BEFORE THE
OHIO ENVIRONMENTAL PROTECTION AGENCY

In the Matter of:

Ohio Department of Transportation
1980 West Broad Street
Columbus, Ohio 43223

Director's Final Findings and Orders

Respondent

PREAMBLE

It is agreed by the Parties hereto as follows:

I. JURISDICTION

These Director's Final Findings and Orders ("Orders") are issued to the Ohio Department of Transportation ("Respondent") pursuant to the authority vested in the Director of the Ohio Environmental Protection Agency ("EPA") under Ohio Revised Code (R.C.) §§ 6111.03, and 3745.01.

II. PARTIES BOUND

These Orders shall apply to and be binding upon Respondent and its assigns and successors in interest liable under Ohio law. No change in ownership of Respondent or its Facilities as defined in these Orders shall in any way alter Respondent's obligations under these Orders.

III. DEFINITIONS

Unless otherwise stated, all terms used in these Orders shall have the same meaning as defined in R.C. Chapters 6111 and the rules promulgated thereunder.

IV. FINDINGS

The Director of Ohio EPA has made the following findings:
1. Respondent, Ohio Department of Transportation (ODOT), is currently constructing highway improvements on 1-271 in Cuyahoga and Summit Counties (PID 80418 CUY/SUM IR 271 00.00/14.87).

2. On November 6, 2018, Ohio EPA conducted an inspection of the project after receiving a complaint indicating that a stream in the vicinity of the project was milky white in color.

3. The inspection verified a milky white discharge with a sulfurous odor consistent with slag leachate coming from the underdrain of the road and discharging to waters of the state.

4. Ohio EPA conducted a follow-up inspection on November 9, 2018 to view the project's outfall locations and to determine the extent of leachate impacts. It was eventually determined that at least five locations showed evidence of slag leachate.

5. As a component to this construction, Respondent used air cooled blast furnace slag as a bedding material to replace required undercuts where the in-situ soils were not suitable for roadway embankment.

6. Because of the large undercuts associated with this project, the slag material used on the project was larger in size than is typical for ODOT projects. Respondent believes that the larger size aggregate may have been fractured from construction traffic which exposed new surfaces that would not have previously interacted with water and generated the leachate observed.

7. ORC § 6111.07(A) provides that “No person shall violate or fail to perform any duty imposed by sections 6111.01 to 6111.08 of the Revised Code or violate any order, rule, or term or condition of a permit issued or adopted by the director of environmental protection pursuant to those sections. Each day of violation is a separate offense.”

8. ORC §6111.052(C) provides that “No person shall place or manage blast furnace slag or steel slag in a manner that results in any of the following:

   (1) An exceedance of a water quality standard, including narrative standards, adopted under section 6111.041 of the Revised Code;

   (2) An exceedance of a primary or secondary maximum contaminant level in ground water adopted under section 6109.04 of the Revised Code;

   (3) A discharge that is prohibited by, or for which a permit is required by United States environmental protection agency regulations, except in accordance with such permit;
(4) A threat to public health or safety or the environment."

9. OAC 3745-1-04(C) provides that waters shall be free of materials entering the waters as a result of human activity producing color, odor, or other conditions in such a degree as to create a nuisance.

10. General Permit for Storm Water Discharges Associated with Construction Activities (3GC07624*BG):

Part I.B.2.b.: The following storm water discharges associated with construction activity are not covered by this permit: storm water discharges associated with construction activity that the director has shown to be or may reasonably expect to be contributing to a violation of a water quality standard.

Part I.B.4.: Prohibition on non-storm water discharges. All discharges covered by this permit must be composed entirely of storm water with the exception of the following: discharges from firefighting activities; fire hydrant flushings; potable water sources including waterline flushings; irrigation drainage; lawn watering; routine external building washdown which does not use detergents; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; springs; uncontaminated ground water from trench or well point dewatering and foundation or footing drains where flows are not contaminated with process materials such as solvents. Dewatering activities must be done in compliance with Part II.C and Part III.G.2.g.iv of this permit. Discharges of material other than storm water or the authorized non-storm water discharges listed above must comply with an individual NPDES permit or an alternative NPDES general permit issued for the discharge.

11. ODOT's I-271 construction and its use of slag in the project has altered the natural color and odor of the receiving stream, Bear Run, which is tributary to Tinkers Creek in violation of OAC 3745-1-04(C), 6111.052(C)(1), (C)(3), and (C)(4), a violation of Part I.B.2.b of the storm water permit and thus a violation of ORC 6111.07(A).

12. Ohio EPA issued a Notice of Violation (NOV) letter citing the violations noted in Finding 11 on November 26, 2018.

13. At Ohio EPA's request, Respondent initiated water quality monitoring of the discharge locations along the project corridor. Monitoring results indicate some exceedances of water quality standards for Total Dissolved Solids.
Director's Findings and Orders
Ohio Department of Transportation
Page 4

14. On January 14, 2019, Respondent sent Ohio EPA a letter responding to the NOV indicating that sample results are showing a downward trend in pollutant loading to the stream and believes that such downward trend will continue as the slag material ages and interacts with subsurface stormwater drainage.

15. The Director has given consideration to, and based her determination on, evidence relating to the technical feasibility and economic reasonableness of complying with these Orders and to evidence relating to conditions calculated to result from compliance with these Orders, and their relation to the benefits to the people of the state to be derived from such compliance in accomplishing the purposes of R.C. Chapter 6111.

V. ORDERS

1. Beginning on the first month following the effective date of these Orders, Respondent shall conduct monthly water quality sampling for pH, Total Dissolved Solids (TDS), sulfates, and Dissolved Oxygen (DO) at outfall points depicted in Table 1. Respondent may cease monthly water quality monitoring upon demonstrating no numeric water quality exceedances for four consecutive quarters for all pollutants listed in Order 1.

<table>
<thead>
<tr>
<th>ODOT Outfall Designation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OF-2</td>
<td>54-inch outfall pipe</td>
</tr>
<tr>
<td>OF-2-2</td>
<td>54-inch outfall pipe, after peat moss dam and before Bear Run convergence</td>
</tr>
<tr>
<td>OF-3</td>
<td>48-inch outfall pipe, near Waste Management property off of South Oakleaf Road</td>
</tr>
</tbody>
</table>

2. Respondent shall report data collected pursuant to Order 1 to Ohio EPA by the 20th day of the month following the month in which the sample was collected.

3. Within 90 days of the effective date of these Orders, Respondent shall develop a Reconnaissance and Sampling Plan (the “Plan”) for Ohio EPA's review and approval that requires (1) periodic inspections of the project site for evidence of other slag leachate outfalls, (2) requires monitoring of these outfalls where leachate is observed to determine if the discharge is posing potential water quality impacts, and (3) instream water quality sampling to determine whether water quality standards are exceeded in the water column of the receiving stream. The Plan shall include the following elements:
Director's Findings and Orders  
Ohio Department of Transportation  
Page 5

a. For discharges that exceed levels that would violate water quality standards, the Plan shall require monthly sampling consistent for parameters required in Order 1.

b. For discharges that do not exceed water quality standards, the Plan shall require quarterly sampling. The Plan may allow for the cessation of sampling of these discharges upon four consecutive quarters of monitoring data showing no exceedances of water quality standards.

4. If water quality sample results from sampled outfalls do not show four consecutive quarters of no numeric water quality exceedances after twelve quarters of sampling or demonstrate a downward trajectory to the satisfaction of Ohio EPA that would show compliance with water quality standards within 60 months of the effective date of these Orders, Respondent shall implement remedial measures in accordance with the following:

   a. Within 48 months of the effective date of these Orders, submit a Permit to Install application for remedial measures designed to ensure water quality standards are met in the receiving stream(s).

   b. Within 52 months of the effective date of these Orders, begin construction in accordance with it an approved PTI;

   c. Within 60 months of the effective date of these Orders, Respondent shall complete construction in accordance with its approved PTI and demonstrate compliance with water quality standards in the receiving stream(s).

VI. TERMINATION

Respondent’s obligations under these Orders shall terminate when Respondent certifies in writing and demonstrates to the satisfaction of Ohio EPA that Respondent has performed all obligations under these Orders and the Chiefs of Ohio EPA’s Division of Surface Water and Division of Drinking and Ground Water acknowledges, in writing, the termination of these Orders. If Ohio EPA does not agree that all obligations have been performed, then Ohio EPA will notify Respondent of the obligations that have not been performed, in which case Respondent shall have an opportunity to address any such deficiencies and seek termination as described above.

The certification shall contain the following attestation: “I certify that the information contained in or accompanying this certification is true, accurate and complete.”
This certification shall be submitted by Respondent to Ohio EPA and shall be signed by a responsible official of Respondent. For purposes of these Orders, a responsible official is as defined in Ohio Administrative Code Rule 3745-33-03(F).

Should the Director determine that Respondent's activities are adversely affecting public health or safety or the environment, the Director reserves the right to terminate these Orders.

VII. OTHER CLAIMS

Nothing in these Orders shall constitute or be construed as a release from any claim, cause of action or demand in law or equity against any person, firm, partnership or corporation, not a party to these Orders, for any liability arising from, or related to activities occurring at the PWS or WWTP.

VIII. OTHER APPLICABLE LAWS

All actions required to be taken pursuant to these Orders shall be undertaken in accordance with the requirements of all applicable local, state and federal laws and regulations. These Orders do not waive or compromise the applicability and enforcement of any other statutes or regulations applicable to Respondent.

IX. MODIFICATIONS

These Orders may be modified by agreement of the parties hereto. Modifications shall be in writing and shall be effective on the date entered in the journal of the Director of Ohio EPA.

X. NOTICE

All documents required to be submitted by Respondent pursuant to these Orders shall be addressed to:

Ohio Environmental Protection Agency  
Northeast District Office  
Division of Surface Water  
Attn: DSW Enforcement Supervisor  
2110 East Aurora Road  
Twinsburg, Ohio 44087

and to:

Ohio Environmental Protection Agency  
Lazarus Government Center  
Division of Surface Water  
Attn: Enforcement Manager
XII. RESERVATION OF RIGHTS

Ohio EPA and Respondent each reserve all rights, privileges and causes of action, except as specifically waived in Section XII. of these Orders.

XII. WAIVER

In order to resolve disputed claims, without admission of fact, violation or liability, and in lieu of further enforcement action by Ohio EPA for only the violations specifically cited in these Orders, Respondent consents to the issuance of these Orders and agrees to comply with these Orders. Compliance with these Orders shall be a full accord and satisfaction for Respondent's liability for the violations specifically cited herein.

Respondent hereby waives the right to appeal the issuance, terms and conditions, and service of these Orders, and Respondent hereby waives any and all rights Respondent may have to seek administrative or judicial review of these Orders either in law or equity.

Notwithstanding the preceding, Ohio EPA and Respondent agree that if these Orders are appealed by any other party to the Environmental Review Appeals Commission, or any court, Respondent retains the right to intervene and participate in such appeal. In such an event, Respondent shall continue to comply with these Orders notwithstanding such appeal and intervention unless these Orders are stayed, vacated or modified.

XIII. EFFECTIVE DATE

The effective date of these Orders is the date these Orders are entered into the Ohio EPA Director's journal.
XIV. SIGNATORY AUTHORITY

Each undersigned representative of a party to these Orders certifies that he or she is fully authorized to enter into these Orders and to legally bind such party to these Orders.

IT IS SO ORDERED AND AGREED:
Ohio Environmental Protection Agency

[Laurie A. Stevenson, Director]

5/8/19
Date

IT IS SO AGREED:
Ohio Department of Transportation

[Jack Marchbanks, Ph.D., Director]

4-25-19
Date