



**Environmental
Protection Agency**

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director

November 4, 2010

Mr. Chris Berger, P.E.
City Engineer, City of Xenia
101 N. Detroit Street
Xenia, OH 45385

RE: Stormwater Program Evaluation

Dear Mr. Berger:

On Monday, September 6, 2010, I conducted a "screening evaluation" of the City of Xenia'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

Most of the information submitted in Xenia's 2009 annual report is information that pertains to activities organized and executed by the Miami Conservancy District (MCD), which has offered assistance with MCMs 1 and 2 to several dozen MS4 communities found within MCD's territory. This collaboration is certainly welcome, and it is hoped it will continue in the future. However, MS4s with whom MCD is collaborating are still expected to explain how they benefit from MCD's public outreach and education efforts. For example, how many kids from Xenia schools attended an MCD sponsored educational event? How many Xenia employees attended a workshop that discussed low impact development and site design? How many Xenia residents may have been informed of stormwater issues through radio or TV public service announcements?

In its rewritten stormwater management plan, Xenia must elaborate as to the extent of its involvement with outreach and education events orchestrated by MCD or other entities. In addition to providing information in utility bills (not done in 2010 because of space limitations), Xenia should consider using the city's internet website and local cable access television station as ways to provide stormwater information to its residents. Past annual reports have included copies of articles about stormwater management, but it's not clear how many were sent, and when they were sent. Numbers of copies of future mailings should be tracked and included in annual reports.

Future program audits will focus on the performance standards listed below.

MCM 1 - Performance Standards Xenia'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 Xenia'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 – The map submitted in 2003 with Xenia's original stormwater management plan purportedly shows storm sewers in the city (it's not clear), and areas in which septic systems are present (this is clear, though only discharging systems need to be accounted for). The map does not show storm sewer outfalls, which is what the first version of the small MS4 general permit called for.

It is assumed Xenia could produce upon request a map showing the locations of all storm sewer outfalls within its boundaries. For the current permit term, MS4s are expected to create maps that show storm sewer systems in their entirety. While budget

Mr. Chris Berger
November 4, 2010
Page 3

cuts are restricting the amount of time the city spends updating its maps, it is assumed the existing ARCVIEW database contains the information needed to prepare a map that shows Xenia's entire storm sewer network. It is not imperative that maps be printed and sent to OEPA, but maps with the required features must be made available when the city's stormwater program is audited in the future.

IDDE Ordinance – To date, the city has not adopted an illicit discharge ordinance, though its stormwater program annual report for 2009 suggests that Xenia's Codified Ordinance 04-39 is used to address illicit discharges. (My meeting notes show that the ordinance in question is not part of 04-39, and has yet to be adopted by city council.) Xenia's revised stormwater management plan must include a copy of the ordinance it has passed to address illicit discharges into the city's storm sewer network, or else an explanation as to why the ordinance, or other suitable regulatory mechanism, has yet to be prepared and adopted. The system Xenia uses to receive illicit discharge complaints should be explained in the revised plan, and details about the numbers of such complaints and how they are resolved can be included in annual reports.

Home Sewage Treatment Systems (HSTS) – The map mentioned above shows areas within Xenia where septic systems are in use, but no accompanying list of addresses was included with the stormwater management plan, as required by the first permit. The revised plan should include a list of all HSTS known to discharge into Xenia's storm sewer system. Subsequent annual reports can list, when appropriate, homes that have been connected to public sewers, or new homes that are relying on discharging septic systems for sewage treatment and disposal.

Dry Weather Screening – Information from Xenia's annual report for 2009 states that outlet pipes for all 14 drainage basins within the city were dry-weather screened as part of an inflow and infiltration (I & I) study. Flows were observed from all 14 outlets, according to the annual report, but no follow up work was done to determine the origin of the flows or their chemical composition.

The city must revise its stormwater management plan to explain how it intends to go about future dry weather screening of its stormwater system outfalls, and what will be done when flows are discovered. A schedule that explains which outfalls will be screened over the 5 year permit term must be included, along with 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.

Future audits of this section of Xenia's stormwater management plan will focus on the performance standards listed below.

MCM 3 - Performance Standards Xenia'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. Xenia'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 contained in the most recent annual report states 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 annual report suggests that violations of Codified Ordinance 1226(c)(1-4) were cited at construction projects, but numbers or types of violations were not listed. If inspectors work with developers and contractors to resolve issues at sites and to "avoid enforcement conflicts", some written record of how these conflicts are ultimately resolved should be prepared and kept by the city as required.

The annual report also suggests that new development projects are required to have erosion and sediment control plans in place. Xenia's stormwater management plan, however, does not clearly describe the site plan review process developers follow when seeking approval to begin new construction projects. Relevant language found in City Ordinance 04-39 and/or 1226 should be used to supplement a summary overview of the process developers follow to ensure proper erosion and sediment controls are included in individual site plans. The ordinance itself can be included as an appendix or attachment to the revised stormwater management plan.

Note the following performance standards when considering how to revise Xenia's stormwater management plan.

MCM 4 - Performance Standards Xenia'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 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

The intent of post-construction stormwater management requirements is that newly developed properties have the capability to treat a certain amount of stormwater runoff (called the "water quality volume") produced by a given site's newly impervious surfaces. The current version of Xenia's stormwater management plan does not address this requirement, but the most recent annual report suggests that existing ordinances are in place to meet the post-construction requirement. The revised stormwater management plan must clearly explain how relevant ordinances will be used by the city in the future to meet the requirements of MCM 5.

MCM 5 – Performance Standards

Xenia'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 Xenia 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, though it's not sure when these plans will be completed.

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

MCM 6 - Performance Standards Xenia'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 its 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 Xenia's operation and maintenance program.

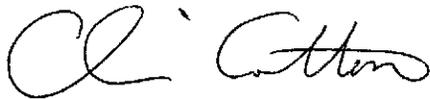
Conclusions

Xenia is not in full compliance with the terms of its stormwater permit. But the city appears to be addressing many of the requirements of this permit in some way. Because Xenia 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 re-write should be completed by the time the next annual report is due. The goal of the rewrite is to have a plan 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.

Mr. Chris Berger
November 4, 2010
Page 7

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 written in a cursive style with a large initial "C".

Chris Cotton
Division of Surface Water

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

CC/ca