

TPDES Permitting

Municipal Separate Storm Sewer
Systems (MS4s) Updates

Lower Rio Grande Valley
Water Quality Management Planning Conference

April 9-11, 2014

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Outline of Presentation

➤ Municipal Stormwater

- Phase I program – Individual Permits
- Phase II program – General Permit

TXR040000



What is an MS4?

- An MS4 is a publicly-owned or operated stormwater drainage system
 - Designed to collect or convey stormwater
 - Includes storm drains, pipes, ditches, gutters, etc.



Phase I MS4s

➤ Medium and Large

- Municipal population 100,000+ (1990 Census)
- Includes public entities in the UA
 - TxDOT, universities, some others
- TCEQ issued 26 TPDES permits – some include coalitions (a total of about 50 permittees)
- First renewals were submitted beginning summer of 2010
- Last renewals will be submitted 2014



Phase I MS4 Permit Renewals

- Minimum Control Measures (MCMs – examples)
 - MS4 Maintenance Activities
 - Post-Construction Control Measures
 - Illicit Discharge Detection and Elimination
 - Pollution Prevention/Good Housekeeping for Municipal Operations
 - Industrial & High Risk Runoff
 - Construction Site Runoff
 - Public Education and Outreach/Public Involvement and Participation
 - Monitoring, Evaluation and Reporting



Requirements of Phase I MS4s

- Perform Monitoring - three options
 - Representative Storm Events,
 - Representative Rapid Bioassessment, or
 - Watershed monitoring - Regional Wet Weather Characterization Program (Dallas-Fort Worth area)
 - Coordinated by North Central Texas Council of Governments
 - Program reviewed and approved by TCEQ



Requirements of Phase I MS4s

In addition to monitoring above,

➤ Monitoring of Floatables

- Often required in 2 locations at a frequency 2 times per year
- Report collected amount

➤ Submit Annual Reports

- TCEQ reviews and provides feedback



Phase I MS4s Permit Renewals

- Discharges into Impaired Waters with Total Maximum Daily Load (TMDL) and Implementation-Plan (I-Plan)
 - Add language from the I-Plan related to the MS4 permittee
- Discharges into Impaired Waters with no TMDL
 - Permittee is required to address impairment within the MCMs



Phase I MS4s Permit Renewals

➤ EPA Review

- More similar requirements as Phase II GP
 - Priority areas
 - List of construction sites
 - Procedures for inspection of industrial sources
 - Mapping requirement
 - Similar requirements for TMDL as Phase II GP



TxDOT MS4 Statewide Individual Permit

The screenshot shows the homepage of the Texas Department of Transportation (TxDOT). At the top left is the TxDOT logo, a stylized star with a horizontal line through it, followed by the text "TEXAS DEPARTMENT OF TRANSPORTATION". To the right of the logo is a search bar and navigation links: "A - Z Site Index | Contact Us | Español". Below the search bar are links for "Driver | Government | Business | Inside TxDOT". The main content area features a large banner for "TEXAS HIGHWAYS" magazine, with the subtitle "The TRAVEL MAGAZINE of TEXAS". To the left of the banner is a tablet displaying the magazine cover, which includes the text "Celebrating 40th! Readers' Choice Top Travel Pick" and "THE COUNTDOWN BEGINS! The TEXAS TOP 40 TRAVEL DESTINATIONS". To the right of the banner is a dark blue box with the text "Texas Highways Celebrates 40 Years" and a "Read More" link with a right-pointing arrow. Below the banner is a row of three categories: "Driver", "Government", and "Business". Each category has a representative image and a brief description. The "Driver" category features a smiling woman driving a car. The "Government" category features a wooden star and a man in a suit. The "Business" category features a smiling woman in a business suit. At the bottom left of the page is a "My TxDOT" button with a right-pointing arrow. At the bottom right is a logo featuring a white cloud over a green field with blue waves below it.

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TEXAS DEPARTMENT OF TRANSPORTATION

Driver | Government | Business | Inside TxDOT

TEXAS HIGHWAYS™
The TRAVEL MAGAZINE of TEXAS

Texas Highways Celebrates 40 Years

Read More >

Driver

Learn more about Texas travel, driving laws and highway safety.

Government

Find studies, policies and legislation, and explore ways TxDOT can work with your community.

Business

Find information on partnering with TxDOT, including opportunities, resources and the bidding process.

My TxDOT



TxDOT MS4 Statewide Individual Permit

- Application received March 18, 2013
 - EPA and TCEQ agreed with concept
 - Delays due to complexity of permit and legal implications
- Coverage will replace
 - 15 Phase I individual permits
 - 19 Phase II authorizations under the Phase II GP
- Coverage will include New MS4 areas



TxDOT MS4 Statewide Individual Permit

➤ Requirements

- Level 2 MS4 provisions from Phase II GP
- Phase I provisions where applicable



Phase II MS4 General Permit

- Phase II General Permit TXR040000
 - Small MS4s located in an urbanized area (UA)
 - Issued December 13, 2013 – 5 year term
 - 472 approved authorizations included 66 waivers under 2007 GP
 - 400 additional new MS4 entities
 - 100 cities
 - 300 non-traditional MS4s



Urbanized Area (UA)

- UAs represent densely developed territory
- A densely settled core of census tracts and/or census blocks meeting minimum population density requirements:
 - A combined residential population of at least 50,000 people
 - Overall population density of at least 1,000 people per square mile

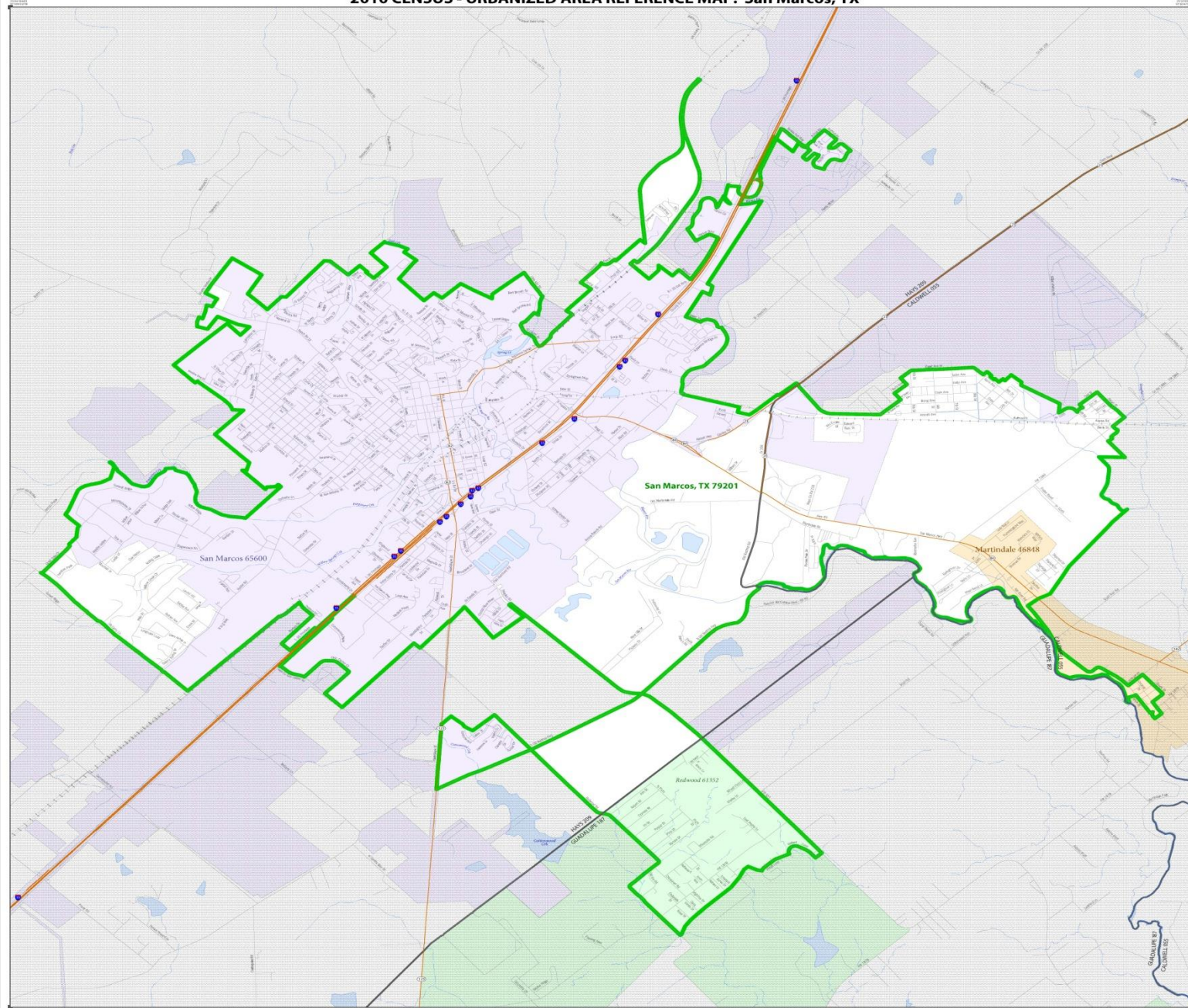


Urbanized Area (UA)

- US Census Bureau develops the UAs
- UA maps illustrate defined boundaries of UAs in the form of a map
- EPA website regarding UA maps:
<http://cfpub1.epa.gov/npdes/stormwater/urbanmaps.cfm>
- TCEQ website regarding UA maps:
<http://www.tceq.texas.gov/assistance/water/sw-ms4.html>



2010 CENSUS - URBANIZED AREA REFERENCE MAP: San Marcos, TX



SYMBOL/DESCRIPTION	SYMBOL	LEGEND	SYMBOL	LABEL/STYLE
International		CANADA		L'ANSE RES 1880
Federal American Indian Reservation		T1880		Dover, DE 24580
Off-Reservation Trust Land		Tooele, VT 88057		NEW YORK 36
Urbanized Area		NEW YORK 36		ENE 029
Urban Cluster		ENE 029		Bristol town 07485
State or statistically equivalent entity		Bristol town 07485		MILFORD 47500
County (or statistically equivalent entity)		MILFORD 47500		Davis 18100
Metro Civil Division (MCD) ^{1,2}		Davis 18100		Incline Village 20100
Incorporated Place ³		Incline Village 20100		Place Label
County, Designated Place (CDP)		Place Label		Place Label

DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL
Interstate		Water Body	
U.S. Highway		Military	
State Highway		Outside Metro Area	
Other Road			
Railroad			
Proposed Street			
Intermittent Stream			

Where international, state, county, or other MCD boundaries coincide, the map shows the boundary symbol for only the highest ranking of these boundaries.

1 A "+" following an MCD name denotes a late MCD. A "+" following a place name indicates that a late MCD exists with the same name and FIPS code as the place the late MCD label is on the map.

2 MCD boundaries are shown in the following states in which some or all MCDs function as general purpose governmental units: Connecticut, Illinois, Indiana, Kansas, Maine, Massachusetts, Michigan, Minnesota, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Dakota, Vermont, and Wisconsin. (Note that Illinois and Nebraska have some counties covered by non-governmental precincts and Missouri has some counties covered by non-governmental townships.)

3 Place label color corresponds to the place fill color.
Label color: Davis Davis Davis Davis Davis

SUBJECT AREA COUNTIES ON MAP SHEET
 48167 Guadalupe
 48209 Hays

All legal boundaries and names are as of January 1, 2010. Urban areas are based on counts from the 2010 Decennial Census. The metropolitan areas on this map are the Census Bureau statistical data collection and tabulation geographic units. Their depiction and description for statistical purposes does not constitute a determination of jurisdictional authority or rights of ownership or control.

Copyright: Mapping, 2010 Census Conference date: January 1, 2010
 Data Source: U.S. Census Bureau's MAZ/ICR database (TAB10)
 Map Created by: Congressional Districts, March 10, 2012



PARENT SHEET 1
 Total Sheets: 1
 Index Sheets: 0
 Parent Sheets: 1

UA NAME: San Marcos, TX
 UA CODE: 79201
 INTTY TYPE: Urbanized Area (UA)
 ST: Texas (48)


Phase II MS4 General Permit

➤ Notification letters sent to
New and existing MS4s

➤ Permit documents on
website:

http://www.tceq.texas.gov/permitting/stormwater/WQ_ms4_small_TXRO4.html

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



**GENERAL PERMIT TO DISCHARGE UNDER THE
TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM**

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

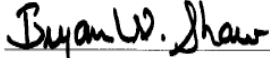
This permit supersedes and replaces
TPDES General Permit No. TXRO40000, issued August 13, 2007


Small Municipal Separate Storm Sewer Systems
located in the state of Texas
may discharge directly to surface water in the state

only according to requirements and 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 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 stormwater and certain non-stormwater 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 permit effective date.

EFFECTIVE DATE: DEC 13 2013
ISSUED DATE: DEC 13 2013


For the Commission




Phase II MS4 General Permit

➤ NOI is updated

➤ Application deadline:
June 11, 2014

TCEQ Office Use Only
Permit No.:
RN:
CN:
Region:

[RESET FORM](#)



TCEQ Notice of Intent (NOI) for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4) under the TPDES Phase II MS4 General Permit (TXR040000)

IMPORTANT:

- Use the [INSTRUCTIONS](#) to fill out each question in this form.
- Use the [CHECKLIST](#) to make certain you filled out all required information. Incomplete applications WILL delay approval or result in automatic denial.
- Once processed your authorization can be viewed at: http://www2.tceq.texas.gov/wq_dpa/index.cfm

APPLICATION FEE:

- You must pay the \$100 Application Fee to TCEQ for the paper application to be complete.
- Payment and NOI must be mailed to separate addresses.
- Did you know you can pay on line?
 - Go to <https://www3.tceq.texas.gov/epay/index.cfm>
 - Select Fee Type: GENERAL PERMIT MS4 PHASE II STORM WATER DISCHARGE NOI APPLICATION
- Provide your payment information below, for verification of payment:
 - Mailed Check/Money Order No.: _____
Name Printed on Check: _____
 - EPAY Voucher No.: _____
 - Is the Payment Voucher copy attached? Yes

One (1) copy of the NOI and Stormwater Management Program (SWMP) with the completed SWMP Cover Sheet MUST be submitted with the original NOI and SWMP.

Is the copy attached? Yes

RENEWAL: Is this NOI a Renewal of an existing Phase II MS4 General Permit Authorization?
(Note: An authorization cannot be renewed after June 11, 2014.)
 Yes The existing authorization number is: TXR04 _____
(If an authorization number is not provided, a new number will be _____)



Phase II MS4 General Permit

- Check list in NOI provides overview of requirements in permit
- Submit SWMP with NOI

MCM 4: Post-Construction Stormwater Management in New Development and Redevelopment

Page # (s) – Provide the page number (s) to the left of each item.

The SWMP includes the following required elements:

Requirements for all MS4s:

1. Description of program that will be developed, implemented and enforced, to address stormwater runoff from new development and redeveloped sites that discharge into the small MS4 that disturb one acre or more, including projects that disturb less than one acre that are part of a larger common plan of development or sale.
2. Ordinance or other regulatory mechanism is in place or planned which will regulate discharges from new development and redevelopment projects.
3. Establish, implement, and enforce a requirement that owners or operators of new development and redeveloped sites design, install, implement, and maintain a combination of structural and non-structural BMPs appropriate for the community and that protects water quality.
4. Document and maintain records of enforcement actions.
5. Long-term operation and maintenance of post construction stormwater control measures is addressed.
6. Operation and maintenance is documented.

Additional Requirements for Level 4 small MS4s:

1. Develop and implement an inspection program to ensure that all post construction stormwater control measures are operating correctly and are being maintained.
2. Inspections are documented.

SWMP lists BMPs used to fulfill this MCM. Examples may include:

- Local ordinance in place or planned
- Guidance document for developers to utilize
- Specific BMPs established for particular watersheds
- List of appropriate BMPs provided to operators
- Elimination of curbs and gutters is encouraged
- Zoning takes into account stormwater issues
- Incentives for use of permeable choices, such as porous pavement
- Requirements for wet ponds or other BMPs for certain size sites
- Xeriscaping

SWMP includes measurable goals, and the method of measurement, for addressing stormwater quality.

SWMP has been fully implemented, or includes a schedule of implementation not to exceed five (5) years from permit issuance date.



Waiver Option from Permitting Requirements

➤ Option 1

- Serves a population less than 1,000 in an UA and
 - Discharge not contributing substantially to interconnected regulated MS4
 - No TMDL or WLA for an impaired waterbody that requires the MS4 to have additional controls

➤ Option 2

- Serves a population under 10,000 and
 - Receiving water has been evaluated
 - No TMDL or WLA for an impaired waterbody that requires the MS4 to have additional controls
 - Future discharge will not impair water body



Phase II MS4 GP Renewal

- Develop and implement a comprehensive Stormwater Management Program (SWMP)
- Submit a Notice of Intent (NOI), SWMP, and \$100 fee
 - Form TCEQ – 20368
 - TCEQ performs technical review of SWMP
- Publish public notice in newspaper
 - Opportunity for the public to submit comments on the NOI and SWMP
- Notice of change (NOC)
 - Changes to SWMP
 - Form TCEQ – 20392
- Annual reports
 - 90 days after permit year, fiscal year, or calendar year



Phase II MS4 GP Renewal

- Minimum Control Measures (MCMs)
 1. Public Education, Outreach, and Involvement
 2. Illicit Discharge Detection and Elimination
 3. Construction Site Stormwater Runoff Control
 4. Post-Construction Stormwater Management in New Development and Redevelopment
 5. Pollution Prevention and Good Housekeeping for Municipal Operations
 6. Industrial Stormwater Sources
 7. Optional MCM for Construction done by the Permittee (MS4)



Phase II MS4 GP Renewal

- Developing a SWMP – existing permittees
 - Assess previous program elements
 - Modify as necessary
 - Develop and implement new elements
- Developing a SWMP – new permittees
 - Develop and implement new elements



Stormwater Management Program

➤ Implementation of SWMP

- Develop a schedule
- Implemented in yearly intervals over the 5 year permit term
- Must be fully implemented at the end of the 5 year permit term

➤ Possibility for Coalitions

- Usually share a boundary or watershed
- Each MS4 is responsible for own compliance



Phase II Annual Reports

- Submit the original report to the TCEQ Stormwater & Pretreatment Team (MC 148)
- Submit a copy of the report to the appropriate TCEQ regional office
 - Specify in the report cover letter that the TCEQ Regional Office has been sent a copy of the report
- Retain a copy of the report on site
- Annual Report template – will be updated:
<http://www.tceq.texas.gov/assistance/water/sw-ms4.html>
- Template will be updated



Sample of a Measurable Goal Table

Example – Measurable Goals Status

MCM	Measurable Goal(s)	Success	Proposed Changes (submit NOC as needed)
1	Provide utility bill inserts to each utility customer at least once each year.	Met goal	None
2	Conduct one public meeting or city-wide cleanup day each year.	Exceeded goal: conducted one public meeting and two cleanup days.	None
3	Map 25% of outfalls and 50% of receiving waters during Year 1 (same as milestone)	Met goal	None
4	Perform site inspections of 25% of all active construction sites.	Did not meet goal. Number of construction sites in city was far above normal for the year.	Revise goal to perform site inspections of 25% of all active construction sites, or a minimum of 50 sites per year. Submitted NOC along with the annual report to reflect this change.
4	Respond to 100% of construction complaints received.	Met goal	None
5	Review all site plans submitted for new development projects.	Met goal	None
6	Sweep 50% of roads each year.	Exceeded goal – swept all city streets in Year 1.	None
	Send two employees each year to a storm water training workshop.	Met goal	None



Phase II MS4 GP Renewal

- Guidance to non-traditional MS4s
- Requirements for discharges to impaired water bodies with and without approved TMDL and I-Plans
 - Discharging pollutants of concern
 - Bacteria reduction
- Flexibility in annual report due dates
 - Fiscal year, calendar year or permit year



Phase II Annual Reports

Permit Year Option		Fiscal Year (example) Option	
<u>Date</u>	<u>Action</u>	<u>Date</u>	<u>Action</u>
Dec. 2013	Permit effective date	Dec. 2013	Permit effective date
June 2014 (180 days)	NOI + SWMP	June 2014 (180 days)	NOI + SWMP
Dec. 2014	End of permit year	Sept. 2014	Start of MS4 fiscal year
March 2015	Year 1 Annual Report due (90 days from permit year)	Sept. 2015	End of MS4 fiscal year
		Dec. 2015	Year 1 Annual Report due (90 days from fiscal year)

- *New MS4s: The first annual report needs to include all months since the permit effective date*
- *Existing MS4s: The first annual report needs to include all months since the end of last reporting period*



Phase II MS4 GP Renewal

- Tiered Permitting Approach – based on population in the UA
 - Level 1: Up to 10,000
 - Level 2: 10,000 to 40,000,
includes non-traditional MS4s
 - Level 3: 40,000 to 100,000
 - Level 4: More than 100,000



Phase II MS4 GP Renewal

- Discharges into Impaired Water Bodies without an Approved TMDL
 - Determine if MS4 is source of the POC
 - Include focused BMPs to reduce to the Maximum Extent Practicable (MEP) the POC
 - Identify sources
 - Modify program as necessary
 - Include progress in annual report



Phase II MS4 GP Renewal

- Discharges into Impaired Water Bodies with an Approved TMDL
 - MS4 contributes to the impairment
 - Describe targeted controls (BMPs) in SWMP and report progress in annual report
 - Each BMP to include a measurable goal
 - Identify a benchmark
 - If pollutant of concern (POC) is bacteria
 - Refer to I-Plan or use alternative BMPs



Phase II MS4 GP Renewal

- Discharges into Impaired Water Bodies with an Approved TMDL
 - Assess progress towards benchmark
 - Use available data or collect monitoring data (instream or outfall)
 - If no progress towards benchmark shown
 - Identify alternative focused BMPs



Phase II MS4 GP Renewal

- Current Permitting Activities
 - Meetings with new MS4 entities and consultants
 - Questions from new and existing MS4 entities
 - Waiver option 2 or not
 - Help using UA maps
 - Filling out NOI
 - Once regulated always regulated
 - MS4 entity responses to notification letters
- Q&A document on MS4 website



TCEQ Web Links

➤ Stormwater Home Page

- http://www.tceq.texas.gov/permitting/stormwater/sw_permits.html

➤ Small Business and Local Government Assistance

- <http://www.tceq.texas.gov/assistance>



TPDES Stormwater Program Contacts

➤ Water Quality Division

- Rebecca L. Villalba, Stormwater & Pretreatment team leader
- Stormwater permit writers
 - Hal Bailey
 - Hanne Lehman Nielsen
 - Dan Siebeneicher
 - Lindsay Garza
 - Kent Trede
 - Elisabeth Molidor
- Austin Office: (512) 239-4671



Contact Information

- Small Business and Local Government Assistance (SBLGA)
(800) 447-2827
www.sblga.info
- Stormwater NOI/NEC/NOT Status
(512) 245-0130
swpermit@tceq.texas.gov
- Permitting Information (Technical)
(512) 239-4671
swgp@tceq.texas.gov

