Texas Municipal Separate Storm Sewer Systems (MS4)

Southwest IECA Texas Stormwater Conference

Rebecca L. Villalba
September 26, 2018

Stormwater Team
Water Quality Division
Texas Commission on Environmental Quality

(512) 239 4671
Municipal Separate Storm Sewer Systems (MS4)

An MS4 is a publicly owned or operated stormwater drainage system designed to collect or convey stormwater.
Phase II MS4 Program

- “Small” MS4s in Urbanized Areas (UAs)
- Population based on the 2000 and 2010 Censuses
- Regulated via a general permit, TXR040000
  - Waiver option based on population
  - Individual TPDES permit is an option
    - Compliance History rating
    - Other considerations
Phase II MS4 General Permit
TXR040000

- Effective December 13, 2013
- Expires December 13, 2018

- Universe under new permit has grown with over 150 new MS4s

<table>
<thead>
<tr>
<th></th>
<th>General Permit 2007 Authorizations Issued</th>
<th>General Permit 2013 Applications Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOIs</td>
<td>406</td>
<td>548</td>
</tr>
<tr>
<td>Waivers</td>
<td>66</td>
<td>79</td>
</tr>
<tr>
<td>Total</td>
<td>472</td>
<td>627</td>
</tr>
</tbody>
</table>
Phase II MS4 General Permit

- Tiered Permitting Approach - based on population in the UA

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 10,000</td>
<td>10,000 to 40,000</td>
<td>40,000 to 100,000</td>
<td>More than 100,000</td>
</tr>
</tbody>
</table>

Includes non-traditional MS4s

*Based on the 2000 and 2010 Censuses*
Phase II MS4s
Active Authorizations

<table>
<thead>
<tr>
<th>Level</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>114</td>
</tr>
<tr>
<td>Level 2</td>
<td>338</td>
</tr>
<tr>
<td>Level 3</td>
<td>43</td>
</tr>
<tr>
<td>Level 4</td>
<td>11</td>
</tr>
<tr>
<td>Waiver</td>
<td>79</td>
</tr>
</tbody>
</table>

Total numbers: 506 NOIs
79 Waivers
Requirements of Phase II MS4

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 (*Level 4 only*)
7. *Optional* MCM for Construction

*Additional requirements for discharges into impaired waterbodies*
Phase II MS4 General Permit

Annual Reports

- Due 90 days after *reporting* year
- Flexibility selecting reporting year
  - Fiscal year, calendar year, or permit year
- Reporting year cannot change during the permit term
- Use Annual Report Template (Form 20561)

- During General Permit renewal year
  - Submit annual report by regular due date
Phase II MS4 General Permit

Annual Report Common Mistakes

- TMDL section - failure to include benchmark value
- Section A - failure to include reporting period year and dates
- Section C - failure to include stormwater data summary
- Section I - failure to include the number of construction activities within the MS4
- Section J - failure to provide original wet ink signature
Phase II MS4 General Permit, TXR04000
2018 Renewal

- Renewal process began: Feb. 2017
- Stakeholder meeting: March 21, 2017
- Development of draft permit: April through August 2017
- Draft permit sent to EPA: August 29, 2017
- EPA review: Fall of 2017
- EPA objection letter: Dec. 4, 2017
- EPA and TCEQ discussions: Dec. through August 2018
- Response sent to EPA: June 20, 2018
- EPA approval letter: July 31, 2018
Small MS4 General Permit, TXR04000
2018 Renewal

- Publish notice: Aug. 24, 2018
  - Texas Register
  - 14 newspapers across the state
- 30-Day comment period: Aug. 24 – Sept. 24, 2018
- Public meeting: Sept. 24, 2018
- Commissioners Agenda (tentative): Dec. 12, 2018
New NPDES Rules – Phase II MS4 Remand Rule

40 CFR §§122.33 and 122.34

- Phase II MS4 Remand Rule
  - Published in *Fed. Reg.* on Dec. 9, 2016
  - Effective Jan. 9, 2017

- The MS4 regulations are revised to ensure that:
  - States determine the adequacy of best management practices (BMPs) and permit requirements
  - States provide public notice and opportunity for the public to request a public hearing
  - Permits must be written with terms that are “clear, specific, and measurable”
This is a procedural rule – no substantive changes are made to the Phase II MS4 requirements

Includes two options for states to administer their Phase II MS4 programs

- Option 1: Comprehensive general permit approach
  - The general permit needs to include all requirements necessary to meet the MS4 permit standard “to reduce pollutants to the maximum extent practicable” (MEP).

- Option 2: Two-step General Permit
  - The general permit includes some requirements for all MS4s.
  - The state establishes additional requirements and BMPs for individual MS4s in the stormwater management programs (SWMPs).
Electronic Reporting Rule – effective Dec. 21, 2015

- Requires electronic submittal of applications and reports
  - Phase 2 of Rule: General permit applications (NOIs) and MS4 reports need to be submitted electronically by Dec. 21, 2020
  - Appendix A of 40 CFR Part 127 includes a list of data elements that need to be reported electronically
  - Waiver option is available from eReporting – religious beliefs, no internet access, or training needed
New Federal Rules – Electronic Reporting Rule
40 CFR Part 127

- Electronic Reporting Rule
  - EPA will develop tools to accept applications and reports from small MS4s
  - TCEQ participates in EPA – State MS4 Technical Workgroup to discuss integrating the eReporting Rule into the MS4 programs
Summary of Proposed Changes to Existing Permit

- **Phase II MS4 Remand Rule**
  - Modified permit language to be **clear, specific**, and **measurable**
  - Added language regarding SWMP modifications during the permit term to comply with permit modification regulations at 40 CFR §§122.62 or 122.63

- **Electronic Reporting Rule**
  - Electronic submittal of applications and reports by December 21, 2020
Summary of Proposed Changes to Existing Permit

Examples of clear, specific, and measurable

- MCM 1. Public Education, Outreach, and Involvement
  If feasible, consider using public input (for example, the opportunity for public comment, or public meetings) in the implementation of the program.

- MCM 2. IDDE
  Inspections – The permittee shall conduct inspections as determined appropriate, in response to complaints, and shall conduct follow-up inspections as needed to ensure that corrective measures have been implemented by the responsible party.

The permittee shall develop written procedures describing the basis for conducting inspections in response to complaints.
Summary of Proposed Changes to Existing Permit

- Modifications to the SWMP during the Permit Term
  - List of changes that do not require a Notice of Change (NOC)
    - Non-substantial changes
    - Adding or annexing new areas
    - Adding BMPs
  - List of changes that require an NOC
    - Replacing BMPs
    - More frequent reporting or monitoring by the MS4
    - Change to compliance dates – not more than 120 days
  - List of changes that require an NOC and public notice
    - All other modifications that change the MS4s permit terms and conditions

- The public notice will be posted on the MS4’s website or the TCEQ website, if the MS4 does not have one.
Summary of Proposed Changes to Existing Permit

- Added and revised definitions such as benchmark value, infeasible, construction activity, Waters of the US, and impaired waterbodies.

- Clarified that annexation of lands or acquiring new areas will not require an NOC, but will require:
  - Within 90 days have a plan for implementing the SWMP in new areas.
  - Implement program in new areas as expeditiously as practicable but no later than three years.

- Added a requirement to check annually if a water body within the MS4’s permitted area has been added to the latest CWA 305(b)/303(d) list.
  - Newly listed impaired waterbodies must be addressed in the SWMP within two years.
Summary of Proposed Changes to Existing Permit

- Added a requirement to review and update the SWMP once a year in conjunction with completion of the annual report.
- Added a requirement to publish the SWMP and annual reports on MS4’s website – if MS4 has one.

For Level 4 MS4s only:

- MCM 2. Illicit Discharge Detection and Elimination
  - Add a program to control the discharge of floatables into the MS4.
- MCM 5. Pollution Prevention and Good Housekeeping for Municipal Operations
  - Add a program to evaluate new and existing flood management projects for their water quality impact.
Summary of Proposed Changes to Existing Permit

- MCM 7. Construction Activities where the MS4 is the site operator
  - Decreased the benchmark value of total suspended solids from 100 mg/L to 50 mg/L to be consistent with the 2016 MSGP

- Application fee increased from $100 to $400
Summary of EPA Objections on Draft Permit

- The permit appears to include terms that are not clear, specific, and measurable
  - Comments mostly related to Impaired Water Bodies and TMDL Requirement

Examples:

- Benchmark should be defined in definition section
- “Appropriate” and “as applicable” should be avoided (terms were used as: “appropriate BMPs”)
- Questioning requirements for discharges to Edwards Aquifer
Summary of EPA Objections on Draft Permit

- EPA questions whether later modifications to the SWMP would require public notice

  - **Examples:**
    - If a water body becomes impaired during the permit term, and new BMPs are needed and the SWMP updated – public notice might be required
    - BMPs for POCs are evaluated annually, and if changes in BMPs are needed – public notice might be required

- EPA and TCEQ had multiple conference calls during Dec. 2017 thru March 2018 to resolve EPA comments
Summary of EPA Objections on Draft Permit

- New permit language based on EPA objections - Modifications to the SWMP during the Permit Term
  - List of changes that do not require an Notice of Change (NOC)
    - Non-substantial changes
    - Adding or annexing new areas
    - Adding BMPs
  - List of changes that require an NOC
    - Replacing BMPs
    - More frequent reporting or monitoring by the MS4
    - Change to compliance dates – not more than 120 days
  - List of changes that require an NOC and public notice
    - All other modifications that change permit terms and conditions

- The public notice will be posted at the MS4’s website or the TCEQ website, if the MS4 does not have one.
Renewing Your MS4 Authorization

- After the MS4 General Permit has been renewed

  1. Within **180 days**, submit a revised SWPM
  2. Address **all requirements** in the new General Permit
  3. Ensure **measurable goals** are measurable
Renewing Your MS4 Authorization

After the MS4 General Permit has been renewed

1. TCEQ will review the SWMP and provide feedback
2. TCEQ will draft a public notice
3. MS4s publish the public notice in a local newspaper
   - Need to include MS4 website link
4. 30-Day public comment period
5. MS4s send affidavit and proof of publication to OCC
   - Be timely!
6. Hold public meeting, if requested
7. TCEQ will respond to public comments
8. TCEQ approves/renews the MS4 authorization
What are Measurable Goals and What are they used for?

- Objective markers or milestones that the MS4 (and the permitting authority) will use to track the progress and effectiveness of BMPs in reducing pollutants to the MEP.
  - Tracking implementation over time
  - Milestones to measure progress in implementing the BMPs
  - Tracking program/BMPs effectiveness
  - Tracking environmental improvement
# Examples of Measurable Goals

<table>
<thead>
<tr>
<th>BMP</th>
<th>Required Actions</th>
<th>Deadline/Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watershed signs</td>
<td>Inspect and maintain existing watershed signs</td>
<td>Frequency: One time per year</td>
</tr>
<tr>
<td>Distribution of brochures</td>
<td>Print 1,000 brochures annually, record number of brochures distributed</td>
<td>Frequency for printing: one time per year&lt;br&gt;Frequency for recording distribution of brochures: ongoing</td>
</tr>
<tr>
<td>Storm sever map</td>
<td>Update and maintain map; document dates of revisions</td>
<td>Frequency: Annually</td>
</tr>
<tr>
<td>Spill response and safety – employee training</td>
<td>Train employees at applicable County facilities once per year; maintain log of attendees</td>
<td>Annually</td>
</tr>
<tr>
<td>County-owned facilities and controls inventory</td>
<td>Develop initial inventory of County-owned facilities and stormwater controls</td>
<td>December 2015</td>
</tr>
</tbody>
</table>
Contact Information

- **Small Business and Local Government Assistance (SBLGA)**
  (800) 447-2827 or [www.texasenvirohelp.org](http://www.texasenvirohelp.org)

- **Stormwater Processing Center (NOI/NEC/NOT Status)**
  (512) 239-3700 or [swpermit@tceq.texas.gov](mailto:swpermit@tceq.texas.gov)

- **STEERS**
  (512) 239-6925 or [STEERS@tceq.texas.gov](mailto:STEERS@tceq.texas.gov)

- **Permitting Information (Technical questions)**
  (512) 239-4671 or [swgp@tceq.texas.gov](mailto:swgp@tceq.texas.gov)
TPDES Stormwater Program Contacts

- Water Quality Division
  - Stormwater Team
    - Rebecca L. Villalba, Team Leader
    - Lindsay Garza, Work Leader
    - Hanne Lehman Nielsen
    - Dan Siebeneicher
    - Gordon Cooper
    - Lili Martinez

- Austin Office: (512) 239-4671
Useful Links

- TCEQ webpage - http://www.tceq.texas.gov/
Questions?