



State of Ohio Environmental Protection Agency

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November 14, 2008

Mr. Steve Bergstresser  
City of Kettering  
3600 Shroyer Road  
Kettering, Ohio 45429-2799

**RE: Stormwater Program Evaluation, NPDES permit # 1GQ00023\*AG**

Dear Mr. Bergstresser:

On Monday, September 22, 2008, I conducted a "screening evaluation" of the City of Kettering's stormwater management program. The city was represented by you, Jeff McMaken, Chad Engle and Dave Miller. A screening evaluation is not as involved as a true audit, which may be conducted in the future to fully assess the city's stormwater program.

Based on my review of the city's current plan, recent annual reports, the document prepared for the evaluation called "City of Kettering Review – Storm Water Management", and our discussions, I offer the following observations and recommendations:

**MCMs 1 and 2 - Public Outreach, Education, Involvement and Participation**

The Miami Conservancy District (MCD) is assisting many MS4 communities within its jurisdictional area by creating or otherwise providing various stormwater related public outreach, education and involvement activities. As a collaborating community, Kettering can get credit for these activities, but only if city staff, residents or school kids attend or otherwise participate in the listed events.

There is no information provided in recent annual reports to suggest that city staff or residents have participated in stormwater activities/events developed by the MCD. And no information is provided about other education or outreach activities beyond what MCD has developed. During our discussions, however, I was made aware via the document prepared for the evaluation that Kettering does provide stormwater-related information to its residents through a periodic newsletter and over its website. A daily TV show broadcast over local cable access channels on occasion has provided stormwater information.

**Recommendations**

The city's stormwater management plan (swmp) should be re-written to more accurately reflect the sorts of outreach/educational activities the city conducts. Subsequent annual reports can then document the scope and possible effectiveness of these efforts. Kettering should continue its collaborative partnership with the MCD, but should not list stormwater related activities developed by MCD in annual reports unless city staff or residents participated in some way.

In addition to tracking the extent of educational outreach efforts, future annual reports should include copies of newsletter articles or summaries of stormwater related information provided over Kettering's daily TV show. The city can also include in its annual reports numbers of visits to the relevant section of its website.

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Regarding public involvement activities, the city is encouraged to continue working with the MCD. But as with public education, Kettering can only claim credit for public involvement activities if it was directly involved, or if city residents or school kids participated.

### **MCM 3 – Illicit Discharge Detection and Elimination**

Kettering has identified all storm sewer outfalls to its MS4, and has a list of residential properties still using septic systems for sewage treatment. Appropriate GIS layers will be added and/or updated accordingly. The city also appears to have an effective way of addressing illicit discharge complaints of which it is made aware, though the example provided in the 9/22/08 Stormwater Program Review document has to do more with surface drainage than an illicit discharge

What's missing at this point is an ordinance (or other regulatory mechanism) that gives Kettering the authority to investigate and stop illicit discharges to its storm sewer system (assuming such authority doesn't exist within another city ordinance.) The ordinance should also provide the city with enforcement capability in the event a business or individual ignores directives to cease an illicit discharge. Enclosed as requested is a copy of the ordinance passed by the City of Forest Park to address illicit discharges to its storm sewer system. Perhaps it will serve as a useful example.

The city must also address the issue of dry weather screening of storm sewers within its borders that discharge to waters of the state. If such discharges are not an issue, this can be explained in future annual reports. If discharges from storm sewer outfalls are observed to be occurring during times of dry weather, the city must explain the process it will follow for investigating such flows

### **Recommendations**

The city should consider re-writing its stormwater management plan so it more accurately describes how illicit discharges are handled. Mention should be made of how dry weather screening of outfalls will be approached, assuming discharges from Kettering's storm sewer system occur during dry weather. If such discharges aren't an issue, this can be reflected in the revised stormwater plan.

Until storm sewer system mapping has been completed, future annual reports should provide updates regarding how much work was done during the reporting year, what portion of the system remains to be mapped, and estimate how long it will take to complete the task.

### **MCMs 4 and 5 – Construction and Post-Construction**

From our discussions, and following review of Kettering Ordinance 4053-06 (Stormwater Runoff Code) it appears the city is covering most of the basic construction program requirements imposed by MCMs 4 and 5. Administrative aspects of the city's program were not reviewed, such as inspection checklists for construction sites. The only obvious deficiency is the lack of specific post-construction stormwater management requirements which new developments must meet. Reference is made to existing detention basins present around the city, mostly on private property, that are inspected annually and maintained as needed. While future development in Kettering may rely on detention basins, there are other options available, both structural and non structural, which will satisfy post-construction stormwater management requirements, particularly from a water quality perspective. These options should be explored whenever it's feasible to do so.

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### **Recommendations**

Kettering's original stormwater management plan from 2003 is not very clear in its explanation of the process construction projects follow from initial proposal to final approval (in terms of erosion and sediment control BMPs). At some point in the near future, the plan should be rewritten to explain the basics of the process, and how erosion and sediment control requirements are addressed with project managers. Reference can be made, where needed, to relevant parts of the city's stormwater runoff code. Likewise, information pertaining to post-construction requirements should be added to the rewritten plan, including how the city approaches inspections of existing stormwater management infrastructure, and how future plans to potentially issue permits to stormwater features on private property may work out.

### **MCM 6 – Pollution Prevention/Good Housekeeping for Municipal operations**

We didn't spend too much time discussing this aspect of the city's stormwater program, so it's not clear, based on the original plan submitted in 2003, what sorts of training city employees have received per this requirement. Nor is it clear, based on content of the original plan, how the city has evaluated its usage of materials in the context of limiting impact to stormwater runoff. Financial constraints tend to make these decisions for most municipal officials, but for the purposes of the city's stormwater management plan, some detail should be provided as to what sorts of materials are routinely used that have the potential to contaminate stormwater runoff, and how use of those materials has been minimized where possible.

Street sweeping is an activity about which many MS4s provide information, either in their respective stormwater plans, or annual reports. This was not discussed during our meeting, nor is any information provided in Kettering's stormwater management plan or annual reports. One of the few tangible measures available to MS4s deals with tracking amounts of material collected from street sweeping activities, which can be seen as "preventing" pollution because it was collected before it could be carried to a receiving waterway.

### **Recommendations**

This section of Kettering's stormwater management plan should be re-written along with the rest of the plan, to more accurately portray specific activities the city is undertaking to meet the intent of this section of the permit. Information pertaining to street sweeping should be included, such as amounts of debris collected and disposed. Summaries of the types of training city employees have taken in the context of materials management/pollution prevention should be included in future annual reports.

### **Conclusions**

Overall, it appears the City of Kettering is doing a reasonable job of implementing most of the requirements of its MS4 permit. As currently written, however, the city's stormwater management plan is not a good reflection of the types of activities that are being carried out day to day. For this reason I am suggesting that the plan be re-written so it provides a more clear and accurate account of the city's efforts with respect to its MS4 permit. Potential re-writing should be done after the new MS4 permit has been issued, which will be near the end of 2008. I would advise that plan content should be based on the requirements as outlined in the MS4 permit, but the writing should be done in a more narrative fashion, without specific adherence to the numerous sub-points into which permit requirements have been broken.

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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,



Chris Cotton  
Division of Surface Water

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

Enclosure

CC/plh