



State of Ohio Environmental Protection Agency

Southwest District

401 East Fifth Street
Dayton, Ohio 45402-2911

TELE: (937)285-6357 FAX: (937)285-6249
www.epa.state.oh.us

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

February 29, 2008

Brian Elkins
City of Clayton
P.O. Box 280
Clayton, Ohio 45315

RE: Storm Water Program Evaluation Screening

Dear Mr. Elkins,

On Tuesday, March 13, 2007, I conducted a "screening level" evaluation of the City of Clayton's storm water management program. You represented the city during this review. A screening evaluation is not as involved as a true audit, which would more fully assess the storm water program against requirements spelled out in Clayton's NPDES storm water discharge permit. Based on our discussions, and my review of the county's plan and most recent annual report, I offer the following observations and recommendations:

Minimum Control Measures 1 & 2 -- Public Education, Outreach, and Involvement

While all the activities listed under MCMs 1 and 2 have merit, it's not clear how some of them benefit, or even involve, the public. Workshops listed are geared toward professionals, as was the Best Management Practices tour organized by the Miami Conservancy District (MCD). If City of Clayton employees attended these workshops or otherwise participated in the activities listed, mention should be made in future reports. How does their presence at these workshops or other educational events translate in to a better informed public regarding storm water issues?

Activities listed under public involvement/participation are likewise useful, but do not appear (based on information provided in the annual reports) to discuss storm water management issues. Such activities should continue in the future, but should only be included in annual reports if there is a storm water management component.

Recommendations

Future annual reports should explain in some detail how the activities listed under MCMs 1 and 2 relate to public education, outreach and involvement. Collaboration with the Miami Conservancy District is fully supported and should continue, but the city needs to elaborate on how activities undertaken by MCD (on behalf of the city) actually promote awareness of storm water issues and problems (if any) in Clayton. Listing activities organized by the MCD which have no direct bearing on Clayton's storm water program can continue, but the

ACTIVITY REPORT

TIME : 06/30/2011 12:00
NAME : OHIO EPA SWDO DERR
FAX : 9372856404
TEL : 9372856357
SER.# : BR0L8J889043

NO.	DATE	TIME	FAX NO./NAME	DURATION	PAGE(S)	RESULT	COMMENT
	06/30	10:42	614 784 8018	27	01	NG	RX ECM
	06/30	11:13	610 524 7796	23	02	OK	RX ECM

BUSY: BUSY/NO RESPONSE
NG : POOR LINE CONDITION /, OUT OF MEMORY
OV : COVERPAGE
POL : POLLING
RET : RETRIEVAL

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city will not get credit in the future for public education and outreach activities that do not either involve or benefit its residents.

MCM 3 – Illicit Discharge Detection and Elimination (IDDE)

Illicit discharges are rare in Clayton, as are residential septic systems discharging into the city's storm sewers. Fourteen of the 15 remaining home systems known to be illegally discharging are found within Clayton's original village limits. In 2008 a trunk sanitary sewer line currently being installed by the Montgomery County Sanitary Engineering Department will reach the old village, and it is assumed homes with septic systems will tie in. Other homes with septic systems remain too far from new or existing sanitary sewer lines to justify the expense of tying in, but these apparently either don't discharge into Clayton's storm sewers, or are not believed to be causing any problems.

Dry weather screening and complaints are handled on an as needed basis by various city departments. Outfall mapping has been done by the Miami Conservancy District for storm sewer outfalls that discharge to the Stillwater River, and Clayton staff is responsible for mapping other outfalls throughout the city. Clayton's 2006 Annual report stated that mapping would be completed in early 2007.

Recommendations

1. Clayton should consider rewriting portions of its storm water management plan to better explain how it would go about investigating alleged illegal discharges into its storm sewer system. If flow is observed coming from a storm sewer outfall after an extended period of dry weather, what steps would be taken to investigate the situation? A copy of the new illicit discharge ordinance, or relevant language from other local ordinances that address illicit discharges, also should be included.
2. Copies of generalized storm sewer maps should be included in the re-written plan. A map showing areas in the city where home septic systems remain should also be included.

Note that the next small MS4 permit may require communities to create maps of the entire storm sewer system

MCM 4 – Construction Site Storm Water Runoff Control

Project plan review and site inspections are done by ME Engineering and the Montgomery County Building Dept, respectively, but the current storm water plan does not explain in any detail how the review process takes place. Language from the city's storm water ordinance could be borrowed and inserted into the plan if it helps clearly describe the review process.

place, and aid in establishing plant cover.

- [24]27. Natural vegetation: any ground cover in its original state before commencement of earth disturbing activities.
- [25]28. Nuisance: a public nuisance as known by common law or in equity jurisprudence.
29. One Hundred-year Floodplain: Any land which is subject to one (1) per cent or greater chance of flooding in any given year, whether or not such land is designated as a flood hazard area by the Federal Insurance Administration or the Federal Emergency Management Agency.
- [26]30. Permanent vegetation: producing long term vegetative cover, e.g. bluegrass, tail fescue, crown vetch, etc.
- [27]31. Permittee: any person to whom approval of a site plan according and pursuant to this standard is granted, or who is subject to inspection under it.
- [28]32. Person: any individual, corporation, partnership, joint venture, agency, unincorporated association, municipal corporation, county, or state agency within Ohio, the federal government, or any combination thereof.
- [29]33. Plan: as used in this [standard] Ordinance, "Plan" shall mean the Runoff Control and Sediment Abatement Plan.
- [30]34. Plans: profiles, typical cross sections, working drawings and supplemental drawings of site, grading, drainage, and runoff and sedimentation control plans, vicinity map, soil map, and other plan as approved, or exact reproductions thereof, which show the location, character, dimensions, and details of the work.
- [31]35. Pollution: the man-induced alteration of the chemical, physical, and biological integrity of air and water resources.
- [32]36. Public Waters: those waters within lakes (except private ponds and lakes on single properties), rivers, streams, ditches, and/or waters leaving property on which surface water originates.
37. Retention: The collection and storage of

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We visited the Village at North Clayton construction project to observe its erosion and sediment controls, and found the site to be in decent shape.

Recommendations

The revised storm water plan should more clearly explain the role of Clayton's contract engineer and Montgomery County's Building Department when it comes to reviewing and ultimately approving construction site erosion and sediment controls. What route does a set of plans follow after being submitted by a project developer and where in the overall review process is time spent discussing erosion and sediment control practices?

The revised plan should also contain a full version of the city's storm water ordinance as it pertains to construction projects. The version included with the 2006 Annual Report contains only even numbered pages.

MCM 5 - Post Construction Storm Water Management in New Development

The 2006 Annual report refers to post construction storm water management issues in the context of drainage, but says nothing about water quality improvements, the primary focus of the requirements. Clayton apparently has not implemented a post-construction storm water management program that addresses water quality considerations.

Recommendations

Revised storm water management plans must specify how future construction projects within Clayton's jurisdiction will meet post construction runoff management requirements. The city's annual report for 2007 should include the status of the city's efforts to create and implement a post-construction storm water management program.

MCM 6 - Good Housekeeping/Pollution Prevention

We didn't spend much time discussing details of this permit requirement, but it appears Clayton is adequately addressing issues relevant to improved materials usage and proper waste handling practices.

Recommendations

Overall, it appears from my cursory review that the City of Clayton is doing a reasonable job with implementation of its storm water management program. The only real deficiency appears to be the lack of a post construction storm water runoff ordinance, or other regulatory mechanism. The city should include information about this requirement in its next annual report, as well as in revisions to its stormwater management plan.

ACTIVITY REPORT

TIME : 07/05/2011 12:00
 NAME : OHIO EPA SWDO DERR
 FAX : 9372856484
 TEL : 9372856357
 SER.# : BROL8J889043

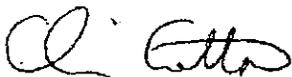
NO.	DATE	TIME	FAX NO./NAME	DURATION	PAGE(S)	RESULT	COMMENT
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BUSY: BUSY/NO RESPONSE
 NG : POOR LINE CONDITION / OUT OF MEMORY
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Note that future audits of the program are likely to be far more in depth. If you have questions or concerns about my findings and recommendations, please contact me at (937) 285-6442 or via email at chris.cotton@epa.state.oh.us.

Sincerely,



Chris Cotton
Division of Surface Water

Cc: OEPA/SWDO/DSW Files
Jason Fyffe, OEPA/DSW/CO

CC/plh

g. Stream bank erosion - the erosion of the stream bank and channel bottom due to high velocity of the flow within the stream.

- [16]19. Excavation: any act by which earth, sand, gravel, rock or any other similar material is dug into, cut, quarried, uncovered, removed, displaced, relocated or bulldozed and shall include the conditions resulting therefrom.
- [17]20. Fill: (1) any act by which earth, sand, gravel, rock or any other material is placed, pushed, dumped, pulled, transported or moved to a new location above the natural surface of the ground or on top of the stripped surface and shall include the conditions resulting therefrom; (2) the difference in elevation between a point on the original ground and a designated point of higher elevation on the final grade; (3) the material used to make a fill.
- [18]21. Finished Grade: the final grade or elevation of the ground surface conforming to the approved grading plan.
- [19]22. Floodplain Scour: the abrading and wearing away of the nearly level land situated on either side of a channel due to overflow flooding.
- [20]23. Grading: the stripping, cutting, filling, stockpiling, or any combination thereof of earth disturbing activity, including land in its cut or filled conditions.
- [21]24. Grassed Waterway: a broad and shallow natural course or constructed channel with erosion resistant grasses or similar herbaceous cover which is used to conduct surface water drainage runoff at non-erosive velocities.
- [22]25. Hazard: any danger to public health, welfare and safety including exposure to risk or damage to property or liability for personal injury; or risk of harm to land, air or water resulting in environmental degradation. Hazards can include flooding and ponding, compaction and settling, landslides, earthquakes, toxic chemicals, radiation, fire and disease.
- [23]26. Mulching: the application of suitable materials on the soil surface to conserve moisture, hold soil in