



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

SEP 13 2017

REPLY TO THE ATTENTION OF:

**VIA E-MAIL: [gkorff@qccast.com](mailto:gkorff@qccast.com) or  
RETURN RECEIPT REQUESTED**

Geoff Korff, President  
Quaker City Castings  
310 Euclid Avenue  
Salem, Ohio 44460

Dear Mr. Korff:

Enclosed is a file-stamped Consent Agreement and Final Order (CAFO) which resolves Korff Holdings LLC, d/b/a Quaker City Castings, docket no. CAA-05-2017-0038. As indicated by the filing stamp on its first page, we filed the CAFO with the Regional Hearing Clerk on September 13, 2017.

Pursuant to paragraph 82 of the CAFO, Korff Holdings LLC d/b/a Quaker City Castings must pay the civil penalty in four installments in accordance with the schedule provided in Paragraph 82. Your check or electronic funds transfer must display the case name and case docket number.

Please direct any questions regarding this case to Thomas Williams, Associate Regional Counsel (312) 886-0814.

Sincerely,

A handwritten signature in cursive script that reads "Brian Dickens".

Brian Dickens, Chief  
Air Enforcement and Compliance Assurance Section (MN/OH)

Enclosure

cc: Ann Coyle, Regional Judicial Officer/C-14J  
Regional Hearing Clerk/E-19J  
Tom Williams/C-14J  
Bob Hodanbosi, OEPA (via e-mail)  
Tim Fischer, NEDO (via e-mail)

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5**

**In the Matter of:**

**Korff Holdings, LLC  
d/b/a Quaker City Castings  
Salem, Ohio**

**Respondent.**

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**Docket No. CAA-05-2017-0038**

**Proceeding to Assess a Civil Penalty  
Under Section 113(d) of the Clean Air Act,  
42 U.S.C. § 7413(d)**

**Consent Agreement and Final Order**

**Preliminary Statement**

1. This is an administrative action commenced and concluded under Section 113(d) of the Clean Air Act (the CAA), 42 U.S.C. § 7413(d), and Sections 22.1(a)(2), 22.13(b) and 22.18(b)(2) and (3) of the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation/Termination or Suspension of Permits (Consolidated Rules), as codified at 40 C.F.R. Part 22.
2. Complainant is the Director of the Air and Radiation Division, U.S. Environmental Protection Agency (EPA), Region 5.
3. Respondent is Korff Holdings LLC, a corporation doing business in Ohio under the name Quaker City Castings.
4. Where the parties agree to settle one or more causes of action before the filing of a complaint, the administrative action may be commenced and concluded simultaneously by the issuance of a consent agreement and final order (CAFO). 40 C.F.R. § 22.13(b).
5. The parties agree that settling this action without the filing of a complaint or the adjudication of any issue of fact or law is in their interest and in the public interest.
6. Respondent consents to the assessment of the civil penalty specified in this CAFO and to the terms of this CAFO.

### **Jurisdiction and Waiver of Right to Hearing**

7. Respondent admits the jurisdictional allegations in this CAFO and neither admits nor denies the factual allegations in this CAFO.

8. Respondent waives its right to request a hearing as provided at 40 C.F.R. § 22.15(c), any right to contest the allegations in this CAFO and its right to appeal this CAFO.

### **Statutory and Regulatory Background**

#### **Ohio SIP**

9. Section 110 of the Act, 42 U.S.C. § 7410, requires each state to adopt and submit to the Administrator for approval a state implementation plan (SIP) that provides for the attainment and maintenance of the National Ambient Air Quality Standards (NAAQS).

10. The Administrator approved Ohio Administrative Code (OAC) Rule 3745-31-02 as part of the federally enforceable Ohio SIP on January 22, 2003, as amended February 20, 2013 and June 25, 2015. 68 Fed. Reg. 2909, as amended, 78 Fed. Reg. 11748 and 80 Fed. Reg. 36477.

11. OAC Rule 3745-31-02(1)(b) provides that no person shall cause, permit, or allow the installation or modification, and subsequent operation of any new source that is not part of a facility and that is not required to obtain a Title V permit without first obtaining a PTIO from the director of the Ohio Environmental Protection Agency (OEPA director).

12. The Administrator approved OAC Rule 3745-31-05 as part of the federally enforceable Ohio SIP on January 22, 2003, as amended February 20, 2013. 68 Fed. Reg. 2909, as amended, 78 Fed. Reg. 11748.

13. OAC Rule 3745-31-05(A)(1)-(3) provides that the OEPA director shall issue a PTI [PTIO] based on the information appearing in the application, information gathered by or furnished to the OEPA, or both, if the director determines that the installation, modification, or

operation of the air contaminant source will: (1) not prevent or interfere with the attainment or maintenance of applicable ambient air quality standards; (2) not result in a violation of any applicable laws including, but not limited to, emission standards adopted by OEPA, Federal Standards of Performance for New Sources adopted by the administrator of the EPA pursuant to Section 111 of the Act and the regulations promulgated thereunder, and National Emission Standards for Hazardous Air Pollutants adopted by the Administrator of EPA pursuant to Section 112 of the Act and the regulations promulgated thereunder; and (3) employ best available technology (BAT).

14. OAC Rule 3745-31-05(D)(1)(a) provides that the OEPA director may impose special terms and conditions as are appropriate or necessary to ensure compliance with the applicable laws and to ensure adequate protection of environmental quality. Those special terms and conditions necessary to ensure compliance shall be federally enforceable and will be designated as such through terms and conditions of a final PTI [PTIO] issued under Chapter 3745.

15. The Administrator approved OAC Rule 3745-35-02 as part of the federally enforceable Ohio SIP on June 10, 1982. 47 Fed. Reg. 25144.

16. OAC Rule 3745-35-02 provides that no person may cause, permit, or allow the operation or other use of an air contaminant source without applying for and obtaining a permit to operate from OEPA in accordance with the requirements of that Rule.

## National Emission Standards for Hazardous Air Pollutants

17. Section 112(b) of the CAA, 42 U.S.C. § 7412(b), provides a list of hazardous air pollutants developed by Congress and modified in accordance with the CAA.
18. Section 112(c)(1) of the CAA, 42 U.S.C. § 7412(c)(1), requires the Administrator publish, and from time to time revise, if appropriate, a list of source categories and subcategories of major sources and area sources of the air pollutants listed pursuant to Section 112(b).
19. Section 112(c)(2) of the CAA, 42 U.S.C. § 7412(c)(2), requires the Administrator establish emissions standards in accordance with Section 112(d) of the CAA for the categories and subcategories the Administrator lists.
20. Section 112(d) of the CAA, 42 U.S.C. § 7412(d), requires the Administrator promulgate regulations establishing emission standards for each category or subcategory of major sources and area sources of hazardous air pollutant listed for regulation.
21. Section 112(d) of the CAA, 42 U.S.C. § 7412(d), also identifies the minimum requirements under which the Administrator is to develop and promulgate such regulations.
22. The Administrator published an initial list of categories and subcategories of major sources and area sources in accordance with Section 112 of the CAA, 42 U.S.C. § 7412, on July 16, 1992. 57 Fed. Reg. 31576-31592.
23. The Administrator subsequently revised the initial list of categories and subcategories of major sources and area sources in accordance with Section 112 of the CAA on June 26, 2002. 67 Fed. Reg. 43112-43113.
24. The amended list of source categories includes iron foundries and steel foundries.
25. The Administrator published the General Provisions of 40 C.F.R. Part 63 (General Provisions-Part 63) on December 29, 1992, as amended. 59 Fed. Reg. 61992. The General

Provisions-Part 63 are codified at 40 C.F.R. Part 63, Subpart A (40 C.F.R. §§ 63.1 through 63.16).

26. The General Provisions-Part 63 define “affected source” as “the collection of equipment, activities, or both within a single contiguous area and under common control that is included in a section 112(c) source category or subcategory for which a section 112(d) standard or other relevant standard is established pursuant to section 112 of the [CAA].”

40 C.F.R. § 63.2.

27. The General Provisions-Part 63 define “major source” as any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants, unless the Administrator establishes a lesser quantity, or in the case of radionuclides, different criteria from those specified in this sentence. 40 C.F.R. § 63.2.

28. The General Provisions-Part 63 define “stationary source” as any building, structure, facility, or installation which emits or may emit any air pollutant. 40 C.F.R. § 63.2.

29. The General Provisions-Part 63 define “area source” as any stationary source of hazardous air pollutants that is not a major source as defined by this part. 40 C.F.R. § 63.2.

30. The General Provisions-Part 63 require at all times, including periods of start-up, shut-down, and malfunction, the owner or operator to operate and maintain an affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. 40 C.F.R. § 63.6(e)(1)(i).

31. The General Provisions-Part 63 provide that operation and maintenance requirements established pursuant to Section 112 of the CAA are enforceable independent of emissions limitations or other requirements in relevant standards. 40 C.F.R. § 63.6(e)(1)(iii).

**NESHAP for Iron and Steel Foundries Area Sources**

32. The Administrator published the National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources on January 2, 2008, as amended. 73 Fed. Reg. 252. These standards are codified at 40 C.F.R. Part 63, Subpart ZZZZZ (Part 63-Subpart ZZZZZ), 40 C.F.R. §§ 63.10880 through 63.10906.

33. Part 63-Subpart ZZZZZ defines “iron and steel foundry” as a facility or portion of a facility that melts scrap, ingot, and/or other forms of iron and/or steel and pours the resulting molten metal into molds to produce final or near final shape products for introduction into commerce. 40 C.F.R. § 63.10906.

34. Part 63-Subpart ZZZZZ defines “foundry operations” as all process equipment and practices used to produce metal castings for shipment. Foundry operations include: mold or core making and coating, scrap handling and preheating, metal melting and inoculation, pouring, cooling and shakeout, shotblasting, grinding, and other metal finishing operations, and sand handling. 40 C.F.R. § 63.10906.

35. Part 63-Subpart ZZZZZ defines “small foundry” as, for an existing affected source, an iron and steel foundry that has an annual metal melt production of 20,000 tons or less and, for a new affected source, an iron and steel foundry that has an annual metal melt capacity of 10,000 tons or less. 40 C.F.R. § 63.10906.

36. Part 63-Subpart ZZZZZ provides that owners and operators are subject to the subpart if they own or operate an iron and steel foundry that is an area source of hazardous air pollutant emissions. 40 C.F.R. § 63.10880(a).

37. Part 63-Subpart ZZZZZ provides that the subpart applies to each new or existing affected source. The affected source is each iron and steel foundry. 40 C.F.R. § 63.10880(b).

38. Part 63-Subpart ZZZZZ provides that an affected source is existing if the owner or operator commenced construction or reconstruction of the affected source before September 17, 2007. 40 C.F.R. § 63.10880(b)(1).

39. Part 63-Subpart ZZZZZ requires the owner or operator of an existing affected source to achieve compliance with the pollution prevention management practices for metallic scrap in 40 C.F.R. § 63.10885(a) and binder formulations in 40 C.F.R. § 63.10886 no later than January 2, 2009. 40 C.F.R. § 63.10881(a)(1).

40. Part 63-Subpart ZZZZZ requires the owner or operator of an affected facility to submit a notification of compliance status according to 40 C.F.R. § 63.9(h)(1)(i) before the close of business on the 30th day after the applicable compliance date specified in 40 C.F.R. § 63.10881. The notification must include the following compliance certifications, as applicable. 40 C.F.R. § 63.10890(c).

- a. The facility has prepared, and will operate by, written material specifications for metallic scrap according to 40 C.F.R. § 63.10885(a)(1) and/or the facility has prepared and will operate by, written material specifications for general iron and steel scrap according to 40 C.F.R. § 63.10885(a)(2). 40 C.F.R. § 63.10890(c)(1).
- b. The facility complies with the no methanol requirement for the catalyst portion of each binder chemical formulation for a furfuryl alcohol warm box mold or core making line according to 40 C.F.R. § 63.10886. 40 C.F.R. § 63.10890(c)(3).

41. Part 63-Subpart ZZZZZ requires the owner or operator of an affected facility to comply with certain General Provisions (40 C.F.R. Part 63, Subpart A) including 40 C.F.R. § 63.6(e)(1). 40 C.F.R. § 63.10890(i).

42. Section 113(a)(3) of the Act, 42 U.S.C. § 7413(a)(3), states whenever, on the basis of any information available to the Administrator of EPA, the Administrator finds that any person has violated or is in violation of any requirement or prohibition of this subchapter, the Administrator may issue a penalty order in accordance with subsection (d). This authority has been delegated to the Regional Administrator. EPA Delegation 7-6-A, 8/9/94; Region 5 Delegation 7-6-A, 2/4/00.

43. The Administrator may assess a civil penalty of up to \$37,500 per day of violation up to a total of \$295,000 for violations that occurred after January 12, 2009 through December 6, 2013, \$37,500 per day of violation up to a total of \$320,000 for CAA violations that occurred after December 6, 2013 through November 2, 2015, and \$44,539 per day of violation up to a total of \$356,312 for violations that occurred after November 2, 2015 under Section 113(d)(1) of the CAA, 42 U.S.C. § 7413(d)(1), and 40 C.F.R. Part 19.

44. Section 113(a)(3) of the Act, 42 U.S.C. § 7413(a)(3), states whenever, on the basis of any information available to the Administrator of EPA, the Administrator finds that any person has violated or is in violation of any requirement or prohibition of this subchapter, the Administrator may issue a penalty order in accordance with subsection (d). This authority has been delegated to the Regional Administrator. EPA Delegation 7-6-A, 8/9/94; Region 5 Delegation 7-6-A, 2/4/00.

45. Section 113(d)(1) limits the Administrator's authority to matters where the first alleged date of violation occurred no more than 12 months prior to initiation of the administrative action, except where the Administrator and the Attorney General of the United

States jointly determine that a matter involving a longer period of violation is appropriate for an administrative penalty action.

46. The Administrator and the Attorney General of the United States, each through their respective delegates, have determined jointly that an administrative penalty action is appropriate for the period of violations alleged in this CAFO.

#### **Factual Allegations and Alleged Violations**

47. QCC owns and operates an iron and steel foundry at 310 Euclid Avenue, Salem, Ohio (facility).

48. The facility is a Stationary Source as defined under Section 111 of the CAA, the General Provisions-Part 60, and the General Provisions-Part 63.

49. The facility is an Area Source as defined under the General Provisions-Part 63.

50. The facility is an iron and steel foundry as defined at 40 C.F.R. § 63.10906.

51. The facility is an Affected Source as defined at 40 C.F.R. § 63.10906.

52. QCC commenced construction, modification, or reconstruction of the facility before September 17, 2007.

53. The facility is an Existing Source as defined at 40 C.F.R. § 63.10880(b)(1).

54. The facility is a Small Foundry as defined at 40 C.F.R. § 63.10906.

55. The facility has one or more air contaminant sources as defined by the Ohio SIP.

56. QCC owns and operates eight centrifugal mold machines (1-8) at the facility.

57. QCC owns and operates one multipart centrifugal mold machine at the facility.

58. QCC owns and operates a Thermal Sand Reclamation Unit within the facility.

59. The Ohio Environmental Protection Agency (OEPA) issued a permit to install and operate (PTIO), Number P0084435, to QCC for the facility on September 28, 2012 (2012 PTIO).

60. The 2012 PTIO requires QCC to maintain a minimum pressure drop of 10.5 inches of water column at the East Wet Scrubber when it operates EU P009, specifically, centrifugal mold machines 1-4. 2012 PTIO Condition C.18.d)(1)a.

61. The 2012 PTIO requires QCC to maintain a minimum pressure drop of 10.5 inches of water column at the East Wet Scrubber when it operates EU P010, specifically, the multipart centrifugal mold machine. 2012 PTIO Condition C.19.d)(1)a.

62. The 2012 PTIO requires QCC to maintain a minimum pressure drop of 10.5 inches of water column at the West Wet Scrubber when it operates EU P009, specifically, centrifugal mold machines 5-8. 2012 PTIO Condition C.18.d)(1)b.

63. OEPA issued a PTIO, Number P0117198, to QCC for the Thermal Sand Reclamation Unit on September 2, 2014 (2014 PTIO).

64. The 2014 PTIO identifies the Thermal Sand Reclamation Unit with an emissions unit identification of P901.

65. The 2014 PTIO states volatile organic compound (VOC) emissions from the Thermal Sand Reclamation Unit shall not exceed 0.61 ton/month averaged over a rolling, 12-month period. 2014 PTIO Condition C.1.b)(1)a.

66. Performance testing was conducted on the P901 baghouse exhaust stack and sand system baghouse on January 7-8, 2016 (2016 testing). The 2016 testing measured the concentration of filterable particulate matter (PM), filterable particulate matter less than or equal to ten microns in aerodynamic diameter (PM10), oxygen, carbon dioxide, nitrogen oxides, carbon monoxide, and total gaseous organics (TGO).

67. The 2016 testing final report stated the average TGO emissions from the P901 baghouse exhaust stack were 2.14 pounds of TGO per hour.

68. The 2.14 lbs/hr TGO test results convert to the potential to emit 0.7811 ton of VOC per month using operational data, permitted limitations, and methodologies identified in the 2014 PTIO.

69. EPA conducted an inspection at the facility on February 21, 2013.

70. EPA issued a request for information to QCC on April 25, 2014.

71. EPA issued a Notice of Violation and Finding of Violation (NOV/FOV) to QCC on September 2, 2014 (2014 NOV/FOV).

72. The 2014 NOV/FOV alleges violations of QCC's 2012 PTIO, the Ohio SIP, the General Provisions-Part 63, Part 63-Subpart ZZZZZ, and the CAA as follows:

- a. QCC failed to obtain a PTI and a PTO for its Wheelabrator-Frye Swing Tableblast, in violation of OAC Rules 3745-31-02 and 3745-35-02, the Ohio SIP, and the CAA.
- b. QCC failed to maintain a minimum pressure drop of 10.5 inches of water column at its East Wet Scrubber, in violation of the 2012 PTIO Conditions C.18.d)(1)a. and C.19.d)(1)a, the Ohio SIP, and the CAA.
- c. QCC failed to maintain a minimum pressure drop of 10.5 inches of water column at its West Wet Scrubber, in violation of 2012 PTIO Condition C.18.d)(1)b, the Ohio SIP, and the CAA.
- d. QCC failed to maintain the East Wet Scrubber associated with centrifugal mold machines 1-4 (EU P009) and the multipart centrifugal mold machines (EU P010) in a manner consistent with safety and good air pollution control practices for minimizing emissions, in violation of 40 C.F.R. §§ 63.6(e)(1) and 63.10890(i) and the CAA.

- e. QCC failed to maintain the West Wet Scrubber associated with centrifugal mold machines 5-8 (EU P009) in a manner consistent with safety and good air pollution control practices for minimizing emissions, in violation of 40 C.F.R. §§ 63.6(e)(1) and 63.10890(i) and the CAA.
- f. QCC failed to submit to EPA a notification of compliance status according to 40 C.F.R. § 63.9(h)(1)(i) before the close of business on the 30th day after the applicable compliance date specified in 40 C.F.R. § 63.10881 for its metallic scrap management program and for its binder formulations, in violation of 40 C.F.R. § 63.10890(c)(1 and 3) and the CAA.

73. EPA issued a Section 114 Request for Information to QCC on April 25, 2014.

74. QCC submitted information in response to the April 25, 2014 Section 114 Request for Information on June 17, 2014. Included with QCC's response was, among other things:

- a. Quarterly deviation reports QCC submitted to OEPA in accordance with its 2012 permits documenting deviations from maintaining the minimum pressure drops at the East Wet Scrubber when it operated and the West Wet Scrubber when it operated.
- b. An April 23, 2008 letter from the original equipment manufacturer of the East and West Wet Scrubbers confirming that at the lower operating pressure drop of 10.5 to 11.5 inches of water column, the West Wet Scrubber is operating normally and effectively removing air pollutants.

75. Representatives from EPA and QCC met on October 21, 2014 to discuss the 2014

NOV/FOV.

76. QCC conducted performance testing for particulate matter at the East and West Wet Scrubbers on December 9, 2014 (2014 test) in response to the June 17, 2014 Section 114 Request for Information.

77. QCC demonstrated during the 2014 test that it complied with the applicable particulate matter emission limits established for the scrubber outlets in its 2012 permits when the East Wet Scrubber operated at pressure drops above 10.5 inches of water column and when the West Wet Scrubber operated at pressure drops of 1.0 to 1.5 inches of water column.

78. EPA issued a NOV/FOV to QCC on April 1, 2016 (2016 NOV/FOV).

79. The 2016 NOV/FOV alleges QCC failed to demonstrate compliance with the applicable emission limit for VOC of 0.61 tons of VOC per month established in its 2014 PTIO, in violation of the 2014 PTIO condition C.1.b)(1)a., OAC Rule 3745-31-05, the Ohio SIP, and the CAA.

80. Representatives from EPA and QCC held calls on June 28, 2016 and July 27, 2016 to discuss the 2016 NOV/FOV.

#### **Civil Penalty**

81. Based on analysis of the factors specified in Section 113(e) of the CAA, 42 U.S.C. § 7413(e), the facts of this case and Respondent's cooperation, efforts to promptly return to compliance, and agreement to perform a supplemental environmental project, Complainant has determined that an appropriate civil penalty to settle this action is \$38,781. Respondent will resolve this civil penalty by paying a cash civil penalty amount of \$26,781 and mitigating the remaining portion of the penalty by completing a supplemental environmental project costing Respondent at least \$15,000.

82. Respondent must pay a \$26,781 civil penalty in four installments, with interest, as follows:

Installment	Due by	Payment	Principal	Interest
Payment 1	Within 30 days from the effective date of the CAFO.	\$6,695.25	\$6,695.25	
Payment 2	Within 90 days from the effective date of the CAFO.	\$6,728.73	\$6,695.25	\$33.48
Payment 3	Within 180 days from the effective date of the CAFO.	\$6,728.73	\$6,695.25	\$33.48
Payment 4	Within 270 days from the effective date of the CAFO.	\$6,711.99	\$6,695.25	\$16.74

Payments must be made by one of the following methods:

Sending a cashier's or certified check, payable to "Treasurer, United States of America," to:

U.S. EPA  
 Fines and Penalties  
 Cincinnati Finance Center  
 P.O. Box 979077  
 St. Louis, Missouri 63197-9000

or, for checks sent by express mail (non-U.S. Postal Service which will not deliver mail to P.O.

Boxes) by sending a cashier's or certified check, payable to "Treasurer, United States of America," to:

U.S. Bank  
 Government Lockbox 979077  
 U.S. EPA Fines and Penalties  
 1005 Convention Plaza  
 Mail Station SL-MO-C2-GL  
 St. Louis, Missouri 63101

The check must note Respondent's name and the docket number of this CAFO.

Electronic funds transfer, payable to "Treasurer, United States of America," and sent to:

Federal Reserve Bank of New York  
ABA No. 021030004  
Account No. 68010727  
33 Liberty Street  
New York, New York 10045  
Field Tag 4200 of the Fedwire message should  
read: "D68010727 Environmental Protection Agency"

The comment or description field of the electronic funds transfer must state Respondent's name and the docket number of this CAFO.

83. Respondent must send a notice of each installment payment that states Respondent's name and the docket number of this CAFO to EPA at the following addresses when it pays the penalty:

Attn: Compliance Tracker (AE-17J)  
Air Enforcement and Compliance Assurance Branch  
Air and Radiation Division  
U.S. Environmental Protection Agency, Region 5  
77 W. Jackson Boulevard  
Chicago, Illinois 60604

Tom Williams (C-14J)  
Office of Regional Counsel  
U.S. Environmental Protection Agency, Region 5  
77 W. Jackson Boulevard  
Chicago, Illinois 60604

Regional Hearing Clerk (E-19J)  
U.S. Environmental Protection Agency, Region 5  
77 W. Jackson Boulevard  
Chicago, Illinois 60604

84. This civil penalty is not deductible for federal tax purposes.

85. If Respondent does not timely pay the civil penalty or any stipulated penalties under Paragraph 100 below, EPA may request the Attorney General of the United States to bring an action to collect any unpaid portion of the penalty with interest, nonpayment penalties and the United States enforcement expenses for the collection action under Section 113(d)(5) of the

CAA, 42 U.S.C. § 7413(d)(5). The validity, amount and appropriateness of the civil penalty are not reviewable in a collection action.

86. Respondent must pay the following on any amount overdue under this CAFO. Interest will accrue on any overdue amount from the date payment was due at a rate established by the Secretary of the Treasury pursuant to 26 U.S.C. § 6621(a)(2). Respondent must pay the United States enforcement expenses, including but not limited to attorneys' fees and costs incurred by the United States for collection proceedings. In addition, Respondent must pay a quarterly nonpayment penalty each quarter during which the assessed penalty is overdue. This nonpayment penalty will be 10 percent of the aggregate amount of the outstanding penalties and nonpayment penalties accrued from the beginning of the quarter. 42 U.S.C. § 7413(d)(5).

#### **Supplemental Environment Project**

87. Respondent must complete a supplemental environmental project (SEP) designed to reduce particulate matter emissions from QCC's inoculation processes (at QCC's centrifugal and sand foundries) by installing and operating the two air pollution control (APC) capture and control systems identified below (See Exhibit A for detailed scope of work).

- a. An APC on the Centrifugal Foundry Metal Inoculation process (Emission Unit F003) that must result in an overall expected control efficiency (CE) of at least 78% for particulates and 72% for metal and organic HAPS.
- b. An APC on the Sand Foundry Metal Inoculation process (Emission Unit F003) that must result in an overall expected control efficiency of at least 80% for particulates and 72% for metal HAPS.

88. At its Salem facility, Respondent must complete the SEP in accordance with the following schedule:

- a. Within 30 days of the effective date of this CAFO, QCC will prepare final design information for the Centrifugal and Sand Foundry hood capture and control systems.
- b. Within 90 days of the effective date of this CAFO, QCC will complete the fabrication, installation, and operation of the Centrifugal Foundry hood capture and control system.
- c. Within 150 days of the effective date of this CAFO, QCC will conduct an engineering evaluation study of, or performance testing for particulate matter at, the Centrifugal Foundry hood capture and control system. The engineering evaluation study and/or performance testing must demonstrate the capture and control system meets the design requirements of Paragraph 87(a).
- d. Within 180 days of the effective date of this CAFO, QCC will complete the fabrication, installation, and operation of the Sand Foundry hood capture and control system.
- e. Within 240 days of the effective date of this CAFO, QCC will conduct an engineering evaluation study of, or performance testing for particulate matter at, the Sand Foundry hood capture and control system. The engineering evaluation study, or performance testing, must demonstrate the capture and control system meets the design requirements of Paragraph 87(b).
- f. Within 270 days of the effective date of this CAFO, QCC will submit an application to Ohio EPA to modify QCC's current PTIO to incorporate the recordkeeping requirements of Paragraph 90 as well as the continuous use of the Centrifugal Foundry and Sand Foundry hoods for capturing and controlling air pollutants during the inoculation processes required by Paragraph 92.

89. Respondent must submit the following reports in accordance with the schedule provided below.

- a. Within 60 days following the completion of testing at each of the inoculation hoods, QCC will submit to EPA a final report summarizing the emission testing performed on each hood, methods used, and emission reductions achieved.
- b. Within 180 days of the effective date of this CAFO, Respondent will submit to EPA a progress report summarizing the implementation status of the SEP, as well as expected dates when the remaining components of the SEP will be completed. If the SEP is completed within 180 days of the effective date of this CAFO, then a progress report is unnecessary and Respondent may submit the final SEP completion report in accordance with Paragraph 95 to satisfy this reporting requirement.

90. Respondent must keep the following records on-site under this CAFO until these recordkeeping requirements are incorporated into the terms of its PTIO in accordance with Paragraph 88(f):

- a. Records of each inoculation event that occurs, the date and time of each inoculation event, and the length of time each event occurs; and
- b. Operational records for each capture and control system hood implemented as part of this SEP showing when the systems were operated, the date and time each system is operated, and the length of time each system was operated.

91. Respondent must spend at least \$15,000, including consulting and evaluation fees, purchasing of equipment, and installation costs.

92. Respondent must continuously use and operate the inoculation hoods each time an inoculation event is occurring at the facility.

93. Respondent certifies as follows:

I certify that Korff Holdings, LLC is not required to perform or develop the SEP by any law, regulation, order, or agreement or as injunctive relief as of the date that I am signing this CAFO. I further certify that Korff Holdings, LLC has not received, and is not negotiating to receive, credit for the SEP in any other enforcement action.

I certify that Korff Holdings, LLC is not a party to any open federal financial assistance transaction that is funding or could be used to fund the same activity as the SEP. I further certify that, to the best of my knowledge and belief after reasonable inquiry, there is no such open federal financial transaction that is funding or could be used to fund the same activity as the SEP, nor has the same activity been described in an unsuccessful federal financial assistance transaction proposal submitted to EPA within two years of the date that I am signing this CAFO (unless the project was barred from funding as statutorily ineligible). For purposes of this certification, the term "open federal financial assistance transaction" refers to a grant, cooperative agreement, loan, federally-guaranteed loan guarantee or other mechanism for providing federal financial assistance whose performance period has not expired.

94. EPA may inspect the facility at any time to monitor Respondent's compliance with this CAFO's SEP requirements.

95. Respondent must submit a SEP completion report to EPA within 60 days of completing the SEP in accordance with Paragraph 88(a-f). This report must contain the following information:

- a. Detailed description of the SEP as completed;
- b. Description of any operating problems and the actions taken to correct the problems;
- c. Itemized cost of goods and services used to complete the SEP documented by copies of invoices, purchase orders or cancelled checks that specifically identify and itemize the individual cost of the goods and services;
- d. Certification that Respondent has completed the SEP in compliance with this CAFO;
- e. Certification that Respondent has operated the Centrifugal Foundry hood capture and control system in accordance with Paragraph 92 since the date installation was completed under Paragraph 88(b),

- f. Certification that Respondent has operated the Sand Foundry hood capture and control system in accordance with Paragraph 92 since the date installation was completed under Paragraph 88(d), and
- g. Description of the environmental and public health benefits resulting from the SEP (quantify the benefits and pollution reductions, if feasible).

96. Respondent must submit all notices and reports required by this CAFO by first-class mail to the Compliance Tracker of the Air Enforcement and Compliance Assurance Branch and Tom M. Williams at the addresses provided in Paragraph 83, above.

97. In each report that Respondent submits as provided by this CAFO, it must certify that the report is true and complete by including the following statement signed by one of its officers:

I certify that I am familiar with the information in this document and that, based on my inquiry of those individuals responsible for obtaining the information, it is true and complete to the best of my knowledge. I know that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

98. Following receipt of the SEP completion report described in Paragraph 95, above, EPA must notify Respondent in writing that:

- a. It has satisfactorily completed the SEP and the SEP report;
- b. There are deficiencies in the SEP as completed or in the SEP report and EPA will give Respondent 30 days to correct the deficiencies; or
- c. It has not satisfactorily completed the SEP or the SEP report and EPA will seek stipulated penalties under Paragraph 102.

99. If EPA exercises option b above, Respondent may object in writing to the deficiency notice within 10 days of receiving the notice. The parties will have 30 days from EPA's receipt of Respondent's objection to reach an agreement. If the parties cannot reach an agreement, EPA will give Respondent a written decision on its objection. Respondent will comply with any requirement that EPA imposes in its decision. If Respondent does not complete

the SEP as required by EPA's decision, Respondent will pay stipulated penalties to the United States under Paragraph 100, below.

100. If Respondent violates any requirement of this CAFO relating to the SEP, Respondent must pay stipulated penalties to the United States as follows:

- a. Except as provided in subparagraph b, below, if Respondent did not complete the SEP satisfactorily according to the requirements of this CAFO, including the schedule in Paragraph 88, Respondent must pay a penalty of \$12,000.
- b. If Respondent did not complete the SEP satisfactorily, but EPA determines that Respondent made good faith and timely efforts to complete the SEP and certified, with supporting documents, that it spent at least 90 percent of the amount set forth in Paragraph 91, Respondent will not be liable for any stipulated penalty under subparagraph a, above.
- c. If Respondent completed the SEP satisfactorily, but spent less than 90 percent of the amount set forth in Paragraph 91, Respondent must pay a penalty of \$2040.
- d. If Respondent did not submit timely the SEP completion report in accordance with Paragraph 95 or any other report required by Paragraph 89 Respondent must pay penalties in the following amounts for each day after the report was due until it submits the report:

<u>Penalty per violation per day</u>	<u>Period of violation</u>
\$500	1 <sup>st</sup> through 14 <sup>th</sup> day
\$1,000	15 <sup>th</sup> through 30 <sup>th</sup> day
\$1,500	31 <sup>st</sup> day and beyond

101. EPA's determinations of whether Respondent completed the SEP satisfactorily and whether Respondent made good faith and timely efforts to complete the SEP will bind Respondent.

102. Respondent must pay any stipulated penalties within 15 days of receiving EPA's written demand for the penalties. Respondent will use the method of payment specified in Paragraphs 82, above, and will pay interest and nonpayment penalties on any overdue amounts.

103. Any public statement that Respondent makes referring to the SEP must include the following language: "Quaker City Castings undertook this project under the settlement of the

United States Environmental Protection Agency's enforcement action against Korff Holdings, LLC for violations of the Clean Air Act.”

104. For federal income tax purposes, Respondent will neither capitalize into inventory or basis, nor deduct any costs or expenditures incurred in performing the SEP.

### **General Provisions**

105. Consistent with the Standing Order Authorizing E-Mail Service of Orders and Other Documents Issued by the Regional Administrator or Regional Judicial Officer under the Consolidated Rules, dated March 27, 2015, the parties consent to service of this CAFO by e-mail at the following e-mail addresses: [williams.thomas@epa.gov](mailto:williams.thomas@epa.gov) (for Complainant), and [gkorff@qccast.com](mailto:gkorff@qccast.com) (for Respondent). The parties waive their right to service by the methods specified in 40 C.F.R. § 22.6.

106. This CAFO resolves only Respondent's liability for federal civil penalties for the violations alleged in this CAFO.

107. The CAFO does not affect the rights of EPA or the United States to pursue appropriate injunctive or other equitable relief or criminal sanctions for any violation of law.

108. This CAFO does not affect Respondent's responsibility to comply with the CAA and other applicable federal, state and local laws. Except as provided in Paragraph 106, above, compliance with this CAFO will not be a defense to any actions subsequently commenced pursuant to federal laws administered by EPA.

109. Respondent certifies that it is complying fully with 40 C.F.R. Part 63, Subpart ZZZZZ and the Ohio SIP.

110. This CAFO constitutes an “enforcement response” as that term is used in EPA's Clean Air Act Stationary Civil Penalty Policy to determine Respondent's “full compliance history” under Section 113(e) of the CAA, 42 U.S.C. § 7413(e).

111. The terms of this CAFO bind Respondent, its successors and assigns.
112. Each person signing this consent agreement certifies that he or she has the authority to sign for the party whom he or she represents and to bind that party to its terms.
113. Each party agrees to bear its own costs and attorneys' fees in this action.
114. This CAFO constitutes the entire agreement between the parties.



**United States Environmental Protection Agency, Complainant**

9/12/17  
Date

  
\_\_\_\_\_  
Edward Nam  
Director  
Air and Radiation Division  
U.S. Environmental Protection Agency, Region 5

**Consent Agreement and Final Order**  
**In the Matter of: Korff Holdings, LLC**  
**Docket No.**

CAA-05-2017-0038

**Final Order**

This Consent Agreement and Final Order, as agreed to by the parties, shall become effective immediately upon filing with the Regional Hearing Clerk. This Final Order concludes this proceeding pursuant to 40 C.F.R. §§ 22.18 and 22.31. IT IS SO ORDERED.

September 12, 2017  
Date

Ann L. Coyle  
Ann L. Coyle  
Regional Judicial Officer  
U.S. Environmental Protection Agency  
Region 5

Consent Agreement and Final Order  
In the matter of: Korff Holdings LLC d/b/a/ Quaker City Castings  
Docket Number: CAA-05-2017-0038

**CERTIFICATE OF SERVICE**

I certify that I served a true and correct copy of the foregoing **Consent Agreement and Final Order**, docket number CAA-05-2017-0038, which was filed on September 13, 2017, in the following manner to the following addressees:

Copy by E-mail to Respondent: Geoff Korff, President  
gkorff@qccast.com

Copy by E-mail to Attorney for Complainant: Thomas Williams, Associate Regional Counsel  
Williams.thomas@epa.gov

Copy by E-mail to Attorney for Respondent: Geoff Korff, President  
gkorff@qccast.com

Copy by E-mail to Regional Judicial Officer: Ann Coyle  
coyle.ann@epa.gov

Dated: September 13, 2017

  
\_\_\_\_\_  
LaDawn Whitehead  
Regional Hearing Clerk  
U.S. Environmental Protection Agency, Region 5

CAA-05-2017-0038

EXHIBIT A

QUAKER CITY CASTINGS  
Supplemental Environmental Project Proposal



**Quaker City Castings Follow-up to USEPA  
Notice and Finding of Violation EPA-5-14-OH-17  
Supplemental Environmental Project (SEP) Proposal**

On behalf of Quaker City Castings (QCC), Labyrinth Management Group, Inc (LMG) has prepared this proposal for QCC's performance of a Supplemental Environmental Project (SEP) as part of ongoing negotiations to resolve the United States Environmental Protection Agency's (U.S. EPA's) Notice and Findings of Violation (FOV) letter. The USEPA FOV letter was issued to QCC's iron & steel foundry located at 310 Euclid Avenue in Salem, Ohio and dated September 2, 2014. LMG has prepared this proposal based on limited existing information.

**SEP PROPOSAL OVERVIEW**

QCC proposes to design, install and operate air pollutant control (APC) capture and control systems for the following operations currently authorized for uncontrolled fugitive air pollutant emissions in QCC's Ohio Federally Enforceable State Operating Permit (FESOP)<sup>1</sup>:

- Centrifugal Foundry Metal Inoculation (Emission Unit F003)
- Sand Foundry Metal Inoculation (Emission Unit F003)

Therefore, the final design of the and installation of the final responses based on our knowledge and experience, additional information provided by QCC, and information previously not provided to U.S. EPA that was contained within LMG's existing files.

**Centrifugal Foundry Metal Inoculation APC System**

The proposed APC system for the Centrifugal Foundry metal inoculation process will utilize a capture hood routed to the existing West Wet Scrubber. The West Wet Scrubber is also used for controlling air pollutants from the individual spinners/mold machines 1-4 associated with centrifugal casting Emission Unit P009. Based on LMG's velocity measurements, a minimum available exhaust draft of 3,500 actual cubic feet per minute (acfm) is available from the West Wet Scrubber for an inoculation capture hood. The final exhaust draft is expected to be greater than this minimum as the design will incorporate slide gates to isolate the individual spinners/mold machines from the exhaust ducting when inoculations are performed.

A preliminary view of the capture hood is provided as Attachment 1. The current hood design would be approximately 5 ft by 5 ft with top-mounted slot ventilation ducted into the existing West Wet Scrubber exhaust system. The hood requires a forward v-notch to allow the overhead crane chain to enter the hood. QCC would engineer a slide closure system for the slot when the ladle was in position.

Based on the proposed design and existing available exhaust draft QCC assumes a capture efficiency of 80% for the inoculation hood. This capture rate results from attempting to capture the large expansion of gases that occurs during the initial 15 to 30 seconds of the process when liquid metal is poured into the inoculation ladle.

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<sup>1</sup> Ohio Permit No. P0084435



**Labyrinth**  
Management Group, Inc.

Strategic Environmental, Safety & Health Solutions

**Quaker City Castings Follow-up to USEPA  
Notice and Finding of Violation EPA-5-14-OH-17  
Supplemental Environmental Project (SEP) Proposal**

Based on the recent USEPA required wet scrubber emission testing, QCC expects the West Wet Scrubber to have a meet a 0.005 grains per dry standard cubic feet per minute (dscfm) emission rate resulting in an estimated minimum of 98% removal for particulates (PM/PM10/PM2.5) and 90% for metal and organic hazardous air pollutants (HAPs). Therefore, the overall expected control efficiency (CE) of the proposed APC system is approximately 78% for particulates and 72% for HAPs.

**Sand Foundry Metal Inoculation APC System**

The proposed APC system for the Sand Foundry metal inoculation process will utilize a capture hood routed to a Torit Dust Collector. Based on QCC information, a minimum exhaust draft of 5,000 acfm is expected to be available for the Sand Foundry inoculation capture hood. The final exhaust draft may be greater than this minimum as the design will incorporate slid gates to isolate the exhaust ducting when inoculations are performed.

A preliminary view of the capture hood is provided as Attachment 2. The current hood design would be approximately 5 ft by 4 ft with ventilation vertically ducted into the Torit dust collector. The Sand Foundry hood will be configured to allow the overhead crane to position a ladle under the hood. Based on the proposed design and anticipated exhaust draft, QCC also proposes a capture efficiency of 80% for the Sand Foundry inoculation hood. Again, this capture rate also results from attempting to capture the large expansion of gases that occurs during the initial 15 to 30 seconds of the process when liquid metal is poured into the inoculation ladle.

QCC expects the Torit dust collector to have the ability to meet a 0.003 grains per dscfm emission rate resulting in an estimated minimum of 99% removal for particulates (PM/PM10/PM2.5) and 90% for metal HAPs. Therefore, the overall expected control efficiency of the proposed APC system is approximately 80% for particulates and 72% for metal HAPs.

**ENVIRONMENTAL IMPROVEMENT**

As discussed above, the Centrifugal and Sand Foundry inoculation process is currently permitted as an uncontrolled fugitive emission unit. Based on the proposed overall control efficiencies for the inoculation hood APC systems, this proposed SEP would result in the estimated annual net criteria air pollutant reductions of 24.2 tons of PM, 11.3 tons of PM10, 5.8 tons of PM2.5 and 1.1 tons of sulfur dioxide (SO2). In addition, annual hazardous air pollutant (HAP) emission reductions include an estimated 1.2 tons of total metal HAPs and 1.4 tons of organic HAPs.

These estimated SEP air pollutant emission reductions are based on AP-42 emission factors, estimated capture and control efficiencies described above, and QCC's current FESOP annual limit of 14,620 tons of metal melt that could be inoculated.



**Labyrinth**  
Management Group, Inc

Strategic Environmental, Safety & Health Solutions

**Quaker City Castings Follow-up to USEPA  
Notice and Finding of Violation EPA-5-14-OH-17  
Supplemental Environmental Project (SEP) Proposal**

**SCHEDULE**

QCC proposes a staggered schedule for implementation of the SEP. The total estimated time to complete the SEP is less than 1 year.

Within 30 days of finalization and approval of the SEP, QCC will prepare final design information for the Centrifugal and Sand Foundry hoods.

Within 90 days of SEP finalization and approval, QCC will complete the fabrication, installation and hood testing/documentation of the Centrifugal Foundry inoculation hood. Hood operation will begin upon completion of installation and testing.

Within 180 days of SEP finalization and approval, QCC will complete the fabrication, installation and hood testing/documentation of the Sand Foundry inoculation hood. Hood operation would begin upon completion of installation and testing.

Within 270 days of SEP finalization and approval, QCC will submit an application to Ohio EPA to modify QCC's current FESOP PTIO to incorporate the use of the inoculation hoods for removal of air pollutants during the inoculation process.

**ESTIMATED SEP COST**

The minimum estimated cost of completing this proposed SEP is \$25,000, including design consulting and evaluation fees; costs for materials and equipment; contractor costs; and QCC's internal labor costs.

It is important to note that these minimum costs do not include APC system testing of the inoculation hoods for capture and/or control efficiency. If emission unit/SEP APC system testing is required the estimated QCC SEP cost will materially increase.

Attachment 1: Centrifugal Foundry Inoculation Hood Drawing  
Attachment 2: Main Sand Foundry Inoculation Hood Drawing  
Attachment 3: SEP Air Pollutant Emission Estimates

Cc: G. Korff, QCC w/ attachments