



State of Ohio Environmental Protection Agency

**Northwest District Office**

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

Re: Lucas County  
Carrie Woods  
Construction  
Storm Water

April 15, 2009

Mr. Don Flenner  
Hallmark Developers/ Carrie Woods LLC  
PO Box 426  
Holland, Ohio 43528

Dear Mr. Flenner:

On March 11, 2009, Ben Smith and I inspected Carrie Woods at McCord and Kelker Street, Sylvania Township, Ohio (photos taken). The purpose of my visit was to evaluate compliance of the site with your National Pollutant Discharge Elimination System (NPDES) permit for storm water associated with construction activity, Facility ID No. 2 GC01238. The inspection was conducted under the provisions of Ohio's water pollution control statutes, Ohio Revised Code (ORC) Chapter 6111. Ohio EPA has no record of other permittees for this project.

As a result of the inspection, I have the following comments:

1. At the time of inspection, the site was inactive. Roads and utilities for Plat 1 had been completed. Four homes were completed and the lots stabilized. Plat 2 remained incomplete. Due to the absence of personnel or a construction trailer, the Storm Water Pollution Prevention Plans (SWP3) and inspection logs were not available for review.
2. Previous compliance issues with the SWP3 have been noted. On February 18, 2009, Brian Retar, P.E., FWB, Inc., e-mailed revisions to address issues with the post construction storm water management requirement of the permit. The revisions still did not address the outstanding issue of the lack of a sediment settling pond meeting the design requirements of the permit. *This is a violation of Part III.G.2.d.ii. of the permit.* If this issue does not get resolved, Ohio EPA will have to refer the site for escalated enforcement.

Regarding the post construction storm water management requirement...The revisions I received appeared to only address the buildout of Plat 1. Design information demonstrating compliance for the Plat 1 and Plat 2 buildout scenario were not included. This item must be addressed.

Looking at the post construction design calculation provided for the buildout of Plat 1... The equation for calculating the runoff coefficient based on percent imperviousness as shown in Ohio EPA's Post Construction Q&A Document and the current Construction

General Permit does not appear to have been used. This results in a calculated WQv value 27% larger than required. Also, the bottom elevation of the pond was used in the orifice opening calculation. This results in draining the entire  $1.2 \times \text{WQv}$  during the target drawdown time instead of only WQv. For dry extended detention ponds, the extended detention volume (EDv) is equal to WQv. The SWP3 must demonstrate that the extended detention volume is released over 48 hours with no more than half of the EDv released in the first 16 hours. Also, the equation used to determine orifice sizing is a derivation of the orifice equation. References state this form of the equation is based on the surface area of the reservoir/vessel remaining constant, which is often untrue with storm water ponds. It appears this equation is not appropriate for this design scenario. Please revise the SWP3 accordingly and submit revisions within 10 days of the date on this letter. For more information about designing to meet the post construction storm water management requirements, please see ODNr's Rainwater and Land Development Manual (<http://www.dnr.state.oh.us/tabid/9186/default.aspx>) and Questions 20, 22, 23, and Appendix B of Ohio EPA's Post Construction Q&A Document (<http://www.epa.state.oh.us/dsw/storm/CGP-PC-Q&A.html#20>).

3. Some bare areas remain where ground had been disturbed. These include, but are not limited to: 1) Ground near southern yard drains in Plat 1. The area appeared to have been seeded, but germination was not successful enough to establish a 70% density of vegetative cover. 2) Ground south of the street near the west end of Plat 1. 3) The ditch in Plat 2. 4) Portions of the dirt pile in Plat 2. *Permit Requires:* Portions of the construction site which will be inactive for more than 21 days must have temporary stabilization initiated within the first seven. Temporary stabilization is required prior to the onset of winter weather for ground that will be idle over winter. Permanent stabilization is required within 7 days on any portion of the site that has reached final grade or will be idle for longer than 1 year. Soil stabilization practices shall be initiated within two (2) days on inactive, barren areas within 50 feet of a stream. In addition, disturbed areas in residential subdivisions must be stabilized at least 7 days prior to transfer of permit coverage for the individual lot(s). Permanent seeding and mulching is required before construction activity is completed throughout the entire site. If seasonal conditions prohibit the establishment of vegetative cover, other means, such as mulching and matting, must still be used and maintained until more permanent methods can be implemented. *Failure to do so is a violation of Part III.G.2.b.i. of the permit.* I recommend reseeding areas where germination has not reached 70% density.

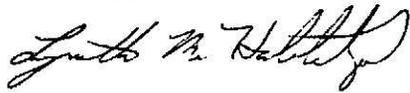
For areas where seeding with mulch may be inappropriate due to flow or to slope, such as the ditch in Plat 2, temporary rolled erosion control products may be required. *Permit Requires:* All erosion and sediment control practices used to meet the conditions of this permit shall meet the standards and specifications of the current edition of Ohio's *Rainwater and Land Development Manual* (ODNR) or other standards acceptable to Ohio EPA. And, operators shall undertake special measures to stabilize channels, outfalls, and prevent erosive flows. *These are violations of Parts III.G.2. and 2.b.ii., respectively, of your permit.*

Mr. Don Flenner  
April 15, 2009  
Page Three

Within 10 days of the date on this letter, please submit to this office **written notification** as to the reasons for the above mentioned comments as well as the actions taken or proposed to prevent any future violations. Your response should include the dates, either actual or proposed, for the completion of the actions.

If there are any questions, please contact me at (419) 373-3009.

Sincerely,



Lynette M. Hablitzel, P.E.  
Division of Surface Water  
Storm Water Program

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pc ~~NWDO File~~  
Lucas SWCD  
Brian Miller, P.E., Lucas County Engineer's Office,  
Rahel Babb, CO, Section 401/Isolated Wetlands  
Brian Retar, PE, FWB, Inc.