



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

APR 01 2016

REPLY TO THE ATTENTION OF:

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Geoff Korff, President  
Korff Holdings, LLC d/b/a Quaker City Castings  
310 Euclid Avenue  
Salem, Ohio 44460

Re: Notice and Finding of Violation  
Quaker City Castings  
Salem, Ohio

Dear Geoff Korff:

The U.S. Environmental Protection Agency is issuing the enclosed Notice and Finding of Violation (NOV/FOV) to Korff Holdings, LLC, doing business as Quaker City Castings (you) under Section 113(a)(1) and (a)(3) of the Clean Air Act (the Act), 42 U.S.C. § 7413(a)(1) and (a)(3). EPA finds that you violated the requirements of the Ohio State Implementation Plan (OH SIP), the Standards of Performance for Calciners and Dryers in Mineral Industries (40 C.F.R. Part 60, Subpart UUU), and Sections 110 and 111 of the Act at your Salem, Ohio facility.

Section 113 of the Clean Air Act gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order and bringing a judicial civil or criminal action.

We are offering you an opportunity to confer with us about the violations alleged in this NOV/FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply, and the steps you will take to prevent future violations. To make the conference more productive, we encourage you to submit to us information responsive to this NOV/FOV prior to the conference date.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contact in this matter is Kevin Vuilleumier. You may call him at (312) 886-6188 to request a conference. You should make the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

A handwritten signature in black ink, appearing to read "G. Czerniak". The signature is fluid and cursive, with a large initial "G" and a long, sweeping underline.

George T. Czerniak  
Director  
Air and Radiation Division

Enclosure

cc: Bob Hodanbosi, Ohio EPA  
Ed Fasko, Ohio EPA NEDO  
Kevin Fortune, Ohio EPA NEDO (e-copy)

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5**

<b>IN THE MATTER OF:</b>	)	
	)	
<b>Korff Holdings, LLC</b>	)	<b>NOTICE OF VIOLATION and</b>
<b>d/b/a Quaker City Castings</b>	)	<b>FINDING OF VIOLATION</b>
<b>Salem, Ohio</b>	)	
	)	<b>EPA-5-16-OH-08</b>
Proceedings Pursuant to	)	
the Clean Air Act	)	
42 U.S.C. §§ 7401 <i>et seq.</i>	)	

**NOTICE AND FINDING OF VIOLATION**

The U.S. Environmental Protection Agency (EPA) is sending this Notice of Violation and Finding of Violation (NOV/FOV or Notice) to notify Korff Holdings, LLC d/b/a Quaker City Castings (you or QCC) that we find you are violating the following:

- a. The Standards of Performance for Calciners and Dryers in Mineral Industries (codified at 40 C.F.R. Part 60, Subpart UUU); and
- b. Your federally-enforceable Permit-to-Install and Operate (PTIO) and the Ohio State Implementation Plan (SIP).

Violations of Subpart UUU also constitute violations of Section 111 of the Clean Air Act (the Act), 42 United States Code (U.S.C) § 7411. Violations of the Ohio SIP and permits issued in accordance with an approved program incorporated into a SIP also constitute violations of Section 110 of the Act, 42 U.S.C. § 7410.

**Regulatory Requirements**

**Ohio SIP**

- 1. Section 108(a)(1) of the Act, 42 U.S.C. § 7408(a)(1) (A-C), requires the Administrator of the EPA (Administrator) to publish, and from time to time revise, a list of air pollutants which, in

the Administrator's judgment, cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare.

2. Section 109 of the Act, 42 U.S.C. § 7409, requires the Administrator to promulgate national primary and secondary ambient air quality standards (NAAQS) to protect the public health and welfare.

3. 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 NAAQS.

4. The federally-approved Ohio SIP requirements relevant to this NOV/FOV are as follows:

a. 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, as defined in Chapter 3745-77 of the Administrative Code, and that is not required to obtain a Title V permit, without first obtaining a PTIO from the director, Ohio Environmental Protection Agency (director). OAC Rule 3745-31-02(A)(1)(b), effective March 22, 2013. 78 Fed. Reg. 11748.

b. The director shall issue a PTI [PTIO] based on the information appearing in the application, information gathered by or furnished to the Ohio Environmental Protection Agency (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 and 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 (3) employ best available technology (BAT). OAC Rule 3745-31-05(A)(1-3), effective March 22, 2013. 78 Fed. Reg. 11748.

c. The 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. Special terms and conditions necessary to ensure compliance shall be federally enforceable. Federally enforceable terms and conditions will be designated as such through terms and conditions of a final PTI issued under this chapter. OAC Rule 3745-31-05(D)(1)(a), effective March 22, 2013. 78 Fed. Reg. 11748.

#### Standards of Performance for New Stationary Sources

5. Section 111(b)(1)(A) of the Act, 42 U.S.C. § 7411(b)(1)(A), requires the Administrator to publish, and from time to time revise, a list of categories of stationary sources which in the Administrator's judgment cause, or contribute significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare.

6. Section 111(b)(1)(B) of the Act, 42 U.S.C. § 7411(b)(1)(B), requires the Administrator to propose and promulgate regulations establishing federal Standards of Performance for New Stationary Sources (NSPS) within the listed stationary source categories.

7. On January 8, 1982, the Administrator published a list of source categories in accordance with Section 111 of the Act, 42 U.S.C. § 7411. *See* 47 Fed. Reg. 951 (codified at 40 C.F.R. § 60.16).

8. The prioritized list of source categories includes Non-Metallic Mineral Processing (priority 13) and Metallic Mineral Processing (priority 14). *See* 40 C.F.R. § 60.16.

9. Section 111(e) of the Act, 42 U.S.C. § 7411(e), provides that after the effective date of standards of performance promulgated under this section, it shall be unlawful for any owner or

operator of any new source to operate such source in violation of any applicable standard of performance.

10. The NSPS regulations apply to the owner or operator of any “stationary source” which contains an “affected facility,” the “construction” or “modification” of which is commenced after the date of publication in Part 60 of any standard or proposed standard applicable to that facility.

*See* 40 C.F.R. § 60.1.

11. Section 111(a)(3) of the Act, 42 U.S.C. § 7411(a)(3), defines “stationary source” to be any building, structure, facility, or installation which emits or may emit any air pollutant.

#### Standards of Performance for New Stationary Sources – General Provisions

12. On December 23, 1971, the Administrator promulgated the Standards of Performance for Stationary Sources - General Provisions at 40 C.F.R. Part 60, Subpart A (General Provisions).

*See* 36 Fed. Reg. 24877. The General Provisions are codified at 40 C.F.R. §§ 60.1 - 60.19.

13. The General Provisions relevant to this NOV/FOV are as follows:

a. 40 C.F.R. § 60.2 defines “construction” to mean fabrication, erection, or installation of an affected facility.

b. 40 C.F.R. § 60.2 defines an “affected facility” under the NSPS to be, with reference to a “stationary source,” any apparatus to which a standard is applicable.

c. 40 C.F.R. § 60.7(a)(1) requires that any owner or operator subject to the provisions of Part 60 furnish the Administrator a notification of the date construction (or reconstruction) of an affected facility commenced postmarked no later than 30 days after such date.

- d. 40 C.F.R. § 60.7(a)(3) requires that any owner or operator subject to the provisions of Part 60 furnish the Administrator a notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.
- e. 40 C.F.R. § 60.7(a)(6) requires that any owner or operator subject to the provisions of Part 60 furnish the Administrator a notification of the anticipated date for conducting the opacity observations required by 40 C.F.R. § 60.11(e)(1) postmarked not less than 30 days prior to such date.
- f. 40 C.F.R. § 60.8(a) provides that within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility, or at such other times specified by this part, and at such other times as may be required by the Administrator under Section 114 of the Act, the owner or operator of an affected facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).
- g. 40 C.F.R. § 60.8(b) requires that performance tests be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart.
- h. 40 C.F.R. § 60.8(f) requires that each performance test consist of three separate runs using the applicable test method, and that each run be conducted for the time and under the conditions specified in the applicable standard.
- i. 40 C.F.R. § 60.11(b) requires that compliance with opacity standards in Part 60 be determined by conducting observations in accordance with Method 9 in Appendix A of Part 60, any alternative method that is approved by the Administrator, or as provided in

40 C.F.R. § 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be three hours for the performance test or other set of observations.

j. 40 C.F.R. § 60.11(e) requires that for the purpose of demonstrating initial compliance, opacity observations be conducted concurrently with the initial performance test required in 40 C.F.R. § 60.8.

#### Standards of Performance for New Stationary Sources – Subpart UUU

14. The Administrator promulgated the Standards of Performance for Calciners and Dryers in Mineral Industries (Subpart UUU) on September 28, 1992, which were subsequently amended on July 29, 1993 and October 17, 2000. *See* 57 Fed. Reg. 44503, 58 Fed. Reg. 40591 and 65 Fed. Reg. 61778. Subpart UUU is set forth at 40 C.F.R. §§ 60.730 through 60.737.

15. The affected facility to which the provisions of Subpart UUU applies is each “calciner” and “dryer” at a “mineral processing plant.” *See* 40 C.F.R. § 60.730(a).

16. The owner or operator of any facility under 40 C.F.R. § 60.730(a) that commences construction, modification, or reconstruction after April 23, 1986, is subject to the requirements of Subpart UUU. *See* 40 C.F.R. § 60.730(c).

17. The requirements of Subpart UUU relevant to this NOV/FOV are as follows:

a. 40 C.F.R. § 60.731 defines “calciner” to mean the equipment used to remove combined (chemically bound) water and/or gases from mineral material through direct or indirect heating.

b. 40 C.F.R. § 60.731 defines “mineral processing plant” to mean any facility that processes or produces any of the following minerals, their concentrates, or any mixture of which the majority (greater than fifty percent) is any of the following minerals, or a

combination of these minerals: alumina, ball clay, bentonite, diatomite, feldspar, fire clay, fuller's earth, gypsum, industrial sand, kaolin, lightweight aggregate, magnesium compounds, perlite, roofing granules, talc, titanium dioxide, and vermiculite.

c. 40 C.F.R. § 60.732 requires that each owner or operator of any affected facility that is subject to the requirements of Subpart UUU comply with the emission limitations set forth in this section on and after the date on which the initial performance test required by 40 C.F.R. § 60.8 is completed, but not later than 180 days after the initial startup, whichever date comes first.

d. 40 C.F.R. § 60.734(a) provides that with the exception of the process units described in 40 C.F.R. § 60.734(b), (c), and (d), the owner or operator of an affected facility subject to the provisions of this subpart who uses a dry control device to comply with the mass emission standard shall install, calibrate, maintain, and operate a continuous monitoring system to measure and record the opacity of emissions discharged into the atmosphere from the control device.

e. 40 C.F.R. § 60.735(a) requires that the owner or operator retain for at least two years the records of the measurements required in 40 C.F.R. § 60.734.

f. 40 C.F.R. § 60.736(a) requires that in conducting the performance tests required in 40 C.F.R. § 60.8, the owner or operator use the test methods in Appendix A of Part 60, or other methods and procedures as specified in 40 C.F.R. § 60.8.

g. 40 C.F.R. § 60.736(b)(1) requires that the owner or operator determine compliance with the particulate matter standards in 40 C.F.R. § 60.732 as follows: Method 5 in Appendix A of Part 60 shall be used to determine the particulate matter concentration. The sampling time for each test run shall be at least two hours and the

sampling volume shall be at least 1.70 dry standard cubic meters (dscm).

### **Enforcement Authority**

18. Whenever, on the basis of any information available to the Administrator, the Administrator finds that any person has violated or is in violation of any requirements or prohibition of an applicable implementation plan or permit, the Administrator shall notify the person and the state in which the plan applies of such finding. At any time after the expiration of 30 days following the date on which such notice of violation is issued, the Administrator may, without regard to the period of violation: (A) issue an order requiring such person to comply with the requirements or prohibitions of such plan or permit, (B) issue an administrative penalty order in accordance with subsection (d), or (C) bring a civil action in accordance with Section 113(b) of the Act. 42 U.S.C. § 7413(a)(1).

19. Except for a requirement or prohibition enforceable under the preceding provisions of this subsection, whenever, on the basis of any information available to the Administrator, the Administrator finds that any person has violated, or is in violation of any other requirement or prohibition of Title I of the Act, the Administrator may: (A) issue an administrative penalty order in accordance with subsection (d), (B) issue an order requiring such person to comply with such requirement or prohibition, (C) bring a civil action in accordance with subsection (b) or section 305, or (D) request the Attorney General to commence a criminal action in accordance with subsection (c). 42 U.S.C. § 7413(a)(3).

20. Failure to comply with any approved regulatory provision of a state implementation plan, or with any permit limitation or condition contained within a permit issued under an EPA approved program that is incorporated into the state implementation plan, shall render the person or governmental entity so failing to comply in violation of a requirement of an applicable

implementation plan and subject to enforcement action under Section 113 of the Act. 40 C.F.R. § 52.23. See 39 Fed. Reg. 33512, September 18, 1974, as amended at 54 Fed. Reg. 27285, June 28, 1989.

### **Factual Background**

21. QCC owns and operates an iron and steel foundry at 310 Euclid Avenue, Salem, Ohio.
22. QCC's facility is a "stationary source" as defined under Section 111 of the Act and the General Provisions.
23. QCC owns and operates a thermal sand reclamation unit at the facility.
24. The thermal sand reclamation unit is an "affected source" as defined under the General Provisions and Subpart UUU.
25. The thermal sand reclamation unit is a "new source" as defined under Section 111 of the Act.
26. The facility has one or more "air contaminant sources" as defined by the Ohio SIP.
27. The facility applied for and obtained a permit to install and operate (PTIO) for the thermal sand reclamation unit.
28. The PTIO for the thermal sand reclamation unit is permit number P0117198 (PTIO).
29. The PTIO was issued on September 2, 2014.
30. The PTIO was effective September 2, 2014.
31. The PTIO expires September 28, 2017.
32. The PTIO identifies the thermal sand reclamation unit with an emissions unit identification of P901.
33. The PTIO states at condition C.1.b)(1)a. that volatile organic compound (VOC) emissions shall not exceed 0.61 ton/month averaged over a rolling, 12-month period.

34. The facility controls air emissions from the sand reclamation unit using a baghouse.
35. The facility conducted performance testing on the P901 baghouse exhaust stack to measure the concentration of filterable particulate matter, filterable particulate matter less than or equal to ten microns in aerodynamic diameter, oxygen, carbon dioxide, nitrogen oxides, carbon monoxide, and total gaseous organics (TGO).
36. The facility conducted performance testing on the sand system baghouse while P901 was operating at or near maximum capacity to measure the concentrations of filterable particulate matter and filterable particulate matter with an aerodynamic diameter of ten microns or less.
37. The performance testing identified in paragraphs 35 and 36 occurred on January 7-8, 2016 (January 2016 testing).
38. The January 2016 testing demonstrated TGO emissions from the P901 baghouse exhaust stack were 2.14 pounds of TGO per hour.
39. The 2.14 pounds of TGO per hour converts to 0.7811 ton/month of VOC using operational data, permitted limitations, and methodologies identified in the PTIO.
40. QCC commenced "construction", as that term is defined at 40 C.F.R. § 60.2, on the thermal sand reclamation unit at the facility on or after April 23, 1986.
41. QCC's thermal sand reclamation unit is an "affected facility" located at a "mineral processing plant," as those terms are defined at 40 C.F.R. §§ 60.2 and 60.731.
42. QCC's thermal sand reclamation unit was, and is, subject to Part 60, the General Provisions, and Subpart UUU at all times relevant to this NOV/FOV.
43. The baghouse(s) controlling emissions from the thermal sand reclamation unit at the facility is a (are) dry control device(s) regulated by 40 C.F.R. § 60.734(a).

44. The January 2016 testing for particulate matter consisted of three runs where each test run had a net sampling time equal to sixty minutes.
45. The January 2016 testing for particulate matter at the sand system baghouse stack consisted of three runs where the volume of dry gas sampled at standard conditions was: (1) 0.901; (2) 0.877; and (3) 0.845 dscm, respectively.
46. The January 2016 testing for particulate matter at the P901 baghouse exhaust stack consisted of three runs where the volume of dry gas sampled at standard conditions was: (1) 0.883; (2) 0.893; and (3) 0.920 dscm, respectively.
47. The final report for the January 2016 testing stated the average concentration of filterable particulate matter from the P901 baghouse exhaust stack across the three runs was 0.013 grains per dry standard cubic foot (dscf).
48. The final report for the January 2016 testing stated the average concentration of filterable particulate matter from the sand system baghouse exhaust stack across the three runs reported (runs 1, 2, and 4) was 0.0037 grains per dscf.
49. The final report for the January 2016 testing did not include initial performance testing for visible emissions.

#### **Explanation of Violations**

50. EPA reviewed information available to it at the time of issuance of this NOV/FOV, information obtained from and discussed with QCC during an inspection conducted on February 21, 2013, as well as information obtained from and discussed with the State of Ohio regarding the thermal sand reclamation unit at the facility. EPA's review of this information revealed QCC violated the Ohio SIP, the General Provisions, Subpart UUU, and the Act as described below.

51. QCC failed to demonstrate compliance with the applicable emission limit for volatile organic compounds of 0.61 tons of VOC per month established in its PTIO number P0117198. QCC's failure to comply with the applicable VOC limit in its PTIO is a violation of condition C.1.b)(1)a. of its PTIO, OAC Rule 3745-31-05, the Ohio SIP, and the Act.

52. QCC failed to submit to the Administrator a notification of the date construction of an affected facility (i.e., the thermal sand reclamation unit at the facility) commenced, postmarked no later than 30 days after such date, in violation of 40 C.F.R. § 60.7(a)(1) and Section 111 of the Act, 42 U.S.C. § 7411.

53. QCC failed to submit to the Administrator a notification of the actual date of initial startup of an affected facility (i.e., the thermal sand reclamation unit at the facility) postmarked within 15 days after such date, in violation of 40 C.F.R. § 60.7(a)(3) and Section 111 of the Act, 42 U.S.C. § 7411.

54. QCC failed to submit to the Administrator a notification of the anticipated date for conducting the opacity observations required by 40 C.F.R. § 60.11(e)(1), postmarked no later than 30 days prior to such date, in violation of 40 C.F.R. § 60.7(a)(6) and Section 111 of the Act, 42 U.S.C. § 7411.

55. QCC failed to conduct initial performance testing, and initial visible emission readings concurrently with the initial performance testing, of an affected facility (i.e., the thermal sand reclamation unit at the facility) within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the affected facility, in violation of 40 C.F.R. §§ 60.8(a), 60.11(b) and 60.11(e), and Section 111 of the Act, 42 U.S.C. § 7411.

56. QCC failed to conduct performance testing of an affected facility (i.e., the thermal sand reclamation unit at the facility) in accordance with the test methods and procedures contained in an applicable subpart. Specifically, QCC did not conduct performance testing for the time and under the conditions specified in Subpart UUU (sample time of at least two hours for each run and a sample volume of at least 1.70 dscm), in violation of 40 C.F.R. §§ 60.8(b) and (f), 60.736(a) and (b)(1), and Section 111 of the Act, 42 U.S.C. § 7411.

57. QCC failed to install, calibrate, maintain, and operate a continuous monitoring system to measure and record the opacity of emissions discharged into the atmosphere from the control device, in violation of 40 C.F.R. § 60.734(a) and Section 111 of the Act, 42 U.S.C. § 7411.

58. QCC failed to retain for at least two years the records of the opacity of emissions discharged into the atmosphere from the control device using a continuous opacity monitoring system, in violation of 40 C.F.R. § 60.735(a) and Section 111 of the Act, 42 U.S.C. § 7411.

**Environmental Impact of Violations**

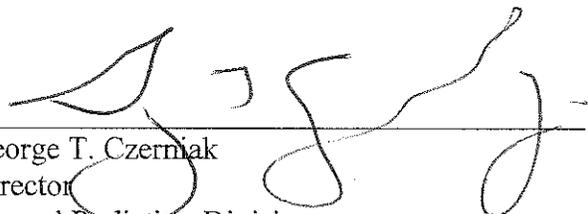
59. Failing to demonstrate initial, and ensure ongoing compliance, with 40 C.F.R. Part 60, the General Provisions, and Subpart UUU can increase public exposure to unhealthy particulate matter. Particulate matter, especially fine particulate matter, contributes to respiratory problems and lung damage.

60. Failure to demonstrate initial, and ensure ongoing compliance with VOC limits can increase exposure of the public to unhealthy organic compounds which, depending on the specific compound(s) can have a variety of adverse health effects.

Date

4/1/16

George T. Czerniak  
Director  
Air and Radiation Division



**CERTIFICATE OF MAILING**

I, Loretta Shaffer, certify that I sent a Notice and Finding of Violation, No. EPA-5-16-OH-08, by Certified Mail, Return Receipt Requested, to:

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

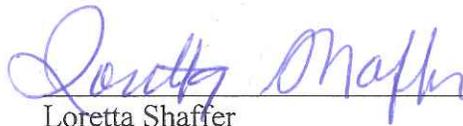
I also certify that I sent copies of the Notice of Violation and Finding of Violation by first-class mail to:

Ed Fasko  
Ohio EPA, NEDO  
Air Pollution Group  
2110 East Aurora Road  
Twinsburg, Ohio 44087

James Kavalec  
James.Kavalec@epa.ohio.gov

Bob Hodanbosi  
Ohio EPA  
Division of Air Pollution Control  
P.O. Box 1049  
Columbus, OH 43216-1049

On the 1 day of April 2016.



Loretta Shaffer  
Program Technician  
AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER: 7009 1680 0000 7673 7260