



**Environmental  
Protection Agency**

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

December 1, 2010

Mr. Eric Pottenger  
Butler County Engineer's Office  
1921 Fairgrove Road  
Hamilton, OH 45011

**RE: Stormwater Program Evaluation**

Dear Mr. Pottenger:

On Tuesday, September 21, 2010, I conducted a "screening evaluation" of Butler County's stormwater management program. You, Teresa Barnes and Bob Lentz represented the county 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 county'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**

It's clear Butler County's Stormwater District has expended significant effort, in a variety of ways, to provide information to its residents about stormwater issues. Unfortunately, it's almost impossible to judge if these activities have resulted in measureable improvements in environmental quality in the area. Nevertheless, it is hoped the district can continue its efforts on a similar scale in the future, and perhaps someday undertake surveys of residents to assess effectiveness of outreach and education activities.

**Recommendations**

Butler County should consider rewriting its stormwater management plan (SWMP) so it more accurately describes current activities undertaken by the District, as well as what it hopes to accomplish in the near future. The current plan is outdated and difficult to read, and does not fully portray the extent of the district's more recent outreach and education activities. A revised plan should be written so that an interested person who

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has limited knowledge about stormwater management regulations could gain a reasonable understanding of what the District is doing to comply with Phase II rules.

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

**MCM 1 - Performance Standards** Butler County'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** Butler County'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)**

Butler County's Stormwater District appears to have a decent handle on the 4 components of this control measure, which include having a specific IDDE ordinance in place, listing household sewage treatment systems, storm sewer outfall maps, and dry weather screening of outfalls.

The large number of storm sewer outfalls present within the District's jurisdictional area will make dry weather screening difficult to complete over the 5 year permit term. The revised SWMP should explain the District's rationale for its approach to outfall screening. If the district cannot reasonably expect to get to the thousands of outfalls present within its jurisdictional area within the 5 year permit term, an alternative proposal should be provided. The revised plan should also explain how the district goes about discerning the composition of material observed flowing from an outfall.

The revised plan should also explain that initial mapping requirements have been met, and then include a discussion of the process which is followed to ensure that new storm

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sewers are added to the existing base map.

A detailed review of the county's illicit discharge ordinance has not been undertaken. The revised SWMP should summarize the basics of the ordinance, emphasizing how it empowers local authorities to pursue and potentially penalize chronic violators. More detailed information, such as numbers of complaints called in to the county and related follow up work, can be provided in the appropriate annual report. A copy of the ordinance itself can be included as an Appendix to the revised SWMP.

Future emphasis on home sewage treatment systems should be limited to discharging systems, especially if they reach the MS4. The goal over time is for homes to be connected to public sanitary sewers, or else use on-lot septic systems which have no discharge. The revised SWMP should explain the district's approach to dealing with private septic systems, with an emphasis on discharging systems. Subsequent annual reports should include numbers of homes which have either been sewered, or have had old discharging systems replaced with on-lot systems.

Future program audits will focus on the following performance standards:

**MCM 3 - Performance Standards** Butler County'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. Butler County'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 annual report information shows that the county 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 revised SWMP should explain the basic review process proposed development projects follow from initial proposal to final approval. Emphasis should be placed on the review of erosion and sediment control requirements, and the extent to which the stormwater district weighs in with suggestions regarding the suitability of specific controls and their location.

The revised SWMP should also outline the enforcement process the county will follow if chronic violations of its erosion controls regulations occur.

**MCM 4 - Performance Standards** Butler County'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 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**

It's not clear what Butler County 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. Several different documents are cited as the source of regulations that may or may not be applicable to new development.

Butler County 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 county prosecutor's opinion regarding involvement of public entities with long term maintenance agreements should be included, or at least summarized, if it helps explain the county's position. Relevant language from local ordinances must be included in the revised plan, as well as specific reference information for other documents cited in the 2009 annual report. Copies of relevant portions of the ordinances may be included as attachments to the revised plan.

Performance standards for MCM 5 are as follows:

**MCM 5 – Performance Standards**

Butler County'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**

Future annual reports should contain estimates of the amount of street sweepings collected and disposed by the county and its stormwater co-permittees. A description of how the material is managed after being collected should be included in the revised SWMP.

The approach the county 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.

The revised plan should also explain how the county has assisted its co-permittees with pollution prevention/materials handling training, and provide an example SWP3 that has been created and implemented at most, if not all, of the township facilities.

**MCM 6 - Performance Standards** Butler County'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.

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**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 Butler County's operation and maintenance program.

**Conclusions**

It appears the county is doing a decent job of implementing the various components of its stormwater management plan. 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 Stormwater District, 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.

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/CO/DSW

CC/mab