OhioEPA

State of Ohio Environmental Protection Agency

Northeast District Office

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

April 6, 2010

RE: CUYAHOGA COUNTY
PORTER CREEK WATERSHED
CITY OF WESTLAKE
NORDSON CORPORATION

NOTICE OF VIOLATION

Mr. Ray Cushing
Nordson Corporation
28601 Clemens Rd.
Westlake, OH 44145

Dear Mr. Cushing:

On April 1, 2010, I performed a compliance inspection of storm water best management practices (BMPs) at the above referenced site. While on site, I met with Gary Strieter, superintendent for Ozanne, and Ben Gibson, project manager for R.E. Rice. I also spoke with Rob Fitzgerald of Ozanne via telephone. Mr. Strieter indicated that Nordson Corporation has largely been acting as its own general contractor for this project and only turned day-to-day management of the construction site over to Ozanne on April 1, 2010. Prior to the date of my inspection, R.E. Rice was primarily responsible for earth disturbing activities and compliance with the Storm Water Pollution Prevention Plan (SWP3). Implementation of the SWP3 is a requirement of the Ohio EPA General Storm Water National Pollutant Discharge Elimination System (NPDES) Permit for Construction Activities #3GC04663*AG.

My inspection revealed the following violations of the NPDES permit:

Administrative Issues

- **Not all operators have obtained NPDES permit coverage**. This is a violation of Part II.B of the NPDES permit and Ohio Revised Code (ORC) 6111.04 and Ohio Administrative Code (OAC) 3745-39-03. The NPDES permit requires all parties that meet the definition of "operator" to obtain NPDES permit coverage. Operator is any party that meets either of the following two criteria:

    - The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or

    - The party has day-to-day operational control of those activities at a project which are necessary to ensure compliance with an SWP3 for the site or other permit conditions, e.g., they are authorized to direct workers at a site to carry out activities required by the SWP3 or comply with other permit conditions.

Based on my conversation with Mr. Strieter and Mr. Gibson, both Ozanne and R.E. Rice meet the definition of operator. To obtain NPDES permit coverage, these companies must submit a Co-Permittee Notice of Intent (Co-Permittee NOI) to Ohio EPA. Copies of the form and instructions are available at www.epa.ohio.gov/dsw/storm/stormform.aspx. The Co-Permittee NOI is to be submitted by each operator before they begin working at the site. For other contractors and subcontractors who do not meet the definition of operator, but who will be involved in the implementation of the SWP3, Nordson must inform them of the terms and conditions of the SWP3 and maintain a written document containing their signatures acknowledging they have reviewed and understand their responsibilities under the SWP3. Edwards Tree Service performed site clearing and appears to fall under this category. Please assure that all operators have submitted Co-Permittee NOIs and provide me with the written document containing the signatures of other contractors and subcontractors as required by Part III.E of the NPDES permit.

- **Storm water BMPs have not been inspected as required by the NPDES permit and there are no records to document these inspections**. 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 all controls to be inspected once every 7 days and within 24 hours of a 0.5-inch or greater rain event. Mr. Gibson acknowledged that R.E. Rice was primarily responsible for implementation of the SWP3 up to this point and that these inspections have not taken place. He could not provide me with the required documentation of these inspections. Please note that the information that must be provided in these reports is detailed in the NPDES permit under Part III.G.2.i under subsection i-ix. A generic construction site inspection form can be found on Ohio EPA's website at www.epa.ohio.gov/dsw/storm/index.html under the link for Construction. Please provide me with a copy of an inspection report completed by the operator charged with this requirement.

SWP3 Implementation Issues

- **Control measures shown in the SWP3 has not been implemented.** This is a violation of Part III.G.2 of the NPDES permit and ORC 6111.04 and 6111.07. The plan calls for a perimeter diversion swale to collect runoff and convey it to sediment traps. The sediment traps are to be constructed within swales along the entrance road. These features of the SWP3 have not been constructed. To bring the site into compliance with the SWP3, these features must be constructed.

- **Perimeter sediment controls and sediment ponds have not been installed within 7 days of first grubbing and prior to grading.** This is a violation of Part III.G.2.d.i of the NPDES permit and ORC 6111.04 and 6111.07. Tree clearing occurred during the Fall of 2009. The aforementioned diversion swale and

sediment traps were to be installed long ago. **NOTE:** Please review implementation of the SWP3 with Bramhall Engineering, the firm that designed it. The contractor has already installed the underdrain system that is part of the future dry enhanced swales. The presence of these underdrains at this point in the construction sequence may undermine the functionality of the sediment traps. The SWP3 may need amendment to make it work as envisioned.

- **Perimeter silt fence has not been maintained and repaired as needed to ensure continued performance of its intended function.** This is a violation of Part III.G.2.h of the NPDES permit and ORC 6111.04 and 6111.07. Soil has been pushed over the silt fence along the north side of the building pad and fill material used to stage the construction trailer has nearly buried the silt fence to the east of the trailer. Please repair the silt fence in these locations. Keep silt fence maintained until the areas draining to it have been permanently stabilized.

- **The SWP3 does not provide adequate specifications for post-construction BMPs and must be revised to demonstrate compliance with NPDES permit requirements.** This is a violation of Part III.G.2.e of the NPDES permit and ORC 6111.04 and 6111.07. Although the plan calls for the use of permeable pavement and dry enhanced swales for post-construction runoff control, the plan lacks details for their construction so as to meet NPDES permit requirements.

    - **Permeable Pavement.** Permeable pavement must be capable of either fully infiltrating the Water Quality Volume (WQv) or providing for its extended detention, i.e., drawdown over a 48-hour period. The method by which permeable pavement will work depends on site and soil conditions. Please review these conditions and determine which method is appropriate for this site. If the site will allow full infiltration of the WQv, please demonstrate that a reservoir of storage has been provided below the underdrain system equal to or greater than the WQv and the time it will take for the full WQv to exfiltrate from this reservoir to the ground beneath. If the site requires extended detention, please demonstrate that the storage volume within the void space of the material under the permeable pavers and above the underdrain system is equal to or greater than the WQv and that the outlet structure to which the underdrain system drains is equipped with an orifice capable of detaining the WQv for at least 48 hours.

    - **Dry Enhanced Swales.** Dry enhanced swales require a specialized bioretention soil mix over a specific surface area to a depth of 2 to 2.5 feet to provide adequate pollutant removal. Designing a dry enhanced swale is essentially like designing a linear bioretention cell. The plan does not call for the specialized soil mix and the contractor has already placed native soils over the underdrains in these swales. This will not provide the

expected pollutant removal and discharge rate control for the WQv required by the NPDES permit. Furthermore, the swales are being placed through an area containing wetlands and a high ground water table. To function as intended, groundwater should not intercept the bioretention soil media. The bioretention soil media should act as a filter for runoff before it can enter the underdrain system. It cannot act as a filter if it is saturated with groundwater. It may be more appropriate to build wet enhanced swales on this site or to provide a liner or curtain drain to prevent groundwater from affecting the function of the dry enhanced swale.

Please review the post-construction BMPs with Bramhall Engineering and provide me with the detail drawings, calculations and other information required to demonstrate compliance with the NPDES permit.

Please provide me with a letter of response indicating the actions you have taken or will take to address the violations noted above. Include a copy of any amendments made to the SWP3 and any documentation requested above with your response. Plan amendments must also be reviewed and approved through the City of Westlake Engineering Department. Your response should be received **by April 21, 2010**. Violations of ORC 6111 are punishable by fines.

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

Sincerely,

Dan Bogoevski

Dan Bogoevski
District Engineer
Division of Surface Water

DB/mt

cc: Robert Kelly, Engineer, City of Westlake
Dennis Clough, Mayor, City of Westlake
Gary Strieter, Ozanne
Ben Gibson, R. E. Rice Inc.
Clarence Watkins, Bramhall Engineering and Surveying Co., Inc.
Clark & Post Architects Inc.

NORDSON CORPORATION
City of Westlake Cuyahoga County
Permittee: Nordson Corporation

Photos Taken: April 1, 2010
By: Dan Bogoevski, DSW-NEDO

Fig 1 (LEFT). Soil has been dumped over top of the silt fence on the north side of the building pad. It must be removed and the silt fence restored.

Fig 2 (RIGHT). Drainage channels have been cut from the building pad to the silt fence to drain the pad. Note that this compromises the function of the silt fence. Silt fence is not intended to receive concentrated flows of runoff. Implementing the diversion swale and grading as depicted in the SWP3 will eliminate the need for these drainage channels.

Fig 3 & 4. The diversion swale depicted on the SWP3 on the north (LEFT PHOTO) and west (RIGHT PHOTO) sides of the building pad has not been installed.

Fig 5. Sediment traps are to be established in the swales along the roadway. They are not installed. However, the underdrain system intended for the permanent swale have been installed and are covered with native soil.

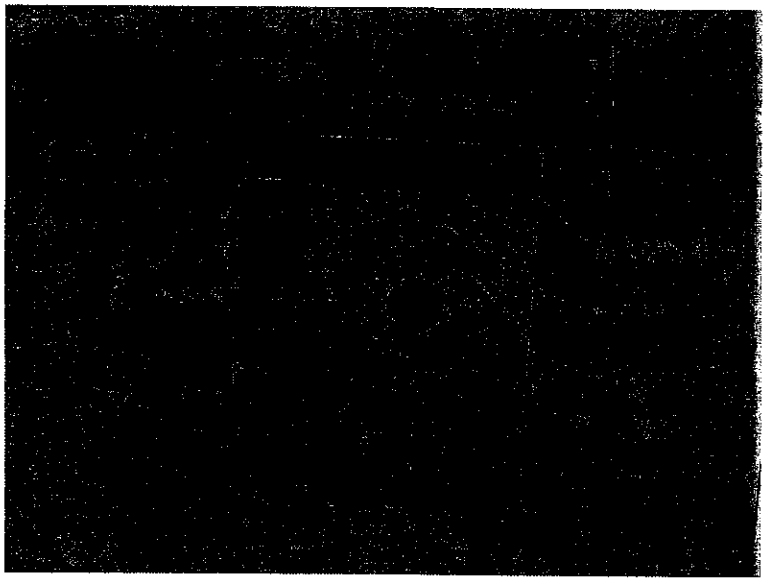

Fig 6. The detail drawing for the permeable pavement system to be installed in the parking lot does not provide sufficient information to determine if it has been designed to meet NPDES permit requirements. The storage reservoir below the underdrain pipe is minimal and may not be large enough to hold the WQv.