



**Environmental
Protection Agency**

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

April 16, 2012

Mr. Richard Norton
Service Director
City of West Carrollton
300 E. Central Avenue
West Carrollton, OH 45449

RE: Storm Water Program Evaluation

Dear Mr. Norton:

On Tuesday, January 31, 2012, I conducted a "screening evaluation" of West Carrollton's storm water management program. The City was represented by Maureen Parsons and you. The evaluation consisted of discussions of the 6 "Minimum Control Measures" (MCMs) that provide the framework for municipal storm water programs. The intent was to evaluate program activities over the first permit term, from 2003 to 2008. Since this is proving to be impractical, evaluations are instead focusing on recent program activities and how they jibe with information provided in the original storm water management plans (SWMP) submitted in 2003.

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 storm water 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 SWMP, recent annual reports, and our discussion, I offer the following observations:

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

West Carrollton informs its residents about storm water management issues through fliers that are published every 3 months and mailed to every property in the city. Storm water information is also included with utility bills sent to more than 4000 city properties on a quarterly basis. The City's website is another avenue by which relevant storm water information is made available to West Carrollton residents.

During a recent review of the website, I found it difficult to find city newsletters. Of the past 4 newsletters sent, only issue #12 (July-Sept 2010) contained storm water management information.

No information (in recent annual reports) has been provided concerning the content of these articles, and example copies of articles have not been included in annual reports. This approach also differs from the one provided in the City's original SWMP, which suggested that the Miami Conservancy District (MCD) would be assisting West Carrollton (as it does with many other MS4s in the area), with its storm water education and outreach efforts. West Carrollton's

revised SWMP must explain its current approach to educating city residents about storm water management issues, and where MCD's efforts in the future might figure in. The revised plan should include directions for finding storm water related articles over the City's website. Details must also be provided about the 5 public involvement opportunities the City intends to use to use to meet current permit requirements. If the required 5 events cannot be orchestrated, or the tone of the event is more about general environmental issues than storm water management, explanations should be provided in the appropriate year's annual report. If West Carrollton intends to rely on MCD to orchestrate some or all of the required number of events, this must be stated in the revised SWMP. The plan must also explain how its residents benefit from education and/or involvement opportunities developed by MCD.

The City should consider adding links to other websites which contain general storm water management information that seeks to educate the average resident. Such links could be to websites maintained by Ohio EPA, U.S. EPA, MCD, or watershed advocacy groups. The revised SWMP should include these links.

Future annual reports must include copies of articles containing storm water management information sent to residents in the previous year. The entire newsletter in which the articles are contained does not need to be sent. If these articles are archived on the City's website, directions for finding them can be provided in the revised SWMP instead of submitting the articles with the annual report. Copies of articles with storm water information made available to residents at the city hall can either be included with annual reports or referenced in the report with a link to the City's website where the articles have been archived.

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

MCM 1 - Performance Standards: West Carrollton's storm water public education and outreach program shall include more than one mechanism and target at least five different storm water themes or messages over the permit term. At a minimum, at least one theme or message shall be targeted to the development community. Storm water 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 storm water theme, audience targeted, and estimate of how many people were reached by each mechanism.

MCM 2 Performance Standards: West Carrollton's storm water 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: West Carrollton's original SWMP speaks to the need to develop ordinances as needed if current ordinances are not adequate in meeting the intent of this requirement. From my review of cited chapters of the City's codified ordinances (Chapters 55, 56, 134, 151,

158, summaries of which were provided in a letter to Ohio EPA dated August 4, 2009), it's not clear how an illicit discharge of waste or other materials into West Carrollton's storm sewers is addressed.

Chapters 55, 151 and 158, for example, speak to discharges of hazardous materials; could this language be used to address dumping of a material or waste that isn't considered hazardous? Chapter 156 speaks to illicit discharges to the City's wastewater treatment plant, which is irrelevant for the purposes of storm water management. Chapter 134 speaks to discharges of various materials into "any natural waterway". Could this language be used if the illicit discharge was to the MS4?

Ohio EPA does not expect regulated communities to create brand new ordinances or other regulatory mechanisms if what's already on the books can be made to work. Bits and pieces of the chapters mentioned above can be seen to apply to certain illicit discharge situations, but appear limited to specific materials that are discharged only into natural waterways.

For the situation mentioned at the end of your 8/4/09 letter, a swift response by city officials to the complaint about a concrete truck being washed out into the storm sewer is commendable. As with most similar situations, however, it's unlikely the City would have needed to invoke a specific ordinance in order to get the truck driver to stop the illegal discharge. Had the truck driver continued washing out in defiance of the City's wishes, what ordinance would have been cited if the City had to follow up with a written violation notice to the concrete company?

The City's revised SWMP must explain how its existing ordinances 1) make it illegal to discharge anything other than runoff water into its storm sewer system (with some exceptions like water from firefighting, etc.), and 2) how city authorities would be empowered to access and investigate suspected sources of illicit discharges into the MS4.

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 does not have to be mapped in its entirety until the end of the current permit term in January 2014. Mapping of all outfalls has been completed. As of the end of 2011, it is estimated that 80 percent of West Carrollton's system has been mapped.

West Carrollton's revised SWMP must discuss which city department(s) will be responsible for maintaining the completed storm sewer map, and for updating the map in the future.

Home Sewage Treatment Systems (HSTS): No home septic systems (either leach-field based or aerated discharge systems) are believed to be present within West Carrollton. The City's revised SWMP should state this fact.

Dry-Weather Screening: West Carrollton has been actively screening its storm sewer outfalls, and seeks to do one fifth of its total each year. The City must revise its SWMP to explain the rationale behind its selection of outfalls that will be screened in a given year, and also explain in general terms what would be done if an observed discharge was more than just ground water. Will samples be taken by city staff and field tested for basic chemical parameters such as pH or specific conductance? Or will sampling and analyses be handled by a contractor? Could the

lab at West Carrollton's wastewater plant be used to do a more involved chemical screening?

Many possible scenarios exist when it comes to identifying an illicit discharge. Because of this unpredictability, the expectation for MS4 storm water plans is that a general plan of attack be described. If applicable, information about specific illicit discharge situations and how they were resolved can be included in the appropriate year's annual report.

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

MCM 3 - Performance Standards: West Carrollton's storm water illicit discharge detection and elimination program shall include or have included an initial dry-weather screening of all storm water outfalls over the permit term. The program shall establish priorities and specific goals for long-term system-wide 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. West Carrollton'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 Storm water Runoff Control: This section of West Carrollton's original SWMP is now inaccurate, and must be rewritten to reflect the City's current approach to reviewing and approving construction plans for new developments. A general description of the process construction projects follow from initial proposal to final approval (with emphasis on erosion and sediment control requirements) must be included in the revised plan. 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.

Ohio EPA's expectation regarding storm water 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 standard, which is not a requirement, is to incorporate the permit by reference into the appropriate part of the City's ordinance.

It is possible West Carrollton's ordinance meets this standard of equivalency, but language in Chapter 156.37(C) is problematic because it seems to condone sediment loss from construction sites. It's true that virtually any construction project will lose sediments from various forms of erosion no matter how good sediment controls are, but it seems odd to include specific figures for "acceptable" losses right in the ordinance. If this is to remain in West Carrollton's construction ordinance, the reasons must be explained in the City's revised SWMP.

The ordinance should also make reference to the "Rainwater and Land Development Manual" published by the Ohio Department of Natural Resources. Any best management practice for

erosion minimization and sediment control included in this manual is acceptable to Ohio EPA.

West Carrollton's construction ordinance does not appear to address in general terms other potential pollutants that can be carried away from construction sites in storm water runoff, such as concrete washout, materials packaging, litter, paint waste, etc. If such language is present, it should be referenced in the revised SWMP. If it's not present, the ordinance needs to be amended accordingly.

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 an attachment to the revised SWMP.

MCM 4 - Performance Standards: West Carrollton's construction site storm water control program shall include preconstruction storm water 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 West Carrollton's jurisdiction, (2) number of pre-construction storm water 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 followed up on.

MCM 5 – Post Construction Storm water Management in New Development: It's not clear what West Carrollton is doing with respect to post-construction storm water management requirements at new development sites. The City does not appear to have a specific post-construction ordinance (or other regulatory mechanism) in place. The portion of Chapter 156 of the City's codified ordinances submitted to Ohio EPA in August 2009, does not contain any language pertinent to post construction requirements, which basically involve the use of structural and/or non-structural practices to "treat" a certain volume of runoff before it leaves the newly developed property. The rest of Chapter 156 does not speak to this requirement in any way, as it appears to be related to flood plain development.

Because West Carrollton is mostly built out, it could argue that post-construction requirements will not make an appreciable difference in improving the quality of runoff that comes from the small number of potentially developable sites within its boundaries. Since most of these sites are within the floodplain, where highly porous deposits of sand and gravel are present, new projects could be designed to infiltrate runoff into the site, thus avoiding discharges altogether.

Regardless of the path it chooses, West Carrollton's revised SWMP should include a discussion of how the City incorporates within its review/approval process, the 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 storm water management practices remain functional.

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

MCM 5 – Performance Standards: West Carrollton's post-construction SWMP shall include pre-construction storm water 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 storm water 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 part of West Carrollton's storm water program, but based on information contained in the original plan, and a review of the most recent annual report, the City appears to be doing a good job reporting on the activities it conducts which have implications for storm water management. To further improve this section of its program, 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. Is the training conducted in house, or contracted out? Do all city employees receive training, or only those whose duties involve handling the materials listed above?
2. The manner in which materials collected from street sweeping activities is managed, from the point of collection until disposal.
3. How the City manages waste fluids generated from maintaining or repairing its fleet of vehicles.

The revised plan should also speak in general terms of improvements the City has made in recent years with respect to materials management and usage. If opportunities exist for being even more efficient with its use of the materials listed, the revised plan should discuss these opportunities and what it would take to make the needed changes.

MCM 6 - Performance Standards: West Carrollton'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 West Carrollton's operation and maintenance program.

Conclusions: West Carrollton's original SWMP, which followed a generic model plan created by the Miami Conservancy District, is now outdated. Recent annual reports provide a more accurate description of the City's current storm water program than the original plan. Therefore, I am requiring the City to revise its plan so that it 1) accurately reflects current activities undertaken by the City and 2) is intelligible to the average reader. The revised plan must be prepared by the time the next small MS4 general permit is issued, in January 2014.

Also mentioned earlier, the revised plan should include as attachments or appendices the relevant portions of updated IDDE, construction and post-construction ordinances, and provide descriptive summaries of these ordinances within the narrative of the plan.

The goal of rewriting the plan is to have a document that will provide a decent overview of the City's storm water management program that will remain relevant several years in to the future.

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: Ohio EPA/SWDO/DSW Files
Anthony Robinson, Ohio EPA/CO/DSW

