



**Environmental  
Protection Agency**

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

January 12, 2011

Mr. Barry Conway  
City of Springboro  
320 West Central St  
Springboro, OH 45066

**RE: Stormwater Program Evaluation**

Dear Mr. Conway:

On Tuesday, November 16, 2010, I conducted a "screening evaluation" of Springboro'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 county'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**

Virtually everything listed by Springboro with respect to these 2 MCMs are activities developed and orchestrated by the Miami Conservancy District (MCD). It is hoped collaboration with MCD will continue in the future, but Springboro must be able to document participating in some way in these activities. The city also must begin to develop strategies of its own to help educate and inform Springboro residents about stormwater issues. If Springboro wishes to claim credit in the future for education and outreach activities undertaken by MCD, it must explain in its re-written stormwater management plan (SWMP) or relevant annual reports specifically how city staff or residents benefitted.

Springboro should begin using the Internet as a way of conveying stormwater information to its residents. The city should also consider distributing stormwater information through utility bills or by including relevant articles in newsletters or other local publications. Information can be archived within the city's website for future use, Mr. Barry Conway and hardcopies of newsletters can be kept at city hall for interested residents who don't have computers at home. Specific information pertaining to local schools' efforts to introduce stormwater management concepts and issues must be provided in appropriate annual reports. Reference to general environmental topics taught in schools is not adequate without mention of stormwater-specific concepts and issues.

As a reminder, future program audits will focus on the following performance standards:

**MCM 1 - Performance Standards** Springboro'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 MS4'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** Springboro'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)**

#### **IDDE Ordinance**

Springboro recently enacted an ordinance to address situations in which illicit discharges to the city's storm sewers have been identified. The ordinance has not been reviewed in detail, but OEPA's expectations are that it 1) allow the city to access and investigate suspected sources of illicit discharges, 2) stop discharges that are confirmed, and 3) issue monetary fines and penalties when necessary. The city's revised SWMP should include a copy of the ordinance as an attachment, and include in the narrative of the plan the language which provides the city the legal leverage to address the 3 points just made.

The revised plan should also include a description of the system the city relies on for taking and dealing with illicit discharge complaints.

#### **Mapping**

The city's storm sewer network is almost completely mapped. The current permit requires MS4s to have their entire systems mapped by January 2014. Copies of completed maps do not have to be included with future annual reports, or in the revised SWMP. Maps only need to be available for review during future program audits. The revised SWMP should explain which city department is responsible for maintaining city storm sewer maps, including future updates. Annual reports should describe the status of the city's mapping efforts, and when the task is likely to be completed.

**Home Sewage Treatment Systems (HSTS)** Approximately 50 residential septic systems are believed to be present in Springboro. The MS4 permit requires a list of discharging systems to be compiled and included in MS4 stormwater plans; standard on-lot leach field based systems do not have to be included (assuming none is failing so badly that it is actually creating a discharge). If discharging systems are not present within the city, the SWMP should be revised

accordingly. If discharging systems are present, then addresses should be included in the revised SWMP, with an outline of the long term plan Springboro has for sewerage the addresses in question.

#### **Dry-Weather Screening**

The revised SWMP should explain Springboro's approach to dry-weather field screening storm sewer outfalls located within the city's limits. The plan should contain a schedule that explains which outfalls will be screened in which year of the permit term. The plan should also include a general discussion of what the city will do if flow is being discharged from one of its outfalls.

Future program audits will focus on the following performance standards:

**MCM 3 - Performance Standards** Springboro'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. Springboro'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 program review. Annual report information suggests the city is inspecting regulated construction sites within its boundaries to determine if erosion and sediment control regulations are being met. The city's current SWMP, however, does not explain the review process construction projects follow from initial proposal to final completion. The SWMP should be revised accordingly, with emphasis on how the city ensures that erosion and sediment controls approved during the pre-construction review process are installed once projects become active. The revised SWMP should also outline the enforcement process the city will follow if chronic violations of its erosion controls regulations occur. Samples of inspection forms completed during site inspections should be included as attachments to the revised SWMP.

**MCM 4 - Performance Standards** Springboro'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

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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 Springboro'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 what Springboro is doing with respect to post-construction stormwater management requirements at new construction sites. The original SWMP makes little mention of the requirement, and information in the most recent annual report suggests that the extent of the program involves inspecting active construction sites that require post-construction controls. The city does not have a specific post-construction ordinance in place.

Springboro must revise this portion of the SWMP to clarify how it intends to meet current NPDES requirements that pertain to post-construction stormwater management. The goal of this MCM is to have new developments install suitable best management practices that will treat a certain portion of stormwater runoff prior to its discharge from the site.

Performance standards for MCM 5 are as follows:

#### **MCM 5 – Performance Standards**

Springboro'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 the 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**

Springboro's revised SWMP should explain in more detail the type of training it will provide to its employees as required by this MCM. The description in the plan can be general, and relevant details can be included in subsequent annual reports.

The revised SWMP also should contain a description of how collected street sweepings are managed after being brought back to the city's equipment yard. Currently, street sweepings

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(which are legally defined as solid waste), are off-loaded from vector trucks directly into an uncovered roll off box which is ultimately emptied at a solid waste landfill. The roll-off box is kept outside, and is not covered. Rainfall that collects within the box is technically considered leachate because it comes in contact with solid waste; this leachate is supposed to be treated before being disposed. The easy fix is to either cover the box, or move it indoors so rainfall is kept out. The revised plan should explain what the city will do to ensure its street sweepings are not exposed to rainfall.

The approach the city is taking to reducing, when possible, the use of pesticides, herbicides and salt, should be discussed in the revised plan. Improved application techniques, combined with fiscal pressure, have probably already led to reductions in the amounts of these materials that are applied, and this should be pointed out in the updated plan. If opportunities for further reductions have been identified, but have yet to be attained, the revised plan should explain how these reductions will be pursued.

**MCM 6 - Performance Standards** Springboro'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 Springboro's operation and maintenance program.

### **Conclusions**

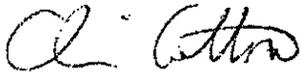
The city has made some progress with certain stormwater program requirements, but is lacking in other areas. Because the original plan followed the cumbersome, overly complicated format provided by USEPA, I'm recommending that the plan be re-written so that it not only reflects more accurately the activities undertaken by the city, but is also intelligible to the average reader. The revised plan should include as attachments or appendices the relevant portions of IDDE, construction and post-construction ordinances, with summaries of the ordinances provided within the body of the plan.

An accurate, more easily readable plan should be completed before the small MS4 general permit is revised and implemented in January, 2014.

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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](mailto:chris.cotton@epa.state.oh.us).

Sincerely,

A handwritten signature in cursive script, appearing to read "Chris Cotton".

Chris Cotton  
Division of Surface Water

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

CC/ca