



**Environmental
Protection Agency**

John R. Kasich, Governor

Mary Taylor, Lt. Governor

Scott J. Nally, Director

February 6, 2012

RE: LORAIN COUNTY
CITY OF AVON
AVON CHESTER ROAD PROPERTY
CONSTRUCTION STORM WATER

NOTICE OF VIOLATION

Carl Frey, P.E.
Director, Engineering
The Richard E Jacobs Group LLC
25425 Center Ridge Road
Cleveland, OH 44145-4122

Dear Mr. Frey:

On December 12, 2011, and again on February 2, 2012, I performed a compliance inspection of storm water best management practices at the above referenced site. My inspections were performed to follow-up on compliance inspections conducted by Timothy McParland, formerly of this office. Our records indicate that storm water runoff from construction activities on this property is authorized under the Ohio EPA General National Pollutant Discharge Elimination System (NPDES) permit for Storm Water Associated with Construction Activities #3GC05363*AG.

My inspection on December 12, 2011, revealed that a large portion of this property lies disturbed and idle with no attempts at temporary stabilization. Wood chips, stalks and other remnants of previous vegetation provide some soil cover, but there was no obvious attempt at seeding and mulching to reestablish vegetative cover to a 70% or greater growth density. A review of our files indicates that it was your intent to stabilize the site by establishing a cover crop over the disturbed areas prior to winter. This has not occurred. My inspection on February 2, 2012, indicated that these site conditions have not changed.

In addition, tire ruts and other surface roughening provide pockets to retain some storm water on-site; however, I observed swales that drain portions of the site to the Chester and Jaycox Road drainage channels as well as drainage channels that flow through the site (see photos). Although silt fence has been installed along some of these channels, it may not be providing adequate sediment control. There are areas where drainage swales flow under silt fence or sections where silt fence requires repair (see photos). Further, although silt fence has been

installed where shown on the Staking/Stumping Plan for Brown South submitted to Ohio EPA on August 15, 2011, some of the delineated wetlands on site are not protected with silt fence and susceptible to receiving sediment-laden runoff. Silt fence should be placed around all wetlands where runoff from disturbed areas flows to the wetlands.

These observations indicate the following violations of the NPDES permit have occurred:

- **Failure to initiate temporary stabilization within seven (7) days of last disturbance on all areas disturbed by construction, but where no additional construction activities will occur within the next 21 days or longer.** This is a violation of Part III.G.2.b.i of the NPDES permit and Ohio Revised Code (ORC) 6111.04 and 6111.07. To correct this violation, you must initiate temporary stabilization of all areas disturbed by construction activities (grading, grubbing, filling, clearing or excavating) immediately. At this time of year, temporary stabilization can be achieved through straw mulching (see attached specifications from *Rainwater and Land Development, Ohio's Standards for Land Development, Stormwater Management and Urban Stream Protection* (Ohio Department of Natural Resources, 2006)). If construction activities are not expected to resume within one (1) year of last disturbance, disturbed areas must be permanently stabilized. At this time of year, permanent stabilization can be achieved through dormant seeding (specifications also attached). You may also choose to temporarily stabilize these areas with straw mulch for now and then do permanent stabilization once the growing season resumes.
- **Failure to install silt fence or other perimeter barriers to protect water resources from sediment transported via sheet flow.** This is a violation of Part III.G.2.d.iii of the NPDES permit and ORC 6111.04 and 6111.07. As indicated previously, some delineated wetlands are not protected with silt fence, yet accept runoff from disturbed areas. All delineated wetlands on the property should be protected from sheet flow runoff with silt fence, filter sock or compost berm (see attached specifications) to minimize the transport of sediment to these water resources.
- **Failure to maintain silt fence installed along drainage channels which flow through the property.** This is a violation of Part III.G.2.i of the NPDES permit and ORC 6111.04 and 6111.07. The NPDES permit requires silt fence to be maintained in a functional condition, i.e., be capable of ponding runoff. There are several locations where flow has cut under the installed silt fence. Please repair as needed to ensure that runoff ponds along and seeps through the silt fence rather than flowing under it. Where silt fence is placed across a drainage swale, please be aware that silt fence may not be the appropriate sediment control. The size of the drainage area should be assessed to determine if a sediment pond, i.e., sediment trap or sediment basin, is more appropriate. As a reminder, the NPDES permit requires the use of a sediment pond for any one of the following conditions:

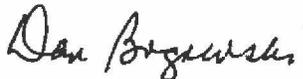
- o Concentrated storm water runoff (e.g., storm sewer or ditch).
- o Runoff from drainage areas which exceed the design capacity of silt fence and other sediment barriers (see Part III.G.2.d.iii of the NPDES permit for these limits).
- o Runoff from drainage areas that exceed the design capacity of inlet protection (see Part III.G.2.d.iv of the NPDES permit for these limits), or
- o Runoff from common drainage locations with 10 or more acres of disturbed land.

Ohio EPA believes that one or more of these conditions exists on this site and thus, one (1) or more sediment ponds should be part of the storm water pollution prevention plan (SWP3) for this project. Please review site drainage patterns and sizes and amend the SWP3 as necessary to comply with the requirements of the NPDES permit.

Please provide me with a letter of response indicating the actions you have taken to address the violations noted above. Include a copy of any updates or amendments made to the SWP3 with your response. Corrective action should be completed and your response should be received **no later than February 29, 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: Robert Knopf, Engineer, City of Avon
James Smith, Mayor, City of Avon



Fig 1. Panoramic view of the site from the SE corner at Jaycox Road. The site was previously completely forested. No vegetation has been established over disturbed areas.



Fig 2 (ABOVE). Mulch left over from tree chipping operations provide some level of ground cover but vegetation has not been established.



Fig 3 (RIGHT). There are a number of swales that drain disturbed areas to the road ditch along Chester Road (visible in the foreground of the photo). There are no sediment controls in place.



Fig 4 (LEFT). View of the ditch along Chester Road looking east from the Chester Road culvert. Note that the flow is visibly more sediment-laden than the flow in the stream coming from the east.

Fig 5 (ABOVE). Close-up of the sediment plume flowing from the ditch along Chester Road into the Chester Road culvert.



Fig 6 & 7. Swales collect runoff from disturbed areas and convey it to the stream that flows through the property. There are no sediment traps or basins in place to provide sediment control. These photos were taken December 12, 2011.



Fig 8 (LEFT). Silt fence has been placed across a drainage swale, but concentrated flows have created erosion. This allows sediment-laden runoff to pass underneath to the Chester Road ditch.

Fig 9 (ABOVE). Silt fence has not been installed around all delineated wetlands. Note that flow from disturbed areas can be conveyed to this wetland (believed to be Wetland S-E).



Fig 10 & 11. There is no silt fence around these wetlands, yet runoff from disturbed areas can convey sediment to them.