In the Matter of:

Columbus Steel Castings Company
2211 Parsons Avenue
Columbus, Ohio 43207

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 Columbus Steel Castings Company ("Respondent") pursuant to the authority vested in the Director of the Ohio Environmental Protection Agency ("Ohio EPA") under Ohio Revised Code ("R.C.") §§ 3734.02(G), 3734.13, 3745.01, and 6111.03.

II. PARTIES BOUND

These Orders shall apply to and be binding upon Respondent and successors in interest liable under Ohio law. No change in ownership of Respondent or of the Facility (as hereinafter defined) 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 3734, and 6111, and the rules promulgated thereunder.

I certify this to be a true and correct copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

[Signature]
OHIO E.P.A.
AUG 29 2007

ENTERED DIRECTOR'S JOURNAL

PRECEDED BY

B E F O R E T H E

O H I O E N V I R O N M E N T A L P R O T E C T I O N A G E N C Y
IV. FINDINGS

The Director of Ohio EPA has determined the following findings:

1. Pursuant to ORC § 3734.02(G) and rule 3745-50-31 of the Ohio Administrative Code (OAC), the Director, may, by order, exempt any person generating, storing, treating, or disposing of hazardous waste in such quantities or under such circumstances that, in the determination of the Director, are unlikely to adversely affect the public health or safety or the environment, from any requirement to obtain a permit or comply with other requirements of ORC Chapter 3734. Any such exemption shall be consistent with and equivalent to rules promulgated under the Resource Conservation and Recovery Act of 1976, 90 Stat. 2806, 42 U.S.C. § 6921 et seq., as amended.

2. Respondent is a "person" as defined in R.C. §§ 3734.01(G) and 6111.01 and Ohio Administrative Code (OAC) rule 3745-50-10(A).

3. Respondent owns and operates a facility, located at 2211 Parsons Avenue, in Columbus, Ohio, where Respondent pours steel castings of railroad parts such as couplers and frames ("the Facility"). Respondent purchased the Facility out of bankruptcy on February 18, 2003. The former owner and operator, Buckeye Steel Castings Company, had conducted similar steel casting operations at the Facility since 1908.

4. The Facility is comprised of 63.3 acres and is surrounded by medium to light industrial and commercial facilities to the east and west. The areas north and south of the Facility are a mixture of single-family residential, medium to light industrial and commercial facilities.

Surface Water Related Findings

5. Buckeye Steel Castings Company held an expired National Pollutant Discharge Elimination System ("NPDES") permit, No. 4IN00043*CD (effective September 25, 1984 and expired September 22, 1989), that was issued for the discharge from its casting quench water, non-contact cooling water, leakage from well water supply lines, and facility area runoff caused by precipitation into Kian Run via the Facility's storm drain outfall (Station No. 4IN00043001). Since acquiring the Facility in 2003, Respondent has operated without an NPDES permit.

6. The Facility discharges "sewage", "industrial waste", and/or "other wastes", as those terms are defined in R.C. Chapter 6111.01 to Kian Run, a tributary of the Scioto River. Kian Run constitutes "waters of the state" as defined by R.C. Chapter 6111.01.
7. Respondent, in operating a steel casting facility, is subject to 40 Code of Federal Regulations ("CFR"), Part 464.33(b)(2) of subpart C of the ferrous casting subcategory for casting quench operations in the metal molding and casting point source category. In accordance with 40 CFR Part 464, federal regulations establish a ninety-eight percent (98%) recycle rate for the Facility's casting quench process segment. Respondent does not recycle its quench water and has not shown that it has complied with 40 CFR 464.33(b)(2).

8. Respondent is also subject to 40 CFR Part 464.32(b), which requires that casting quench operations achieve effluent limitations for copper, lead, zinc, oil and grease, total suspended solids, and pH, through the application of best practicable control technology ("BPT").

9. R.C. Chapter 6111.04 provides that no person shall cause pollution, or place or cause to be placed, any sewage, sludge, sludge materials, industrial waste, or other wastes, in a location where they cause pollution of any waters of the state unless the person holds a valid, unexpired permit, a renewal of a permit, or if the person’s application for renewal of such a permit is pending, as provided in R.C. 6111.

10. OAC Rule 3745-33-02(A) provides that no person may discharge any pollutant or cause, permit, or allow, a discharge of any pollutant without applying for and obtaining an Ohio NPDES permit.

11. OAC Rule 3745-33-03(B) provides that any person proposing to commence the discharge of pollutants must file an NPDES application at least one hundred eighty days prior to the commencement of the discharge.

12. On May 12, 2003 and April 21, 2004, Ohio EPA sent notices of violation ("NOVs") to Respondent, informing them that they were illegally operating without an NPDES permit.

13. Respondent did not make a timely application for an NPDES permit and is discharging pollutants to waters of the state in violation of R.C. §§ 6111.04, R.C. 6111.07, OAC Rule 3745-33-02(A), and OAC 3745-33-03(B).

14. On May 23, 2003, Respondent submitted an incomplete NPDES application to Ohio EPA for the facility's discharge. As of the effective date of these Orders, Respondent has failed to address the deficiencies and submit a complete and approvable NPDES permit application to authorize the facility's discharge to Kian Run, in violation of R.C. §§ 6111.04, R.C. 6111.07, OAC Rule 3745-33-02(A), and OAC Rule 3745-33-03(B).
15. On at least the dates outlined in the chart attached hereto as Attachment I and incorporated by reference as if fully rewritten herein, Respondent exceeded the statewide water quality criteria (SWQC), found in OAC Rule 3745-1-07, for the protection of aquatic life for water hardness (CaCO₃) dependent criteria, for the parameter of zinc. Respondent’s failure to comply with the SWQC for the parameter of zinc is a violation of R.C. §§ 6111.04, R.C. 6111.07 and OAC Rule 3745-1-07.

16. On October 27, 2004, Ohio EPA’s Division of Emergency and Remedial Response (“DERR”) investigated a phenolic resin spill (DERR Spill Id No. 0410-25-4564/0), caused by a pipe break at the facility’s phenolic resin storage tank area. DERR documented that an estimated 2,000 gallons of phenolic resin entered the Facility’s storm sewer system and discharged directly to Kian Run. Respondent’s phenolic resin discharge into Kian Run is a violation of R.C. §§ 6111.04 and 6111.07 and OAC Rule 3745-1-04.

17. On November 3, 2004, Ohio EPA inspected the Facility to evaluate operations and material handling necessary to assess potential impacts to Kian Run. The inspection revealed numerous deficiencies that were outlined in a NOV sent to Respondent on November 10, 2004. The following violations and/or deficiencies were noted:

a. The failure to submit an individual NPDES permit application for the discharge to Kian Run;

b. The failure to have a storm water pollution prevention plan (SWP3) developed for the facility;

c. The failure to have SWP3s developed for tenants leasing property from the Respondent as storm water from the tenant areas combine with storm water from the facility to discharge from a common outfall;

d. The failure to have information available as to whether the interior drains are connected to the City of Columbus sanitary sewer collection system or connected to a separate storm sewer system;

e. The failure to conduct weekly facility inspections to ensure no exposed waste or raw materials will threaten storm water quality and Kian Run;

f. The placement of residual lime from the lime unloading area adjacent to a storm sewer inlet;
g. The spreading of dust from the molding dust collection system on the western perimeter of the facility was located in close proximity to the separate storm sewer system;

h. The spreading of bentonite, from the sand and bentonite unloading area, in a drainage area that has the potential to impact Kian Run;

i. The failure to have a release protocol developed in order to properly test parameters and record dewatering activities associated with the phenolic resin tank secondary containment dike system and phenolic resin unloading area;

j. The failure to have a release protocol developed in order to properly test parameters and record dewatering activities associated with the diesel storage tank secondary containment dike system;

k. Failure to locate raw and waste materials, including used hydraulic oil containment units, in a location to prevent contamination of storm water. Most raw and waste materials were stored at the facility directly over the top of storm catch basins, which discharge directly to Kian Run;

l. Failure to have information available as to whether the maintenance shop oil water separator is connected to the City of Columbus sanitary sewer collection system or connected to the separate storm sewer system discharging directly to Kian Run; and

m. Failure to clean and remove used foundry sand and other waste material to eliminate the potential to impact storm water quality.

18. Pursuant to OAC Rule 3745-1-04, Kian Run shall be free from:

a. Suspended solids or other substances that enter the waters as a result of human activity in concentrations that will settle to adversely affect aquatic life; and

b. Floating debris, oil, scum and other floating materials entering the waters as a result of human activity in amounts sufficient to be unsightly or cause degradation.

19. On November 15, 2004, DERR investigated an oil discharge (DERR Spill Id No. 0411-25-4783/0) at the facility. DERR documented that oil was discharging from a railroad culvert and a diesel fuel storage area at the facility. Oil containment booms had been placed within Kian Run to prevent oil from migrating further.
downstream. Respondent's oil discharge into Kian Run is a violation of R.C. §§ 6111.04 and 6111.07 and OAC Rule 3745-1-04.

20. On January 11, 2005, DERR investigated a spill (DERR Spill Id No. 0501-25-0316/0) at the facility. DERR discovered that approximately 100 gallons of hydraulic oil had been released from a valve on a 3,000 gallon tank. The release impacted a sand and gravel fill area. Respondent hired an environmental contractor to conduct the spill remedial activities at the facility.

21. Pursuant to R.C. Chapter 6111.07(A), no person shall violate or fail to perform any duty imposed by R.C. §§ 6111.01 to 6111.08 or violate any order, rule, or term or condition of a permit issued or adopted by the Director of Ohio EPA pursuant to those sections, including OAC Rule 3745-33-02(A). Each day of violation constitutes a separate offense.

22. The following Orders do not constitute authorization or approval of the construction of any physical structure or facilities, or the modification of any existing treatment works or sewer system. Any such construction or modification is subject to the Permit-to-Install (PTI) requirements of R.C. §§ 6111.44 and 6111.45 and OAC Rule 3745-42-02.

23. The Director has given consideration to, and based his 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 its relation to the benefits to the people of the State to be derived from such compliance in accomplishing the purpose of R.C. Chapter 6111.

**Hazardous Waste Related Findings**

24. At the Facility, Respondent generates "hazardous waste" as that term is defined by R.C. § 3734.01(J) and OAC Rules 3745-50-10(A) and 3745-51-03. Respondent is a large quantity generator of hazardous waste and has been assigned generator identification number OHD000816801. The hazardous waste generated by Respondent at the Facility includes hazardous waste baghouse dust (D006, D008) from the operation of two electric arc furnaces and associated air pollution control system. Other wastes generated at the Facility include mixed slag, foundry sand, refractory brick and various non-hazardous baghouse dusts.

25. On November 9 and 10, 2004, Ohio EPA conducted a complaint investigation and compliance evaluation inspection at the Facility. As a result of the inspection, Ohio EPA determined that Respondent had disposed of hazardous waste without a permit, in violation of ORC § 3734.02(E) and (F).

27. In correspondence dated March 9, 2005, Respondent provided responses to Ohio EPA’s February 24, 2005 letter.

28. On April 5, 2007, Respondent submitted analytical results from a sampling event that Respondent conducted at the Facility. The analytical results do not appear to define the extent of contamination resulting from the hazardous waste disposal unit.

29. Due to Respondent’s establishment and operation of a hazardous waste disposal facility as described in Finding No. 25 of these Orders, Respondent is required to have a hazardous waste facility installation and operation permit and is subject to all general facility standards found in OAC Chapters 3745-54 and 55, including but not limited to, closure in accordance with OAC rules 3745-55-11 through 3745-55-20, the financial assurance for closure requirements contained in OAC rules 3745-55-42 through 3745-55-51 and corrective action for waste management units in accordance with OAC rule 3745-54-101. To obtain a hazardous waste facility installation and operation permit, Respondent is required to submit “Parts A and B” of the application in accordance with OAC Chapter 3745-50.

30. The submittal of a Closure Plan which complies with the administrative requirements of OAC Chapters 3745-65 and 66 and the substantive requirements of OAC Chapters 3745-54 and 55 including but not limited to the groundwater protection program in accordance with OAC rules 3745-54-90 through 3745-54-100 in lieu of the submittal of an application for a hazardous waste facility installation and operation permit is unlikely to adversely affect the public health or safety or the environment. Therefore, the Director finds that the issuance to Respondent of an exemption from the requirement to submit an application for a hazardous waste facility installation and operation permit for the Facility is unlikely to adversely affect the public health or safety or the environment within the meaning of ORC § 3734.02(G).

V. ORDERS

Respondent shall achieve compliance with Chapters 3734. and 6111. of the R.C. and the regulations promulgated thereunder according to the following compliance schedule:

1. Beginning immediately upon the effective date of these Orders, Respondent shall comply with the interim NPDES permit requirements listed in Attachment II of these Orders. Respondent shall comply with these interim
requirements until the issuance of a new NPDES permit for the Facility.

2. Within thirty (30) days of the effective date of these Orders, Respondent shall submit a complete and approvable individual NPDES application (Forms 1 and 2C) with an anti-degradation addendum for the Facility's discharge to Kian Run.

3. Respondent shall attain compliance with the Federal effluent guidelines, 40 CFR 464 Parts 464.32(b) and 464.33(b)(2) of subpart C of the ferrous casting subcategory for casting quench operations in the metal molding and casting point source category, as expeditiously as practicable, but not later than the following schedule:

a. Within 6 months of the effective date of these Orders, Respondent shall submit to Ohio EPA, in accordance with Section X of these Orders, a complete and approvable PTI application and detailed plans for improvements necessary to comply with the 98% recycle rate established by 40 CFR Part 464 for the Facility's casting quench process segment and the BPT requirements of 40 CFR 464.32(b);

b. Within 9 months of the effective date of these Orders, Respondent shall initiate construction of the approved improvements necessary to comply with the 98% recycle rate established by 40 CFR Part 464 for the Facility's casting quench process segment and the BPT requirements of 40 CFR 464.32(b), in accordance with the approved PTI submitted in Order No. 3.a. above; and

c. Within 24 months of the effective date of these Orders, Respondent shall complete construction of the approved improvements necessary to comply with the 98% recycle rate established by 40 CFR Part 464 for the Facility's casting quench process segment and the BPT requirements of 40 CFR 464.32(b), in accordance with the approved PTI submitted in Order No. 3.a. above; and

d. Within 25 months of the effective date of these Orders, Respondent shall attain operational level and comply with the 98% recycle rate established by 40 CFR Part 464 for the Facility's casting quench process segment and the BPT requirements of 40 CFR 464.32(b), in accordance with the approved PTI submitted in Order No. 3.a. above.

4. As set forth in Attachment I, Respondent has experienced zinc concentration levels from the Facility's 4IN0043001 outfall (Outfall 001) which have exceeded the Statewide Water Quality Standard Concentration for zinc of
267 ug/L. Because Respondent does not utilize zinc in its operations, Respondent shall complete a study of potential zinc sources at its facility within six (6) months of the effective date of these Orders. At a minimum, the study shall evaluate the reductions of zinc concentrations that could be achieved through:

i. Improvements to the wastewater treatment system capable of achieving a zinc maximum daily concentration limit of 267 ug/L; and

ii. The removal of zinc contaminated soils and sediment in the facility's brick-lined separate storm sewer collection system.

If this study identifies sources of zinc at Respondent’s facility, Respondent shall meet the following schedule:

a. Within 15 months of the effective date of these Orders, Respondent shall submit to the Ohio EPA Central District Office for approval, in accordance with Section X of these Orders, a facility study with a plan detailing how the Facility will reduce zinc concentrations from the Facility’s 4IN00043001 outfall to achieve a zinc maximum daily concentration limit of 267 ug/L;

b. Should the facility study recommend the installation of pollution control devices to treat and remove zinc concentrations from outfall 4IN00043001, Respondent shall submit for approval, within 17 months of the effective date of these Orders and in accordance with Section X of these Orders, a complete and approvable PTI application and detailed plans for said pollution control devices;

c. Within 6 months of the Director’s issuance of a PTI, if required, Respondent shall initiate construction of any approved pollution control devices to treat and remove zinc concentrations from outfall 4IN00043001;

d. Within 12 months of the Director’s issuance of a PTI, if required, Respondent shall complete construction of any approved pollution control devices to treat and remove zinc concentrations from outfall 4IN00043001 and shall attain a zinc maximum daily concentration limit of 267 ug/L;

e. Should Respondent’s facility study not recommend the installation of pollution control devices to treat and remove zinc concentrations from
outfall 4IN00043001, within 21 months of the effective date of these Orders, Respondent shall attain a zinc maximum daily concentration limit of 267 ug/L.

5. Respondent has submitted a storm water pollution prevention plan ("SWP3"), for approval to Ohio EPA. Upon approval by Ohio EPA Central District Office, Respondent shall immediately implement the approved facility SWP3.

6. Should Respondent submit any deficient application, study or plan as required above, Respondent shall revise the respective submittal within 14 days of receiving any notice of deficiency from Ohio EPA. Respondent shall address Ohio EPA Central District Office's comments and shall resubmit the respective submittal to Ohio EPA in accordance with Section X of these Orders.

7. Within 7 days of the completion of Order Nos. 1 through 6, Respondent shall submit written notification of the compliance with each Order to Ohio EPA Central District Office, in accordance with Section X of these Orders.

8. The Respondent is hereby exempted from the requirement to submit an application for a hazardous waste facility installation and operation permit for the Facility, provided that Respondent complies with the following:

   a. Within 60 days after the effective date of these Orders, Respondent shall submit to Ohio EPA for review and approval a Closure Plan which complies with the administrative requirements of OAC Chapters 3745-65 and 3745-66 and the substantive requirements of OAC Chapters 3745-54 and 3745-55, including but not limited to, the groundwater protection program in accordance with OAC rules 3745-54-90 through 54-100. The Closure Plan is subject to approval by Ohio EPA. If Ohio EPA does not approve the Closure Plan and provides Respondent with a written statement of deficiencies, Respondent shall submit a revised Closure Plan for approval addressing the deficiencies within 30 days of receiving such written statement. If Ohio EPA modifies the Closure Plan, the modified Closure Plan becomes the approved plan. Upon Ohio EPA's written approval of the Closure Plan, Respondent shall implement the approved Closure Plan in the manner and pursuant to the time frames set forth in the approved Closure Plan and OAC rule 3745-55-13;

b. Within 30 days after the submittal of the Closure Plan pursuant to Order No. 8.a., above, Respondent shall submit to Ohio EPA a closure cost estimate and documentation demonstrating that
Respondent has established financial assurance and liability coverage for the areas of the Facility subject to closure, in accordance with OAC rules 3745-55-42 through 3745-55-47; and

c. Within 60 days after completion of closure, Respondent shall submit certification of closure to Ohio EPA in accordance with OAC rule 3745-55-15.

Completion of Order No. 8 shall abate the violation referenced in Finding No. 25 of these Orders.

9. Within 30 days after the effective date of these Orders, Respondent shall pay Ohio EPA the total amount of sixty five thousand dollars ($65,000.00) in settlement of Ohio EPA’s claims for civil penalties, which may be assessed pursuant to R.C. Chapter 6111. Payment shall be made by an official check made payable to “Treasurer, State of Ohio” in that amount. The official check shall be submitted to Brenda Case, or her successor, together with a letter identifying Respondent, to Ohio EPA, Office of Fiscal Administration, P.O. Box 1049, Columbus, Ohio 43216-1049. A copy of this check shall be submitted in accordance with Section X of these Orders.

10. Within 30 days after the effective date of these Orders, Respondent shall pay Ohio EPA the total amount of ten thousand dollars ($10,000.00) in settlement of Ohio EPA’s claims for civil penalties, which may be assessed pursuant to R.C. Chapter 3734. Payment shall be made by an official check made payable to “Treasurer, State of Ohio” for $10,000.00 and will be deposited into the hazardous waste cleanup fund established pursuant to ORC § 3734.28. The official check shall be submitted to Brenda Case, or her successor, together with a letter identifying Respondent, to Ohio EPA, Office of Fiscal Administration, P.O. Box 1049, Columbus, Ohio 43216-1049. A copy of this check shall be submitted in accordance with Section X of these Orders.

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 Ohio EPA’s Division of Hazardous Waste Management and Division of Surface Water Management each acknowledge, 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's Division of Hazardous Waste Management and Division of Surface Water and shall be signed by a responsible official of Respondent. For purposes of these Orders, a responsible official is defined in OAC Rule 3745-33-03(D)(1). The termination of these Orders shall not affect the terms and conditions of Section VII, Other Claims, Section XI, Reservation of Rights, and Section XII, Waiver and Agreement.

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 on or at the Facility.

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

Surface Water Related Documents

All documents required to be submitted by Respondent pursuant to Order Nos. 1 through 7 and 9 of these Orders shall be addressed to:
Ohio Environmental Protection Agency
Central District Office
Division of Surface Water
50 West Town Street, Suite 700
Columbus, Ohio 43215
Attn: DSW Manager

and Ohio EPA Central Office at the following address:

Chris Korleski, Director
Ohio Environmental Protection Agency
Lazarus Government Center
Division of Surface Water
50 West Town Street, Suite 700
Columbus, Ohio 43215
Attn: Manager, Enforcement Section

or to such persons and addresses as may hereafter be otherwise specified in writing by Ohio EPA.

**Hazardous Waste Related Documents**

All documents required to be submitted by Respondent pursuant to Order Nos. 8 and 10 of these Orders shall be addressed to:

Ohio Environmental Protection Agency
Central District Office
Division of Hazardous Waste Management
50 West Town Street, Suite 700
Columbus, Ohio 43215
Attn: DHWM Manager

and Ohio EPA Central Office at the following address:

Chris Korleski, Director
Ohio Environmental Protection Agency
Lazarus Government Center
Division of Hazardous Waste Management
50 West Town Street, Suite 700
Columbus, Ohio 43215
Attn: Manager, Compliance Assurance Section
XI. RESERVATION OF RIGHTS

Ohio EPA reserves its rights to exercise its lawful authority to require Respondent to perform corrective action at the Facility at some time in the future, pursuant to ORC Chapter 3734, or any other applicable law. Respondent reserves its rights to raise any administrative, legal or equitable claim or defense with respect to any final action of the Director regarding such corrective action. Ohio EPA and Respondent each reserve all other rights, privileges and causes of action, except as specifically waived in Section XII. of these Orders.

XII. WAIVER AND AGREEMENT

In order to resolve disputed claims, without admission of fact, violation or liability, Respondent consents to the issuance of these Orders and agrees to comply with these Orders. Except for the right to seek corrective action at the Facility by Respondent, which right Ohio EPA does not waive, 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

[Signature]
Chris Korleski
Director

8/28/07
Date

IT IS SO AGREED:

Columbus Steel Castings Company

[Signature]
Joe W. Harden
Printed or Typed Name

7/31/07
Date
ATTACHMENT I

Zinc MORs (Outfall 001)

<table>
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<th>Units</th>
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<th>Statewide Water Quality Standard Concentration *</th>
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* Based on a Kian Run CaCO₃ of 257 mg/L.
ATTACHMENT II

In compliance with the provisions of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et. seq., hereinafter referred to as "the Act"), and the Ohio Water Pollution Control Act (Ohio Revised Code 6111),

Columbus Steel Castings Company

is authorized by the Ohio Environmental Protection Agency, hereinafter referred to as "Ohio EPA," to discharge from its facility located at 221 Parsons Avenue, Columbus, Ohio, Franklin County and discharging to Kian Run in accordance with the conditions specified in this document.
A. Description of the location of the required sampling stations is as follows:

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<tr>
<th>Sampling Station</th>
<th>Description of Location</th>
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<td>4IN00043001</td>
<td>At point representative of discharge leaving Respondent's property</td>
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<td>4IN00043601</td>
<td>Discharge from quench tank in bolster and frame building</td>
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<tr>
<td>4IN00043602</td>
<td>Discharge from quench tank in coupler building</td>
</tr>
<tr>
<td>4IN00043603</td>
<td>Discharge from hardening machine quench in bolster and frame building</td>
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<tr>
<td>4IN00043604</td>
<td>Discharge from hardening machine quench in coupler building</td>
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Sample shall be conducted during a precipitation/moist event.

Discharge is limited to casing ground water, non-contact cooling water, leakage from well water supply lines, and plant area.

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<th>Monitored Parameter</th>
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<td>All</td>
<td>Composite</td>
<td>mL</td>
<td>-</td>
</tr>
<tr>
<td>All</td>
<td>24h Total</td>
<td>mL</td>
<td>-</td>
</tr>
<tr>
<td>All</td>
<td>Composite</td>
<td>mL</td>
<td>-</td>
</tr>
<tr>
<td>All</td>
<td>24h Total</td>
<td>mL</td>
<td>-</td>
</tr>
</tbody>
</table>

Table - End of Pipe 001 - I Memphis

Authorized to discharge in accordance with the following limitations and monitoring requirements from the following outlet:

1. During the period beginning on the effective date of these Orders and lasting until effective date of a permit, the Respondent is

4NO004001

Part 1.4 - INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS
During discharge:

This discharge is limited solely to casting ground water.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Concentration Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phytoplankton</td>
<td>400 µg/l</td>
</tr>
<tr>
<td>Chlorella</td>
<td>0.5 ppm</td>
</tr>
<tr>
<td>Fauna</td>
<td>70 mg/l</td>
</tr>
<tr>
<td>Fauna</td>
<td>50 mg/l</td>
</tr>
<tr>
<td>Fauna</td>
<td>30 mg/l</td>
</tr>
<tr>
<td>Fauna</td>
<td>10 mg/l</td>
</tr>
<tr>
<td>Fauna</td>
<td>5 mg/l</td>
</tr>
</tbody>
</table>

Table: Initial Monitoring Station - 601 - Ithmin

4IN00043601

During the period beginning on the effective date of these Orders and lasting until effective date of a permit, the respondent is authorized to discharge in accordance with the following limitations and monitoring requirements. From the following list:

Part 4, 2. INTERIM ENFORCEMENT LIMITATIONS AND MONITORING REQUIREMENTS
**Emission Characteristics**

<table>
<thead>
<tr>
<th>Type</th>
<th>Sampling Frequency</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Daily Loading</th>
<th>Weekly Loading</th>
<th>Monthly Loading</th>
<th>Discharge Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composite</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.77 oz - 4.44 lb, Total - 4 lb</td>
</tr>
<tr>
<td>I/Day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0 ppm</td>
</tr>
<tr>
<td>Composite</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0 ppm</td>
</tr>
<tr>
<td>I/Day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0 ppm</td>
</tr>
<tr>
<td>Composite</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0 ppm</td>
</tr>
<tr>
<td>I/Day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0 ppm</td>
</tr>
<tr>
<td>Composite</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0 ppm</td>
</tr>
<tr>
<td>I/Day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0 ppm</td>
</tr>
<tr>
<td>Continuous</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0 ppm</td>
</tr>
</tbody>
</table>

**Table - Internal Monitoring Station - 602 - I/Day**

<table>
<thead>
<tr>
<th>Parameter</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Rate</td>
<td>5000 g</td>
</tr>
<tr>
<td>PPM</td>
<td>10</td>
</tr>
<tr>
<td>ppm</td>
<td>45</td>
</tr>
<tr>
<td>ppm</td>
<td>30</td>
</tr>
<tr>
<td>ppm</td>
<td>0</td>
</tr>
<tr>
<td>ppm</td>
<td>0</td>
</tr>
<tr>
<td>ppm</td>
<td>0</td>
</tr>
<tr>
<td>ppm</td>
<td>0</td>
</tr>
<tr>
<td>ppm</td>
<td>0</td>
</tr>
<tr>
<td>ppm</td>
<td>0</td>
</tr>
<tr>
<td>ppm</td>
<td>0</td>
</tr>
<tr>
<td>ppm</td>
<td>0</td>
</tr>
</tbody>
</table>

3. During the period beginning on the effective date of these orders and lasting until effective date of a permit, the respondent is authorized to discharge in accordance with the following limitations and monitoring requirements from the following outlet:

<table>
<thead>
<tr>
<th>Monitoring Type</th>
<th>Monitoring Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>I/Day</td>
<td>Continuous</td>
</tr>
<tr>
<td>Continuous</td>
<td>I/Day</td>
</tr>
<tr>
<td>I/Day</td>
<td>Continuous</td>
</tr>
<tr>
<td>I/Day</td>
<td>Continuous</td>
</tr>
<tr>
<td>I/Day</td>
<td>Continuous</td>
</tr>
<tr>
<td>I/Day</td>
<td>Continuous</td>
</tr>
<tr>
<td>I/Day</td>
<td>Continuous</td>
</tr>
<tr>
<td>I/Day</td>
<td>Continuous</td>
</tr>
<tr>
<td>I/Day</td>
<td>Continuous</td>
</tr>
<tr>
<td>I/Day</td>
<td>Continuous</td>
</tr>
</tbody>
</table>

4/N00043602
**During discharge:**

This discharge is limited solely to casing ground water.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Measurement</th>
<th>Discharge Limitations</th>
</tr>
</thead>
</table>
| Zinc, Total (Zn) | -/l | 10
| Copper, Total (Cu) | -/l | 0.10
| Flow Rate - NGD | | 50.00

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Monitoring Type</th>
<th>Monitoring Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily</td>
<td>Continuous</td>
<td></td>
</tr>
<tr>
<td>Weekly</td>
<td>Composite</td>
<td></td>
</tr>
<tr>
<td>Monthly</td>
<td>Composite</td>
<td>1/Day</td>
</tr>
<tr>
<td>Yearly</td>
<td>Composite</td>
<td>1/Month</td>
</tr>
</tbody>
</table>

**TABLE - Internal Monitoring Station - 603 - Inlet**

4IN00043603

4. During the period beginning on the effective date of these orders and lasting until effective date of a permit, the Respondent is authorized to discharge in accordance with the following limitations and monitoring requirements from the following outlet:

4. **PART 1A - INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Frequency</th>
<th>Monitoring Type</th>
<th>Monitoring Requirements</th>
<th>Discharge Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Copper</strong></td>
<td>Weekly</td>
<td>Composite</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lead</strong></td>
<td>Weekly</td>
<td>Composite</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Flow Rate</strong></td>
<td>Daily</td>
<td>Composite</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Flow Rate</strong></td>
<td>Daily</td>
<td>Continuous</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Maximum Concentration**: The maximum concentration of the pollutant is specified for each parameter.
- **Monitoring Frequency**: Frequency of monitoring required as per the specified requirements.
- **Monitoring Type**: Type of monitoring required, such as Composite or Continuous.
- **Discharge Limitations**: Limitations for discharge of pollutants.

**Table - Internal Monitoring Station - 604 - Interm**

4IN0004-3604

Authorization to discharge in accordance with the following limitations and monitoring requirements from the following outlet:

- **During the period beginning on the effective date of these orders and lasting until effective date of a permit, the respondent is**

Part I. A. INTERM UNLIMITED LIMITATIONS AND MONITORING REQUIREMENTS