



**Environmental
Protection Agency**

John R. Kasich, Governor

Mary Taylor, Lt. Governor

Scott J. Nally, Director

June 27, 2012

RE: LORAIN COUNTY
CITY OF LORAIN
CONSTRUCTION STORM WATER
LORAIN CITY SCHOOLS

Dan Denicola
Chief Operations Officer
Lorain City Schools
2350 Pole Ave.
Lorain, OH 44052

Dana Strizzi
Hammond Construction
1278 Park Ave SW
Canton, OH 44706

Dear Mr. Denicola and Mr. Strizzi:

On May 2, 2012, Ohio EPA received a response from Bramhall Engineering on behalf of Lorain City Schools to our Notice of Violation dated February 1, 2012, regarding post-construction storm water management issues at 13 new or redeveloped school sites within the Lorain City School district. The response provided Ohio EPA with a plan for corrective action to ensure compliance with the post-construction requirements of the Ohio EPA General National Pollutant Discharge Elimination System (NPDES) Permit for Storm Water Associated with Construction Activity to which each of these projects was subject (OHC000002 or OHC000003).

Ohio EPA has reviewed the plan for corrective action and finds that it does not comply with the NPDES permit. Although we agree with the calculations regarding the Water Quality Volume (WQv) that must be treated through retrofitting, i.e., 26,334 cubic feet, the plan calls for all retrofitting to occur on a single site, i.e., Washington Elementary School. Although the basin can be physically enlarged to detain this WQv, it would essentially result in "over treatment" on this site to make up for no treatment on other sites. Whereas this concept has been used in traditional storm water management, it is not appropriate for post-construction water quality control. Guidelines in the American Society of Civil Engineers (ASCE) Manual and Report on Engineering Practice No. 87 and Water Environment Federation (WEF) Manual No. 23 titled **Urban Runoff Quality Management** indicate that the WQv is the maximized capture volume. Providing treatment for more than this volume results in only minor additional pollutant removal. Thus, detaining more than the WQv associated with the drainage area to a given post-construction water quality practice will not result in significantly greater environmental benefit.

As such, Ohio EPA will accept retrofitting of the Washington Elementary School detention basin into a dry extended detention basin with forebay and micropool as part of the plan for corrective action, but only to address up to the full WQv associated with its drainage area, i.e., 16,797 cubic feet. The remaining 9,537 cubic feet of WQv must be retrofitted on other properties.

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Please review these comments and provide me with a revised retrofit plan no later than July 31, 2012.

If you have any questions, please contact me at (330) 963-1145.

Sincerely,



Dan Bogoevski
District Engineer
Division of Surface Water

DB/cs

cc: Dr. Ed Branham, Superintendent, Lorain City Schools
Dale Vandersommen, Engineer, City of Lorain
Bob Papotto, Bramhall Engineering

ec: Mark Mann, Manager, Storm Water and Enforcement Section, Ohio EPA, DSW, CO