



**Environmental
Protection Agency**

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

August 9, 2012

RE: LORAIN COUNTY
CITY OF NORTH RIDGEVILLE
PERMIT NO. 3GQ100009*BG
MUNICIPAL STORM WATER PROGRAM
INSPECTION

Cathy Becker
Assistant City Engineer
City of North Ridgeville
7307 Avon Belden Road
North Ridgeville, OH 44039

Dear Ms. Becker:

Ohio EPA has completed an audit for a portion of your municipal storm water program. Our audit primarily focused on implementation of minimum control measure (MCM) #4: Construction Site Storm Water Runoff Control and MCM #5: Post-Construction Storm Water Management in New Development and Redevelopment. This program is a requirement of the Ohio EPA General Storm Water National Pollutant Discharge Elimination System (NPDES) Permit for Small Municipal Separate Storm Sewers Systems (MS4s) OHQ000002 and Ohio Administrative Code 3745-39.

On July 18, 2012, Ohio EPA met with you and other representatives of the City of North Ridgeville to determine compliance with the NPDES permit and the Storm Water Management Plan (SWMP) submitted by the City in March 2003. In performing this audit, Ohio EPA implemented a modified version of the Municipal Storm Water Program Evaluation Guide developed by the United States Environmental Protection Agency.

Attached are the Municipal Storm Water Program Evaluation, File Review, and Field Inspection Worksheet(s) completed for your community. Please review these documents in detail to determine specific elements where your construction and post-construction programs need improvement. In addition, you will find comments suggesting ways to improve your MS4 program. The following is a summary of our audit findings:

Violations

- **Failure to conduct site inspections at active construction sites at a frequency of at least once per month.** This is a violation of Part III.B.4.c of the Ohio EPA NPDES General Permit #OHQ00002 for small MS4s. Active construction sites must be inspected at a frequency of at least once per month for compliance with NPDES permit requirements unless you document your procedures for prioritizing inspections such as location to a waterway, amount of disturbed area, compliance of site, etc. within your SWMP (Storm Water Management Plan). During the interview, it was noted that the City has the intention to inspect sites at least once per month; however, the file review indicated that this was not the case for a majority of previous projects within the community. ***Please describe why active construction sites have not been inspected for NPDES permit compliance at least once per month in the past, and***

indicate whether the City will amend its SWMP to include prioritization standards or simply begin to conduct inspections at least once per month in the future.

- **Failure to escalate enforcement to achieve compliance with the local construction site ordinance.** This is a violation of Part III.B.4.a.vi of the Ohio EPA General Storm Water NPDES permit # OHQ000002. A formalized written enforcement escalation plan was provided to Ohio EPA during the interview process, yet the file review indicated that this enforcement escalation procedure has not been followed very closely in the past. The City has issued numerous letters to non-compliant parties; however, no record of a summons to Mayor's court as indicated on the enforcement escalation procedure was found for sites, which remained non-compliant even after the third notice of non-compliance (e.g. Hampton Place Subdivision). In addition, the City must follow this procedure for every applicable project within the community, whether public or private. ***Please indicate why the City has not been following the formalized enforcement escalation procedure in the past. If this procedure simply is not possible to follow due to staffing limitations, etc. please develop and submit an enforcement escalation plan to Ohio EPA, which includes a procedure the City, is capable of following from this point forward.***

Deficiencies

- Ohio EPA recommends that some of the language within the City ordinance should be re-constructed in order to encourage the use of the following:
 - Riparian and Wetland setback protection and maintaining native vegetation;
 - Runoff reduction (i.e. infiltration, mitigation of recharge volume, etc.);
 - "Green" infrastructure (i.e. rain gardens, pervious pavers, etc.); and
 - Balanced growth principles (i.e. conservative design, native vegetation, etc.).Post-construction storm water management, land use planning and building and zoning codes must be linked to create a meaningful storm water program. A good MS4 program goes beyond the WQv requirement. The storm water program manager must work with the building commissioner to affect development patterns in their community that negatively impact storm water quality.
- Ohio EPA recommends that the City includes *individual lots* on a single cohesive list with any other project or earth disturbance greater than an acre within the community such that inspectors as well as engineering staff are fully aware of the status and compliance history of these sites. In addition, the City needs to verify that an individual lot NOI has been submitted to Ohio EPA since typically they are no longer covered by the permit for the subdivision as a whole.
- The City currently does not have any sort of database to track active construction sites, post construction BMPs, and inspection findings within the City in a single cohesive manner (other than a Microsoft Word Document). It is recommended the City review software to track such information for easy access by all storm water inspectors as well as plan review personnel. As the City's storm water program continues to grow and additional inspectors are utilized for compliance inspections, it is important that all personnel are equally aware of previous compliance issues as well as the frequency of visits to each specific site. This database should also include individual lots within subdivisions that are currently active as described above.

- The City's storm water public education and outreach program should include more than one mechanism and target at least five different storm water themes over the permit term. At least one of the themes should *target the development community*, as required by Part III.B.1.c of the NPDES permit. ***This is a reminder that this requirement must be met no later than January 29, 2014.***
- Although the City does not explicitly prohibit low-impact development and green infrastructure, it is simply a design alternative and is not required or encouraged. Ohio EPA expects future storm water regulations to require a certain amount of on-site storm water infiltration, capture and reuse. Low-impact development codes will help you meet these requirements. The City should consider strengthening the local development code and integrating standards, which not only allow for these types of structures to be implemented but also explicitly encourages or requires it. Although some LID practices have been used in the past, they have not been incorporated to the extent possible to meet post-construction requirements. LID practices that could have been incorporated into the design of new projects or redevelopments, had the City asked include green roofs, sidewalk or parking lot bioretention, permeable pavers, cisterns and other rainwater harvesting techniques.
- The City has not yet completed mapping of the entire MS4 system, including all public post-construction BMPs as well as all private post-construction BMPs constructed as of April 21, 2003. As a reminder, the City must complete mapping within five (5) years of NPDES permit renewal, i.e. June 4, 2014.
- Although the City code does not explicitly prohibit certain balanced growth principles such as conservative design and retaining open space, there is little in the code to incentivize it or make it the standard requirement. Codes that can be improved to make them more friendly to storm water program goals include, but are not limited to: use of low-maintenance native vegetation, identifying areas where conservation development and low-impact development practices must be implemented, providing incentives for infill development and redevelopment, increasing vertical development limits, and providing incentives for development and redevelopment along corridors with public transportation, walking and biking options. It was observed during the interview process that the City formerly had in place a code known as the Planned Community Development code, or PCD, which did encourage balanced growth principles in one way or another; however, it had recently been repealed. ***Please describe in further detail exactly how the PCD code paralleled some of the balanced growth principles, e.g. conservative design, as well as why the City chose to repeal it.***
- During the interview, it was observed that the City has been responsible for inspecting some of their own municipal projects that were designed in house. Ohio EPA recommends that in order to avoid a conflict of interest, the firm or department that designed the Storm Water Pollution Prevention Plan (SWP3) for a site should not also inspect that site for compliance.
- During the field review, it was observed that the post-construction BMPs have been installed too early in the construction process at the LCCC Center Ridge Campus project. While in the field, the inspector was not aware that this was an issue until prompted by Ohio EPA. Permeable pavers, bioretention cells, and other post-construction BMPs, which rely on infiltration of storm water runoff, should not be installed

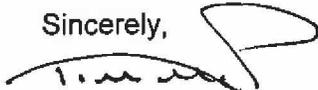
until *all upslope areas of the BMP have been stabilized with a vegetative cover of greater than or equal to a seventy percent (70%) growth density.* The construction sequence depicted on the SWP3 does indicate that the permeable pavers should be one of the last things to be installed; however, it does not mention the timing of the installation of the biocell soil mix placed in the bioretention cells. Although the bioretention cells themselves can be excavated during the early stages of grading and site work, the infiltrative soil mix should not be in place until all upslope areas of the BMP have been sufficiently stabilized. The construction sequence should be reviewed as part of the SWP3 during the plan approval process. ***The City must ensure that upslope areas of these BMPs are stabilized immediately, and that construction vehicles refrain from navigating over the permeable pavers until the site is stable. The bioretention soil mix must be replaced and the voids within the permeable pavers must be cleaned out once upslope areas are considered stable to ensure that the BMPs will function as intended once construction is completed.***

Overall, the City of North Ridgeville has a very strong storm water program in retrospect to other similar communities within the surrounding area. Ohio EPA recommendations are intended to strengthen your program even more. Remember, Post-construction storm water management, land use planning and building and zoning codes must be linked to create a meaningful storm water program. A good MS4 program goes beyond the Water Quality Volume requirement.

Please review my comments and provide me with a letter of response indicating the actions you will take to address my concerns. **Your response should be received no later than September 9, 2012.** Please note that this response does not replace the requirement to submit an Annual Report. Your annual report for 2012 will be due on April 1, 2013.

If you have any questions, please contact Dan Bogoevski, District Engineer of the Division of Surface Water, at (330) 963-1145 or by e-mail at dan.bogoevski@epa.state.oh.us.

Sincerely,



Tim McParland
Assistant to the District Engineer
Division of Surface Water

Cc: David Gillock, Mayor, City of North Ridgeville w/ Enclosure

Ec: Dan Bogoevski, Ohio EPA, DSW, NEDO