



**Environmental
Protection Agency**

Ted Strickland, Governor
Mike Fisher, Lt. Governor
Chris Korleski, Director

November 23, 2010

RE: LORAIN COUNTY
BEAVER CREEK WATERSHED
HENRIETTA TWP.
HENRIETTA SUBSTATION

Mr. Scott Brown
American Transmission Systems Inc (ATSI)
76 S. Main St.
Akron, OH 44308

Dear Mr. Brown:

On October 13, 2010, I inspected the above referenced site for compliance with storm water best management practices (BMPs). Our records indicate that ATSI obtained coverage under the Ohio EPA General Storm Water National Pollutant Discharge Elimination System (NPDES) Permit for Construction Activities #3GC04957*AG on June 9, 2010. While on site, I met with Curtis Figgins, field coordinator for First Energy. During this inspection, I noted several discrepancies with the Storm Water Pollution Prevention Plan (SWP3) and the actual construction that had occurred to that point. As a result, a follow-up on-site meeting was scheduled on October 20, 2010, with Nancy Funni of the Lorain Soil & Water Conservation District (SWCD). Representatives of First Energy included William Beach and Vincent Conant of the Environmental Department and Mr. Figgins of the Energy Delivery Construction Management Department.

On October 25, 2010, Lorain SWCD issued a First Notice of Violation and Stop Work Order for failure to submit changes to the erosion and sediment control plan (a component of the SWP3). The order was issued because construction activities extended beyond the scope of the previously approved erosion and sediment control plan. By November 2, 2010, an amended plan was approved by Lorain SWCD and their stop work order was lifted. However, their letter notes that a post-construction BMP plan has not yet been submitted.

During my inspection on October 13, 2010, I noted that the SWP3 did not provide any BMPs for post-construction water quality control. We discussed this omission during our meeting on October 20, 2010. Part III.G.2.e of the NPDES permit requires the implementation of post-construction BMPs on all projects where 1 or more acre of land is disturbed, except those that do not create any impervious area. The primary developed area of this site consists of a rock pad with underdrain system. The rock in conjunction with the underdrain system effectively acts as an impervious surface that generates a larger volume of runoff than pre-development conditions and conveys it with greater efficiency. Thus, Ohio EPA expects a post-construction BMP to be provided for this area. For construction sites where the larger common plan of development or sale disturbs less than 5 acres, Ohio EPA offers greater flexibility in BMP selection and design, but still requires that post-construction BMPs be provided.

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Further, runoff from the underdrain system discharges into a natural wetland. Part III.G.2.f of the NPDES permit prohibits the discharge of concentrated storm water runoff to natural wetlands. At the very least, Ohio EPA expects that concentrated runoff from the underdrain system be converted to sheet flow before entering the wetland using a level spreader. Ohio EPA recommends that a vegetated filter strip be provided between the level spreader and edge of tree clearing. Specifications for level spreaders and vegetated filter strips can be found in *Rainwater and Land Development, Ohio's Standards for Storm Water Management, Land Development and Urban Stream Protection* (Ohio Department of Natural Resources, 2006), available online at <http://www.dnr.state.oh.us/tabid/9186/default.aspx>. I also provided Mr. Beach with guidance on vegetated filter strips developed by the Lake County (OH) Storm Water Management Department. The filter strip with berm in this guidance is a design that would be required if a vegetated filter strip were selected as the post-construction BMP on a large construction site, i.e., where the larger common plan of development or sale disturbs 5 or more acres of land. Other ideas you may wish to consider on future substation construction where underdrains are installed:

- Raising the elevation of the underdrains such that a reservoir of storage is provided beneath them to allow capture and infiltration of the Water Quality Volume.
- Directing discharges from the underdrain system to a bioretention cell or enhanced swale.

Please provide me with a letter of response indicating the post-construction BMPs that will be implemented on this project. Include a copy of the complete SWP3 with your response. Your response should be received **no later than December 10, 2010**. A copy of the post-construction BMP portion of the SWP3 should also be submitted to Lorain SWCD for review and approval.

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

Sincerely,



Dan Bogoevski
District Engineer
Division of Surface Water

DB/mt

cc: Nancy Funni, Lorain SWCD
Wayne Miletic, Lorain County Engineers Office
Trustees, Henrietta Twp.
William Beach, First Energy, Environmental Department