



**Environmental
Protection Agency**

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

March 12, 2012

Mr. Jim Leslie
Public Works Director
City of Harrison
300 George Street
Harrison, OH 45030

RE: Stormwater Program Evaluation

Dear Mr. Leslie:

On Wednesday, January 18, 2012, I conducted a "screening evaluation" of Harrison'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 stormwater management plan (SWMP), recent annual reports, and our discussion, I offer the following observations:

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

The City of Harrison notifies its residents about stormwater management issues primarily through information included with utility bills. Opportunities to inform city residents about stormwater/storm sewer issues are also available through monthly meetings hosted by Harrison's public works department. Non-stormwater issues typically dominate these meetings, since residents may also use the time to broach concerns about city streets and utilities. Meeting notes are compiled, archived electronically, and made available via Harrison's website.

The City also makes basic stormwater information available on its website. It's not clear how many people view this information, though the most recent stormwater program annual report (from 2010) mentions "total hits on web" as a measurable goal. Harrison's revised SWMP should provide specific information about accessing stormwater information on the city's website, particularly the monthly public works department meetings. The revised plan should also mention that the monthly meetings held by the public works department provide a forum for city residents who have questions or concerns about stormwater issues.

Harrison's revised SWMP must also include a discussion of the city's stormwater utility, which was implemented after the original SWMP was written back in 2003. This discussion should

explain how the utility helps the City meet phase II stormwater regulations, which are oriented toward improving water quality rather than issues related to runoff drainage/conveyance.

Future annual reports should contain copies of stormwater articles included with utility bills sent to city residents. (The entire newsletter does not have to be included, just the specific stormwater articles.) The City should archive these articles on its website, and provide information in its plan about how the articles can be accessed. The City should also consider adding links to other websites from which stormwater management information can be obtained, such as websites maintained by local watershed groups, the Ohio EPA and USEPA.

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

MCM 1 – Performance Standards Harrison'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 Harrison'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)

IDDE Ordinance

Based on reviewing Chapters 936, 1109 and 1111 of Harrison's City Code (submitted to Ohio EPA in response to a June 30, 2009 notice of violation [NOV], and reviewed after our 1/18/12 meeting), it remains unclear what legal authority the City has to respond to, and ultimately eliminate, illicit discharges to its storm sewer system. Reference is made in the 2010 annual report to City Ordinance 42-2007, but this ordinance was not submitted in response to Ohio EPA's 6/30/09 NOV. Efforts to locate this ordinance over the city's website were unsuccessful.

The intent of the requirement is for cities to empower themselves to gain legal access to suspected sources of illicit discharges, confirm that the discharge is occurring, and then eliminate it. The need to establish "right of entry" language was present when the first SWMP was prepared in 2003, and apparently the appropriate language has been included in another ordinance. My notes from our meeting do not indicate which ordinance this is.

Provisions for penalties are also expected to be included in this ordinance for dealing with the rare chronic offender. You mentioned that the City has on occasion shut off water service to residents or businesses that don't abide by the rules. While rarely used, this is an effective tactic that will obviate the need for monetary penalties in most situations; but it's not clear which rules have to be violated for this to occur. The revised SWMP should carry over reference to

this approach from the city's original SWMP, and link it to the relevant part of its illicit discharge ordinance.

The revised SWMP should in its narrative portion explain the basics of this ordinance, what it restricts, and its provisions for enforcement. A copy of the ordinance(s) can be included as an attachment or appendix to the plan itself.

The revised plan should also include a general description of the manner in which the City takes and deals with complaints about illicit discharges to its storm sewers.

Mapping

The city's storm sewer network, including its 2 outfalls, has been completely mapped. The revised SWMP should state this fact, and explain how the City will keep the map updated in the future. The revised plan should also include a schedule the City thinks is reasonable for getting its storm sewers into a Geographic Indexing System.

Home Sewage Treatment Systems (HSTS) No home septic systems are believed to be present within Harrison. If any such systems were to be discovered, the City would require the residences in question to connect to sanitary sewers. Harrison's revised SWMP should include these facts.

Dry-Weather Screening

The revised SWMP must explain Harrison's approach to dry-weather field screening its 2 storm sewer outfalls. When flow is observed coming from an outfall, is the material screened through use of basic field testing equipment such as pH paper or a conductivity meter? What determines if samples need to be collected? Can the samples be analyzed in the lab operated at the city's wastewater treatment plant, or does an outside lab need to be retained?

Many possible scenarios exist when it comes to identifying potential illicit discharges. Because of this unpredictability, the expectation for MS4 stormwater plans is that a general plan of attack be described. If applicable, information about specific discharges and how they were addressed can be included in subsequent annual reports.

Future program audits will focus on a modified form of the following performance standards:

MCM3 – Performance Standards Harrison'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 areas 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. Harrison'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

Chapter 1111.04 of Harrison's codified ordinances contains specific regulations pertaining to erosion and sediment controls required of proposed construction projects within the City limits that are greater than 5 acres in size. Smaller sites are apparently regulated indirectly by Hamilton County, but Harrison's original SWMP provides no further details about this arrangement.

This chapter does not address in general terms other potential pollutants that can be carried away from construction sites in stormwater runoff, such as concrete washout. Nor are there any provisions for enforcement for those situations when either city or county codes are not being followed.

Ohio EPA's expectation regarding stormwater management at construction sites is that local ordinances be at least as stringent with the technical requirements found in the state's general NPDES permit issued to construction sites that disturb more than one acre of land. The easiest way to meet this requirement is to incorporate the permit by reference into the appropriate part of the city's ordinance. The City is free to choose a different path, but its current approach is deficient with respect to current small MS4 general stormwater discharge permit requirements.

The revised SWMP must describe the review process proposed developments follow from initial proposal to final approval, with an emphasis on the points at which erosion and sediment control requirements are discussed. Reference can be made in the narrative to supporting regulations, and the complete ordinance (or relevant parts of different ordinances) can be included as an attachment to the revised plan. A summary of how enforcement actions would be taken against chronic violators should be included in this revised narrative.

Inspection records were not requested during the program review. A sample of the inspection form(s) used to document construction site inspections should be included as attachments to the revised SWMP.

MCM 4 – Performance Standards Harrison'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 Harrison'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 Harrison is doing with respect to post-construction stormwater management requirements at new development sites. The City does not appear to have a specific post-construction ordinance (or other regulatory mechanism) in place. Harrison must revise this

portion of its SWMP to clarify how it intends to meet current NPDES requirements that pertain to post-construction stormwater management.

The revised SWMP should also include a discussion of how the City incorporates within its review process post-construction Best Management Practices (BMPs) that are proposed for new development projects. A list of accepted post-construction BMPs is included in Ohio EPA's general construction permit (see page 23).

The revised plan should also discuss how Operation and Maintenance (O&M) agreements are created and implemented for new developments. The intent of O&M agreements is to ensure that post-construction stormwater management practices remain functional.

Harrison should consider the following performance standards for MCM 5 when it revises its SWMP:

MCM 5 – Performance Standards Harrison'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 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 O&M plans developed and agreements in place.

MCM 6 – Pollution Prevention/Good Housekeeping for Municipalities

Little time was spent discussing this part of Harrison's stormwater program, but based on information contained in the original plan and a review of the most recent annual report; the SWMP must be revised to include the following information:

1. A discussion of the training city employees receive with respect to proper use and management of various materials such as road salt, fertilizers, pesticides and herbicides. (The city's 2010 annual report states that pesticide and herbicide use is not applicable, but the plan itself should highlight this fact.);
2. The manner in which materials collected from street sweeping activities are managed from the point of collection until disposal. (Annual reports should include the amounts of sweepings collected each year.);
3. How the City manages fluids generated from maintaining or repairing its fleet of vehicles;
4. How the city's yard waste program affects stormwater management;
5. What is involved with structure cleaning, and how washwaters are diverted/collected for treatment either at Harrison's wastewater plant or an off-site facility.

MCM 6 – Performance Standards Harrison's pollution prevention/good housekeeping program shall include, at a minimum, an annual employee training. Its O&M program shall include

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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 Harrison's O&M program.

Conclusions

The City has made some progress with certain stormwater program requirements, but is lacking in other areas. Because the original plan is now outdated, and followed the cumbersome format provided by USEPA, the plan must be re-written so that it 1) accurately reflects current activities undertaken by the City, and 2) is intelligible to the average reader. As mentioned previously, the revised plan should include as attachments or appendices the relevant portions of IDDE, construction and post-construction ordinances, but provide summaries of these ordinances within the narrative of the plan. The goal is to have a document that will provide an accurate overview of the city's stormwater management program for several years in to the future.

Within 60 days of receipt of this letter, a schedule for developing required ordinances must be submitted to my office. An updated, accurate, and more easily readable plan must be completed by the time the next small MS4 general permit is implemented in January, 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,



Chris Cotton
Environmental Specialist II
Division of Surface Water

CC/tf

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