



**Environmental
Protection Agency**

Tim Smolenski, Governor
Lee Fisher, Lt. Governor
Chris Kariabicki, Director

September 14, 2010

Mr. Robert Galvin, P.E.
Vandalia City Engineer
333 JE Bohannon Memorial Drive
Vandalia, OH 45377

RE: Stormwater Program Evaluation

Dear Mr. Galvin:

On Tuesday, August 17, 2010, I conducted a "screening evaluation" of the City of Vandalia's stormwater management program. You represented the city during this review. The evaluation consisted of discussions about the 6 "Minimum Control Measures" (MCMs) that provide the framework for municipal stormwater programs. The intent was to evaluate program activities over the first permit term, from 2003 to 2008.

Note that following the discussion of activities for each MCM, specific annual reporting requirements and performance standards (taken directly from the current permit) are listed. Also note that future stormwater program reviews will likely be true audits, and will look at each aspect of the city's program in greater detail.

Based on my review of the city's current plan, recent annual reports, and our discussion, I offer the following observations and recommendations:

MCMs 1 and 2 – Public Information, Participation, Education and Outreach

Information submitted in the 2009 annual report states that the city is informing its residents about stormwater management issues through a local publication, but copies of the articles in question have not been provided. Future efforts to inform residents about stormwater issues are likely to continue in this manner.

Recommendations

Annual reports must contain copies of articles sent out to city residents. Only articles which have stormwater-related content should be included. For future city-sponsored city-wide clean ups, amounts of trash collected should be totaled and included in respective annual reports. Vandalia should also explore the possibility of using its website as another way to provide stormwater related information to interested citizens. Lastly, information regarding the number of storm sewer catch basins present in the city and how many have been stenciled with "do not dump," should be included in future annual reports. Once all have been marked, the city's stormwater management plan (SWMP) should explain how the markings will be maintained.

MCM 1 - Performance Standards Vandalia's stormwater public education and outreach program shall include more than one mechanism and target at least five different stormwater themes or messages over the permit term. At a minimum, at least one theme or message shall be targeted to the development community. Stormwater public education and outreach shall reach at least 50 percent of the city's population over the permit term.

Annual Reporting Annual reports shall identify each mechanism used, including each stormwater theme, audience targeted and estimate of how many people were reached by each mechanism.

MCM 2- Performance Standards Vandalia's stormwater public involvement/participation program shall include, at a minimum, five public involvement activities over the permit term.

Annual Reporting Annual reports shall identify each public involvement and/or participation activity conducted, including a brief description of each activity and an estimate of how many people participated.

MCM 3 – Illicit Discharge Detection and Elimination (IDDE)

Mapping - It's not clear if the city has completed mapping all the storm sewer outfalls within its boundaries. A map included with Vandalia's original stormwater plan shows storm sewers and storm sewer inlets, but these features appear in different colors and are not identified in the map's legend. Storm sewer outfalls are not highlighted, nor are any named streams into which the outlets discharge.

The city must revise its maps to include storm sewer outfalls and the waterways to which they discharge. A copy does not have to be submitted to OEPA, but must be made available during the next stormwater program audit. (Note that by January, 2014, maps must be completed which show Vandalia's entire storm sewer system.)

IDDE Ordinance – The current version of the ordinance included with Vandalia's stormwater management plan says nothing about enforcement.

A copy of the revised ordinance should be included as an attachment or Appendix to the city's revised stormwater management plan.

While complaints regarding illicit discharges into Vandalia's storm sewers are rare, the revised stormwater plan should explain the general idealized process used by the city to address complaints, from receipt to resolution.

Home Sewage Treatment Systems – The number of existing septic systems within Vandalia is small, but it's not known if any of these are discharging systems. The city's revised stormwater management plan should clarify how this issue has been addressed, stating that no discharging systems are present within Vandalia if this is known to be true. If discharging systems are discovered, the revised plan should acknowledge this finding, include the list of addresses as required, and explain if steps will be taken to either monitor or connect relevant properties to sanitary sewers.

Dry Weather Screening – It's not clear if the city has screened all its storm sewer outfalls as required by the original MS4 permit. Vandalia's original stormwater management plan does not explain the general approach that will be taken to address this requirement.

The city's revised SWMP must discuss the city's approach to dry weather screening storm sewer outfalls, and provide a schedule that explains which outfalls will be screened over the 5 year permit term. The revised plan should also discuss the general approach that will be taken in the event a discharge is observed. The outcome of specific situations, either complaint-driven or from routine screening work, should be summarized and included in respective annual reports.

MCM 3 - Performance Standards Vandalia's stormwater illicit discharge detection and elimination program shall include or have included an initial dry-weather screening of all stormwater outfalls over the permit term. The program shall establish priorities and specific goals for long-term systemwide surveillance of the MS4, as well as for specific investigations of outfalls and their tributary area where previous surveillance demonstrates a high likelihood of illicit discharges. Data collected each year shall be evaluated and priorities and goals shall be revised annually based on this evaluation. Vandalia's storm sewer system map shall be updated annually as needed.

Annual Reporting Annual reports shall document the following: (1) number of outfalls dry weather screened, (2) number of dry-weather flows identified, (3) number of illicit discharges identified, (4) number of illicit discharges eliminated, (5) provide schedules for elimination of illicit connections that have been identified but have yet to be eliminated and (6) summary of any storm sewer system mapping updates

MCM 4 – Construction Site Stormwater Runoff Control
Inspection records were not requested during the review, but annual report information suggests that the city is actively inspecting construction sites to ensure erosion and sediment controls are installed and maintained as necessary. A copy of checklists or other forms developed and used by the city to document construction site inspections should be included in the revised SWMP.

The portion of Vandalia's ordinance that requires disturbed land to be stabilized only by temporary seeding should be expanded to include other options. It's true that during certain portions of the year it may be impossible for construction sites to establish vegetation as a way of reducing erosion and stabilizing disturbed soils. But other options exist, such as reducing unnecessary clearing, use of mulch or straw, erosion control matting or blankets, and wood chips or other woody debris. Language in the current version of Ohio EPA's general construction permit considers several alternatives to seeding that can be undertaken regardless of the season.

The city should also modify its construction ordinance so that it refers to the current version of OEPA's general NPDES stormwater discharge permit issued to construction sites. This permit is revised (and renumbered) every 5 years, and while changes between versions usually are not drastic, the city could benefit from the consistency.

The city should also consider re-writing this section of its stormwater management plan to describe the general process construction projects follow from initial proposal to final sign off. While language in part 1476.04 of the city's ordinance at one time described what is expected of applicants, the overall review process could be summarized in general terms in the plan itself.

MCM 4 - Performance Standards Vandalia's construction site stormwater control program shall include preconstruction stormwater pollution prevention plan review of all projects from construction activities that result in a land disturbance of greater than or equal to one acre. To ensure compliance, these applicable sites shall be initially inspected. The frequency of follow-up inspections shall be on a monthly basis unless the city documents its procedures for prioritizing inspections such as location to a waterway, amount of disturbed area, compliance of site, etc. If the city initially had coverage under a previous version of this permit it shall revise the program to satisfy these performance standards, if needed, within two years of when coverage under this general permit was granted.

Annual Reporting. Annual reports shall document the following: (1) number of applicable sites in your jurisdiction, (2) number of pre-construction stormwater pollution prevention plan reviews performed, (3) number and frequency of site inspections, (4) number of violation letters issued, (5) number of enforcement actions taken and (6) number of complaints received and number followed up on.

MCM 5 – Post Construction Stormwater Management in New Development

Vandalia's construction ordinance does not appear to address the post-construction management of stormwater runoff other than from a water quantity/flood prevention standpoint. The intent of OEPA's post-construction requirements is to treat a certain amount of runoff generated from the developed site prior to the water being discharged from the site. Standard detention basins with reduced outlet sizes can meet these requirements, but other options, both structural and non-structural, exist, and are listed in OEPA's construction permit.

Detention basin inspections by Vandalia staff are surely useful, but will not be viewed as adequate in terms of complying with Vandalia's small MS4 permit. The city will have to modify this section of its stormwater management plan to explain how it will address post-construction requirements. If the intention is to rely solely on detention basins with reduced outlet sizes, that's fine as long as the SWMP describes the approach.

MCM 5 – Performance Standards

Vandalia's post-construction SWMP shall include pre-construction stormwater pollution prevention plan review of all projects from construction activities that result in a land disturbance of greater than or equal to one acre to ensure that required controls are designed per requirements. These applicable sites shall be inspected to ensure that controls are installed per requirements. The program shall also ensure that long-term operation and maintenance (O&M) plans are developed and agreements in place for all applicable sites. If the city initially had coverage under a previous version of this permit it shall revise its program to satisfy these performance standards, if needed, within two years of when coverage under this general permit was granted.

Annual Reporting Annual reports shall document the following: (1) number of applicable sites in your jurisdiction requiring post-construction controls, (2) number of pre-construction stormwater pollution prevention plan reviews performed, (3) number of inspections performed to ensure as built per requirements and (4) number of long-term operation and maintenance (O&M) plans developed and agreements in place.

MCM 6 – Pollution Prevention/Good Housekeeping for Municipalities

Little time was spent discussing this section, but information provided in the most recent annual report suggests Vandalia is training some of its staff about stormwater issues and better materials management, is recording the amounts of salt used in winter for road deicing, and is tracking amounts of street sweepings collected and disposed. Stormwater pollution prevention plans are being prepared for relevant city facilities, and will be completed by the end of 2010.

Mr. Robert Galvin
September 14, 2010
Page 6

This section of Vandalia's SWMP should be rewritten to better reflect the city's current activities. Most of the language under MCM 6 in the original plan was crafted by the Miami Conservancy District, but at this point the city should be able to describe its own activities in some detail.

MCM 6 - Performance Standards Vandalia's pollution prevention/good housekeeping program shall include, at a minimum, an annual employee training. Its operation and maintenance program shall include appropriate procedures, controls, maintenance schedules and recordkeeping to address Part III.B.6.d.iii of the small MS4 permit.

Annual Reporting Annual reports shall document the following: (1) summary of employee training program(s) implemented with number of employees that attended and (2) summary of activities and procedures implemented for Vandalia's operation and maintenance program.

Conclusions

Like virtually all MS4s, Vandalia is not in full compliance with the terms of its stormwater permit. But the city appears to be addressing most of the requirements of this permit in some way.

Because Vandalia relied heavily on the Miami Conservancy District for much of the content of its original SWMP, I am recommending that the plan be rewritten so that it more accurately represents the city's current stormwater program activities. The goal of the rewrite is to have a document that is general in nature, and can provide to the average reader a decent overall understanding of how the city is addressing stormwater management requirements. Specific information, as outlined in each respective MCM's annual reporting requirements, can be included as appropriate.

If there are questions about anything in this letter, I can be reached at 937.285.6442 or via email at chris.cotton@epa.state.oh.us.

Sincerely,



Chris Cotton
Division of Surface Water

Cc: OEPA/SWDO/DSW Files
Anthony Robinson, OEPA/CO/DSW
CC/mab