

# Renewal of TPDES Phase II MS4 General Permit TXR040000 Preliminary Proposed Changes

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The Storm Water program area has started planning the renewal of the TPDES Phase II MS4 General Permit No. TXR040000, which expires August 13, 2012. In April 2010, EPA published the *MS4 Permit Improvement Guide*, and expects states to incorporate the items in this guide into future Phase I and Phase II permits. We have reviewed this guide and have identified the items that are feasible to incorporate into the draft permit. This paper provides a summary of our preliminary proposed changes.

## Proposed Changes to the Storm Water Management Program:

The renewed general permit will maintain a requirement to develop and implement a storm water management program (SWMP). The permit language is proposed to be modified to be more specific about each permittee's authority and enforcement measures necessary to control pollutant discharge from an MS4. We expect to add a new requirement to ensure that an MS4 has adequate resources to implement the SWMP and include minimum requirements for the ordinance or similar regulatory mechanism (for example: authority to prohibit illicit discharges, require compliance, require installation of control measures, issue penalties, respond to violations, inspect facilities etc.). We also propose to address the non-traditional MS4s and issues associated with lack of legal authority.

### *Minimum Control Measures:*

The SWMP, as before, would include six minimum control measures (MCMs). However, we propose to combine the first two MCMs from the current permit into MCM No. 1 and add a new MCM to control industrial storm water sources. So while the new permit would still have six MCMs, a new MCM is being considered. The proposed six MCMs are:

1. Public Education, Outreach, and Public Involvement
2. Illicit Discharge Detection and Elimination (IDDE)
3. Construction
4. Post-Construction, Permanent, or Long-Term
5. Pollution Prevention and Good Housekeeping for Municipal Operations
6. Industrial Storm Water Sources

#### *1. Public Education, Outreach, and Public Involvement*

As stated above, this MCM is split into two MCMs in the current permit. To be consistent with the EPA Improvement Guide and because of the similarities of the existing MCMs, we propose to combine them into one MCM.

We propose three minor additions to the technical requirements covered in this MCM:

- a. evaluation of the effectiveness of the program; such as by phone surveys or other methods that quantify results.

- b. utilization of public input; for example, the opportunity for public comments or holding public meetings; and
- c. public involvement related to construction activities; for example holding public meetings for public projects that disturb more than an acre of land, and implementing procedures for receipt and consideration of information submitted by the public.

## 2. *Illicit Discharge Detection and Elimination (IDDE)*

The current permit requires detection and elimination of illicit discharges as well as development of a MS4 map under this MCM. We are considering new requirements to require develop procedures for identifying priority areas, and to perform dry weather field screening. EPA recommends developing benchmarks for pollutants that are screened, but we are not proposing to do so at this time. We anticipate requiring procedures for:

- a. tracking illicit discharges;
- b. removing the source of the discharge;
- c. evaluating the program;
- d. preventing and correcting problems with any on-site sewage disposal systems located in the MS4;
- e. facilitating public reporting of illicit discharges;
- f. responding to public complaints about illicit discharges; and
- g. implementing a training program for municipal staff.

We expect that this MCM will more closely resemble the IDDE program required in the individual Phase I MS4 permits.

## 3. *Construction*

This MCM will maintain the requirements related to construction plan reviews, site inspections, enforcement, and public involvement. (Public involvement will be listed under MCM No. 1). These requirements will likely be more specific in the new draft permit.

Proposed new requirements include requiring the permittee to maintain a construction site inventory, perform MS4 staff training, and educate construction site operators.

## 4. *Post-Construction, Permanent, or Long-Term Control Measures*

This MCM addresses post-construction sites that are one acre or more in size as well as smaller projects that are part of a common plan of development. We will keep the requirements that MS4s must use a combination of structural controls and non-structural controls to address this MCM. However, we also propose to require the development of written procedures for implementing the program.

The EPA Guide suggests requiring low impact development (LID) control measures, such as infiltration, evapotranspiration, harvesting, and reuse of storm water. Rather than require these measures in the general permit, we propose to recommend that permittees utilize the use of these measures.

We propose to expand the language about long-term maintenance of control measures and clarify who is responsible for implementing this task, including performing the actual inspections.

We also propose to add new language related to regulating new development and redevelopment to implement consistent water quality protection measures. Permittees must include water quality and watershed protection elements when they revise their

community plans (or similar plans). For example, cities, in their community plans, may include elements such as minimizing the level of impervious surface, protecting sensitive areas, and keeping vegetative buffers along waterways.

Another proposed requirement is for the permittees to inventory, inspect, and document those control measures.

#### *5. Pollution Prevention and Good Housekeeping for Municipal Operations*

In the existing permit, this MCM includes implementing good housekeeping measures for municipal operations, having a training program for employees, maintaining and inspecting structural controls, and disposing of waste removed from the MS4.

We propose to expand this MCM to include:

- a. development of an inventory (list and map) of municipally owned facilities, including storm water controls;
- b. evaluation and prioritization of facilities based on the potential discharge of pollutants to storm water;
- c. development of storm water control measure standard operating procedures (SOPs) for municipal facilities;
- d. inspections and visual monitoring for high priority facilities;
- e. replacement of materials and chemicals in operation and maintenance (O&M) activities with more biodegradable materials;
- f. pollution prevention measures to minimize exposure to storm water from O&M activities;
- g. include detailed requirements regarding street sweeping;
- h. addition of new language related to pesticide, herbicide, and fertilizer application; and
- i. addition of language describing requirements for contractors hired to perform O&M activities.

#### *6. Industrial Storm Water Sources*

This MCM is new and would include requirements for the MS4 operators to maintain an inventory of industrial sites, perform inspections, and train staff.

#### *Monitoring, Evaluation, and Reporting*

The Phase II MS4 general permit currently requires MS4 operators to evaluate their SWMP in regards to the appropriateness of control measures and their progress toward achieving measurable goals. Those evaluations must be submitted to TCEQ in an annual report. We will maintain those evaluation and reporting requirements.

The Phase I MS4 individual permits include similar requirements as well as water quality monitoring. We propose to continue to provide water quality monitoring as an option for Phase 2 MS4s, but not require it, since larger entities with available resources might find this option helpful in accessing the SWMP.

#### *Discharges to Impaired Waterbodies*

During informal conversations with the EPA, it appears that EPA is expecting to see pollutant reduction plans for discharges to impaired waterbodies. If the discharge contains a pollutant of concern, EPA expects TCEQ to require monitoring for the pollutant of concern to ensure the effectiveness of BMPs. Monitoring could be done in collaboration among MS4s. We are considering allowing some flexibility in the type and frequency of monitoring required including instream monitoring, outfall monitoring, etc.

The general permit addresses discharges to water quality-impaired receiving waters. We propose to expand the language under this item and divide it into: (1) Discharges to a water quality impaired water body, and (2) Discharges to a water quality impaired water body with an approved TMDL and TMDL Implementation plan. We propose to add a requirement to develop a pollution reduction plan (PRP) to reduce the discharge of the pollutant of concern, when discharging to an impaired waterbody.

#### *Additional Considerations*

1. The current general permit has a seventh MCM, *Authorization for Municipal Construction Activities*, which applies only to construction activities where the MS4 operator is also the construction site operator. We are considering removing this MCM, since our experience shows that this MCM is rarely used. Conversely, we may leave it as an optional MCM.
2. We are also considering removing Waiver Option 2 because the waiver has never been used. Option 2 consist of waiving permit requirements for an urbanized area serving a population less than 10,000 where the discharge does not have the potential to exceed surface water quality standards, and storm water controls are not needed based on wasteload allocations that are part of a TMDL.
3. We are also considering replacing the Waiver Option 2 with a tiered permitting approach. The need for coverage would still be determined by the urbanized area, but smaller cities and non-traditional MS4s that serve a population of less than 10,000 would have less stringent requirements, such as they would not have to do field screening under MCM No.2, etc. We believe EPA would support this approach and it could alleviate some of the regulatory burden that regulated small MS4s are currently facing.
4. We will be regulating new areas based on the 2010 Census and we will be able to provide a five-year compliance period for the new areas. Areas already regulated based on the 2000 Census will likely continue to be regulated.

#### **References**

1. TPDES GP for Phase II (Small) Municipal Separate Storm Sewer Systems (MS4s) TXR040000, TCEQ, Issued August 13, 2007
2. MS4 Permit Improvement Guide, EPA, April 2010.  
([http://www.epa.gov/npdes/pubs/ms4permit\\_improvement\\_guide.pdf](http://www.epa.gov/npdes/pubs/ms4permit_improvement_guide.pdf))