water, including foundation or footing drains where flows are not contaminated with industrial materials such as solvents.

4. Other Permitted Discharges

Any discharge authorized under a separate TPDES or TCEQ permit may be combined with discharges from construction sites operated by the small MS4.

C. Limitations on Permit Coverage

Discharges that occur after construction activities have been completed, and after the construction site and any supporting activity site have undergone final stabilization, are not eligible for coverage under Part VI of the general permit.

D. Numeric Effluent Limitations

All discharges of storm water runoff from concrete batch plants must be monitored at the following monitoring frequency and comply with the following numeric effluent limitations:

	Limitations	Monitoring
<u>Parameter</u>	Daily Maximum	Frequency
Total Suspended Solids	65 mg/l	1/Year
Oil and Grease	15 mg/l	1/Year
рН	between 6 and 9 standard units	1/Year

E. Storm Water Pollution Prevention Plan (SWP3)

Operators of municipal construction activities that qualify for coverage under this general permit and that discharge storm water associated with construction activities that reach waters of the U.S. must:

- 1. develop a SWP3 according to the provisions of this general permit that covers the entire site and begin implementation of that plan prior to commencing construction activities;
- 2. post a signed copy of the notice contained in Attachment 1 of this general permit in a location at the construction site where it is readily available for viewing prior to commencing construction activities and maintain the notice in that location until completion of the construction activity and final stabilization of the site;
- 3. ensure the project specifications allow or provide that adequate BMPs may be developed and modified as necessary to meet the requirements of this general permit and the SWP3;
- 4. ensure all contractors are aware of the SWP3 requirements, are aware that municipal personnel are responsible for the day-to-day operations of the SWP3, and who to contact concerning SWP3 requirements; and
- 5. ensure that the SWP3 identifies the municipal personnel responsible for implementation of control measures described in the plan.

F. Effective Date of Coverage

Operators of construction activities eligible for coverage under this general permit are authorized to discharge storm water associated with construction activity from a site 48 hours from the time that the signed notice is posted at the site.

G. Deadlines for SWP3 Preparation and Compliance

The SWP3 must:

- 1. be completed and initially implemented prior to commencing construction activities that result in soil disturbance;
- 2. be updated as necessary to reflect the changing conditions of new contractors, new areas of responsibility, and changes in best management practices; and
- 3. provide for compliance with the terms and conditions of this general permit.

H. Plan Review and Making Plans Available

The SWP3 must be retained on-site at the construction site or made readily available at the time of an on-site inspection to: the executive director; a federal, state, or local agency approving sediment and erosion plans, grading plans, or storm water management plans; local government officials; and the operator of a municipal separate storm sewer receiving discharges from the site.

I. Keeping Plans Current

The permittee must amend the SWP3 whenever:

- 1. there is a change in design, construction, operation, or maintenance that has a significant effect on the discharge of pollutants and that has not been previously addressed in the SWP3; or
- results of inspections or investigations by site operators, authorized TCEQ personnel, or a
 federal, state or local agency approving sediment and erosion plans indicate the SWP3 is
 proving ineffective in eliminating or significantly minimizing pollutants in discharges
 authorized under this general permit.

J. Contents of SWP3

The SWP3 must include, at a minimum, the information described in this section.

- 1. A site description, or project description, must be developed to include:
 - (a) a description of the nature of the construction activity, potential pollutants and sources;

- (b) a description of the intended schedule or sequence of major activities that will disturb soils for major portions of the site;
- (c) the number of acres of the entire construction site property and the total number of acres of the site where construction activities will occur, including off-site material storage areas, overburden and stockpiles of dirt, and borrow areas;
- (d) data describing the soil type or the quality of any discharge from the site;
- (e) a map showing the general location of the site (e.g. a portion of a city or county map);
- (f) a detailed site map indicating the following:
 - (1) drainage patterns and approximate slopes anticipated after major grading activities;
 - (2) areas where soil disturbance will occur;
 - (3) areas which will not be disturbed;
 - (4) locations of all major structural controls either planned or in place;
 - (5) locations where stabilization practices are expected to be used;
 - (6) locations of off-site material, waste, borrow or equipment storage areas;
 - (7) surface waters (including wetlands) either adjacent or in close proximity; and
 - (8) locations where storm water discharges from the site directly to a surface water body.
- (g) the location and description of asphalt plants and concrete plants (if any) providing support to the construction site and that are also authorized under this general permit;
- (h) the name of receiving waters at or near the site that will be disturbed or that will receive discharges from disturbed areas of the project; and
- (i) a copy of Part VI of this TPDES general permit.
- 2. The SWP3 must describe the structural and the non-structural controls (best management practices) that will be used to minimize pollution in runoff. The description must identify the general timing or sequence for implementation and the party responsible for implementation. At a minimum, the description must include the following components:

(a) Erosion and Sediment Controls

- (1) Erosion and sediment controls must be designed to retain sediment on-site to the maximum extent practicable with consideration for local topography and rainfall.
- (2) Control measures must be properly selected, installed, and maintained according to the manufacturer's or designer's specifications. If periodic inspections or other information indicates a control has been used incorrectly, or that the control is performing inadequately, the operator must replace or modify the control.
- (3) Sediment must be removed from sediment traps and sedimentation ponds no later than the time that design capacity has been reduced by 50%.
- (4) If sediment escapes the site, accumulations must be removed at a frequency to minimize further negative effects and, whenever feasible, prior to the next rain event.
- (5) Controls must be developed to limit offsite transport of litter, construction debris, and construction materials by storm water runoff.

3. Stabilization Practices

The SWP3 must include a description of interim and permanent stabilization practices for the site, including a schedule of when the practices will be implemented. Site plans should ensure that existing vegetation is preserved where it is possible.

- (a) Stabilization practices may include but are not limited to: establishment of temporary vegetation, establishment of permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of existing trees and vegetation and other similar measures.
- (b) The following records must be maintained and either attached to or referenced in the SWP3 and made readily available upon request to the parties in Part VI.H. of this general permit:
 - (1) the dates when major grading activities occur;
 - (2) the dates when construction activities temporarily or permanently cease on a portion of the site; and
 - (3) the dates when stabilization measures are initiated.
- (c) Stabilization measures must be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and except as provided in (1) through (3) below, must be initiated no more than fourteen (14) days

after the construction activity in that portion of the site has temporarily or permanently ceased.

- (1) Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceased is precluded by snow cover or frozen ground conditions, stabilization measures must be initiated as soon as practicable.
- (2) Where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonably arid conditions, stabilization measures must be initiated as soon as practicable. These conditions exist in arid areas (areas with an average rainfall of 0 to 10 inches), semiarid areas (areas with an average annual rainfall of 10 to 20 inches), and other areas experiencing droughts.
- (3) Where construction activity on a portion of the site is temporarily ceased and earth disturbing activities will be resumed within twenty-one (21) days, temporary stabilization measures do not have to be initiated on that portion of site.

4. Structural Control Practices

The SWP3 must include a description of any structural control practices used to divert flows away from exposed soils, to limit the contact of runoff with disturbed areas, or to lessen the off-site transport of eroded soils.

- (a) Sediment basins are required, where feasible, for common drainage locations that serve an area with ten (10) or more acres that remain disturbed at any one time. Sediment basins may be either temporary or permanent, but must be designed to store either the calculated volume of runoff from a 2 year, 24 hour storm from acreage drained, or designed to provide 3,600 cubic feet of storage per acre drained. When calculating the volume of runoff from a 2-year, 24-hour storm event, it is not required to include the flows from offsite areas and flow from onsite areas that are either undisturbed or have already undergone final stabilization, if these flows are diverted around both the disturbed areas of the site and the sediment basin. In determining whether installing a sediment basin is feasible, the permittee may consider factors such as site soils, slope, available area on site, public safety, and other similar considerations. Where sediment basins are not feasible, equivalent control measures, which may include a series of smaller sediment basins, must be used. At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries (and for those side slope boundaries deemed appropriate as dictated by individual site conditions) of the construction area.
- (b) Sediment traps and sediment basins may be used to control solids in storm water runoff for drainage locations serving less than ten (10) acres. At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all

down slope boundaries (and for those side slope boundaries deemed appropriate as dictated by individual site conditions) of the construction. Alternatively, a sediment basin providing storage for a calculated volume of runoff from these areas for a 2-year, 24- hour storm or 3,600 cubic feet of storage per acre drained may be provided.

5. Permanent Storm Water Controls

A description of any measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed must be included in the SWP3. Permittees are only responsible for the installation and maintenance of storm water management measures prior to final stabilization of the site

6. Other Controls

- (a) Off-site vehicle tracking of sediments and the generation of dust must be minimized.
- (b) The SWP3 must include a description of construction and waste materials expected to be stored on-site and a description of controls to reduce pollutants from these materials.
- (c) The SWP3 must include a description of pollutant sources from areas other than construction (including storm water discharges from dedicated asphalt plants and dedicated concrete plants), and a description of controls and measures that will be implemented at those sites to minimize pollutant discharges.

7. Approved State and Local Plans

- (a) Permittees must ensure the SWP3 is consistent with requirements specified in applicable sediment and erosion site plans or site permits, or storm water management site plans or site permits approved by federal, state, or local officials.
- (b) SWP3s must be updated as necessary to remain consistent with any changes applicable to protecting surface water resources in sediment erosion site plans or site permits, or storm water management site plans or site permits approved by state or local official for which the permittee receives written notice.

8. Maintenance

All erosion and sediment control measures and other protective measures identified in the SWP3 must be maintained in effective operating condition. If through inspections the permittee determines that BMPs are not operating effectively, maintenance must be performed before the next anticipated storm event or as necessary to maintain the continued effectiveness of storm water controls. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable.

9. Inspections of Controls

(a) Personnel provided by the permittee and familiar with the SWP3 must inspect disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation, all structural control measures for effectiveness and necessary maintenance, and locations where vehicles enter or exit the site for evidence of off-site tracking. Inspections must occur at least once every fourteen (14) calendar days and within twenty four (24) hours of the end of a storm event of 0.5 inches or greater. As an alternative, the SWP3 may be developed to require that these inspections will occur at least once every seven (7) calendar days; in which case additional inspections are not required following each qualifying storm event. If this alternative schedule is developed, the inspection must occur on a specifically defined day, regardless of whether or not there has been a rainfall event since the previous inspection.

Where sites have been finally or temporarily stabilized, where runoff is unlikely due to winter conditions (e.g. site is covered with snow, ice, or frozen ground exists), or during seasonal arid periods in arid areas (areas with an average annual rainfall of 0 to 10 inches) and semi-arid areas (areas with an average annual rainfall of 10 to 20 inches), inspections must be conducted at least once every month.

(b) Personnel provided by the permittee and familiar with the SWP3 must inspect all accessible discharge locations to determine if erosion control measures are effective in preventing visually noticeable changes to receiving waters, including persistent cloudy appearance in water color and noticeable accumulation of sediments.

Where discharge locations are inaccessible, nearby downstream locations must be inspected to the extent that such inspections are practicable. The frequency for these inspections must be established by the permittee in the SWP3 with consideration for local rainfall and soil, but must occur at least once during the construction activity if a discharge occurs.

- (c) The SWP3 must be modified based on the results of inspections, as necessary, to better control pollutants in runoff. Revisions to the SWP3 must be completed within seven (7) calendar days following the inspection. If existing BMPs are modified or if additional BMPs are necessary, an implementation schedule must be described in the SWP3 and wherever possible those changes implemented before the next storm event. If implementation before the next anticipated storm event is impracticable, these changes must be implemented as soon as practicable.
- (d) A report summarizing the scope of the inspection, names and qualifications of personnel making the inspection, the dates of the inspection, and major observations relating to the implementation of the SWP3 must be made and retained as part of the SWP3. Major observations should include: the locations of discharges of sediment or other pollutants from the site; locations of BMPs that need to be maintained; locations of BMPs that failed to operate as designed or proved inadequate for a

- particular location; and locations where additional BMPs are needed.
- (e) Actions taken as a result of inspections must be described within, and retained as a part of, the SWP3. Reports must identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report must contain a certification that the facility or site is in compliance with the SWP3 and this permit.
- 10. The SWP3 must identify and ensure the implementation of appropriate pollution prevention measures for all eligible non-storm water components of the discharge.

K. Additional Retention of Records

The permittee must retain the following records for a minimum period of three (3) years from the date that final stabilization has been achieved on all portions of the site. Records include:

- 1. a copy of the SWP3; and
- 2. all reports and actions required by this general permit, including a copy of the site notice.

Attachment 1



CONSTRUCTION SITE NOTICE

FOR THE

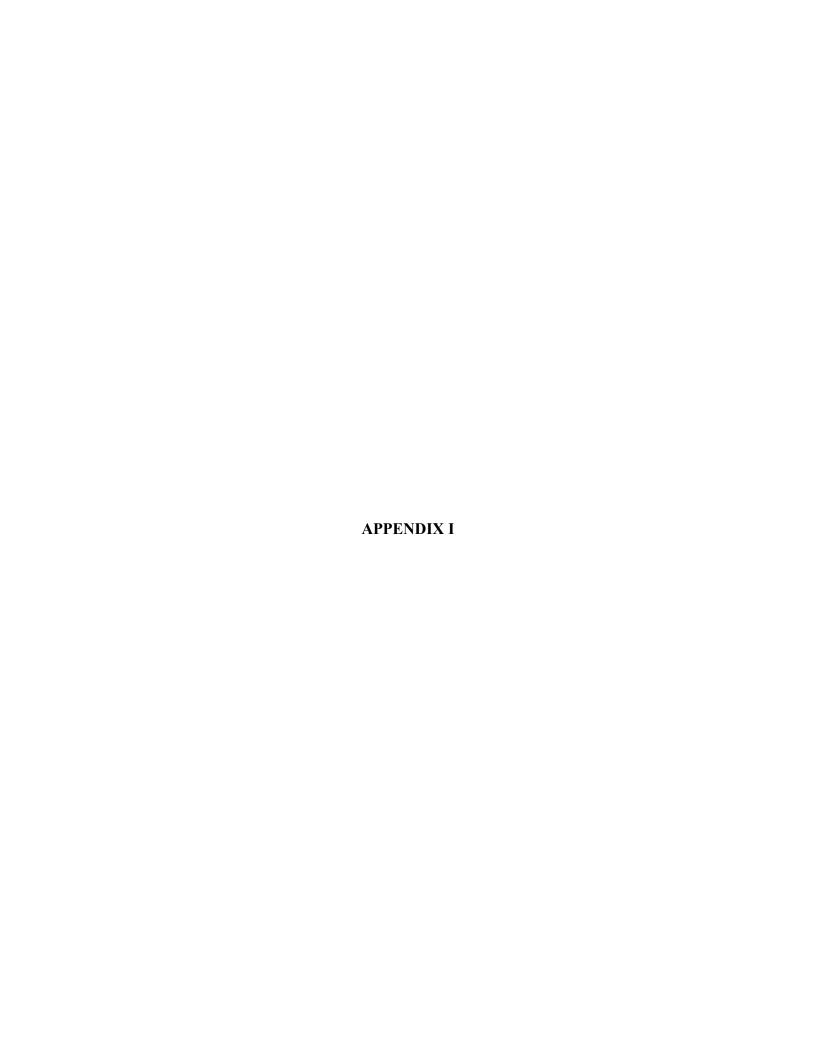
Texas Commission on Environmental Quality Storm Water Program

TPDES GENERAL PERMIT TXR040000

The following information is posted in compliance with Part VI of the Texas Commission on Environmental Quality's (TCEQ) TPDES General Permit Number TXR040000 for discharges of storm water runoff from construction sites that are operated by small municipal separate storm sewer system operators. Additional information regarding the TCEQ storm water permit program may be found on the internet at: www.tceq.state.tx.us

Permit Number:	1 XR04
Contact Name and Phone Number:	
Project Description: (Including estimated start date and either the projected end date, or date that disturbed soils will be finally stabilized)	
Location of Storm Water Pollution Prevention Plan (SWP3):	
enalty of law that I have read and understand the PDES General Permit TXR040000. A storm ecording to permit requirements. I am aware	d or Printed Name Person Completing This Certification) certify under e eligibility requirements for claiming an authorization under Part VI of water pollution prevention plan has been developed and implemented there are significant penalties for providing false information or for he possibility of fine and imprisonment for knowing violations.
ignature	Date

PERMITTEE NAM	ME/ADDRESS (Include	e Facility Name/Location	if Different)	NATION	AL POLLUTANT D	OISCHARGE (NPDES)	ELIMINAT	ION SYSTEM	NOTE	Enter v	our permit	numl	er in	the	
NAME				DISC	CHARGE MON		REPORT	(DMR)	underli	ned space	in the upp	er rig	ht ha		ner of
ADDRESS					2-16) Γ NUMBER		(17	E NUMBER	_	e. Exampl Mai		(MC 2	13)		
FACILITY LOCATION				YEAR	-	ORING PI	ERIOD EAR M		= - - <u>-</u>		P.O. B Austin)87	
PARAMETER (32-37)		(3 Card Only) Q (46-53)	(54-61)	LOADING		(4 Card C (38-4	Only) QUA 5)	ALITY OR COI (46-53)	NCENTRAT (54-6	1)		NO. EX	FREQU C ANAI	F YSIS	SAMPLE TYPE
Total Suspended Solids	SAMPLE MEASUREMENT	AVERAGE *****		XIMUM ****	UNITS *****		****	AVERA(AXIMUM	UNITS	(62-63)	(64-	.68)	(69-70)
	SAMPLE REQUIREMENT	*****	**	****	*****	**	****	*****	* Da	65 ily Max	mg/l		1/Y	ear	Grab
Oil & Grease	SAMPLE MEASUREMENT	*****	**	****	*****	**	****	*****	*						
	SAMPLE REQUIREMENT	*****	**	****	*****	**	****	*****	* Da	15 aily Max	mg/l		1/Y	ear	Grab
pН	SAMPLE MEASUREMENT	*****	**	****	*****	**	****	*****	*			L			
	SAMPLE REQUIREMENT	*****	**	****	*****	**	****	****		.0 - 9.0 Range	S.U.		1/Y	ear	Grab
	SAMPLE MEASUREMENT														
	SAMPLE REQUIREMENT														
NAME/TITI	LE PRINCIPAL E OFFICER	XECUTIVE								TE	LEPHONE			DATE	I
			PREPARED UNDER MY DESIGNED TO ASSURE T THE INFORMATION SUBI MANAGE THE SYSTEM, (INFORMATION, THE INF	DIRECTION OR SUPE HAT QUALIFIED PER MITTED. BASED ON M OR THOSE PERSONS D ORMATION SUBMITT	IS DOCUMENT AND ALL ATT REVISION IN ACCORDANCE SONNEL PROPERLY GATHE IY INQUIRY OF THE PERSON DIRECTLY RESPONSIBLE FOL ED IS, TO THE BEST OF MY	E WITH A SYSTE R AND EVALUAT OR PERSONS WH R GATHERING TH KNOWLEDGE AN	SIGN	ATURE OF PR EXECUTIV		ADEA	NILIMDED		ZE A D	MO	DAY
	YPED OR PRINTEI ND EXPLANATIO		PENALTIES FOR SUBMIT AND IMPRISONMENT FO	TING FALSE INFORM R KNOWING VIOLAT		SSIBILITY OF FIN	^T OFFICER	OR AUTHOR		T AREA CODE	NUMBER)	EAR	МО	DAY
EPA Form 3320-	1 (3-99)		(REPLA	CES EPA F	ORM T-40 WHI	ІСН МАҰ	NOT BE	USED)			PAG	GE		OF	





permit when it is no longer needed.

3. Billing Contact (Attn or C/O):

1. Billing Mailing Address:

City:

4. Phone No.: 5. Fax No.:

Is the billing address same as the Operator Address?

2. Country Mailing Information (if outside USA).

State:

Notice of Intent (NOI) for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4) under the TPDES Phase II MS4 General Permit (TXR040000)

Did you know you can pay on line? Go to www.tceg.state.tx.us/ePay

TCEQ Office Use Only Permit No.:

RN:

CN:

Select Fee Type: G	ENERAL PERMI	T MS	4 PHASE II STORM \	WATER DISCHARGE NOI APPLICATION	N
Application Fee: You must pay the \$1	00 Application F	ee to	TCEQ for the applic	ation to be considered complete.	
How did you pay this fee?					
☐ Mailed: Check/Money Order No.:			Name Printed on Cl		
EPAY: Voucher No.: 41187			Is the Payment Vou	cher copy attached?	
IMPORTANT:					
 Use the attached INSTRUCTIONS will 					
 After completing this form, use the atta 	iched CUSTOM	ER (CHECKLIST to mal	ce certain all items are complete and	
accurate.					
 Missing, illegible, or inaccurate items r 	nay delay final a	<u>ckno</u>	wledgment or covera	ge under the general permit.	
One (1) copy of the NOI and SWMP v	with the comple	ted S	SWMP Cover Sheet	MUST be submitted with the origina	ıl
NOI and SWMP.					
Is the copy attached? Yes					
A. OPERATOR (applicant)					
1. If the applicant is currently a custom	er with TCEQ, w	/hat i	is the Customer Num	ber (CN) issued to this entity?	
CN					
2. What is the full Legal Name of the a	pplicant?				
City of Weslaco					
(The exact legal name must be provided.)		1 14	he HC Destal Carrie	- O	
3. What is the applicant's mailing addre					
Address: 255 South Kansas Av	enue	Suit	e No./Bldg. No./Mail	Code:	
Cit	States =		<u> </u>	ZIP Code: 78596	
City: Weslaco	State: Texas			ZIF Code. 78596	
Country Mailing Information (if outs	side USA).	Cou	ntry Code:	Postal Code:	
4. Phone No.: (956) 973-3146			Extension:		
5. Fax No.: (956) 447-3298			E-mail Address: dsa	alinas@weslacotx.gov	
6. Indicate the type of Customer:			industrie i - i		
Federal Government	State G	oven	nment 🔲 Co	ounty Government	
City Government	Other C	Jove	rnment	_	
7. Number of Employees:	0-20 ; 2	1-100	D; 🔲 101-250; [2 251-500; or □ 501 or higher	
B. BILLING ADDRESS					
The Operator is responsible for paying t	he annual fee. Tl	he an	nual fee will be asses	sed to permits active on September 1	of
each year. TCEQ will send a bill to the					

Country Code:

Extension:

E-mail Address:

Yes, go to Section C. No, fill out Section B

ZIP Code:

Postal Code:

Suite No./Bldg. No./Mail Code:

C. REGULATED ENTITY (RE) INFORMATION	
1. Has the TCEQ issued a Regulated Entity Reference Number (RN) for the regulated MS4?	
Yes. What is the RN? RN	
No - TCEQ will assign the RN number after the NOI is submitted.	
2. Name that is used to identify the small MS4 (Regulated Entity).	
(Example: City of XXX MS4) City of Weslaco MS4	
3. Provide a brief description of the regulated MS4 boundaries:	
(Example: Area within the City of XXXX limits that is located within the xxx (e.g. Dallas) urbanized area.)	
Area within the City of Weslaco limits.	
4. a. What is the county where the largest residential population exists within the regulated MS4 boundaries? Hidalgo	
b. Is the MS4 located within additional counties? Yes No	
If yes, what county(s)?	
5. What is the latitude and longitude of the approximate center of the regulated portion of the small MS4?	
Latitude: 26.16186 N Longitude: -97.99043 W	
6. What is the mailing address for the regulated entity?	
Is the RE mailing address the same as the Operator? Yes, go to Section F. No, provide the address.	
Street Number: Street Name:	
City: State: ZIP Code:	
D. GENERAL CHARACTERISTICS	
1. I certify that any portion of the regulated MS4 is not located on Indian Country Lands. Yes No	
If No, you must obtain authorization through EPA, Region VI.	
2. What is the Standard Industrial Classification (SIC) code (see instructions for common codes): 9111	
3. Has TCEQ "designated" the small MS4 as needing coverage under this general permit?	
If "No" and no portion of the Small MS4 is located within an Urbanized Area as determined by the 2000 Decennial Census	
by the U.S. Bureau of Census requiring a NOI be submitted, the operator is not eligible for coverage under this general perm	it
through the NOI.	
4. Storm Water Management Program (SWMP)	
a. I certify that the SWMP submitted with this Notice of Intent has been developed according to the provisions of this	
general permit TXR040000. Yes No	
b. I certify that the SWMP Cover Sheet is completed and attached to the front of the SWMP. Yes No	
b. I certify that the SWMP Cover Sheet is completed and attached to the front of the SWMP. LYes No	
If No to question a. or b. the application is considered incomplete and may be returned.	
b. Who is the person responsible for implementing or coordinating implementation of the SWMP?	
(Note: All contact information requested below is required.)	
Name: Anthony Covacevich Title: City Manager Company: City of Weslaco	
Address: 255 South Kansas Avenue Suite No./Bldg. No./Mail Code:	
City: Weslaco State: Texas ZIP Code: 78596	_
Phone No.: (956) 968-3181 Extension:	
Fax No.: (956) 958-6672 E-mail Address: amata@weslacotx.gov	_
5. Seventh Minimum Control Measure (MCM) for Municipal Construction Activities	
a. Is the Minimum Control Measure for authorization to discharge storm water from municipal construction activities	
included with the attached SWMP?	
b. If you answered "Yes" to 5.a., what are the boundaries within which those activities will occur?	
Note: If the boundaries are located outside of the urbanized area, then the entire SWMP must also incorporate the additional	1
areas.	

TCEQ- 20368 (08/14/2007) Page 2

c. Is the discharge or potential discharge from regulated or Contributing zone within the Transition zone of the E	construction activities within the Recharge Zone, Contributing Zone, dwards Aquifer? Yes No				
If the answer is "Yes", please note that a copy of the agency approved Plan required by the Edwards Aquifer Rule (30 TAC Chapter 213) must be either included or referenced in the construction storm water pollution prevention plan(s).					
6. Discharge Information					
a What is the name of the receiving water body(s) from	the MS42				
Unnamed Drain Ditch; thence to the Floodway; thence	Laguna Madre				
b. What is the classified segment(s) that receives discha	rges directly or indirectly from the small MS4?				
- · · ·	agos, andony or manoonly, nomina and amount of				
Segment No. 2491 of the Bays and Estuaries	Continue all MCA and a late 4 FDA agreement CWA \$ 202(d)				
list of impaired waters? Yes No	ges from the small MS4 on the latest EPA-approved CWA § 303(d)				
If Yes, what is the name of the impaired water body(s) r	eceiving the discharges from the small MS42				
11 1 es, what is the name of the imparted water body(s) i	cceiving the discharges from the sman 14104:				
d. Is the discharge into any other MS4 prior to discharge	e into surface water in the state? Yes No				
If Yes, what is the name of the MS4 Operator?	o into buriace water in the state.				
11 163, What is no hame of the Mist operator.					
7. Edwards Aquifer					
	thin the Recharge Zone, Contributing Zone, or Contributing Zone				
within the Transition Zone of the Edwards Aquifer?	Yes No				
	by approved Plan required by the Edwards Aquifer Rule (30 TAC				
Chapter 213) for activities also regulated under this general permit must be either included or referenced in the SWMP. 8. Public Participation Process					
	on responsible for publishing notice, the notice of the executive				
	MP, for publishing in a newspaper of largest circulation in the county				
	otice must be published at least once in the newspaper of largest				
circulation in the county containing the largest resident					
<u> </u>					
The applicant must file with the Chief Clerk a copy of a	n affidavit of the publication within 60 days of receiving the written				
instructions from the Office of Chief Clerk.					
a. I will comply with the Public Participation requireme	ents described in Part II.D.12 of the general permit. Yes No				
If No, coverage under this general permit is not obtaina					
h. Who is the person responsible for publishing notice of	of the executive director's preliminary determination on the NOI and				
SWMP? (Note: All contact information requested below is					
	Facilities Director Company: City of Weslaco				
Address: 255 South Kansas Avenue	Suite No./Bldg. No./Mail Code:				
City: Weslaco	State: Texas Zip Code: 78596				
Phone No.: (956) 973-3146	Extension:				
Fax No.: (956) 447-3298	E-mail Address: dsalinas@weslacotx.gov				
	where copies of the NOI and SWMP, as well as the executive				
director's general permit and fact sheet, may be viewed?					
Name of Public Place: City of Weslaco Public Library	MARKET - 1				
,					
Address of Public Place: 525 South Kansas Ave., Wesla	co, TX 78596				
·					
County of Public Place:					

E. CERTIFICATION		
Check "Yes" to the certifications below. Failure to indicate "Yes" to ALL items may general permit.	result in denial of coverage	under the
I certify that I have obtained a copy and understand the terms and conditions of the general certify that the small MS4 qualifies for coverage under the general permit TXR040000 I understand that a Notice of Termination (NOT) must be submitted when this authorized I understand that permits active on September 1st of each year will be assessed an Annu Operator Certification:). ution is no longer hand at	Yes Yes Yes Yes Yes
I,ANTHONY COVACEVICH Typed or printed name	CITY MANAGER Title	
certify under penalty of law that this document and all attachments were prepared under accordance with a system designed to assure that qualified personnel properly gather and Based on my inquiry of the person or persons who manage the system, or those persons information, the information submitted is, to the best of my knowledge and belief, true, there are significant penalties for submitting false information, including the possibility violations.	d evaluate the information s directly responsible for gath	ubmitted. nering the
I further certify that I am authorized under 30 Texas Administrative Code §305.44 to s can provide documentation in proof of such authorization upon request.	ign and submit this docume	nt, and
Signature: Cuthoung Charles Date:	1/4/08	

(Use blue ink)





STORMWATER MANAGEMENT PROGRAM ADDENDUM NO. 1

Developed in accordance with the requirements of TEXAS COMMISSION ON ENVIRONMENTAL QUALITY - TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM - TPDES GENERAL PERMIT TXR040000

Permit Term:

August 13, 2007 - July 13, 2012

Prepared August 2008







Prepared by: Lower Rio Grande Valley TPDES Stormwater Task Force, South Texas Environmental Institute www.stei.org

TABLE OF CONTENTS

4.0 BEST MANAGEMENT PRACTICES, MEASURABLE GOALS,
IMPLEMENTATION SCHEDULE, AND MEASUREABLE GOAL EVALUATION
PROCESS
4.1 - MCM #1 - PUBLIC EDUCATION AND OUTREACH
4.2 - MCM #2 - PUBLIC INVOLVEMENT AND PARTICIPATION 16
4.3 - MCM #3 - ILLICIT DISCHARGE DETECTION AND ELIMINATION 18
4.4 - MCM #4 - CONSTRUCTION SITE STORMWATER RUNOFF
CONTROL21
4.5 - MCM #5 – POST-CONSTRUCTION STORMWATER MANANGEMENT
4.6 - MCM #6 - POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR
MUNICIPAL OPERATIONS
4.7- MCM #7 - AUTHORIZATION FOR MUNICIPAL CONSTRUCTION
ACTIVITIES26
5.0 STORMWATER MANAGEMENT PROGRAM
5.1 - PUBLIC EDUCATION AND OUTREACH BMPS
5.7- AUTHORIZATION FOR MUNICIPAL CONSTRUCTION ACTIVITIES
BMPS66
6.0 CITY PERMITTED FACILITIES
APPENDIX F – TPDES PERMITS
APPENDIX I – BMP LISTED BY REGULATORY REQUIREMENT

4.0 BEST MANAGEMENT PRACTICES, MEASURABLE GOALS, IMPLEMENTATION SCHEDULE, AND MEASUREABLE GOAL EVALUATION PROCESS

Task Force Accomplishments to Date. From 2002 and through 2007, the LTSTF participants completed the following work products:

- A Mission Statement was developed that outlines the goals and objectives for the LTSTF Project (see Appendix B).
- Interlocal agreements were entered into between LTSTF members and TAMUK (see Appendix C).
- Organization by-laws were developed that govern the LTSTF's procedures (see Appendix D).
- Tables were developed that outline the seven MCMs required by the Phase II MS4 regulations and additional stormwater programs
- A MS4 SWMP was developed for individual municipalities to achieve compliance with the TPDES requirements
- The LTSTF participants developed public outreach and educational seminars and numerous educational outreach events were developed, funded and hosted, including conferences in the LRGV, Coastal Bend area, City of Laredo, City of Monterrey, Mexico and San Antonio (see Appendix G).
- With funding provided by the member cities, the LTSTF operating budget was developed based on estimated costs for program implementation

Overview of Conceptual SWMP. In 2002, the LTSTF partners began laying the foundation for the development of the five-year SWMPs, which outline the BMP programs. Emphasis was placed on developing BMPs that meet the Phase II stormwater regulations. Development of the SWMPs was accomplished with input from the individual municipalities, the LTSTF MS4 committee, and TAMUK. By-laws were executed on January 23, 2003 (Appendix H). The by-laws identify the LTSTF as the managing entity made up of one voting representative from each member community. The LTSTF utilizes and directs TAMUK personnel, who provide administrative and management support to develop the SWMPs. The interlocal agreements between TAMUK and the member municipalities identify TAMUK as the contracting fiscal agent of the LTSTF. The LTSTF members also participate in workgroups, one of which directly assists TAMUK with the development of the SWMPs.

The SWMPs BMPs are divided into two main categories: Priority One activities are those required to comply with Phase II stormwater regulations and Priority Two activities are those that address broader stormwater and water quality management issues. The Priority One activities will be submitted in each city's application for a Phase II municipal stormwater permit with the TCEQ in February 2008; permits will be issued shortly thereafter by the TCEQ. Priority Two programs are those that augment programs to meet community standards and/or are already included in existing, comprehensive programs (City of Boulder, 2003).

The Phase II regulations call for MCMs to address the impact of stormwater runoff on water quality. These programs are described in detail in the conceptual SWMP.

The conceptual SWMP was developed in part, by incorporating existing BMP programs found in various SWMP templates into the methodology used by this project. The SWMP templates are listed in the reference section of this report. Selected BMPs, in the conceptual SWMP template for each required MCM are listed below, but not necessarily limited to those listed and described below:

1) MCM 1 - Public Education and Outreach

- School-Based Education Program (water quality curriculum and classroom programs)
- Business Education Program (see MCM 3)

Note: TAMUK will facilitate many of these programs through the LTSTF.

2) MCM 2 - Public Participation and Involvement

- Storm Drain Stenciling Program
- Illicit Discharge Hotline (see MCM 3)
- Annual Public Meetings to Solicit Input

Note: TAMUK will facilitate many of these programs through the LTSTF.

3) MCM 3 - Illicit Discharge Detection and Elimination

- Legal Prohibition of Illicit Discharges (ordinances and other code development)
- Illicit Discharge Enforcement (spill response plan, inspections and enforcement)
- Community-Based Education Program (brochures, fact sheets and other materials)
- Business Education
- Storm Sewer System Mapping

4) MCM 4 - Construction Site Stormwater Runoff Control

- Training and Education for Construction Site Operators and Inspectors
- Erosion Control Ordinance (required erosion control for construction sites)
- Erosion Control Standard Operating Procedures (SOPs) (outline application and approval procedures for construction site stormwater management plan submittals)
- Erosion Control Inspection and Enforcement (implementation of erosion control ordinance)
- Public Input

5) MCM 5 - Post-Construction Stormwater Management

- Post-Construction Ordinance (required treatment of stormwater runoff)
- Design Criteria and Standards (outline type of stormwater treatment or BMPs required)
- Development Review (ensures application of BMPs)
- BMP Operation and Maintenance (requires long-term maintenance of BMPs)

6) MCM 6 - Pollution Prevention and Good Housekeeping for Municipal Operations

• Training and Certification for Municipal Employees (site-specific water pollution prevention activities)

Note: TAMUK will work with LTSTF to develop appropriate training curricula.

7) MCM 7 – Authorization for Municipal Construction Activities

- General SWP3 developed for permittee owned projects to be used by all contractors, architects and engineers
- MCM will apply in all urbanized areas, all non-urbanized areas within the city limits, and within the one (1) mile of city extraterritorial jurisdiction (ETJ);

8) General Requirements

The main objective of this section is to develop a method of "grading" the contents of the SWMP. TAMUK will work with the LTSTF in developing checklists, reports, surveys, quantitative and qualitative data, and evaluation techniques to assure the annual report provides effective feedback to the TCEQ and the permittee on the success of or on the shortcomings of the SWMP. Some of the tasks are as follows:

- Good Recordkeeping program
- Performance Measures
- Evaluation will determine changes to SWMP
- Annual Report

The LTSTF communities will fund the common and shared program costs within their respective jurisdictions. Cost allocation will be based on each member's urbanized population. Costs to implement the individual community programs will be the responsibility of each individual community.

Planned Year 1 SWMP tasks. The conceptual SWMP template requires the LTSTF to do the following by the end of 2008:

- Produce and distribute brochures addressing prevention of stormwater pollution.
- Stencil stormwater drains with the message, "No Waste, Drains to Arroyo Colorado" or "No Waste, Drains to the Laguna Madre."
- Implement a school-based education program for reaching students.
- Develop ordinance templates to regulate potential stormwater pollutants from commercial, industrial, municipal and residential sources, and from local, private and public construction activity.
- Further evaluate agricultural and publicly-owned activities (e.g., TxDOT and counties).
- Develop erosion control training programs and a certification program for public employees and private contractors and conduct training sessions.
- Develop stormwater runoff pollution prevention materials for businesses, residences and municipal operations and make materials will be available at City Halls.
- Work with Chambers of Commerce, Economic Development Corporations, and municipal operations staff in developing pollution prevention plans for restaurants, vehicle services facilities, and industrial sites.
- Organize focus groups comprised of employees from the LTSTF communities to facilitate discussions of maintenance practices for public works, parks, airports, solid waste facilities, wastewater and water treatment plants, and storm sewers.

 Apply for 319 Non-Point Source, Border 2012, and other funding from the TCEQ and EPA.

Planned Year 2 SWMP tasks. In 2009, the primary responsibility for the LTSTF members will be to adopt the ordinances developed in 2008, to develop Standard Operating Procedures (SOPs) to outline requirements for erosion control plans, to develop SOPs for site plan review and inspection, to develop SOPs for BMP selection guidance, and to prepare storm sewer system and outfall maps for their communities that will be completed by August 2009. The LTSTF will continue to implement the shared and common programs (conferences, workshops, seminars) at the benefit of all the communities. The mapping of the sewer systems will be expanded in some cities and initiated in others beginning in 2009.

The following sections describe in detail the plans incorporated into the conceptual SWMP template for each of the seven minimum control measures (MCMs).

Planned Years 3-5 SWMP tasks. In 2010, the LTSTF and TAMUK will work together to gradually phase in all the SWMP BMPs until fully implemented by 2012.

4.1 MCM #1 - Public Education and Outreach

To satisfy the regulatory requirements for this MCM, public education and outreach on stormwater impacts is required. The permittee must implement a public education program to include the following:

- I. Distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff; and
- II. Inform businesses and the general public of the impacts associated with illegal discharges and improper disposal of waste.

Program Objective. The objective of MCM #1 is to increase the public's awareness of stormwater issues. To achieve this, a public education program must first educate the public on the definition of urban stormwater runoff. Next, the public must be made aware of the problems that are associated with stormwater and then be educated on what they can do to help solve the problems. Finally, a successful program must provide opportunities for hands-on activities and buy in from the community. The conceptual SWMP template's Education Program uses a variety of methods to "get the word out."

Priority One Activities. The activities planned to comply with Phase II MS4 MCM #1 are outlined below.

<u>Public Education and Outreach.</u> Brochures or fact sheets will be distributed with municipal water utility bills and by other appropriate means. Brochures equivalent to the number of households in each LTSTF partner's permitted area will be produced. Each partner will be responsible for distributing the materials. Other examples of outreach are explained below. The *After the Storm* brochure was developed, produced and made available for distribution to both residential and commercial audiences in certain cities by the LTSTF in 2005. This program will continue be expanded to include the entire

LTSTF membership. A new brochure will be developed that includes additional information on the impacts of illicit discharges and other water quality issues (http://www.epa.gov/weatherchannel/). In addition, the *No La Riegues* campaign developed by Texas Sea Grant and adopted by the LTSTF in 2005, will be revitalized and promoted again. The LRGVDC provided a \$10,000 grant to the LTSTF in 2005 to showcase the campaign (www.nolariegues.com). The *Chucho Salva el Dia* campaign initiated by the EPA will also be adopted by the LTSTF in 2008. TAMUK will facilitate the development and distribution of these materials (http://epa.gov/region6/6xa/childrens_health_video.htm#jump).

Water Quality Curriculum. A watershed information curriculum with associated materials and training will be made available and advertised to all elementary classroom teachers in the LTSTF member's school districts. Program materials will include curriculum on water quality and water conservation, stormwater pollution prevention, and promotion of the ACWPP. The SWMP education will also include mailing of post-cards promoting the stormwater education program to all school district teachers, and creation of a comprehensive brochure listing K-12 programs to be printed and distributed in 2008.

<u>LTSTF Web Site.</u> Background information on the LTSTF project, including the seven (7) MCMs along with specific information promoting the stormwater education program, storm drain stenciling program, and annual meetings, will be developed and provided on a web site <u>www.stormwater.stei.org</u>. This web site will be updated frequently. The website is currently under construction.

Priority Two Activities. The activities planned to address broader stormwater and water quality management issues related to the Phase II MS4 MCM #1 are outlined below.

Annual Events. Each municipality will include a stormwater pollution prevention outreach program in various annual community events. Booths, brochures, childrenfriendly materials, and other similar approaches shall be used. Each City shall consider designated a day or a week for stormwater pollution prevention awareness,

<u>Signage</u>. Stormwater pollution prevention signs will be designed, produced and installed along major intersections in each LTSTF city. The signs will bear the logos from the LTSTF, the ACWPP and the respective city. Each community will place signs at locations where pedestrians and vehicle drivers will recognize the sign as an indicator of a local water body that should be protected.

<u>Performance Measures</u>. The SWMP MCM #1 goals and programs will be measured for success by tabulating households reached, number of outreach events conducted, quantity of specific materials produced, tabulating web site "hits", grants obtained, and tracking the number of teachers and students that participate in events.

4.2 MCM #2 - Public Involvement and Participation

To satisfy the regulatory requirements for this MCM public involvement and participation is required. The permittee must implement a public involvement program to include the following:

- I. The permittee, must at a minimum, comply with Federal, State and local public notice requirements when implementing the SWMPs required under the TPDES program.
- II. Notice of all public hearings should be published in a community publication or newspaper of general circulation, to provide opportunities for public involvement that reach a majority of citizens through the notification process.
- III. Public Committees are recommended to act as a buffer between the LTSTF and the elected officials and the community. These committees shall represent a cross section of the regulated community and should be an active component of the SWMP during the implementation process.

Program Objective. The objective of MCM #2 is to promote public participation as a means of ensuring buy-in and support from the public. This includes providing information and seeking public input on stormwater management issues. The MCM #2 programs include participatory programs such as neighborhood storm drain stenciling, illicit discharge reporting and annual public meetings. The individual LTSTF partners will be responsible for scheduling and hosting annual public meetings in each of their communities. In addition, partners are responsible for ensuring that a significant number of the storm drains are stenciled in their communities.

Priority One Activities. The activities planned to comply with Phase II MS4 MCM #2 are outlined below.

Annual Public Meetings. Annual public meetings will be conducted to provide citizens with the opportunity to discuss various viewpoints and provide input concerning stormwater quality issues. Meetings will be publicized in accordance with public notification requirements in each jurisdiction, such as a local newspaper or appropriate publication of wide circulation. Records of the meetings will be tabulated as shown in Table 19 in Section 5 and kept in the SWMP.

Storm Drain Stenciling Program. A Storm Drain Stenciling Program will be initiated and incorporated into the MCM #1 Public Education Program. A minimum of number of storm drains will be stenciled per year in each LTSTF city. This criterion will be used to evaluate the program. Municipal staff will provide stormwater education programs and facilitate storm drain stenciling activities with youth and citizens organizations. LTSTF and TAMUK will facilitate the development of partnerships with local youth service groups to perform a significant portion of the storm drain stenciling work. These groups may include the Boys & Girls Clubs, Boy Scouts of America, and local environmental groups. Recordkeeping of stenciling of storm drains is important and shall be a key part of the program. Recordkeeping will include locations, type of storm drain, and volunteer group information. Figure 6 shows an example of a storm drain stencil template.



Figure 6. Example storm drain stencil.

<u>Public Steering Committee</u>. One of the first tasks of the LTSTF and TAMUK is to work with individual member cities in selecting representatives from their communities to form a steering committee comprised of a cross section of the regulated community. The group shall include, but will not be necessarily limited to, representation from the following industries: home building, engineering, academia, general contracting, developers, non-profit organizations, elected officials, municipal staff, environmental groups, regulators, industrial, residential and commercial. Each city shall have such a committee. The role of the group will be to provide input in the development and implementation of the SWMP.

<u>Performance Measures.</u> The SWMP MCM #2 goals and programs will be measured for success by achieving stenciling program goals, assuring significant attendance in meetings, and tallying the number of meetings held.

4.3 MCM #3 - Illicit Discharge Detection and Elimination

To satisfy the regulatory requirements for this MCM the following is required:

- I. The permittee must develop, implement and enforce a program to detect and eliminate illicit discharges into the permittee's MS4 and/or neighboring MS4.
- II. Develop, if not already completed, a storm sewer system map, showing the location of all municipal storm sewer outfalls and the names and location of all state waters that receive discharges from those outfalls. In order to assure an effective illicit discharge elimination program, it is anticipated that the mapping should include the entire stormwater conveyance system (manholes, joints, inlets, and pipes).
- III. To the extent practical and allowable under federal, State, County or local law, effectively prohibit, through ordinance or other regulatory mechanism, non-stormwater discharges into the storm sewer system, and implement appropriate planning, enforcement procedures and actions.

- IV. Develop and implement a plan to detect and address non-stormwater discharges, including illicit discharges and illegal dumping, to the system. The plan must include the following three components:
 - i. procedures for locating priority areas likely to have illicit discharges;
 - ii. procedures for tracing the source of an illicit discharge;
 - iii. procedures for removing the source of the discharge.

Program Objective. The objective of MCM #3 is to detect and eliminate improper or illegal connections and discharges. A cost-effective way to reduce some stormwater pollutants is to identify and eliminate illicit connections and discharges. The SWMPs will include public and municipal education programs and spill response and ordinance requirements to control these discharges. In addition, public information materials will be developed, which will discuss the impacts of spills on water quality, and a hotline for reporting illicit discharges will be advertised.

Priority One Activities. The activities planned to comply with Phase II MS4 MCM #3 are outlined below.

<u>Municipal Separate Storm Sewer System (MS4) Mapping</u>. Each individual community, as required, will develop or enhance existing storm sewer maps, which will show the locations of municipal storm sewer outfalls, the conveyance system as warranted, and the names and locations of state waters that receive discharges from those outfalls, to assure compliance with TPDES.

Ordinance Development and Spill and Enforcement Response Plan. The LTSTF will develop draft Stormwater Pollution Prevention Ordinance templates (Appendix D) for various activities and to comply with TPDES goals. The LTSTF MS4 Ordinance Committee will be empowered to develop ordinances, to accept input from the public committees, and to work with TAMUK in evaluating and implementing them. All of the individual partners' city attorneys will be required to review the ordinance language. The templates will also be submitted to neighboring Phase I cities, the TCEQ and the EPA for review. Their comments, if any, will be review by the workgroup and distributed to the membership.

<u>Business Education Program.</u> The LTSTF and TAMUK will work together to provide stormwater pollution prevention education and/or materials to the commercial sectors identified as potentially significant contributors of pollutants to the MS4s. These sources include restaurants and vehicle service facilities.

Certification Criteria for Automotive Businesses and Restaurants. The LTSTF and TAMUK will work together to conduct internet research and communicate with staff from model stormwater programs across the U.S. to collect and review BMPs and outreach materials developed for these sectors (this research will overlap with research for municipal operations as part of MCM #6). The LTSTF and TAMUK will also develop draft stormwater criteria to be required of all businesses, and solicit input from existing businesses regarding feasibility and appropriateness of the new criteria. A Criteria Checklists will be developed for vehicle repair shops, auto body shops, and restaurants.

Incorporate Stormwater Education in Landscaping, Subdivision Development and Commercial Planning. The LTSTF and TAMUK will work together to conduct internet research and work with the ACWPP to develop a fact sheet on stormwater protection for landscape professionals, and to develop smart growth, green engineering and low impact development programs. In addition, the three groups will share information on potential stormwater impacts from pressure-washing sidewalks, shopping carts, etc., with the retail store focus group. A brochure and outreach plan regarding pressure washing and window washing BMPs will be developed in 2009.

Conduct Site Visits to Educate Businesses and Assess Stormwater Impacts. The LTSTF members will visit major businesses in their respective cities and review stormwater criteria during the site visits. Educational materials, such as EPA's *After the Storm* brochure, will also be mailed to businesses. Detailed recordkeeping of activities performed will be maintained by each LTSTF member city.

Coordinate Materials Development with TAMUK and ACWPP. The *After the Storm* brochure and other materials will be jointly developed by the LTSTF, TAMUK, and the ACWPP for use with both residential and business audiences. Door stickers will be developed to educate business staff (restaurants, groceries, auto facilities, etc.) to never dump wastes on the ground, and to help individuals understand that the storm drain connects directly to surface water. A stormwater fact sheet will be developed specifically for automotive businesses. Stormwater information will be added to any existing restaurant permitting fact sheets. All of the activities will be conducted in coordination with the activities performed to comply with the MCM #6 requirements so that one educational fact sheet would meet the needs for municipal fleet maintenance operations and vehicle repair and auto body businesses.

Respond to Illicit Discharge Incidents as Appropriate. The LTSTF will assist cities to develop a program to conduct inspections to identify the presence and determine the source of illicit connections and illegal dumping activities. The LTSTF will assist member cities in training their building inspectors and their engineering and utility inspectors to implement this BMP.

Priority Two Activities. The activities planned to address broader stormwater and water quality management issues related to the Phase II MS4 MCM #3 are outlined below.

Household Hazardous Waste Disposal (HHW) Program. All LTSTF members will develop a Household Hazardous Waste Program facilitated by TAMUK, ACWPP and various municipal recycling programs. The LTSTF will develop a regional program to support the local programs.

<u>Performance Measures</u>. The SWMP MCM #3 goals and programs will be measured for success by assigning levels of completion to the required mapping BMP, targeting a set number of ordinances per time period, keeping track of the number of illicit discharges detected and eliminated, measuring pounds of household waste recovered, tallying number of business meetings and site visits, and other similar measures.

4.4 MCM #4 - Construction Site Stormwater Runoff Control

To satisfy the regulatory requirements for this MCM the following is required:

- I. The permittee must develop, execute, and enforce a construction site stormwater runoff control ordinance that reduces pollutants in stormwater runoff. The ordinance must regulate construction activities that result in land disturbance of greater than or equal to one (1) acre pursuant to the TPDES regulations. Reduction of pollutants in stormwater discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development that would disturb one (1) acre or more. This includes a construction site on a lot that measures one-quarter (1/4) acre that exists within a ten (10) acre forty (40) lot subdivision development. (TCEQ, 2007).
- II. The construction site stormwater runoff control program must be developed and implemented to assure adequate design, implementation, and maintenance of BMPs at construction sites within the MS4 service area to reduce pollutant discharges and protect water quality. The program must include the development and implementation of:
 - i. An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under Federal, State or local law;
 - ii. Requirements for construction site operators to implement appropriate erosion and sediment control BMPs;
 - iii. Requirements for construction site operators to control waste such as discarded building materials, refueling, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;
 - iv. Procedures for site plan review during planning and permitting which incorporate consideration of potential water quality impacts;
 - v. A policy that defines responsibility for the on-site Stormwater Pollution Prevention Plan (SWP3) pursuant to TPDES regulations. It is conceivable that each contractor working at the same job site, whether simultaneously or not, may be required to obtain its own TPDES permit, unless the developer allows for use of one (1) overall TPDES permit under the developers authority.
 - vi. Procedures for site inspection and enforcement of control measures.

Program Objective. The objective of MCM #4 is to minimize construction site stormwater runoff. Effective construction site stormwater pollution prevention can dramatically reduce sediment loading to receiving surface waters. An effective erosion control program must include adequate ordinance language, consistent and reasonable inspection and enforcement, and appropriate development and construction standards. The SWMP will include all of these components. In addition, the SWMP will include a contractor training and a certification program. These program elements will ensure consistent city-wide and region-wide education and minimum standards.

Priority One Activities. The activities planned to comply with Phase II MS4 MCM #4 are outlined below.

<u>Erosion Control Ordinance</u>. A template construction and post-construction ordinance that focuses on erosion control will be developed. A model ordinance is shown in Appendix C. The template will be distributed to the public steering committees and to the LTSTF membership. The public committees will provide input to the LTSTF Ordinance Development Committee.

Priority Two Activities. The activities planned to address broader stormwater and water quality management issues related to the Phase II MS4 MCM #4 are outlined below.

Contractor Certification Program. With EPA Border 2012 grant funding, the LTSTF introduced the membership to the Texas A&M University Engineering Extension Service (TEEX) stormwater contractor certification course during a conference held in 2005 at South Padre Island. The TEEX course provides a curriculum that complies with the "competent individual" requirement of the TPDES rules. Approximately 50 individuals were trained during the training session. The LTSTF and TAMUK will continue to develop an effective education and training program to be utilized by the membership.

<u>Performance Measures</u>. The SWMP MCM #4 goals and programs will be measured for success by tabulating and tracking permits and citations issued, inspections conducted, number of training events conducted, certifications issued, ordinances adopted, and accounting for revenue generated.

4.5 MCM #5 - Post-Construction Stormwater Management

To satisfy the regulatory requirements for this MCM, the following is required:

- I. The permittee must develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one (1) acre, including projects less than one (1) acre that are part of a larger common plan of development, that discharge into the MS4. The program must ensure that controls are in place that would prevent or minimize water quality impacts.
- II. The permittee must develop and implement strategies which include a combination of structural and/or non-structural BMPs appropriate for the community, including the use of an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under Federal, State or local law. The permittee must also ensure adequate long-term operation and maintenance of BMPs.

Program Objective. The objective of this MCM is to address stormwater runoff pollution in new development and redevelopment of lands within the permittee's jurisdiction and extra territorial jurisdiction (ETJ). It is estimated that when the surface area of a drainage basin of a receiving waterbody becomes ten (10) to twenty (20) percent impervious, significant ecological stresses result that adversely impact the aquatic ecosystem of that waterbody (Schueler, 2003).

Therefore, the most important strategy for addressing stormwater pollution prevention is to develop effective land use and development management strategies. One of the best strategies is to address the aggregate amount of new impervious surfaces. This can be done with developed land vegetation requirements, drainage policies and use of innovative BMPs like smart growth and low impact development (LID). Other strategies include implementing effective BMPs for the control and treatment of site stormwater runoff, such as stormwater detention ponds, vegetative buffer zones or grass swales. The SWMPs for post-construction include the development of programs and ordinances that address stormwater runoff from new development and redevelopment. The SWMP will use a successful, existing BMP manual as part of its program. TAMUK will conduct a comprehensive search for these type of manuals during development of the SWMP.

Priority One Activities. The activities planned to comply with Phase II MS4 MCM #5 are outlined below.

<u>Post-Construction Ordinance</u>. A template construction and post-construction ordinance will be drafted and adopted by each LTSTF member. A template is found in Appendix C. As a matter of policy, the template will be distributed to the public committees and the membership for input.

<u>Performance Measures</u>. The SWMP MCM #5 goals and programs will be measured for success by ordinances adopted, developing a measurable post construction inspection program, assuring allocation of funds annually to operation and maintenance of these BMPs, and tracking education outreach in this area of interest.

4.6 MCM #6 - Pollution Prevention/Good Housekeeping for Municipal Operations

To satisfy the regulatory requirements for this minimum control measure the following is required:

- I. The permittee must develop and implement a stormwater pollution prevention operation and maintenance program. The program must prevent and/or reduce stormwater pollution from facilities such as landfills, airports, streets, roads, right-of-ways, alleys, highways, municipal parking lots, maintenance and storage yards, fleet or maintenance shops with outdoor storage areas, caliche, soil, and compost storage locations, recycling centers, disposal areas operated by the permittee, and waste transfer stations. The program will also regulate activities such as park and open space maintenance, fleet and building maintenance, street maintenance, new construction of municipal facilities, and stormwater system maintenance, as applicable.
- II. The permittee must implement a training program that includes an employee component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. The program must also inform public employees of the impacts associated with illegal discharges and improper disposal of waste from municipal operations.

Program Objective. The objective of MCM #6 is to implement pollution prevention programs for municipal operations. A significant number of municipal operations can adversely affect water quality and quantity. Municipal activities ranging from the storage and handling of harmful chemicals, pickup, transportation and disposal of solid waste, to the routine maintenance of municipal properties, vehicles, roads, and storm sewer appurtenances can be stormwater pollution contributors. Activities such as integrated pest management, water conservation, recycling and education programs are proven BMPs in addressing these pollutant sources.

Priority One Activities. The activities planned to comply with Phase II MS4 MCM #6 are outlined below.

<u>Develop an Inventory of All Potential Sources of Stormwater Pollution.</u> A template will be developed for each city to identify municipal operations that are potential sources of stormwater pollution.

- In 2005, civil engineering students visited with city staff of each LTSTF member and developed inventories. These inventories will be reviewed by TAMUK and updated.
- TAMUK will contact municipal departments to fill gaps and expand upon information provided by the inventories.
- Data needed from the inventories may include:
 - Source or type of operation
 - Location of facility/operation
 - Contact information
 - Activities conducted on-site
 - Proximity to stormwater or surface water
 - Potential impact to stormwater or surface water
 - Percent of site with impervious surface
 - Existing and needed control measures
- The inventory of all municipal operations by LTSTF members can be represented as a breakdown of potential sources by jurisdiction, type location

<u>Identify Priority Operations</u>. TAMUK will use the inventory to prioritize municipal operations based on number of facilities, number of stormwater polluting activities identified, acreage affected, distance to surface water or to conveyance structure and the percent of impervious surface on-site. Municipal operations that will be scrutinized include:

- Vehicle repair or fleet maintenance
- Street and road maintenance
- Right of way mowing
- Storm drain system maintenance including regional detention facilities, on site detention ponds, and outfalls within MS4 jurisdictions from neighboring communities
- Parks maintenance
- Golf course maintenance
- Landfill maintenance
- Transfer station and recycling center operations

- Municipal curb side solid waste activities
- Wastewater and water treatment facility operations
- Operation and maintenance of intermediate receiving waterways owned by the permittee
- Operation and maintenance of lift stations

<u>Certification Program</u>. The LTSTF will develop a certification program for municipal operations. The SWMP will develop policy, SOPs, and certification programs that will be evaluated annually.

<u>Develop BMPs and SOPs</u>. The LTSTF will develop BMPs for stormwater pollution runoff control for municipal activities or operations. A BMP table will also be created to help determine what BMPs would likely apply to which activities. In addition, focus group meetings will be conducted to get input from municipal employees on the draft BMPs. The attendees will be asked what activities they perform each day that impact stormwater and whether or not the BMPs are reasonable or attainable. After the focus group meetings, the BMPs will be modified to reflect input received from the focus groups.

<u>Develop Educational Materials and Certification Criteria</u>. The LTSTF will develop criteria checklists for the priority operations that specify required BMPs. Staff will use these checklists to gather data on-site to determine if an operation is a concern. The LTSTF will also develop resource sheets for BMPS for the priority municipal operations. These sheets will list the required BMPs for effective management of stormwater runoff from municipal operations.

Conduct Site Visits. The LTSTF members will conduct site visits of municipal operations to determine the practicality of the BMPs and certification criteria and also to give provide staff with a better understanding of operations. The BMPs and certification criteria will be edited based on the site visit experiences. Follow-up letters will be sent to each operation after the each visit, noting the practices that were already in place to protect stormwater and the potential stormwater impacts that need to be corrected to achieve effective management.

Identify Common Deficiencies.

Good recordkeeping is essential for an effective housekeeping program. All information required for BMP evaluation will be kept for the annual SWMP evaluation.

<u>Developing Elements of a Municipal Stormwater Pollution Control Plan.</u> TAMUK will recommend designing a generic Stormwater Pollution Control Plan that will include the elements listed below. The plan will provide a central location for copies of required BMPs and resource sheets.

- Employee training plan and logs
- Implementation and tracking of BMPs
- Run-off control plans
- Map of facility
- Spill Prevention and Response Plan
- Recordkeeping
- BMP lists, resource sheets, stormwater messages, and other resources

• Tracking of inspections (copies of site visit checklists, follow-up letters, etc.)

Develop Training Messages and Videos. Continuous outreach and education must be provided to employees. LTSTF can work with TAMUK to develop key training messages for stormwater pollution prevention for municipal activities. Site visits will also be conducted to photograph local operations and practices. A PowerPoint presentation will be developed containing photographs and text to show good and bad practices and "what is wrong with this picture" scenarios. The slides will be used to train supervisors and employees on BMPs and common activities that impact stormwater. TAMUK and the LTSTF will also develop a training video from the actual information, data, and media from the site visits.

<u>Performance Measures</u>. The SWMP MCM #6 goals and programs will be measured for success by recordkeeping of the following:

- Pounds of fertilizer applied.
- Pounds of pesticide applied.
- Capital expenditures for BMPs.
- Number of spills/leaks/discharges greater than 1 gallon and corrective actions taken.
- Number of catch basins cleaned.
- Tons or cubic yards of debris collected.
- Number of contaminated or suspected contaminated basins.
- Number of curb miles swept.

4.7 MCM #7 – Authorization for Municipal Construction Activities

The development of a MCM for municipal construction activities is an optional measure and is an alternative to the MS4 operator seeking coverage under TPDES general permit TXR150000. To satisfy the regulatory requirements for this MCM the following are required:

- I. The permittee must describe how construction activities will generally be conducted so as to take into consideration local conditions of weather, soils, and other site specific considerations;
- II. The permittee must describe the area that this MCM will address and where the permittee's construction activities are covered (e.g., within the boundary of the urbanized area, the corporate boundary, a special district boundary, an extra territorial jurisdiction, or other similar jurisdictional boundary);
- III. The permittee must either provide a description of how the permittee will supervise or maintain oversight over contractor activities to ensure that the Storm Water Pollution Prevention Plan (SWP3) requirements are properly implemented at the construction site; or how the permittee will make certain that contractors have a separate authorization for storm water discharges.
- IV. The permittee must provide a general description of how a SWP3 shall be developed, according to Part VI.E of general permit TXR040000, for each construction site.

Program Objective. The objective of MCM #7 is to exempt the permittee from having to use TPDES GCP TXR150000 for each construction site owned by the permittee. This will save the local governments a considerable amount of revenue. Contractors working for the permittee will not be required to obtain a separate authorization and will be authorized to use MCM #7 for authorization to discharge stormwater runoff into the MS4.

Priority One Activities. The activities planned to comply with Phase II MS4 MCM #6 are outlined below.

Storm Water Pollution Prevention Plan (SWP3). TAMUK will assist the MS4 Planning Committee in developing a general SWP3 to meet the requirements of MCM #7. The SWP3 will include the following:

- A site or project description
- A description of the BMPs that will be used to minimize pollution in runoff. The description must identify the general timing or sequence for implementation.
- A description of permanent storm water controls.
- Other required controls and BMPs.
- Documentation of compliance with approved state and local plans.
- Maintenance requirements.
- Inspections of controls.
- The SWP3 must identify and ensure the implementation of appropriate pollution prevention measures for all eligible non-storm water components of the discharge, as listed in Part II.A.3 of General Construction Permit (GCP) TXR150000.
- The SWP3 must include the information required in Part III.B of GCP TXR150000.

Priority Two Activities. The activities planned to address broader stormwater and water quality management issues related to the Phase II MS4 MCM #7 are outlined below.

<u>Annual Evaluation</u>. The SWP3 and MCM #7 will be evaluated each year and changes proposed for increasing effectiveness of the program. The SWMP will include development of a method of evaluating the SWP3s for a random selection of various types of projects.

<u>Contractor, Engineer, Architect Survey.</u> Each contractor, engineer and architect involved in a construction project will be required to submit a survey to the permittee upon completion of the project. The survey will be developed to evaluate MCM #7.

<u>Performance Measures</u>. The SWMP MCM #7 goals and programs will be measured for success by evaluating permits issued, inspections conducted, citations issued, success of BMPs used, and results of contractor surveys.

5.0 STORMWATER MANAGEMENT PROGRAM

The City of Alton SWMP has been developed to meet the following regulatory requirements from the TCEQ TPDES General Permit TXR40000:

To the extent allowable under state and local law, a SWMP must be developed and implemented according to the requirements of Part III of this general permit, for storm water discharges that reach waters of the United States, regardless of whether the discharge is conveyed through a separately operated storm sewer. The SWMP must be developed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act and the Texas Water Code. Existing programs or best management practices (BMPs) may be used to fulfill the requirements of this general permit. The MS4 operator must develop the SWMP to include the six minimum control measures described in Part III.A.1. through 6, and the operator may develop and include the optional seventh minimum control measure in Part III.A.7. Small MS4s have five years from the date of issuance of this general permit to fully implement their SWMP. A discharger's compliance with its approved SWMP will be deemed compliance with Part III of this permit.

This Section describes the City of Alton's SWMP and the Best Management Practices (BMPs) selected to comply with the TPDES program's six (6) Minimum Control Measures (MCMs) and is organized in the following outlined format:

- Section 5.1 Public Education and Outreach
- Section 5.2 Public Involvement in Storm Water Management Program Development
- Section 5.3 Illicit Discharge Detection and Elimination
- Section 5.4 Construction Site Storm Water Controls
- Section 5.5 Post Construction Storm Water Management for New Development/ Redevelopment
- Section 5.6 Pollution Prevention/Good Housekeeping for Municipal Operations
- Section 5.7 Authorization for Municipal Construction Activities

Each of these sections includes a brief description of the BMPs selected for each MCM, a proposed implementation schedule for each BMP, performance measures for the programs, and identifies the municipal departments assigned to each BMP.

5.1 Public Education and Outreach BMPs

The BMPs listed in this section were selected to meet the following regulatory requirement (Minimum Control Measure #1):

Public Education and Outreach on Storm Water Impacts

- (a) A public education program must be developed and implemented to distribute educational materials to the community or conduct equivalent outreach activities that will be used to inform the public. The MS4 operator may determine the most appropriate sections of the population at which to direct the program. The MS4 operator must consider the following groups and the SWMP shall provide justification for any listed group that is not included in the program:
- (1) residents;
- (2) visitors;
- (3) public service employees;
- (4) businesses:
- (5) commercial and industrial facilities; and
- (6) construction site personnel.

The outreach must inform the public about the impacts that storm water run-off can have on water quality, hazards associated with illegal discharges and improper disposal of waste, and steps that they can take to reduce pollutants in storm water runoff.

The following table lists BMPs that meet the requirements of MCM 1.

Table 1: Public Education and Outreach BMPs

Section Description of BMP		BMP* Type	IMPLEMENTATI SCHEDULE (YEAR)						
			1	2	3	4	5		
5.1.1	Utility Bill Inserts/Mass Mail-out	I	X	X	X	X	X		
5.1.2	Web Site	S	X	X	X	X	X		
5.1.3	Classroom Presentations	I, S	X	X	X	X	X		
5.1.4	Stenciling	C, S	X	X	X	X	X		
5.1.5	Videos	S	X	X	X	X	X		
5.1.6	Signage	C	X	X	X	X	X		
5.1.7	Community outreach	C, S	X	X	X	X	X		
5.1.8	Education - ACWPP	S	X	X	X	X	X		

I - INDIVIDUAL BMP

C - COMMON BMP

S - SHARED BMP

*see page 10 of this SWMP for explanation of the BMP Type

X – notes activity, see Section for details

5.1.1 Utility Inserts/Mass Mailout

Inserts in the forms of small brochures, informative handouts or fact sheets will be distributed with municipal water utility bills or in a mail-out. Brochures equivalent to the number of households within the City's permitted area will be produced. Inserts shall include information on various topics like waste oil disposal, use of pesticides and fertilizers on landscaping, household hazardous waste, water quality, and the SWMP in general. The mail-out brochures and utility inserts will also be available at public viewing areas in the lobbies of city hall, the public library, and other city-owned facilities. The topics of these brochures, mail-outs and/or utility inserts will target various audiences: residents, visitors, public service employees, businesses, commercial and industrial facilities, and construction site personnel.

The City of will develop a utility insert or a mass mail out program using existing outreach materials developed by the TCEQ, EPA and other organizations. Brochures, utility inserts and mass mail-outs are inexpensive tools that can be used for effective outreach to residents, visitors, public service employees, businesses, commercial and industrial facilities, and construction site personnel.

Table 2: Implementation Schedule – Utility Inserts/Mass Mail-out

Permit Period	Measurable Goal
Year 1	City will develop an annual budget and assign city departments to oversee this BMP.
Year 2	Delegated department will develop a comprehensive program to include acquiring existing outreach materials, and developing a consistent and regular schedule of
	disbursement.
Years 3-5	Full implementation and annual review conducted

Table 3: BMP Responsibility – Utility Inserts/Mass Mail-out

Primary Department	Support Groups						
City Public	LRGV TPDES Stormwater Task Force (LTSTF)						
Works Dept.	Texas A&M University-Kingsville (TAMUK)						
	South Texas Environmental Institute (STEI)						
	Lower Rio Grande Valley Development Council (LRGVDC)						
	Arroyo Colorado Watershed Partnership (ACWP)						
	City Engineering Department						
	City Planning Department						
	City Public Utilities Board						

5.1.2 Web Site

Background and other information on the SWMP, including the seven (7) MCMs along with specific information promoting the stormwater education program, storm drain stenciling program, meetings, and other general information will be developed and provided on a web site www.stormwater.stei.org. This web site will be updated frequently. The website is currently under

construction.

The City's objective is to provide real time SWMP information to the public, including data, updates, policy and meeting schedules via a website. The website will provide outreach materials, training schedules, downloadable information and an email address for feedback. Ultimately, a list server may be developed to engage professionals, educators and regulators. The website will specifically target the TPDES Phase II program and topics that will outreach residents, visitors, public service employees, businesses, commercial and industrial facilities, and construction site personnel.

Table 4: Implementation Schedule – Web Site

Permit Period	Measurable Goal
Year 1	City will develop an annual budget and assign city webmaster to oversee this BMP.
Year 2	Delegated department will develop a comprehensive program to acquire existing
	outreach materials, develop a consistent and regular schedule for updating the
	website, coordinate links between stakeholders and support groups, and develop and
	develop and implement the final website design.
Years 3-5	Develop an on-line feedback mechanism and a possible list server.

Table 5: BMP Responsibility – Web Site

Primary Department	Support Groups
City Public	LRGV TPDES Stormwater Task Force (LTSTF)
Works Dept.	South Texas Environmental Institute (STEI)
	Arroyo Colorado Watershed Partnership (ACWP)
	City Engineering Department
	City Public Utilities Board

5.1.3 Classroom Presentations

A watershed information curriculum with associated materials and training will be made available and advertised to all elementary classroom teachers in the City's school district. Program materials will include a curriculum on water quality and water conservation, stormwater pollution prevention, and promotion of the SWMP. Post-cards promoting the stormwater education program will be mailed to all school district teachers, and a comprehensive brochure listing K-12 programs will also be printed and distributed.

The City will also promote the Arroyo Colorado Watershed Protection Plan (ACWPP) and work with the ACWP to promote mutually beneficial goals. A watershed model developed by the ACWP will be made available to the City and the school district.

Table 6: Implementation Schedule – Classroom Presentations

Permit Period	Measurable Goal
Year 1	City will meet with school district officials to coordinate and agree on curriculum.
	City will develop a schedule.
Year 2	City will perform two (2) pilot classroom presentations to solicit feedback from
	teachers and students. Feedback data will be used to evaluate effectiveness and to
	adjust curriculum. Cost of classroom presentations BMP will be determined.
Year 3	Refined curriculum will be tested on four (4) additional schools.
Years 4-5	Budget developed for full implementation. Perform four (4) presentations per year.

Table 7: BMP Responsibility – Classroom Presentations

Primary Department	Support Groups
City Public	Local School District
Works Dept.	Texas A&M University-Kingsville (TAMUK)
	South Texas Environmental Institute (STEI)
	Arroyo Colorado Watershed Partnership (ACWP)
	City Engineering Department
	Region 1 Education Service Center

5.1.4 Stenciling

A Storm Drain Stenciling Program will be initiated and incorporated into the MCM #1 Public Education Program. A minimum number of storm drains will be stenciled per year in the City. This criterion will be used to evaluate the program. Municipal staff will provide stormwater education programs and facilitate storm drain stenciling activities with youth and citizens' organizations. The City program will evaluate and attempt to develop partnerships with businesses and industrial facilities. Stenciling of existing storm drains at parking lots of businesses and industrial facilities will be evaluated and implemented.

The City will facilitate the development of partnerships with local youth service groups to perform a significant portion of the storm drain stenciling work. These groups may include the Boys & Girls Clubs, Boy Scouts of America, and local environmental groups. Records of stenciled storm drains, including locations, types of storm drain, and volunteer group information, will be maintained. The stencil will include the logo of the LRGV TPDES Task Force, the ACWP, and the City.

The City will evaluate and implement storm drain stenciling in new construction within its jurisdiction. Contractors will be provided with specifications and instructions on how to stencil storm drains. This program will be implemented on public and private new construction.

Table 8: Implementation Schedule – Stenciling

Permit Period	Measurable Goal
Year 1	Inventory manhole covers, inlets and other structures.
	Establish partnerships, seek grants, and develop final stencil design.
	Develop budget and program.
Years 2-5	Establish goals and policies.
	Attempt to stencil 25% of existing inventory each year and stencil all new
	installations.
	Attempt to stencil 25% of partnering businesses and industrial facilities.

Table 9: BMP Responsibility – Stenciling

Primary Department	Support Groups
City Public	Local Environmental Groups
Works Dept.	Texas A&M University-Kingsville (TAMUK)
	South Texas Environmental Institute (STEI)
	Lower Rio Grande Development Council (LRGVDC)
	Arroyo Colorado Watershed Partnership (ACWP)
	City Engineering Department
	Local Youth Organizations

5.1.5 Brochures and Videos

The *After the Storm* brochure created by the EPA (http://www.epa.gov/weatherchannel/) was developed, produced and made available for distribution to both residential and commercial audiences in certain cities by the LTSTF in 2005. This program will continue to be expanded by the City. A new brochure will be developed that will include additional information on the impacts of illicit discharges and other water quality issues. In addition, the *No La Riegues* campaign developed by Texas Sea Grant and adopted by the LTSTF in 2005 (www.nolariegues.com) will be revitalized and promoted. The websites to these materials will be linked to the City's website. In addition, the *Chucho Salva el Dia* video campaign initiated by the EPA will also be adopted by the LTSTF in 2008 (http://epa.gov/region6/6xa/childrens_health_video.htm#jump). The City will facilitate the development and distribution of these materials. The City will also identify other videos readily available and use local public air time, libraries, and other outreach tools to promote this BMP. The topics of these brochures and videos will target various audiences: residents, visitors, public service employees, businesses, commercial and industrial facilities, and construction site personnel.

Table 10: Implementation Schedule – Videos

Permit Period	Measurable Goal
Year 1	City will identify stormwater videos.
	Develop a video program, budget allowances, and a schedule of production.
	Develop partnerships with local cable access entities.
	Identify environmental groups that can assist.
Years 2-5	Broadcast three (3) videos to public channels within the City's viewing area and/or
	provide copies of videos to local school and public libraries.

Table 11: BMP Responsibility – Videos

Primary	
Department	Support Groups
City Public	Local School District
Works Dept.	Texas A&M University-Kingsville (TAMUK)
	South Texas Environmental Institute (STEI)
	Lower Rio Grande Development Council (LRGVDC)
	Public Access Cable Entity
	Neighboring city with public access channel capability
	Arroyo Colorado Watershed Partnership (ACWP)
	Local Cable Network
	Public Library
	Local Environmental Groups

5.1.6 Signage

Stormwater pollution prevention signs will be designed, produced and installed along major intersections within the City. The signs will bear the logos from the LTSTF, the ACWP and the City. The City will place signs at locations where pedestrians and vehicle drivers will recognize the sign as an indicator of a local water body that should be protected, the importance of water quality, and the potential effects of stormwater pollution. Attractive graphics and brief messages or captions along roadsides can be very effective. Messages can be conveyed in English and Spanish. The sign campaign will primarily target visitors and public service employees. The installation of these signs will be privatized or completed by city staff.

Table 12: Implementation Schedule – Signage

Permit Period	Measurable Goal
Year 1	City will identify design of signs and locations for posting.
	Develop an installation program, budget allowances, and a schedule.
	Develop partnerships with local entities; identify environmental groups that can help.
	Develop a signage program for new construction, development and greenspace areas.
	Review pet walking ordinances and other related policies and ordinances.
Years 2-5	Install 25% of total locations identified each year. Promote new installations.
	Implement any ordinances during the second year.

Table 13: BMP Responsibility – Signage

Primary Department	Support Groups	
City Public	City Parks and Recreation Department	
Works Dept.	City Engineering Department	
	City Planning Department	
	South Texas Environmental Institute (STEI)	
	Arroyo Colorado Watershed Partnership (ACWP)	

5.1.7 Community Outreach

City will provide educational and outreach materials to the community, including brochures, fact sheets and handouts. The topics of this outreach will target various audiences: residents, visitors, public service employees, businesses, commercial and industrial facilities, and construction site personnel. These materials will be made available at City Hall and throughout municipal facilities. Materials will also be made available to developers, businesses, and contractors during the planning and permitting processes. The City will include a stormwater pollution prevention outreach program in various annual community events. Booths, brochures, children- friendly materials, and other similar approaches shall be used. The City shall consider designating a day or a week for stormwater pollution prevention awareness. The City will also develop a partnership with various regional entities and help coordinate an annual conference that promotes the SWMP of the City and various SWMPs in the region.

Table 14: Implementation Schedule – Community Outreach

Permit Period	Measurable Goal	
Year 1	Develop a program and budget.	
Years 2-5	Provide educational materials to the public. Establish locations for self service	
	distribution.	
	Help organize an annual conference in the region.	
	Contribute and participate at various annual events.	
	Promote outreach to businesses, engineers, contractors, developers, and the general	
	public at least once a year.	

Table 15: BMP Responsibility – Community Outreach

Primary Department	Support Groups	
City Public	LRGV TPDES Stormwater Task Force (LTSTF)	
Works Dept.	City Engineering Department	
	City Chamber of Commerce	
	Professional organizations	
	South Texas Environmental Institute (STEI)	
	Arroyo Colorado Watershed Partnership (ACWP)	

5.1.8 Education - Arroyo Colorado Watershed Protection Plan

A watershed information curriculum with associated materials and training will be made available and advertised to residents, visitors, public service employees, businesses, commercial and industrial facilities, and construction site personnel. Program materials will promote the ACWP. The City will work closely with the ACWP to implement this BMP.

Table 16: BMP Responsibility - Education, Arroyo Colorado Watershed Protection Plan

Permit Period	Measurable Goal
Year 1	City will develop an annual budget and assign a city department to oversee this BMP.
Year 2	Delegated department will develop a comprehensive program to include acquiring
	existing outreach materials, and developing a consistent and regular schedule.
Years 3-5	Full implementation and annual review conducted.

Table 17: BMP Responsibility – Education, Arroyo Colorado Watershed Protection Plan

Primary Department	Support Groups
City Public	LRGV TPDES Stormwater Task Force (LTSTF)
Works Dept.	South Texas Environmental Institute (STEI)
	City Public Utilities Board
	Arroyo Colorado Watershed Partnership (ACWP)

5.7 Authorization for Municipal Construction Activities BMPs

The BMPs listed in this section were selected to meet the following regulatory requirement:

Authorization for Municipal Construction Activities

The development of a MCM for municipal construction activities is an optional measure and is an alternative to the MS4 operator seeking coverage under TPDES general permit TXR150000. Additionally, contractors working for the permittee are not required to obtain a separate authorization if they do not meet the definition of a construction site operator, as long as the permittee meets the status of construction site operator. Permittees that choose to develop this measure will be authorized to discharge storm water and certain non-storm water from construction activities where the permittee can meet the definition of construction site operator in Part I of this general permit. The authorization to discharge under this MCM is limited to the regulated area, such as the portion of the MS4 located within an urbanized area or the area designated by TCEQ as requiring coverage. However, an MS4 operator may also utilize this MCM over additional portions of their MS4 that are also in compliance with all of the MCMs listed in this general permit. This MCM must be developed as a part of the SWMP that is submitted with the NOI for permit coverage. If this MCM is developed after submitting the initial NOI, a NOC must be submitted notifying the executive director of this change, and identifying the geographical area or boundary where the activities will be conducted under the provisions of this general permit. Utilization of this MCM does not preclude a small MS4 from obtaining coverage under the TPDES Construction General Permit, TXR150000, or under an individual TPDES permit.

- (a) The MCM must include:
 - (1) a description of how construction activities will generally be conducted by the permittee so as to take into consideration local conditions of weather, soils, and other site specific considerations;
 - (2) a description of the area that this MCM will address and where the permittee's construction activities are covered (e.g. within the boundary of the urbanized area, the corporate boundary, a special district boundary, an extra territorial jurisdiction, or other similar jurisdictional boundary); and
 - (3) either a description of how the permittee will supervise or maintain oversight over contractor activities to ensure that the SWP3 requirements are properly implemented at the construction site; or how the permittee will make certain that contractors have a separate authorization for storm water discharges.
 - (4) a general description of how a SWP3 shall be developed, according to Part VI.E. of the general permit, for each construction site.

Authorization for Municipal Construction Activities (cont.)

Part VI.E:

Operators of municipal construction activities that qualify for coverage under this general permit and that discharge storm water associated with construction activities that reach waters of the U.S. must:

- 1. develop a SWP3 according to the provisions of this general permit that covers the entire site and begin implementation of that plan prior to commencing construction activities;
- 2. post a signed copy of the notice contained in Attachment 1 of this general permit in a location at the construction site where it is readily available for viewing prior to commencing construction activities and maintain the notice in that location until completion of the construction activity and final stabilization of the site;
- 3. ensure the project specifications allow or provide that adequate BMPs may be developed and modified as necessary to meet the requirements of this general permit and the SWP3;
- 4. ensure all contractors are aware of the SWP3 requirements, are aware that municipal personnel are responsible for the day-to-day operations of the SWP3, and who to contact concerning SWP3 requirements; and
- 5. ensure that the SWP3 identifies the municipal personnel responsible for implementation of control measures described in the plan.

The following table lists BMPs that meet the requirements of MCM 7.

Table 84: Authorization for Municipal Construction Activities BMPs

Section	Optional MCM #7 - Authorization for Municipal Construction Activities Description of BMP	BMP* Type	IMPLEMENTATION SCHEDULE (YEAR)				
	Description of Bivin		1	2	3	4	5
5.7.1	Stormwater Pollution Prevention Plan (SWP3)	C	X	X	X	X	X
5.7.2	Contractor, Engineer, Architect Survey	C	X	X	X	X	X

I - INDIVIDUAL BMP

C - COMMON BMP

S - SHARED BMP

*see page 10 of this SWMP for explanation of the BMP Type

X – notes activity, see Section for details

5.7.1 Storm Water Pollution Prevention Plan (SWP3)

The development of a MCM for municipal construction activities is an optional measure and is an alternative to the MS4 operator seeking coverage under TPDES general permit TXR150000. The objective of MCM #7 is to exempt the permittee from having to use TPDES GCP TXR150000 for each construction site owned by the permittee. This will save the local governments a considerable amount of revenue. Contractors working for the permittee will not be required to obtain a separate authorization and can use MCM #7 for authorization to discharge stormwater runoff into the MS4. The City will develop a comprehensive SWP3 to meet the requirements of this MCM.

The permittee will develop a general SWP3 to meet the requirements of MCM #7. The SWP3 will include the following:

- A site or project description.
- A description of the BMPs that will be used to minimize pollution in runoff that must identify the general timing or sequence for implementation.
- A description of permanent storm water controls.
- Other required controls and BMPs.
- Documentation of compliance with approved state and local plans.
- Maintenance requirements.
- Inspections of controls.
- Identification and implementation plan for appropriate pollution prevention measures for all eligible non-storm water components of the discharge, as listed in Part II.A.3 of General Construction Permit (GCP) TXR150000.
- The information required in Part III.B of GCP TXR150000.

The SWP3 will include:

- (1) a description of how construction activities will generally be conducted by the permittee so as to take into consideration local conditions of weather, soils, and other site specific considerations.
 - Soils Information will be required SWP3 will show locations of unstable, or highly
 erodible soils as determined by the local County Soil Survey and/or soil tests. SWP3
 will show location of any soil test borings on plan and any geotechnical studies will
 be provided. Other soils information such as permeability, perched water table, etc.
 may be included.
 - SWP3 shall include a plan of action in case of inclement weather
 - the SWP3 shall include site specific conditions such as: surface water locations, existing natural areas, special notes for critical areas, location of practices, site development, limits of grading and clearing, vicinity map, etc.
 - Inspections will be conducted by city staff immediately after storm events greater than 0.5 inches of rain in a 24 hour period, or as required by the TPDES regulations.
- (2) a description of the area that this MCM will address and where the permittee's construction activities are covered;

- (3) how the permittee will make certain that contractors have a separate authorization for storm water discharges.
 - The city will incorporate into its construction permitting process, a policy that will require evidence of submittal of a NOI and of payment of local, state and federal fees.
 - The City SWP3 plan will require posting of site specific stormwater permit pursuant to TPDES regulations on site.
 - The contractors SWP3 plans will be submitted to the City during the permitting process for review and compliance to the City's SWMP.
 - Guidance and training material will be made available to the contractors.

In general, the city will require every TPDES regulated site within its jurisdiction to develop a SWP3. The city will provide the following to assist the regulated community:

- Guidance documents.
- An SWP3 template that will be developed from existing TCEQ, EPA and industry models.
- A variety of templates may be developed to accommodate type of construction (residential, small construction, large construction, etc.)
- The SWP3 will go through a review process to assure compliance with local, state and federal requirements.
- The city will develop an implementation program that will include inspections, evaluation, assessment and modification of BMPs, and feedback opportunities.

Table 85: Implementation Schedule – SWP3 BMPs

Permit Period	Measurable Goal	
Year 1	Develop SWP3 to include ordinances, inspection policy, enforcement, and planning	
	review.	
	Develop feedback program.	
Years 2-5	Implement program.	
	Evaluate feedback and update program.	

Table 86: BMP Responsibility – SWP3 BMPs

Primary Department	Support Groups	
City Public	LRGV TPDES Stormwater Task Force (LTSTF)	
Works Dept.	Texas A&M University-Kingsville (TAMUK)	
	South Texas Environmental Institute (STEI)	
	Lower Rio Grande Development Council (LRGVDC)	
	City Engineering Department	
	City Planning Department	

5.7.2 Contractor, Engineer, Architect Survey

The City will update its existing drainage design policy to include provisions for the implementation of proper erosion and sediment controls and waste management on applicable construction sites.

Table 87: Implementation Schedule – Contractor, Engineer, and Architect Survey

Permit Period	Measurable Goal	
Year 1	Develop Survey	
Years 2-5	Submit an annual Survey to regulated community	

Table 88: BMP Responsibility – Contractor, Engineer, Architect Survey

Primary Department	Support Groups LTSTF STEI	
Public Works		

6.0 CITY PERMITTED FACILITIES – CITY OF WESLACO

The General Permit requires the City to list all municipally owned industrial facilities that are subject to the TPDES stormwater regulations. Cities often operate several types of facilities that are subject to the industrial storm water permitting requirements. Landfills, wastewater treatment plants, airports, recycling facilities, and compost facilities are examples of regulated industrial facilities commonly operated by municipalities. The following municipal facilities are currently covered by the TPDES general permits for industrial activities.

Table 88: City owned Multi Sector Permitted Facilities

Facility	Location	General Permit	Individual Permit
South Waste Water Treatment Plant RN104589866	Hidalgo County on Mile 4.5 N and 7 West, Weslaco, TX		STORMWATER TXR05R609 (active)
North Waste Water Treatment Plant ¹	Hidalgo Co. on Mile 8 N & 4.5 N Weslaco, TX		STORMWATER TXR05R635 (active)

A copy of the TPDES multi-sector stormwater general permit for each of the listed facilities is included in Appendix F.





TXR050000 is acknowledged. Your facility's TPDES multi-sector storm water general permit number is: activity under the terms and conditions imposed by the Texas Pollutant Discharge Elimination System (TPDES) storm water multi-sector general permit The Notice of Intent (NOI) for the facility listed below was received on December 12, 2006. The intent to discharge storm water associated with industrial TEXAS COMMISSION ON ENVIRONMENTAL QUALITY Lexas Pollutant Discharge Elimination System Storm Water Multi-Sector General Permit

Coverage Effective: December 12, 2006

PO BOX 8396 WESLACO, TX 78955

Storm Water Processing Team by telephone at (512) 239-3700 or e-mail at swpermit@tceq.state.tx.us. A copy of this document should be kept with your SWP3. This permit expires on August 14, 2011, unless otherwise amended. For additional information, see the TCEQ web site at www.tceq.state.tx.us, or contact the ON MILE B N & 4.5 N PROJECT/SITE:
NORTH WASTE WATER TREATMENT PLANT
HIDALGO County (SWP3) that is tailored to your industrial site. As a facility authorized to discharge under the storm water multi-sector general permit, all terms and conditions periodic inspections. Among the conditions and requirements of this permit, you must have prepared and implemented a storm water pollution prevention plan TCEQ's storm water multi-sector general permit requires certain storm water pollution prevention and control measures, possible monitoring and reporting, and WESLACO, TX 78596 must be complied with to maintain coverage and avoid possible penalties OPERATIONS MANAGEMENT INTERNATIONAL INC



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY Texas Pollutant Discharge Elimination System Storm Water Multi-Sector General Permit

activity under the terms and conditions imposed by the Texas Pollutant Discharge Elimination System (TPDES) storm water multi-sector general permit The Notice of Intent (NOI) for the facility listed below was received on December 11, 2006. The intent to discharge storm water associated with industrial

TXR050000 is acknowledged. Your facility's TPDES multi-sector storm water general permit number is:

ON MILE 4.5 N & 7 WES: PROJECT/SITE:
SOUTH WASTE WATER TREATMENT PLANT HIDALGO Count must be complied with to maintain coverage and avoid possible penalties. periodic inspections. Among the conditions and requirements of this permit, you must have prepared and implemented a storm water pollution prevention plan TCEQ's storm water multi-sector general permit requires certain storm water pollution prevention and control measures, possible monitoring and reporting, and (SWP3) that is tailored to your industrial site. As a facility authorized to discharge under the storm water multi-sector general permit, all terms and conditions Coverage Effective: December 11, 2006 TXR05R609 PO BOX 8396 OPERATIONS MANAGEMENT INTERNATIONAL INC WESLACO, TX 78955

This permit expires on August 14, 2011, unless otherwise amended. For additional information, see the TCEQ web site at www.tceq.state.tx.us, or contact the

Storm Water Processing Team by telephone at (512) 239-3700 or e-mail at swpermit@tceq.state.tx.us. A copy of this document should be kept with your SWP3



BMP ID	BMP Description	Regulatory Minimum Control Measure
5.1.1	Utility Inserts and/or Mailouts	III.a.1 Public Education (a)(1) residents (a)(2) visitors (a)(4) businesses (a)(5) commercial/industrial (b) Documentation
5.1.2	Website	III.A.1. Public Education (a)(1) Residents (a)(2) Visitors (a)(3) Public service employees (a)(4) Businesses (a)(5) Commercial/Industrial (a)(6) Construction Site Personnel (b) Documentation III.A.2. Public Involvement/ Participation
5.1.3	Classroom Presentations	III.A.1. Public Education (a)(1) Residents (b) Documentation

BMP ID	BMP Description	Regulatory Minimum Control Measure
5.1.4	Stenciling	III.A.1. Public Education (a)(1) Residents (a)(2) Visitors (a)(3) Public service employees (a)(4) Businesses (a)(5) Commercial/Industrial (a)(6) Construction Site Personnel (b) Documentation III.A.2. Public Involvement/ Participation III.A.3. Illicit Discharges (a) illicit discharges
5.1.5	Brochures and Videos	III.A.1. Public Education (a)(1) Residents (a)(2) Visitors (a)(3) Public service employees (a)(4) Businesses (a)(5) Commercial/Industrial (a)(6) Construction Site Personnel (b) Documentation

BMP ID	BMP Description	Regulatory Minimum Control Measure
5.1.6	Signage	III.A.1. Public Education (a)(1) Residents (a)(2) Visitors (a)(3) Public service employees (b) Documentation
5.1.7	Community Outreach	III.A.1. Public Education (a)(1) Residents (a)(2) Visitors a)(3) Public service employees (a)(4) Businesses (a)(5) Commercial/industrial facilities (b) Documentation III.A.2. Public Involvement/ Participation

BMP ID	BMP Description	Regulatory Minimum Control Measure
5.1.8	Arroyo Colorado Watershed Protection Plan (ACWP BMP)	III.A.1. Public Education (a)(1) Residents (a)(2) Visitors (a)(3) Public service employees (a)(4) Businesses (a)(5) Commercial/Industrial (a)(6) Construction Site Personnel (b) Documentation III.A.2. Public Involvement/ Participation
5.1.8	Education –General Watershed Protection Plan (non-ACWP BMP)	III.A.1. Public Education (a)(1) Residents (a)(2) Visitors (a)(3) Public service employees (a)(4) Businesses (a)(5) Commercial/Industrial (a)(6) Construction Site Personnel (b) Documentation III.A.2. Public Involvement/ Participation

BMP ID	BMP Description	Regulatory Minimum Control Measure
5.2.1	Public Meetings	III.A.1. Public Education (a)(1) Residents (a)(2) Visitors (a)(3) Public service employees (a)(4) Businesses (a)(5) Commercial/Industrial (a)(6) Construction Site Personnel (b) Documentation III.A.2. Public Involvement/
5.2.2	Stenciling	Participation III.A.1. Public Education (a)(1) Residents (a)(2) Visitors (a)(3) Public service employees (a)(4) Businesses (a)(5) Commercial/Industrial (a)(6) Construction Site Personnel (b) Documentation III.A.2. Public Involvement/ Participation
5.2.3	Citizen Advisory Committee	III.A.3. Illicit Discharges (a) illicit discharges III.A.2. Public Involvement/ Participation

BMP ID	BMP Description	Regulatory Minimum Control Measure
5.2.4	Hotline	III.A.2. Public Involvement/ Participation III.A.3. Illicit Discharge Detection and Elimination (a)(1) Detection

BMP ID	BMP Description	Regulatory Minimum Control Measure
5.3.1	Mapping	III.A.3. Illicit Discharge Detection and Elimination (c) storm sewer map
5.3.2	IDD&E Ordinance	III.A.3. Illicit Discharge Detection and Elimination (a) illicit discharges (b) non-storm water discharges
5.3.3	Business Education	III.A.1. Public Education (a)(3) public service employees (a)(4) Businesses (a)(5) Commercial/industrial facilities (b) Documentation III.A.3. Illicit Discharge Detection and Elimination (a) illicit discharges (b) non-storm water discharges

BMP ID	BMP Description	Regulatory Minimum Control Measure
5.3.4	General Ordinances	III.A.3. Illicit Discharge Detection and Elimination (a) illicit discharges (b) non-storm water discharges
5.3.5	Low Impact Development and Smart Growth	III.A.1. Public Education (a)(3) Public service employees (a)(4) Businesses (a)(5) Commercial/Industrial (a)(6) Construction Site Personnel (b) Documentation III.A.3. Illicit Discharge Detection and Elimination (a) illicit discharges (b) non-storm water discharges
5.3.6	Illicit Discharge Inspections	III.A.1. Public Education (a)(3) public service employees (a)(4) Businesses (a)(5) Commercial/industrial facilities (b) Documentation III.A.3. Illicit Discharge Detection and Elimination (a) illicit discharges (b) non-storm water discharges

BMP ID	BMP Description	Regulatory Minimum Control Measure
5.3.7	Business Site Inspections	III.A.3. Illicit Discharge Detection and Elimination (a) illicit discharges (b) non-storm water discharges
5.3.8	Household Hazardous Waste	III.A.2. Public Involvement/ Participation III.A.3. Illicit Discharge Detection and Elimination (a)(2) Elimination

BMP ID	BMP Description	Regulatory Minimum Control Measure
5.4.1	Erosion Control Ordinance	III.A.4. Construction Site Storm Water Runoff Control (a) ordinance (b) contractor requirements
5.4.2	Construction Site Plan Review	III.A.4. Construction Site Storm Water Runoff Control (c)(3) site inspection and enforcement
5.4.3	Site Inspection and Policy Enforcement	III.A.4. Construction Site Storm Water Runoff Control (c)(3) site inspection and enforcement

BMP ID	BMP Description	Regulatory Minimum Control Measure
5.4.4	Contractor Certification	III.A.1. Public Education (a)(6) Construction site personnel (b) Documentation III.A.4. Construction Site Storm Water Runoff Control (b) construction site Requirements
		III.A.5. Post-Construction Storm Water Management in New and Redevelopment (a) structural and non-structuralBMPs (c) long-term BMP maintenance
5.4.5	Construction Site Waste Management	III.A.3.Illicit Discharge Detection and Elimination (a)(2) Elimination III.A.4. Construction Site Storm Water Runoff Control (b)(2) waste control (c)(3) site inspection and enforcement
5.4.6	Development of BMP Menus	III.A.4. Construction Site Storm Water Runoff Control (c)(3) site inspection and enforcement

BMP ID	BMP Description	Regulatory Minimum Control Measure
5.5.1	Post-Construction Ordinance	III.A.1. Public Education (a)(1) Residents (a)(4) Businesses (a)(6) Construction Site Personnel III.A.5. Post-Construction Storm Water Management (b) ordinance (c) long-term operation and maintenance of BMPs
5.5.2	Drainage Design Policy	III.A.1. Public Education (a)(1) Residents (a)(4) Businesses (a)(6) Construction Site Personnel III.A.5. Post-Construction Storm Water Management (b) ordinance (c) long-term operation and maintenance of BMPs
5.5.3	BMP Inspection and Maintenance	III.A.4. Construction Site Storm Water Runoff Control (c)(3) site inspection and enforcement
5.5.4	Land Use	III.A.5. Post-Construction Storm Water Management (a) appropriate use of structural/non-structural BMPs

BMP ID	BMP Description	Regulatory Minimum Control Measure
5.6.1	Stormwater Sewer System O&M	III.A.6. Pollution Prevention/Good Housekeeping (a)(4) storm water system maintenance
5.6.2	Street Sweeping	III.A.6. Pollution Prevention/Good Housekeeping (a)(2) street, road, or highway maintenance (a)(6) municipal parking lots (d) disposal of waste
5.6.3	City Employee Training Program	III.A.1. Public Education (a)(3) Public service employees (b) Documentation III.A.6. Pollution Prevention/Good Housekeeping (b) training program (e) municipal operations

BMP ID	BMP Description	Regulatory Minimum Control Measure
5.6.4	O&M Certification and Standard Operating Procedure Program	III.A.1. Public Education (a)(3) Public service employees (b) Documentation III.A.6. Pollution Prevention/Good Housekeeping (a)(1) park and open space maintenance (a)(2) street, road, or highway maintenance (a)(3) fleet and building maintenance (a)(4) storm water system maintenance (a)(5) new construction and land disturbances (a)(6) municipal parking lots (a)(7) vehicle and equipment maintenance and storage yards (a)(8) waste transfer stations (a)(9) salt/sand storage locations (b) training (e) municipal operations and industrial activities
5.6.5	Site Visits	III.A.6. Pollution Prevention/Good Housekeeping (a) good housekeeping and BMPs (c) structural BMP control (e) municipal operations

BMP ID	BMP Description	Regulatory Minimum Control Measure
5.6.6	Stormwater System O&M	III.A.6. Pollution Prevention/Good Housekeeping (a)(4) storm water system
5.6.7	Pesticides, Herbicide and Fertilizer Management	III.A.6. Pollution Prevention/Good Housekeeping (a)(1) park and open space maintenance (a)(2) street, road, or highway maintenance (a)(3) fleet and building maintenance (a)(4) storm water system maintenance (a)(5) new construction and land disturbances (a)(6) municipal parking lots (a)(7) vehicle and equipment maintenance and storage yards (a)(8) waste transfer stations (a)(9) salt/sand storage locations (b) training

BMP ID	BMP Description	Regulatory Minimum Control Measure
5.6.8	Collection and Disposal of Stormwater Waste	III.A.6. Pollution Prevention/Good Housekeeping (d) disposal of waste

BMP ID	BMP Description	Regulatory Minimum Control Measure
5.7.1	Stormwater Pollution Prevention Plan (SWP3)	III.A.7. Authorization for Municipal Construction Activities
5.7.2	Contractor, Engineer, Architect Survey	III.A.7. Authorization for Municipal Construction Activities