



State of Ohio Environmental Protection Agency

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Ted Strickland, Governor
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December 31, 2008

Ms. Sherry Callahan
City of Carlisle
760 West Central Avenue
Carlisle, Ohio 45005

RE: Stormwater Program Evaluation, NPDES permit # 1GQ100049*AG

Dear Ms. Callahan:

On Tuesday, September 30, 2008, I conducted a "screening evaluation" of the City of Carlisle's stormwater management program. The city was represented by you and Greg Wallace. A screening evaluation is not as involved as a true audit, which may be conducted in the future to more fully assess administrative aspects of the city's stormwater program.

Based on my review of the city's current plan, recent annual reports, and our discussions, I offer the following observations and recommendations for each of the 6 "minimum control measures" prescribed by the US EPA:

MCMs 1 and 2 – Public Education/Outreach/Participation/Involvement

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, Carlisle 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 participated in stormwater activities/events developed by the MCD, such as the Honey Creek Watershed Festival, the Butler County WaterFest, or the Preble County Earth Day Event. Therefore, they should not appear in annual reports Carlisle prepares for its stormwater management program.

Aside from a newsletter that is sent to residents periodically, and informational pamphlets provided by MCD and made available at city hall to Carlisle residents, no other information is present in the city's stormwater plan regarding public outreach and education. The prevalence of private drinking water wells in the city has fostered significant education efforts in the past, some of which is likely repeated periodically to remind residents of their obligations to manage materials properly, or to inform new residents of the area. Examples of this outreach should be included in the city's re-written stormwater management plan, and in future annual reports.

Recommendations

The city should rewrite its stormwater management plan to more accurately explain the extent of its public outreach and education efforts. Note that new requirements for MCMs 1 and 2 will be contained in the revised small MS4 permit, which will be issued sometime during the winter of 2009. Revisions to the city's plan should incorporate these new requirements when applicable.

MCM 3 – Illicit Discharge Detection and Elimination

The city has mapped its storm sewer system, including (with MCD's assistance) the system's outfalls (which total either 5 or 6), but the map I examined during the evaluation did not include the outfalls, nor did it show ditches or other stormwater conveyances the city is responsible for maintaining.

Carlisle has not yet adopted an illicit discharge ordinance, but according to its 2007 annual report, an ordinance will be passed by city council by the end of 2008.

Recommendations

The few remaining septic systems in use in the city should be located on the revised map of its storm sewer system. All parts of the system the city is responsible for maintaining should be included on the revised map, along with all storm sewer outfalls.

A copy of the city's illicit discharge ordinance should be included in the city's re-written stormwater management plan. Note that ordinances are expected to have provision for enforcement

Because so few catch basins are present in the city, Carlisle should consider marking these points to discourage dumping, even though instances of illicit dumping are thought to be rare. Small placards with the message "Dump no Waste – Drains to River" are cheap and can be easily affixed to storm sewer grates. Harrison Township in Montgomery County recently undertook such a project for its 1700+ storm sewer inlets and could provide useful information about what is involved with such a project. David Whitehair is the Township Services Director who administered the effort; he can be reached at (937) 274-6871.

MCM 4 – Construction Site Stormwater Runoff Control

It's not clear from Carlisle's stormwater management plan what steps developers must follow in order to get new construction projects underway in the city. Nor is it clear how erosion and sediment control issues are broached for such projects. (My notes from our meeting are of little help.) Carlisle has yet to pass a construction ordinance to address stormwater runoff from new development projects, though according to its 2007 annual report it has committed to doing so by the end of 2008.

Recommendations

Carlisle should re-write its stormwater plan to more fully explain how regulated construction projects are reviewed in the context of erosion, sediment control, and general materials management requirements. The re-written plan should also contain a copy of the construction ordinance the city has committed to adopting by the end of 2008.

MCM 5 – Post Construction Storm Water Management

Due to Carlisle's location over the Great Miami River buried valley aquifer system, stormwater runoff management is considerably easier than other areas where more impermeable soils are the norm. I can't say this means the city does not have to put some sort of post-construction ordinance (or other regulatory mechanism) in place, but a good argument could be made for waiving the requirement. At a minimum the city should revise its stormwater plan to explain how local geologic conditions favor large scale infiltration of runoff water into the ground. If the city can demonstrate that future developments could be designed to infiltrate or otherwise retain the "water quality volume" calculated for the site (the amount of runoff created from a 0.75 inch rain that has to be treated prior to leaving a developed property), then some of the elements of a post-construction stormwater management program could conceivably fall away.

MCM 6 – Pollution Prevention/Good Housekeeping

We didn't spend much time discussing specifics of this portion of the city's stormwater program. But because Carlisle does no parks maintenance (besides mowing grass), contracts out for vehicle/equipment maintenance, and stores its de-icing salt under roof, it seems minimal opportunities exist in which stormwater runoff could become contaminated by materials handling activities undertaken by city employees. Nevertheless, the city must re-write this portion of its stormwater management plan to explain in some detail how it meets with the intent of this portion of its permit, and how city employees are trained in areas specifically mentioned in the permit.

Conclusions

Because Carlisle currently does not have a construction program or illicit discharge ordinance (or other regulatory mechanisms) in place, the city cannot be considered in compliance with the terms of its NPDES stormwater discharge permit. Other components of the program, however, are being addressed reasonably well, though this does not come across from reading the current version of Carlisle's stormwater management plan. Lastly, the city's location on top of a huge and highly porous aquifer system means certain aspects of stormwater management are less important than they might be in areas with different geologic circumstances, ie, less permeable soils.

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Taken together, the city should re-write its stormwater management plan to better describe its activities for each of the 6 minimum controls. The renewed Small MS4 permit will be issued some time in the winter of 2009, and it is advised that efforts to rewrite Carlisle's stormwater plan wait until after the new permit is in effect.

If you have 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
Division of Surface Water

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

CC/plh