



Environmental
Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

April 29, 2011

Mr. Scott Vagedes
City Engineer, Tipp City
260 S. Garber Drive
PO Box 188
Tipp City, OH 45371

RE: Stormwater Program Evaluation, NPDES permit # 1GQ00003

Dear Mr. Vagedes:

On Friday, March 25, 2011, I conducted a "screening evaluation" of Tipp City's stormwater management program. You and John Bodiker represented the city during this review. John Norton and Charles Eborge from Norton Engineering, which contracts with Tipp City to work on parts of its stormwater program, were also present at this meeting. 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 5 year term of the small MS4 general permit.

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 stormwater management plan, recent annual reports, and our discussion, I offer the following observations and recommendations:

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

Tipp City staff appears to be using MCD-orchestrated activities to improve their own knowledge about stormwater issues. But it's not clear, based on reading the stormwater management plan (SWMP) and the most recent annual report (from 2009) what the city is doing to educate its residents about stormwater issues. Utility mailings periodically contain newsletters with stories or information of local interest, and this could be one way to meet public education requirements of the small MS4 general permit. Local newspapers are another obvious option for distributing information. Stormwater program information available over Tipp City's internet website will be an important way of educating residents in the future, but no mention is made of this in the current SWMP. The Honey Creek Watershed group is another possible way to get information out to residents, and thus far has not been utilized to any great extent. In

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late 2005, OEPA sent to every MS4 in the state a DVD copy of a short educational video titled "Tempest In A Channel: Stormwater Runoff's Impacts on Urban Streams". Copies of the video were also sent to numerous local cable access television stations across Ohio, including Tipp City's KIT-TV. It's not known if the video was broadcast, though small cable access stations typically do broadcast programs they agree to accept. If the city can confirm broadcast of this video, it can report the estimated number of viewers KIT has in the appropriate section of future annual reports.

Tipp City has involved local middle school students in storm sewer inlet marking activities, which is a great hands-on way to help kids learn the basics of stormwater management. No mention of this activity appears in the original SWMP.

Recommendations

Because Tipp City's original stormwater management plan (SWMP) is outdated, it should be rewritten to reflect the specific outreach strategies the city currently uses, and will seek to exploit in the future. The revised SWMP should include a discussion of the city's use of the internet, and how it intends to incorporate (and archive) basic stormwater information within its web site. USEPA and Ohio EPA have significant amounts of relevant information available on line that could be easily accessed from links placed in the appropriate section of the Tipp City's website.

Copies of newly written stormwater related articles should be included with future annual reports. If previously published articles will be re-used in some way, then copies do not have to be included in subsequent annual reports. Ideally, articles can be archived on-line for future reference.

The revised SWMP should also explain the basics of Tipp City's program for marking storm sewer inlets. While the work does have a definite end point, it's not clear how many inlets have been marked so far, how many are expected to be marked in a given year, and how labels will be maintained in the future. Specific details will not be known, but the basic strategy is something that should be explained in the revised plan.

MCM 1 - Performance Standards Tipp City'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.

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MCM 2- Performance Standards Tipp City's stormwater public involvement and 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 All storm sewer outfalls within Tipp City's boundaries have been mapped, as has most of the city's storm sewer system. The city has until January, 2014 to complete mapping of its entire system.

Tipp City's revised SWMP should explain which city department is responsible for updating these maps when development adds new storm sewers to the existing network. A copy of the completed map does not have to be submitted to OEPA, but should be made available during the next stormwater program audit/evaluation.

IDDE Ordinance – Tipp City apparently does not have specific language in either an ordinance or other regulatory mechanism that clearly prohibits illegal discharges of improper materials or wastes into its storm sewer network. Septic system discharges are addressed through a long standing agreement with the Miami County Health Department, but the intent of this requirement is to address other potential pollutants that could be discharged into city storm sewers. It's possible that the existing ordinance has language prohibiting discharges into storm sewers as well as sanitary sewers. But this needs to be clarified, and a copy of whatever language the city relies on to prohibit illicit discharges to storm sewers must be included as an attachment or Appendix to the updated SWMP.

The revised plan should also explain how the city is now using the "IWorq" computer program as a way of logging and following up on complaints, some of which may involve stormwater management issues.

Home Sewage Treatment Systems – Forty eight residential septic systems are currently present within Tipp City. None is thought to discharge to the city's storm sewers. The revised SWMP should state this fact, and also explain how Tipp City and the Miami County Health Department work together if problems with residential septic systems are encountered.

Dry Weather Screening – The city has contracted with Norton Engineering for storm sewer outfall screening. Since undertaking this activity, no problems have been found. The city's SWMP should be revised to include a discussion of its outfall screening program, including such things as numbers of outfalls screened per year and their locations. The discussion should include information about what the city would do if a potentially problematic discharge were to be detected. Since unpredictable situations can occur, the narrative by necessity has to be general. Specific information about detected discharges and how they were addressed can be provided in annual reports.

MCM 3 - Performance Standards Tipp City's 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. Tipp City's storm sewer system map shall be updated annually as needed.

Annual Reporting Annual reports shall document the following: (1) number of outfalls dryweather 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 information included in recent annual reports, along with inspection reports prepared by John Bodiker, suggests the city is doing an adequate job of inspecting active construction projects within its territory.

Tipp City uses a section of its subdivision regulations, initially passed in 1978, as the basis for requiring erosion and sediment controls at construction sites. The revised SWMP should explain how use of these regulations meets the intent of the MS4 permit. The revised SWMP must also explain the general process proposed construction projects follow from initial review to final completion, emphasizing points at which erosion and sediment control needs are discussed. The revised narrative should also explain the enforcement process Tipp City will follow when dealing with chronic violators of its ordinance. Relevant subdivision regulations submitted to OEPA in response to an April 16, 2009, notice of violation does not contain information about how chronic violators are dealt with by the city. From our discussions it's known that bond monies may be kept by the city if construction site operators fail to address problems. But the narrative portion of the current SWMP does not discuss this.

The performance standards listed below may be a helpful guideline the city can follow when revising this section of its SWMP. The original SWMP does contain information that helps explain the city's construction program, and perhaps some of that verbiage can be used in the revised plan.

MCM 4 - Performance Standards Tipp City'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 Tipp City's 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

It's not clear how Tipp City's construction project review process accommodates post-construction stormwater runoff management requirements that focus on water quality, versus water quantity. Currently the city includes drainage restriction language on final record plats, which effectively puts the burden for maintenance of post-construction best management practices (BMPs) on property owners, even on private property. But there's no mention of this in the city's original SWMP.

Tipp City must revise its SWMP to describe the review process new developments follow to ensure that adequate post-construction stormwater practices are installed as designed, then operated and maintained accordingly. Relevant ordinance language which requires the installation of post-construction water management features can be referenced in the narrative, with relevant sections of the ordinance included as an attachment or appendix to the revised plan.

MCM 5 – Performance Standards

Tipp City'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 Tipp City's 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 Tipp City is 1) training appropriate staff about stormwater issues and better materials management; 2) recording the amounts of salt used in winter for road deicing, and 3) tracking amounts of street sweepings collected and disposed.

This section of Tipp City's SWMP should be rewritten to better explain the city's current employee training program, and its efforts to minimize use of various materials such salt and pesticides/herbicides. Verbiage from the original plan may be used in the revised plan if appropriate, and emphasis should be on describing how materials management practices have improved, and subsequent cost savings that have been realized. The story of reducing use of road deicing salt simply by questioning how much was being used to begin with is the kind of information that is worth sharing.

MCM 6 - Performance Standards Tipp City'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 Tipp City's operation and maintenance program.

Conclusions

Tipp City appears to be doing an adequate job of addressing the requirements of its stormwater permit. But, as repeatedly mentioned in this letter, the city's stormwater management plan needs to be updated so that it more accurately reflects the full extent of the city's activities. Recent annual reports contain information about various stormwater related activities that would not otherwise be known by reading the original

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SWMP. In addition to improving its accuracy, the goal of rewriting the plan is to create 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. Requirements undoubtedly will change over time, but the city should be able to prepare a revised plan that will remain reasonably accurate for many years.

It is expected that the city will have its revised SWMP in place by the time the next small MS4 general permit has been implemented, early in 2014.

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,

A handwritten signature in black ink, appearing to read "Chris Cotton". The signature is fluid and cursive, with the first name "Chris" and last name "Cotton" clearly distinguishable.

Chris Cotton
Division of Surface Water

cc: OEPA/SWDO/DSW Files
Anthony Robinson, OEPA/CO/DSW

ec: John Norton, Norton Engineering LLC

CC/ca