



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

November 16, 2016

CERTIFIED MAIL

Jaime Vigil
President
Republic Steel
2633 Eight Street N.E.
Canton, Ohio 44704

Re: Final Findings and Orders for violations of
Ohio's air pollution regulations

Dear Jamie Vigil:

Transmitted herewith are the Final Findings and Orders ("Orders") of the Director of Ohio EPA concerning the above-referenced matter.

Please note that the effective date of the Orders is the date that the Orders were entered into the Ohio EPA Director's journal, which is the date that is stamped on the first page of the Orders.

Sincerely,

A handwritten signature in black ink, appearing to read "James Kavalec", is written over a faint, light-colored signature line.

James Kavalec, Manager
Compliance/Enforcement Section
Division of Air Pollution Control

ec: James Lee, PIC
Lee Tullis, DAPC
Kara Philibin, DAPC
John Paulian, DAPC
Brandon Schwendeman, DAPC
Stephen Feldman, Legal Office
Muhammad Mereb, DAPC
Tim Fischer, NEDO-DAPC
Terri Dzienis, Canton

2. The following relevant emissions units ("EUs") at the facilities are subject to Ohio EPA rules and regulations:

Emissions Unit ID/ Facility	Company Description	Control Method	Year Installed / modified
P905/ Canton	#7 EAF	Melt Shop baghouse	1968 / 2005
P907/ Canton	#9 EAF	Melt Shop baghouse	1968 / 1998
P142/ Canton	Mecana shot blast	Mecana baghouse	2000 / NA
F001/ Canton	Paved and unpaved roadways and parking lots	Watering	1916 / NA
NA/ Canton	Bloom/Billet burying operation	Watering or other RACM identified in new PTI	1998/ NA
F008/ Canton	FlexCast alloy handling system	FlexCast Baghouse	2006/ NA
P157/ Canton	FlexCast Billet/Bloom continuous caster	FlexCast Baghouse	2006/ NA
P123/ Canton	CBCF Ladle metallurgical facility	CBCF main baghouse	1994/ NA
P129/ Canton	CBCF Alloy conveying and silos	CBCF main baghouse	1994/ NA
P913/ Lorain	#1 EAF	#1 EAF baghouse	2013/ NA

3. The most recent Title V permit for the Canton facility was effective on December 29, 2005 and expired on April 24, 2007. The Title V permit for the Lorain facility was effective on June 20, 2003 and expired on June 20, 2008. Timely Title V renewal applications were submitted for both facilities pursuant to Ohio Administrative Code ("OAC") rule 3745-77-08(E)(1). As such, all provisions and authorizations of the expired permits remain in effect until the Director's final action on the pending renewal applications.

4. ORC § 3704.05(C) prohibits any person who is a holder of a permit issued by the Director of Ohio EPA pursuant to ORC § 3704.03 from violating any of its terms and conditions.

5. ORC 3704.05(G) prohibits a person from violating any order, rule, or determination of the Director that was issued, adopted, or made under ORC Chapter 3704.

6. ORC § 3704.05(J)(2), in part, prohibits any person from violating any applicable requirement of a Title V permit.



7. The Canton City Health Department, Air Pollution Control Division ("Canton APC") acts as a contractual agent for Ohio EPA's Division of Air Pollution Control in Stark County.

Opacity Violations (EAFs – EUs P905 and P907 at Canton Facility)

8. The Title V permit for the Canton facility requires that visible particulate emissions ("VEs") of fugitive dust shall not exceed 6% opacity as a 6-minute average from the Melt Shop housing the EAFs P905 and P907, which would include doors, roof vents and windows.

9. The Standards of Performance for New Stationary Sources for EAFs and Argon-Oxygen Decarburization Vessels at Steel Plants (40 CFR Part 60, Subpart AAa) require, in part, that fugitive VEs that exit from a shop and, are due solely to the operations of an affected EAF, be at or below 6% opacity as a 6-minute average. The requirements of 40 CFR Part 60, Subpart AAa are incorporated as applicable requirements in the Title V permit.

10. During full compliance evaluation ("FCE") inspections conducted in September of 2010 and September of 2012, Canton APC conducted U.S. EPA Method 9 observations and concluded that Respondent exceeded the 6% opacity limit while one or both EAFs (P905 and P907) were in operation, in violation of the facility's Title V permit, ORC § 3704.05(C), ORC § 3704.05(J)(2), and 40 CFR Part 60, Subpart AAa.

11. On July 25, 2013, Canton APC observed excessive fugitive VEs from the Canton facility during routine surveillance and determined that the fugitive VEs were exiting from the Flexcast Caster building roof ventilation openings, which is an extension to the Melt Shop building. Because Canton APC determined that the emissions originated from the EAF operations, but had migrated into the Flexcast building before exiting to the atmosphere, the observed fugitive VEs are considered to be emissions from the building housing the EAFs and are subject to the 6% opacity limit applicable to the EAF. Canton APC performed U.S. EPA Method 9 observation and the highest 6-minute average opacity was 19.0%, exceeding the 6% opacity limit while EAF P905 was operating, in violation of the facility's Title V permit, ORC § 3704.05(C), ORC § 3704.05(J)(2), and 40 CFR Part 60, Subpart AAa. By letter dated July 30, 2013, Canton APC notified Respondent of the alleged opacity violations.

12. On September 16, 2013, Canton APC received a response to the July 30, 2013 letter which included (a) documentation of expenditures between September 8, 2010 and October 23, 2012, related to non-routine maintenance of the dust collection system serving the EAFs and related processes following completion of an engineering study in 2010; (b) information on a second engineering study of the Melt Shop collection system underway in 2013; (c) documentation of expenditures for additional repairs on or replacement of damaged duct work, fan wheels, filters bags, siding and roof of the Melt Shop building, and air valves, expenditures for additional repairs to the Melt Shop's



collection system in September of 2013; (d) and a compliance plan for further planned work on dampers, fans, and other air flow issues contributing to noncompliance at the Canton facility.

13. On August 26, August 28 and September 2, 2014, Canton APC conducted another FCE at the Canton facility. On August 28, 2014, Canton APC observed fugitive VEs escaping from holes in the baghouse fans housing, holes in the alloy conveyor belt incline and holes in the Melt Shop building exterior through the stock house extension when only EAF #7 (P905) was operating. On September 2, 2014, Canton observed fugitive VEs escaping from holes in the baghouse fans housing, holes in the Melt Shop building roofline and Melt Shop building exterior through the stock house extension when only EAF #9 (P907) was operating.

14. On October 1, 2014, Respondent submitted an update to its compliance plan dated September 16, 2013. Respondent stated it planned to temporarily idle EAF #7 (P905) as well as the Flexcast Caster (P157) operations and that Respondent planned to implement numerous additional corrective measures for EAF #9 (P907) as a one-furnace operation based on the recommendations of the two third-party engineering studies conducted in 2010 and 2013. Respondent did not specify additional corrective measures for EAF #7 (P905) or a two-furnace operation. As of the effective date of these Orders, the corrective measures for a one-furnace operation by EAF #9 (P907) are completed.

15. In addition to the violations identified in Finding Nos. 10 and 11, Respondent self-reported deviation of the 6% fugitive dust opacity limit from the Melt Shop on one day in 2014. Additionally, Respondent self-reported observations of visible emissions (not Method 9 readings) from the Melt Shop for 5 days in 2010, 4 days in 2011, 12 days in 2012, 9 days in 2013, and 4 days in 2014.

16. During the FCE inspections conducted in September of 2016, Canton APC conducted U.S. EPA Method 9 observations and concluded that Respondent exceeded the 10% opacity limit for the railcar loading and dust storage silo equipment that handles dust collected by the melt shop baghouse serving EAF #9 (P907), in violation of the facility's Title V permit, ORC § 3704.05(C), ORC § 3704.05(J)(2), and 40 CFR Part 60, Subpart AAa. The highest 6-minute average for the observation period was 10.6%. By letter dated September 30, 2016, Canton APC notified Respondent of the alleged opacity violations.

Stack Test Violation (Mecana Shot Blast - EU P142 at Canton Facility)

17. Permit-to-install ("PTI") # 15-1340 was issued on January 27, 1999. It requires that particulate matter ("PM") emissions from EU P142 not to exceed 0.0052 grains per dry standard cubic foot ("grains/dscf") and 0.76 pounds per hour ("lb/hr"). The PTI also requires that PM smaller than 10 microns in diameter ("PM10") emissions from emission unit P142 not to exceed 0.46 lb/hr. If the tested PM exceeds the allowable



PM10 (i.e. 0.46 lb/hr); then the PTI requires that Respondent make a determination of how much of the PM was PM10.

18. On February 8, 2013, Respondent conducted a stack test on EU P142. PM emissions were 0.0621 grains/dscf and 1.75 lb/hr, which exceeded the PTI limits, in violation of PTI # 15-1340 terms and conditions, and ORC § 3704.05(C). No PM10 results were included in the stack test report. By letter dated June 26, 2013 Canton APC notified Respondent of these alleged violations and the failure to determine PM10 emissions for P142.

19. On July 31, 2013, Canton APC received Respondent's response to the NOV that included its compliance plan. On September 24, 2013, Respondent sent an update to its response which listed the corrective actions that had been taken, including the replacement of eight canisters in the baghouse. Respondent stated that the problem was corrected as of September 15, 2013.

20. On November 22, 2013, P142 passed a stack test retest. PM emissions were 0.00291 grains/dscf and 0.091 lb/hr. Since the PM emissions did not exceed the allowable PM10, no determination of the PM10 fraction was required. This violation has been abated.

Visible emission of Fugitive Dust Violation (Roadways and parking areas-EU F001 at Canton Facility)

21. OAC Rule 3745-17-07(B) and the Title V permit, states, in part, that there shall be no visible particulate emissions of fugitive dust (using USEPA Method 22) from any paved roadway or parking area except for a period of time not to exceed 6 minutes during any 60-minute observation period and except for a period of time not to exceed 13 minutes during any 60-minute observation period for unpaved roadways and parking areas.

22. OAC Rule 3745-17-08(B), requires the use of reasonably available control measures (RACM) to prevent fugitive dust from becoming airborne. RACM includes, as appropriate, the application of dust suppressant on unpaved roadways (OAC Rule 3745-17-08(B)(2)), paving of roadways and the maintaining of roadways in a clean condition (OAC Rule 3745-17-08(B)(8)), and the prompt removal of earth or other material from paved streets to minimize or prevent re-suspension (OAC Rule 3745-17-08(B)(9)).

23. As a RACM, the Title V permit also requires that all paved roadways and parking areas be swept and/or treated with water to minimize or eliminate, at all times, visible emissions of fugitive dust generated by vehicular traffic and to ensure compliance with the permit limitations.



24. On August 8, 2014, Canton APC received a complaint concerning excessive visible emissions of fugitive dust from Respondent's paved and unpaved roadways. On this same date, Canton APC conducted a complaint investigation and performed a U.S. EPA Method 22 observation between 1:26 p.m. and 2:40 p.m. on a paved road at the facility. The visible emissions of fugitive dust were continuous for the entire 74-minute observation period, in violation of the facility's Title V permit, OAC Rule 3745-17-07(B)(4), and ORC § 3704.05(C), 3704.05(G) and 3704.05(J)(2). In addition, Respondent failed to adequately implement the RACM specified in the facility's Title V permit during the observation period, in violation of the facility's Title V permit, OAC Rules 3745-17-08(B)(8) and 3745-17-08(B)(9), and ORC § 3704.05(C), 3704.05(G) and 3704.05(J)(2). By letter dated August 15, 2014, Canton APC notified Respondent of these alleged violations.

25. On August 29, 2014, Canton APC received a response to the August 15, 2014 letter, in which Respondent stated that the buildup of debris on the paved roadways was attributable to the lack of sweeping due to the poor condition of large portions of these paved roadways and that its compliance plan would include increased watering.

26. In March-April 2015, Respondent repaired roadways throughout the Facility with asphalt patching, including the area specifically observed by Canton APC on August 8, 2014, to facilitate sweeping of the paved roadways.

27. On August 5, 2015, Canton APC received a complaint concerning excessive dust in an area where slag is used to bury hot blooms/billets. On this same date, Canton APC conducted an inspection and observed visible dust emissions in the area of burial of hot blooms/billets and along the nearby roadway. Canton APC performed a U.S. EPA Method 22 observation on the road segment between 1:09 p.m. and 2:09 p.m. and observed visible emissions for 47 minutes and 40 seconds, in violation of the facility's Title V permit. In addition, although watering was taking place during the inspection as RACM, the measures appeared to be inadequate. By letter dated November 3, 2015, Canton APC notified Respondent of these alleged violations.

28. On December 22, 2015, Canton APC received Respondent's response to the NOV, in which Respondent stated that it had relocated a larger watering truck from its Lorain facility to the Canton facility to improve the effectiveness of RACM.

Fugitive Dust and Permitting Violation (Bloom/Billet Burial Operation at Canton Facility)

29. OAC Rule 3745-15-05(B), states, in part, that an air contaminant source is exempt from Chapter 3704 of the Revised Code and rules adopted thereunder, unless the potential emissions of an any air contaminant exceeds ten pounds per day, except as otherwise provided by rule or law.



30. OAC Rule 3745-31-02 prohibits a person from allowing the installation or modification of an air contaminant source without first applying for and obtaining a PTI, except as otherwise provided by rule or law.

31. On August 5, 2015, Canton APC received a complaint concerning excessive dust in an area where slag is used to bury hot blooms/billets. On this same date, Canton APC conducted an inspection and observed visible dust emissions in the area of burial of hot blooms/billets and along the nearby roadway. Canton APC performed a U.S. EPA Method 22 observation at the bloom/billet burial operation between 12:32 p.m. to 1:32 p.m. and observed visible emissions for 53 minutes, indicating inadequate implementation of RACM at this location. Canton APC and Respondent met on August 20, 2015, to discuss the bloom/billet burial operation. By a letter dated November 3, 2015, Canton APC notified Respondent of these alleged violations and requested information as to the permitting status of the bloom/billet burial operation.

32. In its letter dated December 22, 2015, Respondent stated that it did not find information about this process in its permitting records and it believed that the bloom/billet burial operation started around November 7, 2008. Respondent also agreed to apply RACM to minimize or eliminate fugitive dust from the bloom/billet burial operation, and also stated that it had replaced the slag used in the burial operation in late August and early September in response to the excessive dust observed by Canton APC.

33. By a letter dated December 31, 2015, Respondent submitted additional information about its investigation concerning the permitting status of the bloom/billet burial operation. It was stated that the process was not permitted because it was not considered to be a fugitive dust source when conducted as intended (using fresh slag with minimal fines). Respondent stated it now believed that the bloom/billet burial operation started in 1998.

34. By a letter dated February 16, 2016, Respondent provided potential to emit ("PTE") calculations for the bloom/billet burial operation. It was estimated that the process has particulate emissions uncontrolled PTE of 33.4 lb/day, indicating that the process does not meet the de minimis exemption per OAC Rule 3745-15-05(B). In violation of OAC Rule 3745-31-02, Respondent installed and operated the bloom/billet burial operation without first applying for and obtaining a PTI.

35. On February 18, 2016, Canton APC sent a NOV letter to Respondent concerning the alleged permitting violation. The NOV requested Respondent to submit a PTI application for the bloom/billet burial operation. In a letter dated March 3, 2016, Respondent stated that it would do so. After Respondent submits the application, the requirements to apply RACM for the control of fugitive dust will be incorporated into the final PTI when issued by Ohio EPA.



Testing Violation (Flex Cast – EU F008 and EU P157 at Canton Facility)

36. PTI # 15-01578 issued on December 10, 2004, requires that PE/PM₁₀ emissions from EU F008 not exceed 0.43 lb/hr and PE/PM₁₀ emissions from EU P157 not exceed 0.54/lb/hr. Since both EU F008 and EU P157 are controlled by the same baghouse, they can be tested simultaneously with an allowable PE/PM₁₀ of 0.97 lb/hr for the combined emissions of the two EUs.

37. On September 1, 2015, Respondent conducted a stack test on EUs F008 and P157. PE/PM₁₀ emissions were measured as 5.30 lb/hr, which exceeded the PTI limits, in violation of PTI # 15-01578 terms and conditions, and ORC § 3704.05(C). On November 4, 2015, Canton APC sent a NOV letter to Respondent concerning these alleged violations.

38. On December 16, 2015, Canton APC received Respondent's response to the NOV that included its compliance plan. Respondent stated that a small pinhole was discovered in the baghouse. Respondent's compliance plan included repairing the pinhole prior to resuming Flexcast operations (which were being temporarily idled), thoroughly inspecting the baghouse for other holes, replacing all the bags in the baghouse with Teflon coated membrane bags as recommended by Respondent's consultant, and conducting a stack test retest (after 60 baghouse operation days following bag replacement for proper bag conditioning).

Opacity Violations (EUs P123 and P129 at Canton Facility)

39. The Title V permit for the Canton facility requires that visible particulate emissions shall not exceed 5% opacity as a 6-minute average from the stack of the baghouse serving EU P123 while it is operating, and shall not exceed 20% opacity as a 6-minute average from the stack of the baghouse serving EUs P123 and P129 while they are operating.

40. On July 18, 2016 Canton APC observed excessive visible particulate emissions from the stack of the baghouse serving EUs P123 and P129 while both these EUs were operating. Canton APC performed U.S. EPA Method 9 observation and the highest 6-minute average opacity was 31.7%, exceeding the 5% and 20% opacity limit of the Title V permit, in violation of the facility's Title V permit, ORC § 3704.05(C), and ORC § 3704.05(J)(2). On July 22, 2016, Canton APC sent a NOV letter to Respondent concerning these alleged violations.

41. On July 28, 2016, Canton APC received Respondent response to the NOV. The compliance plan included the interim measure of replacing 80 bags in the baghouse serving EUs P123 and P129 until all bags could be replaced, which was expected to be by the middle of September 2016. On August 19, 2016, Canton APC received Respondent's update that all 840 bags had been. On August 24, 2016, Canton APC conducted a site visit and confirmed there was no longer excessive visible



emissions from the stack of the baghouse serving EUs P123 and P129.

42. During the FCE inspections conducted in September of 2016, Canton APC conducted U.S. EPA Method 9 observations of the lime loading process associated with EU P129 and concluded that Respondent exceeded the 10% opacity as a 3-minute average limit for EU P129, in violation of the facility's Title V permit, ORC § 3704.05(C), and ORC § 3704.05(J)(2). The highest 3-minute average for the observation period was 50%. By letter dated September 30, 2016, Canton APC notified Respondent of the alleged opacity violations.

Testing Violation (EAF – EU P913 at Lorain Facility)

43. PTI P0109191 for EU P913 was issued on July 18, 2012. The initial installation of P913 was completed on November 22, 2013 and it commenced operations on November 25, 2013. Equipment for P913 was damaged during a fire incident on November 30, 2013. Respondent made repairs and re-commissioned the EAF in February 2014. The PTI required Respondent to perform emission testing within 6 months after startup to demonstrate compliance with the allowable mass emission rates of the applicable air contaminants.

44. The National Emission Standards for Hazardous Air Pollutants for Area Sources: EAF Steelmaking Facilities (40 CFR Part 63, Subpart YYYYYY) require, in part, that performance testing be conducted within 180 days of startup to demonstrate initial compliance with the applicable emissions limits. These requirements are incorporated in the PTI permit for P913.

45. The Standards of Performance for New Stationary Sources for EAFs and Argon-Oxygen Decarburization Vessels at Steel Plants (40 CFR Part 60, Subpart AAa) require, in part, that performance testing be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup to demonstrate initial compliance with the applicable emissions limits. These requirements are incorporated in the PTI permit for P913.

46. Ohio EPA Northeast District Office ("NEDO") received an Intent to Test notification for P913, from Respondent, on August 22, 2014. The emissions test was attempted on September 27 and 28, 2014, but due to malfunctions the testing was stopped and postponed to a later date. A second emissions test was attempted on January 23 to 26, 2015 and it was canceled after the first run due to excessive fugitive dust from the Melt Shop roof.

47. By letters dated January 20, 2015, and February 19, 2015, NEDO notified Respondent of alleged violations of PTI P0109191, ORC § 3704.05(C), 40 CFR Part 60, Subpart AAa, and 40 CFR Part 63, Subpart YYYYYY, due to the failure to conduct the required performance tests.



48. The required performance tests were conducted on April 14, 15, and 17 for the gaseous pollutants and on April 15, 17 and 20 for particulates (including mercury and lead) and visible emissions. Following an extension granted by NEDO, the emissions testing report demonstrating compliance with the applicable emissions limits was submitted to Ohio EPA on June 4, 2015. This violation has been abated.

Opacity Violation (EAF - EU P913 at Lorain Facility)

49. PTI P0109191 requires that VEs of fugitive dust shall not exhibit 6% opacity or greater as a 6-minute average from the Melt Shop due to the operation of P913, which would include doors, roof vents and windows.

50. Subpart AAa of 40 CFR Part 60, that was incorporated in PTI P0109191, requires that fugitive VEs exiting the Melt Shop, due solely to the operations of P913, be at or below 6% opacity as a 6-minute average.

51. Subpart YYYYY of 40 CFR Part 63, that was incorporated in PTI P0109191, requires, in part, that no gases exiting the Melt Shop, due solely to the operations of P913, be discharged or cause to be discharged into the atmosphere at 6% opacity or greater.

52. On January 26, 2015, NEDO performed a U.S. EPA Method 9 observation, while P913 was operating. NEDO used the Melt Shop building roof ventilation opening as the emissions point and recorded ten 6-minute averages at or above 6% opacity, in violation of the facility's PTI P0109191, ORC § 3704.05(C), 40 CFR Part 60, Subpart AAa, and 40 CFR Part 63, Subpart YYYYY. The opacity readings averaged between 6% and 43%. By letter dated February 19, 2015, NEDO notified Respondent of these alleged violations.

53. On April 17 and 20, 2015, NEDO performed U.S. EPA Method 9 observations, while P913 was operating, and recorded visible emissions at six percent opacity and greater. By letter dated June 5, 2015, NEDO notified Respondent of these alleged violations. On April 14, 17, and 20, 2015, Alliance Source testing performed U.S. EPA Method 9 observations, while P913 was operating, and recorded visible emissions at six percent opacity or greater. Respondent has advised that P913 was temporality idled in July 2015.

54. The Director has given consideration to, and based his determination on, evidence relating to the technical feasibility and economic reasonableness of complying with the following Orders and their relation to benefits to the people of the State to be derived from such compliance.

V. ORDERS

The Director hereby issues the following Orders:



1. Within thirty (30) days of the effective date of these Orders, Respondent shall develop a Roadway Fugitive Dust Work Practice Plan for the Canton facility, consistent with the obligations of OAC Rule 3745-17-08(B) and the facility's Title V permit. The Plan shall include an updated drawing of the paved and unpaved roadways and parking areas. The Plan shall be submitted to Canton APC for approval within 30 days of the effective dates of these Orders, and implemented upon approval. Additionally, a drawing indicating which roadway segments were repaired and the specific dates completed during March-April 2015, as stated in paragraph 25 above, shall be submitted to Canton APC within thirty (30) days of the effective dates of these Orders.

2. Within sixty (60) days of the effective date of these Orders, Respondent shall submit documentation demonstrating that the corrective measures relating to the one-furnace operation by EAF #9 (P907) have been completed as indicated in paragraph 14 above.

3. Within sixty (60) days of the effective date of these Orders, Respondent shall conduct a verification study at the Canton Facility to evaluate the effectiveness of the capture and evacuation system in capturing the fugitive VEs resulting from operation of one EAF, to achieve compliance with the facility's Title V permit and 40 CFR Part 60, Subpart AAa., in accordance of the following procedures:

- a. U.S. EPA Method 9 testing shall be conducted by a third party while EAF #9 (P907) is operating at or near its maximum capacity, when only 3 baghouse fans are operating (the minimum allowed for one furnace operation), for the duration of at least three total heats in order to observe charging, melting, refining, and tapping stages of each, and using three locations as simultaneous observation areas of the Meltshop building to be agreed upon in advance by Canton APC (one including the opening on the Flexcast Caster building roof). If fugitive VEs are observed from multiple openings from the building in the viewing area, Respondent shall record the opacity of the emission point with the highest fugitive VE value. Respondent shall identify the stage of the melting cycle for the EAF in the comment section of the Method 9 form. Respondent shall not make any changes to the openings between the Melt Shop building and the adjacent buildings for the duration of the study.
- b. Respondent shall also verify the appropriate settings for various operating parameters identified as part of the Compliance Assurance Monitoring (CAM) Plan and Title V permit for P905 and P907 including, but not limited to, baghouse fan damper openings, canopy duct damper opening, and fan amperage.
- c. Respondent shall notify Canton APC fourteen (14) days in advance of the planned Method 9 testing, and shall submit the results of the Method 9 testing together with the evaluation of settings for operating parameters



within thirty (30) days following completion of the Method 9 testing. Additionally, Respondent shall provide documentation that the EAF #9 (P907) roof canopy damper automatic control is working properly and detailing the damper position settings and conditions for each change of damper position.

- d. In the event Respondent is unable to verify compliance with the Method 9 opacity standard, Respondent shall submit a detailed plan of action to Canton APC within sixty (60) days following receipt of the Method 9 testing results.

4. Prior to resuming a two-furnace operation at the Canton Facility, or resuming regular operation of EAF #7 (P905), Respondent shall complete the following additional corrective measures:

- a. Restore effective damper control at P905;
- b. Reconnect PLC control of canopy dampers on P905; and
- c. Repair/replace Main ID Fan at fan location #3.

5. Within sixty (60) days of resumption of a two-furnace operation or regular operation of EAF #7 (P905), Respondent shall conduct a verification study for the two-furnace operation (consistent with the study elements described in Order V.3 above as approved by Canton APC). In the event Respondent is unable to verify compliance with the Method 9 opacity standard, Respondent shall submit a detailed plan of action within sixty (60) days following receipt of the Method 9 testing results.

6. Within one hundred and twenty (120) days of the effective date of these Orders, Respondent shall develop and implement an Operation and Maintenance Plan ("O&M Plan") for the Meltshop baghouse and capture system and shall provide Ohio EPA and Canton APC with the O&M Plan. The plan shall include the following, at a minimum:

- a. The minimum number of baghouse fans that should be operated when each EAF is operating individually and when both EAFs are operating simultaneously;
- b. The minimum baghouse fan damper opening percentage when each EAF is operating individually and when both EAFs are operating simultaneously;
- c. The minimum canopy duct damper opening percentage when each EAF is operating individually and when both EAFs are operating simultaneously during each stage of operation (charging, melting, and tapping);
- d. The minimum number of baghouse compartments that should be operated/enabled when each EAF is operating individually and when both



EAFs are operating simultaneously;

- e. The maximum length of time and/or the conditions for baghouse filter bag replacement;
- f. The maximum length of time and/or the conditions for baghouse fan rotor replacement, fan blade replacement, popit valve replacement, reverse air valve replacement; and
- g. Preventative Maintenance Schedule for baghouse and capture system to ensure capture and collection efficiency are kept at their optimal levels. This should include schedule for duct work buildup inspection and cleanout.

7. If the O&M Plan required in Order V.6 above is completed prior to resuming a two-furnace operation at the Canton Facility and the completion of Order V.5 above, the O&M Plan shall be updated within thirty (30) days following receipt of the study results required by Order V.5 to incorporate the information from those results into this Plan.

8. Prior to resuming Flexcast operations at the Canton Facility, Respondent shall repair the pinhole in the baghouse, thoroughly inspect the baghouse for other holes, and replace all the bags in the baghouse with Teflon coated membrane bags. Within thirty (30) days after resumption of Flexcast operations, Respondent shall submit an Intent-to-Test notification to Canton APC to test for PE/PM₁₀ emissions from the stack of the baghouse associated with EU F008 and P157.

9. Within sixty (60) days after resumption of Flexcast operations, Respondent shall perform stack testing for PE/PM₁₀ emissions from EU F008 and P157 to determine compliance with the emissions limitations of PTI # 15-01578. EUs F008 and P157 shall be operated at or as close as possible to their maximum capacity. Respondent shall submit the results of the stack test to Canton APC within thirty (30) days after the test date.

10. Within sixty (60) days of the effective date of these Orders, Respondent shall either submit a PTI application for the bloom/billet burial operation referenced in paragraphs 31 to 35, or terminate slow-cooling using this bloom/billet burial operation. Emission calculations or other appropriate documentation showing permit exempt or a PTI application shall be submitted prior to the start of any alternative slow-cooling of bloom/billets operation.

11. Within thirty (30) days of the effective date of these Orders, Respondent shall provide Ohio EPA with an initial near-term plan to address excessive fugitive VEs from the Melt Shop housing P913 at the Lorain facility, including expected completion dates for each item not to exceed ninety (90) days after submission of the plan.



12. If, following completion of the items set forth in the initial near-term plan required in Order V.11, Respondent is unable to verify compliance with the opacity standard, Respondent shall conduct a third party engineering study of fugitive VEs from the Melt Shop housing P913 to identify additional recommended corrective measures in order to achieve compliance with the applicable opacity standard together with a schedule showing expected completion dates. The study required in Order V.12 shall be completed within one hundred twenty (120) days following completion of the items set forth in the initial near-term plan required in Order V.11.

13. In lieu of Respondent following the requirements set forth in Orders V.11 and V.12 above, in the event P913 remains temporarily idled as of the effective date of these Orders, the initial plan of action required by Order V.11 shall instead be submitted within sixty (60) days after resumption of operations of P913, and the third party engineering study described in Order V.12, if required, shall be submitted within one hundred (120) days following completion of the items in the initial near-term plan.

14. Respondent shall submit PTI and/or PTO applications to the extent necessary to incorporate the following requirements from these Orders into the applicable permits. This is required prior to the termination of these Orders. Notwithstanding the foregoing, this Order V.14 is not intended to impose a permit or permit modification obligation where none exists or to preclude Respondent from demonstrating that a PTI modification is not necessary. Nevertheless, the following requirements are to be incorporated into the Respondent's Title V permit prior to the termination of these Orders.

- a. Roadway (F001) Fugitive Dust Work Practice Plan for Canton Facility as referenced in Order V.1. above.
- b. P905 and P907 Operation and Maintenance Plan for Canton Facility as referenced in Order V.5. above.

15. Within Sixty (60) days of the effective date of these Orders, Respondent shall make necessary repairs at the Canton facility to address the alleged opacity violations identified in Findings IV.16 and IV.42. Within Seventy (70) days of the effective date of these Orders, Respondent shall submit a report, in accordance with Section X, that identifies these repairs and date(s) they were completed.

16. Respondent shall pay the amount of one hundred and twenty-five thousand dollars (\$125,000) in settlement of Ohio EPA's claims for civil penalties, which may be assessed pursuant to ORC Chapter 3704. Within thirty (30) days after the effective date of these Orders, payment to Ohio EPA shall be made by an official check made payable to "Treasurer, State of Ohio" for one hundred and twenty-five thousand dollars (\$125,000). The official check shall be submitted to Carol Butler, or her successor, together with a letter identifying the Respondent, to:



Ohio EPA
Office of Fiscal Administration
P.O. Box 1049
Columbus, Ohio 43216-1049

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, these obligations have been embedded in operation permits in accordance with Order V.14, and the Chief of Ohio EPA's Division of Air Pollution Control acknowledges, in writing, the termination of these Orders. If Ohio EPA does not agree that all obligations have been performed, then Ohio EPA will notify Respondent of the obligations that have not been performed, in which case Respondent shall have an opportunity to address any such deficiencies and seek termination as described above.

The certification shall contain the following attestation: "I certify that the information contained in or accompanying this certification is true, accurate and complete."

This certification shall be submitted by Respondent to Ohio EPA and shall be signed by a responsible official of Respondent. For purposes of these Orders, a responsible official is as defined in OAC Rule 3745-33-03(D)(1) for a corporation, or a corporate officer who is in charge of a principal business function of Respondent.

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, operations by Respondent.

VIII. OTHER APPLICABLE LAWS

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

IX. MODIFICATIONS

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



X. NOTICE

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

Canton City Health Department
Air Pollution Control Division
420 Market Avenue North
Canton, Ohio 44702-1544
Attention: Terri Dzienis

Ohio EPA
Northeast District Office
2110 East Aurora Road
Twinsburg, Ohio 44087
Attention: Tim Fischer

and to:

Ohio EPA
Division of Air Pollution Control
P.O. Box 1049
Columbus, Ohio 43216-1049
Attention: Jim Kavalec

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

XI. RESERVATION OF RIGHTS

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

XII. WAIVER

In order to resolve disputed claims, without admission of fact, violation or liability, and in lieu of further enforcement action by Ohio EPA for only the violations specifically cited in these Orders, Respondent consents to the issuance of these Orders and agrees to comply with these Orders. Compliance with these Orders shall be a full accord and satisfaction for Respondent's liability for the violations specifically cited herein and all violations known to Ohio EPA (including those reported by Respondent to Ohio EPA, Canton APC, or U.S. EPA) up through the effective date of these Orders.

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.

ORDERED AND AGREED:

Ohio Environmental Protection Agency



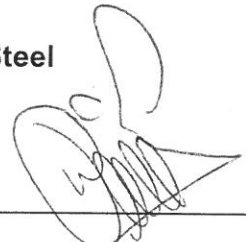
Craig W. Butler
Director

11/15/16

Date

AGREED:

Republic Steel



Signature

11/07/2016

Date

Printed or Typed Name

Jaime Vigil

President

Title

