

THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS

UNITED STATES OF AMERICA)	
)	
Plaintiff,)	Case No. 1:20-cv-02582
)	
v.)	
)	
AMERICAN ZINC RECYCLING CORP.)	
(formerly known as Horsehead Corp.))	
)	
Defendant.)	

CONSENT DECREE

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CONSENT DECREE

WHEREAS, Plaintiff United States of America, on behalf of the United States Environmental Protection Agency (“U.S. EPA”), has filed a Complaint in this action concurrently with this Consent Decree.

WHEREAS, Defendant American Zinc Recycling Corp., formerly known as Horsehead Corporation (hereinafter, “AZR”), owns and operates an electric arc furnace dust processing facility located at 2701 East 114th Street, Chicago, Illinois (“Facility”).

WHEREAS, the Complaint alleges that AZR has violated, and continues to violate, at its Facility, the emissions limits for particulate matter (“PM”) and other requirements that are set forth in: (a) AZR’s Title V Operating Permit, issued pursuant to Title V of the Clean Air Act (“CAA”), 42 U.S.C. §§ 7661–7661f and the Prevention of Significant Deterioration (“PSD”) provisions of the CAA, as set forth in CAA Sections 160–169B, 42 U.S.C. §§ 7470–92; and (b) the standards set forth in the federally enforceable State Implementation Plan (“SIP”) adopted by the State of Illinois and approved by U.S. EPA pursuant to CAA Section 110, 42 U.S.C. § 7410 (“Illinois SIP”).

WHEREAS, U.S. EPA identified alleged violations of the CAA, its implementing regulations, and of the federally enforceable Illinois SIP at AZR’s Facility in a Notice and Finding of Violation (“NOV/FOV”) issued on April 14, 2014, included as Appendix 1, and provided a copy of the NOV/FOV to the State of Illinois and AZR in accordance with the 30-day notice requirement in CAA Section 113(a), 42 U.S.C. § 7413(a).

WHEREAS, on February 2, 2016, AZR and a number of its corporate affiliates filed a petition for relief under Chapter 11 of the Bankruptcy Code, which commenced proceedings in the U.S. Bankruptcy Court for the District of Delaware (the “Bankruptcy Court”) in the case captioned In re Horsehead Holding Corp., et al., No. 16-10287 (Bankr. D. Del.) (the “Horsehead Bankruptcy Case”);

WHEREAS, U.S. EPA identified alleged CAA violations at AZR’s Facility that occurred before and after the commencement of the Horsehead Bankruptcy Case;

WHEREAS, pursuant to the Order confirming the Second Amended Joint Plan of Reorganization, any environmental liabilities for the Chicago, Illinois Facility “shall pass through the bankruptcy as if unimpaired and unaffected as if the bankruptcy case had never been commenced,” with the exception of certain pre-petition penalties and administrative claims (Horsehead Bankruptcy Case, Docket No. 1695, at Para. 132);

WHEREAS, AZR does not admit any liability to the United States arising out of the transactions or occurrences alleged in the Complaint or the NOV/FOV;

WHEREAS, on October 20, 2017, AZR replaced the capture and control system on the Feed Transfer Tower by installing and commencing operation of a New Bag Collector 2 and ceased operating the former Bag Collector 2;

WHEREAS, on February 20, 2019, AZR replaced the capture and control system on the Iron Rich Material Kiln Discharge Area and the Iron Rich Material Transfer Area by installing

and commencing operation of a New Bag Collector D and ceased operating the former Bag Collectors 1 and 14, respectively;

WHEREAS, Kiln 1 is currently out of service and is undergoing repairs, and Kiln 1 shall comply with the applicable requirements of this Consent Decree after Kiln 1 is restarted, in accordance with the provisions of this Consent Decree; and

WHEREAS, the Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and will avoid litigation between the Parties and that this Consent Decree is fair, reasonable, and in the public interest.

NOW, THEREFORE, before the taking of any testimony, without the adjudication or admission of any issue of fact or law except as provided in Section I, with the consent of the Parties, IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:

I. JURISDICTION AND VENUE

1. This Court has jurisdiction over the subject matter of this action, pursuant to 28 U.S.C. §§ 1331, 1345, and 1355, and CAA Section 113(b), 42 U.S.C. § 7413(b), and over the Parties. Venue lies in this District pursuant to CAA Section 113(b), 42 U.S.C. § 7413(b), and 28 U.S.C. §§ 1391(b) and (c) and 1395(a), because the violations alleged in the Complaint are alleged to have occurred in, and AZR conducts business in, this judicial district. For purposes of this Consent Decree, or any action to enforce this Consent Decree, AZR consents to the Court's jurisdiction over this Consent Decree and any such action and over AZR and consents to venue in this judicial district.

2. For purposes of this Consent Decree, AZR agrees that the Complaint states claims upon which relief may be granted pursuant to Sections 113(b) and 167 of the CAA, 42 U.S.C. §§ 7413(b) and 7477.

3. Notice of the commencement of this action shall be given to the State of Illinois as required by CAA Section 113(b), 42 U.S.C. § 7413(b).

II. APPLICABILITY

4. The obligations of this Consent Decree apply to and are binding upon the United States, and upon AZR and any successors, assigns, or other entities or persons otherwise bound by law.

5. No transfer of ownership or operation of the Facility, whether in compliance with the procedures of this Paragraph or otherwise, shall relieve AZR of its obligation to ensure that the terms of the Decree are implemented. At least thirty (30) Days prior to such transfer, AZR shall provide a copy of this Consent Decree to the proposed transferee and shall simultaneously provide written notice of the prospective transfer, together with a copy of the proposed written agreement, to U.S. EPA Region 5 and the United States Department of Justice, in accordance with Section XIII (Notices). Any attempt to transfer ownership or operation of the Facility without complying with this Paragraph constitutes a violation of this Decree.

6. AZR shall provide a copy of this Consent Decree to all officers, employees, and agents whose duties might reasonably include compliance with any provision of this Decree, as

well as to any contractor retained to perform work required under this Consent Decree. AZR shall condition any such contract upon performance of the work in conformity with the terms of this Consent Decree.

7. In any action to enforce this Consent Decree, AZR shall not raise as a defense the failure by any of its officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree.

III. DEFINITIONS

8. Terms used in this Consent Decree that are defined in the CAA or in regulations promulgated pursuant to the CAA shall have the meanings assigned to them in the CAA or such regulations, unless otherwise provided in this Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions shall apply:

- a. “ACFM” shall mean actual cubic feet per minute.
- b. “Bag Collector” or “Bag Collectors” shall mean the air pollution control system that uses fabric filter bags for the removal of Particulate Matter and PM₁₀ from air routed from an Emissions Unit at the Facility.
- c. “Capture and Control System” shall mean any system, including duct systems, fans, and hoods, that captures an air pollutant at or near its emissions points and transports the air pollutant via air to a Bag Collector, removes the air pollutant from the air, and exhausts the air through a stack.
- d. “Complaint” shall mean the Complaint filed by the United States in this action.
- e. “Consent Decree” or “Decree” shall mean this Decree and all appendices attached hereto (listed in Section XXII).
- f. “Continuously Operate” or “Continuous Operation” shall mean, except for the Curing and Blending Building, as defined below, that when a monitoring device, a Bag Collector, or both are installed and operated by AZR under this Consent Decree, the monitoring device and Bag Collector shall be operated at all times of operation of the Emissions Unit served by that monitoring device and/or Bag Collector. For the Curing and Blending Building, except as otherwise provided by Paragraphs 25.b., “Continuous Operation” shall mean that (i) the monitoring devices and Bag Collectors 11A, 11B, and 12 shall be operated at all times when material movement is occurring within the Truck Unloading Bay of the Curing and Blending Building; (ii) the monitoring devices and Bag Collector 11A and 11B shall be operated at all times when material movement is occurring within the Rail Unloading Bay of the Curing and Blending Building; and (iii) the monitoring devices and Bag Collector 11A and 11B shall be operated at all times when material movement is occurring within the Mixing Bay of the Curing and Blending Building. When no material movement is occurring within the Curing and Blending Building, the monitoring devices and Bag Collectors are not required to be operated, and the

corresponding parametric standards shall not apply. Such operation shall be consistent with the limitations and requirements set forth in this Consent Decree.

- g. “Date of Lodging” shall mean the calendar date on which this Consent Decree is lodged with the United States District Court for the Northern District of Illinois and recorded on that Court’s docket.
- h. “Day” shall mean a calendar day. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next business day.
- i. “Defendant” shall mean AZR Corporation.
- j. “Effective Date” shall have the definition provided in Section XV.
- k. “Emissions Unit” or “Unit” shall have the meaning in 40 C.F.R. § 52.21(b)(7) and shall, for purposes of this Consent Decree, refer individually to the following Emissions Units, listed with their corresponding existing, new, and/or modified Bag Collectors at the Facility, as set forth in Table 1, below.

Table 1: Facility Emissions Units with Corresponding Bag Collectors

Emissions Unit	Corresponding Existing Bag Collector	Corresponding New/Modified Bag Collector
Carbon Material Pneumatic Transfer System	Bag Collector 15	None - ceased operations
Material Transfer from Coke Conveyor CB-1 to Belt EB-5	Bag Collector 16	New Bag Collector E
Curing and Blending Building*	Bag Collector 11A Bag Collector 11B Bag Collector 12	Modified Bag Collector 11A Modified Bag Collector 11B Modified Bag Collector 12
Feed Transfer Tower	Replacement completed	New Bag Collector 2
Feed Handling Building	Bag Collector 7 Bag Collector 8 Bag Collector 9 Bag Collector 13	New Bag Collector-A New Bag Collector-B New Bag Collector-C
Crude Zinc Oxide Bin	Bag Collector 5 Bag Collector 6	None - ceased operations
Iron Rich Material Transfer Area	Replacement completed	New Bag Collector-D
Iron Rich Material Kiln Discharge Area	Replacement completed	New Bag Collector-D
Waelz Rotary Kiln 1*	Product Collector 3	No change
Waelz Rotary Kiln 2*	Product Collector 10	No change
* not included as a Process Emission Source, as defined below		

- l. “Existing Capture and Control System” shall mean the Capture and Control Systems at the Facility identified in Table 1, above, listed in the column entitled “Corresponding Existing Bag Collector.”
- m. “Facility” shall mean AZR’s electric arc furnace dust processing facility located at 2701 East 114th Street, Chicago, Illinois.
- n. “Flowmeter” means a device used to measure volumetric airflow, in actual cubic feet per minute.
- o. “FPM” shall mean feet per minute.
- p. “Modified Capture and Control System” shall mean the Capture and Control System at the Curing and Blending Building as shown above on Table 1, for which AZR shall make certain improvements as set forth in this Consent Decree.
- q. “Month” shall mean a calendar month.
- r. “Monthly Block Average” shall be determined on a Monthly basis by

summing the total volume of petroleum coke used then dividing it by the total volume of coke (petroleum and metallurgical) at Waelz Kiln 1 and separately at Waelz Kiln 2 at the end of each Month.

- s. “Natural Draft Opening” shall mean any opening to the outdoor air in the Curing and Blending Building that is not connected to a duct in which a fan is installed.
- t. “Negative Pressure” shall mean that the direction of airflow is inward through any natural draft openings and the building is maintained to ensure negative pressure differential values of at least 0.013 mm of mercury (0.007 inches of water), as demonstrated in accordance with the relevant provisions of this Consent Decree.
- u. “New Capture and Control System” shall mean a new Capture and Control System to be installed at the Facility to replace an Existing Capture and Control System, as shown above on Table 1, and includes the installation of a new Capture and Control System at the Iron Rich Material (“IRM”) Kiln Discharge Area, IRM Transfer Area, the Feed Handling Building, the Feed Transfer Tower, and the Material Transfer from Coke Conveyor CB-1 to Belt EB-5.
- v. “New/Modified Capture and Control System” shall mean a New Capture and Control System or a Modified Capture and Control System, including any New/Modified Bag Collector that is part of the Capture and Control System.
- w. “Operating Day” shall mean any Day on which Operation of an Emissions Unit has occurred.
- x. “OEM” shall mean the original equipment manufacturer for each New or Modified Capture and Control System.
- y. “Paragraph” shall mean a portion of this Decree identified by an Arabic numeral.
- z. “Particulate Matter” shall have the meaning in 40 C.F.R. § 51.100(oo).
- aa. “Particulate Matter Emissions” shall have the meaning in 40 C.F.R. § 51.000(pp).
- bb. “Parties” shall mean the United States and AZR.
- cc. “PM₁₀” shall have the meaning in 40 C.F.R. § 51.100(qq).
- dd. “PM₁₀ Emissions” shall have the meaning in 40 C.F.R. § 51.100(rr).
- ee. “PSD” shall mean the Prevention of Significant Deterioration program within the meaning of Part C of Subchapter I of the CAA, 42 U.S.C. §§ 7470–7492 and 40 C.F.R. Part 52.

- ff. “Process Emissions Sources” shall mean the (i) Carbon Material Pneumatic Displace Transfer System, (ii) Carbon Material Bin, now referred to as the “Transfer from Coke Conveyor CB-1 to Belt EB-5,” (iii) Feed Handling System (with pelletizers), now referred to as “Feed Handling Building” and “Feed Transfer Tower,” (iv) Crude Zinc Oxide Bin, (v) IRM Transfer Area, and (vi) the IRM Kiln Discharge Area. The Facility’s Process Emission Sources are the Emissions Units listed in Table 1, excluding the Curing and Blending Building and the Waelz Kiln 1 and Waelz Kiln 2.
- gg. “Reorganization Plan” shall mean the Debtors’ Second Amended Joint Plan of Reorganization in In re Horsehead Holding Corp., et al., No. 16-10287 (Bankr. D. Del) (Horsehead Bankruptcy Case, Docket No. 1695-2).
- hh. “Representative Normal Conditions” shall be interpreted consistent with U.S. EPA’s “Clean Air Act National Stack Testing Guidance,” issued April 27, 2009.
- ii. “Section” shall mean a portion of this Consent Decree identified by a Roman numeral.
- jj. “Test Port” shall mean any one of the seven (7) test ports installed in the Curing and Blending Building for the purposes of evaluating the face velocity at such locations, as shown in the schematic included as Appendix 2 to this Consent Decree.
- kk. “Title V permit” shall mean a permit required by and issued in accordance with the requirements of 42 U.S.C. §§ 7661–7661f.
- ll. “Ton” or “Tons” shall mean short ton or short tons.
- mm. “United States” shall mean the United States of America, acting on behalf of U.S. EPA.
- nn. “U.S. EPA” shall mean the United States Environmental Protection Agency and any of its successor departments or agencies.
- oo. “Visible Emission” shall mean an emission of opacity or optical density above the threshold of vision, consistent with 40 C.F.R. Part 63.2.

IV. CIVIL PENALTY

- 9. Civil Penalties Payable to the United States.
 - a. Within 30 Days after the Effective Date of this Consent Decree, AZR shall pay to the United States the sum of \$400,000 as a civil penalty, together with interest accruing from the Date of Lodging, at the rate specified in 28 U.S.C. § 1961 as of the Date of Lodging.
 - b. In addition to the amount payable under Paragraph 9.a, the United States

on behalf of U.S. EPA shall have an Allowed Other General Unsecured Claim (as that term is used in the Reorganization Plan) of \$654,000 as an additional civil penalty for the Complaint's alleged violations at the Facility before the commencement of the Horsehead Bankruptcy Case (the "Allowed EPA Chicago Claim"), to be paid within 30 Days after the Effective Date as a Class 8B Allowed Other General Unsecured Claim under the Reorganization Plan. As provided by the Reorganization Plan, the Allowed EPA Chicago Claim shall be paid at the rate of 19.9%.

10. AZR shall pay the civil penalty due by FedWire Electronic Funds Transfer ("EFT") to the U.S. Department of Justice account, in accordance with instructions provided to AZR by the Financial Litigation Unit ("FLU") of the United States Attorney's Office for the Northern District of Illinois after the Effective Date. The payment instructions provided by the FLU will include a Consolidated Debt Collection System ("CDCS") number, which AZR shall use to identify all payments required to be made in accordance with this Consent Decree.

11. At the time of payment, AZR shall send notice that payment has been made: (i) to U.S. EPA via email at cinwd_acctsreceivable@epa.gov or via regular mail at U.S. EPA Cincinnati Finance Office, 26 W. Martin Luther King Drive, Cincinnati, Ohio 45268; and (ii) to the United States and to U.S. EPA via email or regular mail in accordance with Section XIII. Such notice shall state that the payment is for the civil penalty owed pursuant to the Consent Decree in United States v. American Zinc Recycling Corp. and shall reference the civil action number, CDCS Number, and DOJ case number 90-5-2-1-11205.

12. The Allowed EPA Chicago Claim (under Paragraph 9.b) shall receive the same treatment under the Reorganization Plan, without discrimination, as all other Class 8B Allowed Other General Unsecured Claims, with all attendant rights provided by the Bankruptcy Code and other applicable law, and shall not be entitled to any priority in distribution over other allowed unsecured claims. In no event shall the Allowed EPA Chicago Claim be subordinated to any other Class 8B Allowed Other General Unsecured Claim pursuant to any provision of the Bankruptcy Code or other applicable law that authorizes or provides for subordination of allowed claims, including, without limitation, Sections 105, 510, and 726(a)(4) of the Bankruptcy Code. The Parties stipulate and agree that the United States shall not be required to file or re-file proofs of claim or administrative expense applications in the Horsehead Bankruptcy Case for the claims that would be allowed and paid under Paragraph 9 of this Consent Decree. The United States shall be relieved of any such filing obligation notwithstanding any bar date or deadline set in the Horsehead Bankruptcy Case, and whether or not this Consent Decree is entered by the District Court before any such bar date or deadline.

13. AZR shall not deduct any penalties paid under this Decree pursuant to this Section or Section VII (Stipulated Penalties) in calculating its federal income tax.

V. COMPLIANCE REQUIREMENTS

A. Installation and Modification of Capture and Control Systems.

14. Feed Transfer Tower: Replacement of Bag Collector 2 with a New Capture and Control System. By no later than one hundred eighty (180) days after the Effective Date, AZR shall install and commence Continuous Operation of the New Capture and Control System at the

Feed Transfer Tower, which includes New Bag Collector 2. AZR shall install at the New Capture and Control System at the Feed Transfer Tower monitoring and recordkeeping systems sufficient to meet the applicable requirements of Section D, below.

15. Iron Rich Material Kiln Discharge Area: Replacement of Bag Collector 1 with a New Capture and Control System. By no later than one hundred eighty (180) days after the Effective Date, AZR shall install and commence Continuous Operation of a New Capture and Control System at the Iron Rich Material (“IRM”) Kiln Discharge Area. The New Capture and Control System at the IRM Kiln Discharge Area shall include the following:

- a. New Bag Collector-D (35,000 ACFM minimum capacity).
- b. Associated fan (with a 30,000 ACFM minimum capacity), ductwork, dampers, and associated structural supports. Ductwork for the New Capture and Control System in the IRM Kiln Discharge Area must meet a minimum design velocity of 3,800 FPM.
- c. Dampers to control airflow to Kiln #1, Kiln #2, and fan.

AZR shall install at the New Capture and Control System at the IRM Kiln Discharge Area monitoring and recordkeeping systems sufficient to meet the applicable requirements of Section D, below.

16. Feed Handling Building: Replacement of Bag Collectors 7, 8, 9, and 13 with New Capture and Control Systems. By no later than December 31, 2021, AZR shall cease operations of Existing Bag Collectors 7, 8, 9, and 13, and install and commence Continuous Operation of New Capture and Control Systems at the Feed Handling Building. The New Capture and Control Systems at the Feed Handling Building shall include the following, except as otherwise provided in Paragraph 21.b.:

- a. New Bag Collector-A (12,000 ACFM minimum capacity), Bag Collector-B (12,000 ACFM minimum capacity), and Bag Collector-C (35,000 ACFM minimum capacity).
- b. Associated fans (a 10,000 ACFM minimum capacity fan for Bag Collector-A, a 10,000 ACFM minimum capacity fan for Bag Collector-B, and a 28,000 ACFM minimum capacity fan for Bag Collector-C).
- c. Repaired, modified, and installed ductwork, dampers, collection chutes at the pelletizers, collection hoods, skirts, other chutes, and other dust enclosures, as necessary for proper operation of the New Capture and Control Systems associated with the Feed Handling Building.

AZR shall install at the New Capture and Control System at the Feed Handling Building, monitoring and recordkeeping systems sufficient to meet the applicable requirements of Section D, below.

AZR may design each New Capture and Control System so that the New Capture and Control System associated with New Bag Collector A, the New Capture and Control System associated with New Bag Collector B, and the New Capture and Control System associated with New Bag Collector C can operate independently and control emissions from a specific Emission Unit or Emission Units within the Feed Handling Building. If AZR designs the systems in such manner, its obligation to Continuously Operate each such New Capture and Control System shall apply during the operation of the corresponding Emission Unit or Emissions Units within the Feed Handling Building.

17. Curing and Blending Building: Modification of Existing Capture and Control System. By no later than two hundred ten (210) days after the Effective Date, AZR shall install a monitoring and recordkeeping system on and begin Continuous Operation of the Modified Capture and Control System for the Curing and Blending Building sufficient to meet the applicable requirements of Section D, below (hereinafter “Modified Capture and Control System”). The Modified Capture and Control System at the Curing and Blending Building shall include the following, as otherwise addressed in Paragraph 25.b.:

- a. Modified Bag Collector 11A (60,000 ACFM original nominal capacity), Modified Bag Collector 11B (60,000 ACFM original nominal capacity), and Modified Bag Collector 12 (30,000 ACFM original nominal capacity), and three bays (Rail Unloading Bay, Truck Unloading Bay, and Mixing Bay) with interconnected openings.
- b. Reconfigured existing and/or new ductwork.

18. Material Transfer from Coke Conveyor CB-1 to Belt EB-5: Replacement of Bag Collector 16 with a New Capture and Control System. By no later than one hundred sixty-five (165) days after the Effective Date, AZR shall install and commence Continuous Operation of a New Capture and Control System at the point of Material Transfer from Coke Conveyor CB-1 to Belt EB-5. The New Capture and Control System for the Material Transfer from Coke Conveyor CB-1 to Belt EB-5 shall include the following:

- a. A New Bag Collector E with a minimum capacity of 10,000 ACFM.
- b. Replaced and reconfigured existing ductwork and/or new ductwork.

AZR shall install at the New Capture and Control System at the Material Transfer from Coke Conveyor CB-1 to Belt EB-5 monitoring and recordkeeping systems sufficient to meet the applicable requirements of Section D, below.

19. Waelz Rotary Kilns 1 and 2: Installation of Monitoring and Recordkeeping Systems. By no later than ninety (90) days after the Effective Date, AZR shall install and commence Continuous Operation of monitoring and recordkeeping systems at Product Collector 10 sufficient to meet the applicable requirements of Section D, Paragraph 44, below. Kiln 1 is currently out of service. AZR shall therefore install and commence Continuous Operation of monitoring and recordkeeping systems at Product Collector 3 sufficient to meet the applicable requirements of Section D, Paragraph 44, below, by no later than ninety (90) days after Kiln 1 is restarted, in accordance with Paragraph 21.

20. Ductwork Velocity Minimum. As part of and by the dates set forth for the installation and modification of each New/Modified Capture and Control System set forth in Paragraphs 14 through 18, above, AZR shall install new ductwork and/or modify existing ductwork as and to the extent necessary for the duct(s) to achieve a minimum design velocity of 4,500 FPM, except for (i) the Iron Rich Material Kiln Discharge Area, which AZR may operate at a minimum design velocity of 3,800 FPM, as set forth in Paragraph 15, or (ii) as approved in Paragraph 20.a, below. By no later than ninety (90) days after the Effective Date, AZR shall modify any ductwork at the Facility associated with Existing Capture and Control Systems that will not be installed, modified, or replaced in connection with the installation and modification of any New/Modified Capture and Control Systems set forth in Paragraphs 14 through 18, above, as and to the extent necessary for such ductwork to achieve a minimum design velocity of 4,500 FPM.

- a. Notwithstanding the requirements of this Paragraph 20, by no less than ninety (90) days prior to installation or modification of any New/Modified Capture and Control System set forth in Paragraphs 14 through 18, above, AZR may submit to U.S. EPA for review and approval, in accordance with Section V.H., information supporting a design velocity lower than 4,500 FPM for specific ductwork. AZR's request for such lower design velocity shall include detailed supporting documentation. If U.S. EPA determines that a velocity different than proposed by AZR (up to 4,500 FPM) is appropriate for such ductwork, then U.S. EPA shall send notice of such determination to AZR within sixty (60) days of receipt of any such request.
- b. Following installation of each New/Modified Capture and Control System set forth in Paragraphs 14 through 18, above, AZR shall report the minimum design velocity for the ductwork used in each of the Process Emissions Sources controlled by such New/Modified Capture and Control System as part of its next Compliance Report to U.S. EPA, pursuant to Section VI (Reporting Requirements). Such report(s) shall include supporting documentation, including, but not limited to calculations and diagrams.

21. Certain Potential Operation and Design Changes.

- a. Notwithstanding the foregoing requirements set forth in Paragraphs 14 through 20, if AZR elects to permanently cease operations of any Process Emissions Source, the Curing and Blending Building, or any Waelz Kiln, any compliance obligation otherwise applicable to such Process Emissions Source, Curing and Blending Building, or Waelz Kiln pursuant to this Consent Decree shall thereafter no longer be applicable. In addition, notwithstanding the foregoing requirements set forth in Paragraphs 14 through 20, in the event that any Process Emissions Source, the Curing and Blending Building, or any Waelz Kiln subject to requirements imposed under Paragraphs 14 through 20 is not operating for a period of 30 days or more within three months of the applicable compliance date for such Process Emissions Source, Curing and Blending Building, or Waelz Kiln, then the applicable compliance date, including but not limited to, for Continuous Operation set forth in Paragraphs 14 through 20, shall be extended until ninety (90) days after the date the source(s) was or is restarted.
- b. If AZR proposes to revise the planned design for the Feed Handling Building's New Capture and Control Systems, as currently outlined in Paragraph 16, then AZR shall submit its revised design proposal for U.S. EPA review under Section V.H. AZR shall submit any such proposal by no later than September 30, 2020, or by a later deadline that U.S. EPA agrees to in writing. Among other things, the revised design proposal shall include information about how the revised design would alter the configurations and capacities of the Bag Collectors and associated fans

specified in Paragraph 16 and the Minimum Airflow Rates for those Bag Collectors in Table 3 in Paragraph 26. In seeking any such design revision, AZR shall bear the burden of demonstrating that its revised design for the New Capture and Control Systems would achieve equal or better particulate matter capture, airflow, and emissions control results than the design currently outlined in Paragraph 16, based on information supplied by a qualified third-party consultant. If U.S. EPA approves the revised design, then the required changes to Paragraph 16 and Table 3 in Paragraph 26 shall be set forth in a written agreement to be filed with the Court as a non-material Consent Decree modification under Paragraph 152. If, within ninety (90) days of AZR's submission to U.S. EPA of the revised design proposal, U.S. EPA has not provided to AZR U.S. EPA's written determination to approve or deny the revised design, then the compliance date identified in Paragraph 16 shall be extended by the number of days equal to the difference between ninety (90) days after AZR's submission to U.S. EPA of the revised design proposal and the date that U.S. EPA provides to AZR U.S. EPA's written determination to approve or deny the revised design.

B. Emission Standards and Operating Requirements.

22. Capture of Particulate Matter. By no later than ninety (90) days after the Effective Date, AZR shall continuously demonstrate capture of Particulate Matter from each Process Emissions Source and the Curing and Blending Building by eliminating Visible Emissions such that no Visible Emissions are emitted from any building housing a Process Emissions Source and the Curing and Blending Building, monitored in accordance with Paragraph 40, below.

23. Bag Collector Stack Opacity Limit. By no later than ninety (90) days after the Effective Date, AZR shall not cause or allow emissions of Particulate Matter with an opacity greater than 30 percent into the atmosphere from any Bag Collector stack. AZR shall demonstrate compliance by limiting opacity from each Bag Collector Stack to less than 30 percent, monitored in accordance with Paragraph 41, below. The requirements of this Paragraph do not apply to the Product Collectors.

24. Pressure Drop. By no later than ninety (90) days after the Effective Date, AZR shall operate each Existing Bag Collector within the interim pressure drop operating ranges set forth in Table 2 below, until AZR commences Continuous Operation of each New/Modified Capture and Control System. By no later than ninety (90) days after the Effective Date, AZR shall operate each Product Collector within the pressure drop operating ranges set forth in Table 2 below. By no later than the Continuous Operation of each New/Modified Capture and Control System, AZR shall operate each New/Modified Capture and Control System within the pressure drop operating range established pursuant to Paragraph 29. AZR shall monitor pressure drop in accordance with the requirements set forth in Paragraph 44.

- a. The applicable pressure drop operating range for each Existing Bag Collector, each Product Collector, and each New/Modified Capture and

Control System shall not apply following replacement of all bags in any Existing Bag Collector, Product Collector, or New/Modified Capture and Control System (or in the affected compartment(s) if the bags are replaced in less than all compartments) until such time as the replacement bags are seasoned, as demonstrated by the pressure drop achieving the minimum value in the applicable pressure drop operating range. Thereafter, the applicable pressure drop operating range shall apply at all times until the next time all bags are replaced in any Existing Bag Collector, Product Collector, or New/Modified Capture Control System or any compartment(s) thereof.

- b. During the period following replacement of all bags in any Existing Bag Collector or Modified Capture and Control System or any compartment thereof until such time as the replacement bags are seasoned, as demonstrated by the pressure drop achieving the minimum value in the applicable pressure drop operating range, AZR shall implement a pre-coat procedure to the extent and for the duration necessary to achieve and maintain the minimum value in the applicable pressure drop operating range, provided, however, that if AZR determines that such pre-coat procedure interferes with process operations by introducing distinct characteristics into the material collected by any Existing Bag Collector or Modified Capture and Control System, then AZR is not required thereafter to implement the pre-coat procedure for the relevant Bag Collector(s).

Table 2: Pressure Drop Operating Ranges

Emissions Unit	Corresponding Existing Bag Collector	Pressure Drop Operating Range
Material Transfer from Coke Conveyor CB-1 to Belt EB-5	Bag Collector 16	2 – 7 in. w.g.
Curing and Blending Building	Bag Collector 11A Bag Collector 11B Bag Collector 12	2 – 7 in. w.g.
Feed Handling Building	Bag Collector 7 Bag Collector 8 Bag Collector 9 Bag Collector 13	2 – 7 in. w.g.
Waelz Rotary Kiln 1	Product Collector 3	1.5 – 6 in. w.g.
Waelz Rotary Kiln 2	Product Collector 10	1.5 – 6 in. w.g.

25. Operation of the Curing and Blending Building.

- a. Required Negative Pressure. By no later than ninety (90) days after the Effective Date, AZR shall Continuously Operate the Curing and Blending Building under Negative Pressure, in accordance with Paragraphs 42.a,

49.a, and/or 50.a.

- b. Minimum Airflow. In conjunction with the other requirements of this Paragraph 25, AZR shall use airflow studies, periodic airflow monitoring, and continuous fan amperage monitoring to ensure that AZR maintains minimum required airflow rates (“Minimum Airflow Rates”) for the Bag Collectors in the Curing and Blending Building.
- (1) Initial Airflow Study. By no later than two hundred forty (240) days after the Effective Date, AZR shall complete an Initial Airflow Study and submit a Study Report identifying Minimum Airflow Rates for the Bag Collectors that are necessary to maintain Negative Pressure under particular operating scenarios in the Curing and Blending Building. In the Initial Airflow Study, AZR shall assess Minimum Airflow Rates by simultaneously:
- (i) monitoring the in-draft velocity at the Test Ports in the Building as prescribed by Paragraph 42.a to ensure that it remains at no less than 200 FPM; (ii) conducting airflow rate measurements at each Bag Collector, using U.S. EPA Methods 1 and 2 in Appendix A to 40 C.F.R. Part 60, starting no later than the commencement of the first in-draft velocity test run and continuing until completion of the third test run; (iii) monitoring the fan amperage for each Bag Collector; (iv) monitoring the pressure drop for each Bag Collector; and (v) identifying the Natural Draft Openings that were open during each portion of the Initial Airflow Study, including the Natural Draft Openings’ respective positions (i.e., closed, 25 percent open, 50 percent open, 75 percent open or fully open). The Initial Airflow Study shall identify Minimum Airflow Rates in accordance with the provisions of this Paragraph 25.b(1)25.b(1)(a).
- (a) AZR shall continuously operate Bag Collector 11A, Bag Collector 11B, and Bag Collector 12, and AZR shall identify the average unit-specific airflow rate that each Bag Collector achieved when the in-draft velocity at each Test Port in the Building was maintained at no less than 200 FPM, as measured in accordance with the procedures for monitoring in-draft velocity specified in Paragraph 42.a.
 - (b) AZR shall present the results of the Initial Airflow Study in a Study Report submitted to EPA in accordance with Section V.H.
 - 1) The Study Report shall specify the Natural Draft Openings that were open during the Initial Airflow Study, including the Natural Draft Openings’ respective positions (i.e., closed, 25 percent open, 50 percent open, 75 percent open or fully open), and summarize the in-draft velocity monitoring results,

airflow rate measurements for each Bag Collector, fan amperage monitoring for each Bag Collector, and pressure drop monitoring results for each Bag Collector during the Study.

- 2) The Study Report shall identify the average *unit-specific* airflow rate for each Bag Collector during the Study.
- 3) The Study Report shall report the summation of the average *unit-specific* airflow rates for Bag Collectors 11A, 11B, and 12 to identify an *aggregate airflow rate* for the three Bag Collectors.
 - a) If the *aggregate airflow rate* identified in the Study equals or exceeds 97,550 ACFM, then AZR's Study Report shall propose a Minimum Airflow Rate for each Bag Collector at the rate *equal to* the average *unit-specific* airflow rate identified in the Study *plus* any margin of safety determined to be necessary to account for airflow measurement variability and reasonably expected wind conditions.
 - b) If the *aggregate airflow rate* identified in the Study is less than 97,550 ACFM, then AZR's Study Report shall propose a Minimum Airflow Rate for each Bag Collector at a rate *that exceeds* one or more of the average *unit-specific* airflow rates identified in the Study, so that the sum of the Minimum Airflow Rates for the three Bag Collectors equals 97,550 *plus* any margin of safety determined to be necessary to account for airflow measurement variability and reasonably expected wind conditions.
- (c) Upon EPA approval of the Initial Airflow Study Report under Section V.H, AZR shall Continuously Operate the Modified Capture and Control System at the Curing and Blending Building in accordance with this Paragraph 25 and the respective Minimum Airflow Rates specified in the approved Study Report, monitored in accordance with Paragraph 42. AZR shall also limit the Natural Draft Openings to those specified in the approved Initial Airflow Study Report, and maintain the Natural Draft Openings in the positions specified in the approved Study Report.

- (2) Periodic Airflow Monitoring. In addition to the airflow monitoring performed during the Initial Airflow Study, AZR shall conduct periodic airflow monitoring for the Curing and Blending Building Bag Collectors, as required by Paragraph 32.b and Paragraph 42.c.
 - (3) Fan Amperage. As an additional measure to ensure minimum airflow in the Curing and Blending Building, AZR shall maintain the fan amperage within the appropriate standards as determined in accordance with Paragraph 32, at each corresponding Bag Collector, monitored in accordance with Paragraph 42.
 - (4) Direct Exhaustion of Air from the Truck and Rail Unloading Bays. By no later than ninety (90) days after the Effective Date, AZR shall at all times Continuously Operate the Curing and Blending Building such that (i) the Truck Unloading Bay exhausts air to Bag Collector 12 and to Bag Collector 11A and Bag Collector 11B during all times that trucks are unloaded within the Truck Unloading Bay; and (ii) the Rail Unloading Bay exhausts air to Bag Collector 11A and Bag Collector 11B during all times that rail cars are unloaded within the Rail Unloading Bay. Until EPA approval of the Initial Airflow Study Report under Section V.H, AZR shall not utilize less than all three Bag Collectors when material movement is occurring in the Truck Unloading Bay, other than while data is being collected during the Study. After EPA approval of the Initial Airflow Study Report under Section V.H, AZR shall operate the Bag Collectors at the approved Minimum Airflow Rates when material movement is occurring in the Truck Unloading Bay and/or the Rail Unloading Bay. AZR may choose to measure in-draft velocities at each Test Port to demonstrate that the in-draft velocities are no less than 200 FPM in accordance with the methodology in Paragraph 42.a. to demonstrate that the Curing and Blending Building is operating under Negative Pressure if any of Bag Collectors 11A, 11B, or 12 are not then operating. If AZR demonstrates, on a daily basis, that the in-draft velocities equal or exceed 200 FPM, then stipulated penalties will not apply for up to seven (7) days, notwithstanding that any of Bag Collectors 11A, 11B, or 12 are not then operating. If any of Bag Collectors 11A, 11B, or 12 are still not operating more than seven (7) days, then stipulated penalties will apply beginning on the eighth day and continuing until AZR restores operation of the Bag Collector(s).
- c. Permanent Closure of Louvers. By no later than ninety (90) days after the Effective Date, AZR shall permanently close: (i) one 18' x 6' louver in the south lean-to attached to the Truck Unloading Bay; (ii) one 6' x 6' louver in the center of the Truck Unloading Bay; (iii) two 6' x 6' louvers on the north and south sides of the Mixing Bay; and (iv) two 12' x 6' louvers in the east wall towards the south end of the Rail Unloading Bay.

- d. Closure of Overhead Doors. By no later than ninety (90) days after the Effective Date, AZR shall ensure that overhead doors in the Truck Unloading Bay are closed during any unloading activities in the Truck Unloading Bay, and that overhead doors in the Rail Unloading Bay are closed during any unloading activities in the Rail Unloading Bay.
- e. Natural Draft Openings.
 - (1) Unless altered Natural Draft Openings are allowed in accordance with Paragraph 25.e(2), after submission of the Initial Airflow Study Report AZR shall not operate any portion of the Curing and Blending Buildings with Natural Draft Openings larger than those specified in the Initial Airflow Study Report, considering both the Natural Draft Openings' size and respective positions (i.e., closed, 25 percent open, 50 percent open, 75 percent open or fully open).
 - (2) If AZR plans to create a new Natural Draft Opening, enlarge an existing Natural Draft Opening, or increase the open position of an existing Natural Draft Opening, relative to the Natural Draft Openings specified in the approved Study Report, or if AZR locates an additional preexisting Natural Draft Opening that had not yet been identified before ninety (90) days after the Effective Date of this Consent Decree, then AZR shall: (i) ensure that an equivalent area (sq. ft.) of existing Natural Draft Openings listed in the approved Initial Airflow Study Report shall be reduced or eliminated; and (ii) update its prior demonstration that the Curing and Blending Building is under Negative Pressure in accordance with EPA Method 204 to reflect the relevant change in the Natural Draft Opening(s) and submit the updated demonstration for U.S. EPA review and approval in accordance with Section V.H. If U.S. EPA does not approve or disapprove AZR's proposed changes to the Natural Draft Opening(s) within sixty (60) days of receiving AZR's updated demonstration, then AZR may implement the proposed changes to the Natural Draft Opening(s), provided however that, if U.S. EPA subsequently disapproves AZR's proposed changes to the Natural Draft Opening(s), AZR must restore the configuration of the Natural Draft Opening(s) governed by U.S. EPA's disapproval. If AZR's use of altered Natural Draft Openings is allowed under this Paragraph 25.e(2), then AZR shall not operate any portion of the Curing and Blending Buildings with Natural Draft Openings larger than those allowed under this Paragraph 25.e(2), considering both the Natural Draft Openings' size and respective positions (i.e., closed, 25 percent open, 50 percent open, 75 percent open or fully open)

26. Operation of the New Capture and Control Systems at the Process Emissions Sources: Minimum Airflow. By no later than the date of Continuous Operation of each New Capture and Control System set forth in Paragraphs 14, 15, 16, and 18, AZR shall Continuously

Operate each respective New Capture and Control System at the Process Emissions Sources in accordance with the respective minimum airflows set forth in Table 3, below. AZR shall demonstrate compliance with such minimum airflows by:

- a. maintaining the fan amperage within the appropriate standards as determined in accordance with Paragraph 32, at each corresponding Bag Collector, monitored in accordance with Paragraph 43; and
- b. maintaining the Minimum Airflow Rates, which are equal to at least 90% of the respective target airflows as set forth in Table 3, below, monitored in accordance with Paragraph 43.

Table 3. Target and Required Minimum Airflow Rates at Process Emissions Sources

New Bag Collector	Target and Minimum Airflow Rates (ACFM)
Bag Collector E	10,000 x 90% = 9,000
Bag Collector 2	7,500 x 90% = 6,750
Bag Collector A	10,000 x 90% = 9,000
Bag Collector B	10,000 x 90% = 9,000
Bag Collector C	28,500 x 90% = 25,650
Bag Collector D	30,000 x 90% = 27,000

27. Waelz Kilns Carbon Source Limit. By no later than ninety (90) days after the Effective Date, AZR shall use a carbon source for Waelz Kiln 1 and Waelz Kiln 2 at the Facility that is not greater than 10 percent petroleum coke by volume of total carbon source, based on a Monthly Block Average. Compliance shall be demonstrated by monitoring, in accordance with Paragraph 46.

28. Carbon Material Pneumatic Displacement Transfer System and Crude Zinc Oxide Bin. By no later than ninety (90) days after the Effective Date, AZR shall permanently cease operation of the Carbon Material Pneumatic Transfer System (and its corresponding Bag Collector 15) and the Crude Zinc Oxide Bin (and its corresponding Bag Collectors 5 and 6).

C. Initial Compliance Demonstration

29. AZR shall retain a qualified third-party consultant to assist AZR in determining appropriate set points for each New/Modified Capture and Control System set forth in Paragraphs 14 through 18, above (“Set Point Determination”). AZR shall complete the Set Point Determination prior to Continuous Operation of each New/Modified Capture and Control System set forth in Paragraphs 14 through 18, above. The Set Point Determination shall include the following components:

- a. Startup procedures for the relevant equipment consistent with applicable instructions provided by the OEM, subject to appropriate in-field adjustments in accordance with the professional judgment of the qualified consultant;
- b. Opacity observations from the stack of each Bag Collector comprising part of each New/Modified Capture and Control System, in accordance with 40 C.F.R. Part 60, Appendix A Method 9;
- c. Opacity observations at each building that contains an Emissions Unit controlled by a New/Modified Capture and Control System, in accordance with 40 C.F.R. Part 60, Appendix A Method 9; and
- d. Determination of the appropriate pressure drop range for each Bag Collector comprising part of the relevant New/Modified Capture and Control System, based on OEM guidance and the evaluation by the qualified consultant of the performance of the equipment during the Set Point Determination.

30. Notice of Set Point Determination. AZR shall provide U.S. EPA with written notice of each Set Point Determination at least fourteen (14) days prior to the commencement of such Set Point Determination, and U.S. EPA may attend such Set Point Determination.

31. Set Point Determination Report and Initial PM Performance Test Protocol.

- a. By no later than thirty (30) days following commencement of each Set Point Determination, AZR shall:
 - (1) submit to U.S. EPA a Set Point Determination Report that contains the results of such Set Point Determination, including, but not limited to: (i) records of Method 9 observations; (ii) established set points for pressure drop, and all other information used to establish pressure drop set points, including, but not limited to, OEM guidance on pressure drop and any equipment evaluations; and (iii) monitoring results of pressure drop; and
 - (2) submit for U.S. EPA review and approval, in accordance with Section V.H, an Initial PM Performance Test Protocol containing a written protocol by which AZR will conduct the Initial PM Performance Test for each Bag Collector comprising part of each New/Modified Capture and Control System, as described in Paragraph 32.
- b. During the pendency of U.S. EPA's review of the Set Point Determination Report submitted by AZR pursuant to Paragraph 31.a(1) and the Initial PM Performance Test Report submitted by AZR pursuant to Paragraph 35 for the relevant New/Modified Capture and Control System, AZR shall comply with the parametric set points and operating ranges for pressure drop identified for the relevant equipment within the Set Point Determination Report. In the event that, based on its review of the Set Point Determination Report and the Initial PM Performance Test Report

for the relevant New/Modified Capture and Control System, U.S. EPA disagrees with any parametric set point or operating range for pressure drop identified for the relevant equipment within the Set Point Determination Report, then U.S. EPA shall provide notice to AZR that it disagrees with one or more parametric set points or operating ranges for pressure drop identified for the relevant equipment within the Set Point Determination Report, and the basis for U.S. EPA's disagreement. Upon issuance by U.S. EPA of any such notice, the parties shall identify an alternative value for the parametric set points or operating ranges for pressure drop for the relevant New/Modified Capture and Control System specified by U.S. EPA. In the event the parties are unsuccessful in identifying a mutually-acceptable parametric set point or operating range for pressure drop for the relevant parameter, then AZR must adopt the specific parametric set point or operating range for pressure drop identified by U.S. EPA for the relevant equipment or initiate dispute resolution pursuant to Section VIII of this Consent Decree.

32. Fan Amperage Determination.

- a. By no later than sixty (60) days after the Set Point Demonstration for the relevant Bag Collector, AZR shall submit for U.S. EPA review, a written Protocol for a twelve (12) month study of fan amperage and airflow for the Bag Collector, as outlined in Subparagraph 32.b. U.S. EPA may provide written comments on AZR's Fan Evaluation Protocol or U.S. EPA may decline to comment. The procedures of this Paragraph shall apply.
 - (1) If U.S. EPA provides written comments within ninety (90) days after receipt of AZR's Protocol, then within thirty (30) days of receipt of such comments, AZR shall either: (i) modify the Protocol consistent with U.S. EPA's written comments; or (ii) submit the matter for dispute resolution under Section VIII of this Consent Decree.
 - (2) AZR shall commence the study in accordance with the Protocol within thirty (30) days after: (i) U.S. EPA provides written notice that it declines to comment on the Protocol; (ii) ninety (90) days have elapsed since submission of the Protocol and U.S. EPA has provided no written comments; or (iii) the Protocol has been modified consistent with U.S. EPA's written comments.
- b. For a period of twelve (12) consecutive months, AZR will monitor and record airflow rate at the outlet/clean side of the Bag Collector stack(s) by conducting airflow rate measurements, using U.S. EPA Methods 1 and 2 in Appendix A to 40 C.F.R. Part 60, at least once per month, for a minimum duration of one hour at each Bag Collector. AZR will also monitor fan amperage on a continuous basis and evaluate the variations in fan amperage relative to the fan curve for the Bag Collectors, corresponding operating and/or ambient temperature conditions, and air

flow. During this evaluation period, AZR will also measure and record relevant Bag Collector system parameters on a periodic basis and/or corresponding to material changes in fan amperage.

- c. Within ninety (90) days following the end of the twelve-month period, AZR will submit to U.S. EPA for its review and approval, a proposed operating plan describing the appropriate fan amperage values for the respective Bag Collector which correspond to the Minimum Airflow Rates as determined by the Initial Airflow Study (for the Curing and Blending Building) and as provided by Paragraph 26.b and Table 3 (for the Process Emissions Units) as follows:
- (1) Lower Investigation Value: fan amperage level below which AZR will investigate the relevant system and record the findings; if such investigation identifies a cause that warrants a responsive action, records of corrective actions taken will be maintained, or the findings of the investigation will be recorded as justification for the continued operation of the system without corrective actions being taken.
 - (2) Upper Investigation Value: fan amperage level above which AZR will investigate the relevant system and record the findings; if such investigation identifies a cause that warrants a responsive action, records of corrective actions taken will be maintained, or the findings of the investigation will be recorded as justification for the continued operation of the system without corrective actions being taken.
 - (3) Upper Threshold Value: fan amperage level above which AZR will take corrective action to restore the fan amperage to a level below the Upper Investigation Threshold.
 - (4) Lower Threshold Value: fan amperage level below which AZR will take corrective action to restore the fan amperage to a level above the Lower Investigation Threshold.
- d. Upon submittal of the operating plan in accordance with Paragraph 32.b, AZR will operate in accordance with the fan amperage standards provided in the operating plan pending U.S. EPA review. After U.S. EPA review and approval in accordance with Section V.H, AZR will operate in accordance with the fan amperage standards provided in the operating plan approved by U.S. EPA. In the event that, based on its review of the operating plan, U.S. EPA disagrees with any standard for fan amperage identified for the relevant equipment within the operating plan, then U.S. EPA shall provide notice to AZR that it disagrees with one or more such standards, and the basis for U.S. EPA's disagreement. Upon issuance by U.S. EPA of any such notice, the parties shall identify an alternative value for the fan amperage standards for the relevant New/Modified Capture and Control System specified by U.S. EPA. In the event the parties are

unsuccessful in identifying mutually-acceptable fan amperage standards, then AZR must adopt the specific standards identified by U.S. EPA for the relevant equipment or initiate dispute resolution pursuant to Section VIII of this Consent Decree.

33. Initial PM Performance Test. By no later than sixty (60) days from the date that AZR receives U.S. EPA's approval of the Set Point Determination and the Initial PM Performance Test Protocol, AZR shall retain a qualified third-party to conduct an Initial PM Performance Test under Representative Normal Conditions for each New/Modified Capture and Control System. The Initial PM Performance Test shall be conducted for a minimum of three, one-hour runs, and shall include the following components, conducted concurrently:

- a. Measure PM emission rates and airflows at each stack for each Bag Collector comprising part of each New/Modified Capture and Control System, in accordance with 40 C.F.R. Part 60, Appendix A Method 1 through Method 5 and Method 201.
- b. Measure opacity from the stack of each Bag Collector comprising part of each New/Modified Capture and Control System, in accordance with 40 C.F.R. Part 60, Appendix A Method 9;
- c. Measure opacity at each building that contains an Emissions Unit controlled by a New/Modified Capture and Control System, in accordance with 40 C.F.R. Part 60, Appendix A Method 9;
- d. Monitor fan amperage for each Bag Collector comprising part of each New/Modified Capture and Control System;
- e. Monitor pressure drop at each Bag Collector at each New/Modified Capture and Control System; and
- f. Monitor in-draft velocity at each Test Port at the Curing and Blending Building.

34. Notice of Initial PM Performance Test. AZR shall provide U.S. EPA with written notice of the scheduled date of each Initial PM Performance Test at least thirty (30) days prior to such Initial Performance Test. U.S. EPA may attend such Initial Performance Test.

35. Initial PM Performance Test Report. By no later than sixty (60) days following each Initial PM Performance Test, AZR shall submit to U.S. EPA a report that contains the results of such performance test for all test runs, including but not limited to: (i) production/processing rates at the time of the performance test; (ii) all calculations; (iii) records of Method 9 observations; (iv) monitoring results of fan amperage, pressure drop, and in-draft velocity; and (v) all appendices.

36. Initial CO Performance Test. Except as provided in Paragraph 21.a., by no later than December 31, 2020 for Kilns 1 and 2, AZR shall retain a qualified third-party consultant to conduct an initial CO performance test at Bag Collectors 3 and 10 under Representative Normal Conditions (the "Initial CO Performance Test"). Performance of the Initial CO Performance Test shall also be conducted to satisfy AZR's obligation to conduct CO testing pursuant to Condition 4.2.2.e.ii.B. of AZR's Title V Permit (Clean Air Act Permit Program Permit No. 96038189). The Initial CO Performance Test shall be conducted for a minimum of three, one-

hour runs to determine emission rates and consist of the following components, which shall be conducted concurrently:

- a. Measure CO emission rates at Product Collectors 3 and 10, in accordance with 40 C.F.R. Part 60, Appendix A Method 1 through Method 4 and Method 10; and
- b. Monitor fuel feed for the Waelz Kiln 1 and Waelz Kiln 2 of metallurgical coke and petroleum coke, as a percentage by volume.

37. Initial CO Performance Test Protocol. By no later than sixty (60) days prior to any planned Initial CO Performance Test, AZR shall submit for U.S. EPA review and approval, in accordance with Section V.H, an Initial CO Performance Test Protocol containing a written protocol by which AZR will conduct the Initial CO Performance Test for Kilns 1 and 2 at Product Collectors 3 and 10.

38. Notice of Initial CO Performance Test. AZR shall provide U.S. EPA with written notice of the scheduled date of each Initial CO Performance Test at least thirty (30) days prior to each Initial Performance Test. U.S. EPA may elect to attend each Initial Performance Test.

39. Initial CO Performance Test Report. By no later than sixty (60) days following each Initial CO Performance Test, AZR shall submit to U.S. EPA a report that contains the results of each performance test for all test runs, including but not limited to:

- (i) production/processing rates at the time of the performance test; (ii) all calculations;
- (iii) monitoring results of fuel feed; and (iv) all appendices.

D. Monitoring and Demonstrating On-Going Compliance

40. Monitoring to Demonstrate Compliance with Capture of Particulate Matter. Beginning no later than ninety (90) days after the Effective Date, AZR shall conduct on each operating day Method 22 monitoring, in accordance with U.S. EPA Reference Test Method 22, 40 C.F.R. Part 60, Appendix A, for a minimum of six (6) minutes at each building that contains a Process Emissions Unit and at the Curing and Blending Building. Monitoring shall be conducted during expected Representative Normal Conditions for the day. AZR shall maintain records of operating hours of each Emissions Unit and each monitoring event conducted pursuant to this Paragraph.

41. Monitoring to Demonstrate Compliance with the Bag Collector Stack Opacity Limit. Beginning no later than ninety (90) days after the Effective Date, AZR shall (i) conduct on each operating day Method 22 monitoring, in accordance with U.S. EPA Reference Test Method 22, 40 C.F.R. Part 60, Appendix A, for a minimum of six (6) minutes at each Bag Collector stack; and (ii) if Visible Emissions are observed during such Method 22 monitoring, initiate (within thirty (30) minutes after such Visible Emissions are observed) opacity monitoring in accordance with U.S. EPA Reference Test Method 9 for a minimum of six (6) minutes. Monitoring shall be conducted during expected Representative Normal Conditions for the day. AZR shall maintain records of each monitoring event conducted pursuant to this Paragraph.

42. Monitoring at the Curing and Blending Building.

- a. In-Draft Velocity Monitoring

- (1) During the time periods and circumstances specified in this

Paragraph 42 and Paragraphs 25.b(1), 49.a, and 50.a, AZR shall measure in-draft velocities at each Test Port in accordance with the procedures of this Paragraph to demonstrate that the in-draft velocities at the Test Ports are no less than 200 FPM, as set forth in Paragraph 42.a(2), below.

- (2) For each Operating Scenario allowed under Paragraph 25.b(1), AZR shall conduct a separate trial and measure in-draft velocities at the Test Ports using a handheld anemometer to collect three rounds of data at each Test Port (hereinafter, “test runs”) for each Operating Scenario. For each of the three test runs, AZR shall conduct three, 30-second measurements at each Test Port, with each 30-second measurement to be conducted within five minutes and the results averaged. AZR shall wait at least one hour after conducting the first test run before conducting the third test run at each Test Port. AZR shall complete all three test runs of measurements of in-draft velocities at the Test Ports within four hours of initiating measurements. AZR shall maintain records of each measurement event conducted pursuant to this Paragraph.
- (3) AZR shall monitor in-draft velocities at the Test Ports according to the following schedule:
 - (a) Once every three months, with the first such monitoring event to occur no later than one hundred eighty (180) days following the Effective Date, and with each subsequent monitoring event occurring approximately every three months thereafter, until a total of four quarterly monitoring events are completed.
 - (b) If AZR demonstrates that the in-draft velocity at each Test Port equals or exceeds 200 FPM during four (4) consecutive quarterly monitoring events as set forth in Paragraph 42.a(3)(a), then AZR may reduce the frequency of its monitoring to once every six (6) months. If AZR does not demonstrate that the in-draft velocity at each Test Port equals or exceeds 200 FPM during four consecutive quarterly monitoring events set forth in Paragraph 42.a(3)(a), then AZR shall continue quarterly monitoring as set forth in Paragraph 42.a(3)(a) until such requirement is satisfied.
 - (c) If AZR satisfies the requirements of Paragraphs 42.a(3)(a) and (b) and reduces its monitoring frequency to once every six months, and AZR demonstrates through two consecutive semiannual monitoring events that the in-draft velocities determined for each Test Port equal or exceed 200 FPM in accordance with the requirements of this

Paragraph, then AZR shall have fully satisfied its obligation under this Paragraph to demonstrate in-draft velocities equal to or exceeding 200 FPM at each Test Port. If AZR does not demonstrate during two consecutive semiannual monitoring events that the in-draft velocities determined for each Test Port equal or exceed 200 FPM in accordance with this Paragraph, then AZR shall continue to conduct semiannual measurement of in-draft velocities at each Test Port, as set forth in this Paragraph, until such requirement is satisfied.

- b. Continuous Fan Amperage Monitoring. Beginning no later than the date of commencement of Continuous Operation of the Modified Capture and Control System at the Curing and Blending Building set forth in Paragraph 17, AZR shall Continuously Operate and maintain devices that continuously monitor and record, in accordance with the requirements of 40 C.F.R. Part 60, the fan amperage of each Bag Collector for the Curing and Blending Building, as 15-minute block averages.
- c. Annual Airflow Monitoring. By no later than the date of commencement of Continuous Operation of the Modified Capture and Control System at the Curing and Blending Building as set forth in Paragraph 17, and annually thereafter, AZR shall conduct and record flow rate measurements, using U.S. EPA Methods 1 and 2 in Appendix A to 40 C.F.R. Part 60, for a minimum duration of one hour at each Bag Collector for the Curing and Blending Building. The airflow monitoring performed during the Initial Airflow Study shall qualify as the first annual airflow monitoring event for the Curing and Blending Building.
- d. Additional Recordkeeping Requirements. By no later than the date of commencement of Continuous Operation of the Modified Capture and Control System at the Curing and Blending Building as set forth in Paragraph 17, AZR shall prepare and maintain contemporaneous operating records identifying: (i) all times when the Curing and Blending Building is operated under each Operating Scenario allowed under Paragraph 25.b(1); and (ii) the Natural Draft Openings that were open at all times, including the Natural Draft Openings' respective positions (i.e., percent open).

43. Monitoring Minimum Airflow at the Process Emissions Source Capture and Control Systems.

- a. Continuous Fan Amperage Monitoring. Beginning no later than the date of commencement of Continuous Operation of each New/Modified Capture and Control System as set forth in Paragraphs 14, 15, 16, and 18, AZR shall Continuously Operate and maintain devices that continuously monitor and record, in accordance with the requirements of 40 C.F.R. Part 60, the fan amperage of each Bag Collector at a Process Emissions Source within such New/Modified Capture and Control System, as 15-minute

block averages.

- b. Annual Airflow Monitoring. Beginning no later than the date of commencement of Continuous Operation of each New/Modified Capture and Control System as set forth in Paragraphs 14, 15, 16, and 18, and annually thereafter, AZR shall conduct and record flow rate measurements, using U.S. EPA Methods 1 and 2 in Appendix A to 40 C.F.R. Part 60, for a minimum duration of one hour, at each Bag Collector at a Process Emissions Source within such New/Modified Capture and Control System.

44. Monitoring to Demonstrate Compliance with Pressure Drop.

- a. Daily Pressure Drop Monitoring during Interim Bag Collector Operations. Beginning no later than ninety (90) days following the Effective Date and until AZR commences Continuous Operation of pressure drop monitoring and record keeping equipment at each Bag Collector as required in Paragraphs 14 through 18, AZR shall monitor and record at least one time each operating day the pressure drop across each Existing Bag Collector.
- b. Continuous Pressure Drop Monitoring of Bag Collectors. Beginning no later than the date AZR commences Continuous Operation of pressure drop monitoring and record keeping equipment at each Bag Collector and Product Collector as required in Paragraphs 14 through 19, above, AZR shall Continuously Operate and maintain devices that continuously monitor and record, in accordance with the requirements of 40 C.F.R. Part 60, the pressure drop as a 15-minute block average at such New/Modified Bag Collector and each Product Collector. The pressure drop for each Product Collector and each New/Modified Bag Collector shall be determined as the average across all individual compartments in use, except during time periods when one of the compartments is being seasoned; when a compartment is being seasoned, the pressure drop shall be determined as the average across all individual compartments in use that are not being seasoned.

45. Warning System. By no later than the date of Continuous Operation of each New/Modified Capture and Control System as set forth in Paragraphs 14 through 18, AZR shall install and maintain a visible and audible warning system that sounds an alarm when (i) fan amperage is not within the appropriate standards as determined by Paragraph 32 at a Bag Collector; and (ii) pressure drop is not within each established pressure drop operating range, as established pursuant to Paragraph 29, at a Bag Collector.

46. Monitoring to Demonstrate Compliance with Waelz Kilns Carbon Source Limit. Beginning no later than ninety (90) days following the Effective Date, AZR shall monitor and record the Monthly Block Average of petroleum coke, and metallurgical coke, and any other carbon source usage at Waelz Kiln 1 and Waelz Kiln 2.

E. Required Response Actions Based on Parametric Performance Indicators

47. Visible Emissions from Buildings.

- a. Curing and Blending Building Capture and Control System and Process Emissions Sources Capture and Control System. If Visible Emissions monitored from a building in accordance with Paragraph 40 (Monitoring to Demonstrate Compliance with Capture of Particulate Matter) exceed the applicable standard identified in Paragraph 22 (Capture of Particulate Matter), then AZR shall promptly investigate the cause of the Visible Emissions and satisfy standards applicable to Visible Emissions from the building. If, within one hour of identifying the Visible Emissions using Method 22, AZR does not satisfy standards applicable to the Visible Emissions from the building, then stipulated penalties shall apply until AZR demonstrates, in accordance with the methodology in Paragraph 40, that Visible Emissions from the building no longer exceed the applicable standard identified in Paragraph 22.

48. Bag Collector Stack Opacity.

- a. Curing and Blending Building Capture and Control System and Process Emission Sources Capture and Control System. If opacity monitored from a Bag Collector stack in accordance with Paragraph 41 (Monitoring to Demonstrate Compliance with the Bag Collector Stack Opacity) exceeds the applicable standard identified in Paragraph 23, then AZR shall promptly investigate the cause of the Visible Emissions and reduce opacity to less than the applicable standard. Within one hour of identifying the opacity in excess of the applicable standard using Method 9, AZR shall perform a subsequent Method 9 measurement in accordance with the methodology in Paragraph 41. If, within one hour of the first Method 9 test identifying the opacity in excess of the applicable standard, AZR does not reduce opacity to less than the applicable standard, then stipulated penalties shall apply until AZR demonstrates, in accordance with the methodology in Paragraph 41 above, that opacity has been reduced to less than the applicable standard.

49. Fan Amperage.

- a. Curing and Blending Building Capture and Control System. If, subsequent to establishing the applicable standard for fan amperage at the conclusion of the process described in Paragraph 32 at a Bag Collector comprising part of the Modified Capture and Control System at the Curing and Blending Building, the measured fan amperage is not within the appropriate standards as determined by Paragraph 32 for such Bag Collector, as monitored pursuant to Paragraph 42.b, AZR shall promptly investigate the cause of the variation in fan amperage and restore the fan amperage to within the appropriate standards for Lower Threshold Value or Upper Threshold Value, as applicable (the "Appropriate Standards"), as determined by Paragraph 32 for such Bag Collector. If AZR does not

restore the fan amperage for such Bag Collector to within the Appropriate Standards as determined by Paragraph 32 for such Bag Collector within four hours of the variation in fan amperage, then stipulated penalties shall apply until AZR demonstrates that fan amperage is within the Appropriate Standards as determined by Paragraph 32 for such Bag Collector. Notwithstanding the foregoing, AZR may choose to measure in-draft velocities at each Test Port to demonstrate that the in-draft velocities are no less than 200 FPM in accordance with the methodology in Paragraph 42.a. to demonstrate that the Curing and Blending Building is operating under Negative Pressure if the fan amperage is not within the Appropriate Standards as determined by Paragraph 32. If AZR demonstrates, on a daily basis, that the in-draft velocities equal or exceed 200 FPM, then stipulated penalties will not apply for up to seven (7) days, notwithstanding that the fan amperage is not within the Appropriate Standards as determined by Paragraph 32 and/or that the Bag Collector(s) are otherwise not Continuously Operating. If AZR does not restore the fan amperage for such Bag Collector to within the Appropriate Standards as determined by Paragraph 32 within seven (7) days, then stipulated penalties will apply beginning on the eighth day and continuing until AZR restores the fan amperage to within the Appropriate Standards.

- b. Process Emission Sources Capture and Control Systems. If, subsequent to establishing the applicable standard for fan amperage at the conclusion of the twelve-month fan amperage determination process described in Paragraph 32, a Bag Collector comprising part of any New/Modified Process Emissions Sources Capture and Control Systems is not within the Appropriate Standards as determined by Paragraph 32 for such Bag Collector, as monitored pursuant to Paragraph 43.a, AZR shall promptly investigate the cause of the variation in fan amperage and restore the fan amperage for such Bag Collector(s) to within the Appropriate Standards as determined by Paragraph 32 for such Bag Collector. If AZR does not restore the fan amperage for such Bag Collector to within the Appropriate Standards as determined by Paragraph 32 for such Bag Collector within four hours of the variation in fan amperage, then stipulated penalties shall apply until AZR demonstrates, in accordance with the methodology in Paragraph 43.a above, that the fan amperage is within the Appropriate Standards as determined by Paragraph 32 for such Bag Collector.

50. Airflow.

- a. Curing and Blending Building. If airflow at a Bag Collector comprising part of the Modified Capture and Control System at the Curing and Blending Building is less than the Minimum Airflow Rate for such Bag Collector, as monitored pursuant to Paragraph 42.c, AZR shall promptly investigate the cause of the variation in airflow and restore the airflow to at least the Minimum Airflow Rate for such Bag Collector determined in accordance with Paragraph 25.b. If AZR does not restore the airflow for such Bag Collector to at least the Minimum Airflow Rate for such Bag

Collector within four hours of the variation in airflow, then stipulated penalties shall apply until AZR demonstrates that airflow is equal to at least the Minimum Airflow Rate for such Bag Collector, as demonstrated in accordance with the methodology in Paragraph 42.c. AZR may choose to measure in-draft velocities at each Test Port on a daily basis to demonstrate that the in-draft velocities are no less than 200 FPM in accordance with the methodology in Paragraph 42.a. to demonstrate that the Curing and Blending Building is operating under Negative Pressure during the time period that airflow is less than the Minimum Airflow Rate for such Bag Collector. Stipulated penalties will not apply to the time periods that AZR is conducting Test Port measurements in accordance with Paragraph 42.a. if such Test Port measurements demonstrate that the Curing and Blending Building is operating under Negative Pressure.

- b. Process Emissions Sources Capture and Control Systems. If airflow at a Bag Collector comprising part of any New/Modified Process Emissions Source Capture and Control System is less than the Minimum Airflow Rate for such Bag Collector, as monitored pursuant to Paragraph 43.b, AZR shall promptly investigate the cause of the variation in airflow and restore the airflow to at least the Minimum Airflow Rate for such Bag Collector. If AZR does not restore the airflow for such Bag Collector to at least the Minimum Air Flow Rate for such Bag Collector within four hours, then stipulated penalties shall apply until AZR demonstrates, in accordance with Paragraph 43.b, that airflow has been restored to at least the Minimum Airflow Rate for such Bag Collector.

51. Pressure Drop.

- a. Curing and Blending Building Capture and Control System, Process Emission Sources Capture and Control Systems, and Product Collectors. If the pressure drop at a Bag Collector or Product Collector is not within the established pressure drop operating range, as monitored and determined pursuant to Paragraphs 44.a and 44.b, as applicable, AZR shall promptly investigate the cause of the variation in pressure drop and restore the pressure drop to within the established operating range for such Bag Collector or Product Collector. If AZR does not restore the pressure drop for such Bag Collector or Product Collector to a value that is within the established operating range within four hours of a variation in pressure drop, then stipulated penalties shall apply until AZR demonstrates, in accordance with Paragraphs 44.a and 44.b above, that the pressure drop is within the established range for such Bag Collector or Product Collector.

52. Notwithstanding the requirements in Paragraphs 47 through 51 above, AZR may elect to cease operations of any Process Emissions Source, Curing and Blending Building, or Waelz Kiln(s) in response to a parameter not meeting a required operating standard, and in doing so, stipulated penalties would not apply during such time period that AZR ceased operations of the Process Emissions Source, Curing and Blending Building, or Waelz Kiln.

F. Operation, Maintenance, and Corrective Action Plan for Emissions Capture and Control Systems and Environmental Management System

53. Submittal of Operation, Maintenance, and Corrective Action Plans. By no later than the date of commencement of Continuous Operation of each New/Modified Capture and Control System set forth in Paragraphs 14 through 18, above, and the date of Continuous Operation of the monitoring and recordkeeping equipment set forth in Paragraph 19, above, AZR shall prepare and submit to U.S. EPA for review and approval, in accordance with Subsection V.H (Approval of Deliverables), an Operation, Maintenance, and Corrective Action Plan that applies to each New/Modified Capture and Control System, as set forth in Paragraphs 15 to 18, and to the new monitoring and recordkeeping equipment as set forth in Paragraph 19. Each Operation, Maintenance, and Corrective Action Plan shall include:

- a. Monitoring Parameters. Parameters to be monitored to determine compliance, as set forth in Section D of this Consent Decree, and established levels or ranges;
- b. Monitoring Procedures and Schedule. Procedures for conducting monitoring and the monitoring schedule;
- c. Operation and Maintenance of each Emission Unit and Capture and Control System. Procedures for the proper operation and maintenance of each Emission Unit and Capture and Control System used to meet the emission limits in Section B of this Consent Decree;
- d. Operation and Maintenance of each Monitoring Device. Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance, including calibration and certification of accuracy of each monitoring device according to the OEM; and
- e. Corrective Action Plan. Corrective actions to be taken if AZR deviates from the limits, set points, parameter values, or ranges established pursuant to Paragraph 29. The Corrective Action Plan shall include:
 - (1) Procedures to determine and record the cause of any deviation or excursion, and the time the deviation or excursion began and ended; and
 - (2) Procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed.
- f. Preventative Maintenance Plan and Schedule. A preventive maintenance plan and schedule for each Capture and Control System;
- g. Spare Parts Inventory. A spare parts inventory for each Capture and Control System; and
- h. Records Maintenance. Procedures for maintaining records required by Section D of this Consent Decree.

AZR shall update and modify its Operation, Maintenance, and Corrective Action Plans to incorporate appropriate changes. Modifications to the Operation, Maintenance, and Corrective Action Plans shall be submitted to U.S. EPA in accordance with Subsection V.H (Approval of Deliverables), but shall take effect without the need for U.S. EPA's affirmative approval unless U.S. EPA disapproves all or part of the submission within 45 days of the date of the submission pursuant to Paragraph 61 (c) or (d). At all times, AZR shall operate in accordance with the Operation, Maintenance, and Corrective Action Plans.

G. Permits

54. Permits Needed to Meet Compliance Obligations. Unless expressly stated otherwise in this Consent Decree, in any instance where any compliance obligation under this Consent Decree requires AZR to obtain a federal, state, or local permit or approval, AZR shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals.

55. When permits are required, AZR shall complete and submit applications for such permits to the applicable State and/or local agency to allow sufficient time for all legally required processing and review of the permit request, including requests for additional information by the applicable State and/or local agency. Any failure by AZR to submit a timely permit application for an Emissions Unit at the Facility, as required by permitting requirements under state, local, and/or federal regulations, shall bar any use of Section VIII (Force Majeure) of this Consent Decree where a Force Majeure claim is based on permitting delays.

56. Federally-Enforceable Construction Permits to Ensure Survival of Consent Decree Limits and Standards after Termination of Consent Decree. AZR shall comply with the following to ensure that the limits and standards set forth in this Consent Decree survive termination of the Consent Decree:

- a. By no later than forty-eight (48) months from the Effective Date of this Consent Decree, AZR shall submit an appropriate application to Illinois EPA or the applicable authorized state agency, to incorporate the specific requirements of Paragraph 56.b. into federally enforceable construction permits, whether as new permits or modifications to existing permits and including, but not limited to, revisions to construction permits issued by Illinois EPA pursuant to 35 Ill. Adm. Code Part 201 under the Illinois SIP, to ensure that such requirements become and remain an "applicable requirement" as that term is defined in 40 C.F.R. § 70.2, beyond the termination of this Consent Decree. Following submission of the appropriate application(s), AZR shall promptly submit to Illinois EPA any information that Illinois EPA requests in connection with the permit application(s).
- b. AZR shall submit an appropriate application(s) to incorporate into construction permits, whether as new permits or modifications to existing permits, all of the following requirements of this Consent Decree pursuant to this Paragraph 56:

- (1) The requirement to operate the New Capture and Control System at the Feed Transfer Tower, including New Bag Collector-2; the New Capture and Control System at the IRM Kiln Discharge Area, including New Bag Collector-D; the New Capture and Control System at the Feed Handling Building, including New Bag Collectors A, B, and C; the Modified Control System at the Curing and Blending Building, and the New Capture and Control System for the Material Transfer from Coke Conveyor CB-1 to Belt EB-5, including New Bag Collector E, as set forth in Paragraphs 14 through 18.
- (2) The requirements to satisfy standards applicable to Visible Emissions and opacity, as set forth in Paragraphs 22 - 23, respectively, to monitor and record, as set forth in Paragraph 40 - 41, respectively, and to implement applicable response actions pursuant to Paragraphs 47 - 48.
- (3) The requirements to maintain each New/Modified Bag Collector and each Product Collector within the appropriate pressure drop operating range established in Paragraph 29, as set forth in Paragraphs 24 and 51, to continuously monitor and record pressure drop at each New/Modified Bag Collector and Product Collector, as set forth in Paragraph 44, and to implement applicable response actions pursuant to Paragraph 51.
- (4) The requirement to operate the Curing and Blending Building under Negative Pressure, as set forth in Paragraph 25.a.
- (5) The requirements to maintain each New/Modified Bag Collector at the required Minimum Airflow Rates as determined by the Initial Airflow Study (for the Curing and Blending Building) and as provided by Paragraph 26.b and Table 3 (for the Process Emissions Units), to monitor and record flowrate measurements, as set forth in Paragraphs 42.c and 43.b, and to implement applicable response actions pursuant to Paragraph 50.
- (6) The requirements to keep overhead doors in the Truck Unloading Bay closed during unloading activities in the Truck Unloading Bay and Rail Unloading Bay during any unloading activities in the Rail Unloading Bay, as set forth in Paragraph 25.d.
- (7) The requirement to limit Natural Draft Openings in the Curing and Blending Building, as set forth in Paragraphs 25.f and 25.g.
- (8) The requirement to limit the carbon source for Waelz Kiln 1 and Waelz Kiln 2 to no more than 10 percent petroleum coke by volume, as set forth in Paragraph 27 of this Consent Decree, to monitor and record monthly petroleum coke, metallurgical coke, and other carbon source usage at Waelz Kilns 1 and 2, as set forth

in Paragraph 46.

- (9) The requirement to permanently cease operations of the Crude Zinc Oxide Bin, as set forth in Paragraph 28.
- (10) The requirement to operate in accordance with the Operation, Maintenance, and Corrective Action Plan, in accordance with Paragraph 53, provided however that any monitoring practices included within the Operation, Maintenance, and Corrective Action Plan shall not be required to be included within a construction permit except to the extent otherwise expressly required by this Paragraph 56.
- (11) A requirement to conduct subsequent PM/PM₁₀ stack testing on the Process Emission Source Bag Collectors every five years and conduct subsequent CO stack testing on the Product Collectors every five years.

57. Title V Permit. Prior to termination, and in accordance with the requirements of the Illinois Environmental Protection Agency Clean Air Act Permit Program governing modification and amendment of a Title V Permit, AZR shall file an updated Title V Permit renewal application, a minor modification, a significant modification, or an administrative amendment to the Facility's Title V permit, as appropriate, to incorporate the applicable requirements of such permit into the Title V Permit for the Facility. In addition, by no later than thirty-six (36) months from the Effective Date, AZR shall file an updated Title V Permit renewal application, a minor modification, a significant modification, or an administrative amendment to the Facility's Title V permit, as appropriate, to:

- a. remove from AZR's current Title V Permit the Crude Zinc Oxide Bin (formerly served by Bag Collectors 5 and 6) as Bag Collectors 5 and 6 are no longer operable; and
- b. include operation of EB-1 Bucket Elevator in AZR's current Title V Permit.

58. When the requirements of this Consent Decree are incorporated into the construction permits applicable to the Facility and then subsequently incorporated into the Facility's Title V Permit, these requirements shall also become enforceable pursuant to such permits.

59. Notwithstanding the reference to the Title V Permit and construction permit in this Consent Decree, the enforcement of any such CAA permit shall be in accordance with its own terms and the CAA and its implementing regulations. Such Title V Permit and construction permit shall not be enforceable under this Consent Decree, although any term or limit established by or under this Consent Decree shall be enforceable under this Consent Decree regardless of whether such term has or will become part of a Title V Permit and construction permit, subject to the terms of Section XVII (Termination) of this Consent Decree.

60. At the time each application is made pursuant to either Paragraph 56 or 57 of this Consent Decree, AZR shall provide U.S. EPA, in accordance with Section XIII (Notices), a copy

of each application for Title V Permit and/or construction permit, as well as a copy of any draft permit or amended permit proposed by Illinois EPA as a result of such application to allow for timely participation by U.S. EPA in any public comment opportunity.

H. Approval of Deliverables.

61. After review of any plan, report, or other item that is required to be submitted pursuant to this Consent Decree, U.S. EPA shall in writing: (a) approve the submission; (b) approve the submission upon specified conditions; (c) approve part of the submission and disapprove the remainder; or (d) disapprove the submission.

62. If the submission is approved pursuant to Paragraph 61, AZR shall take all actions required by the plan, report, or other document, in accordance with the schedules and requirements of the plan, report, or other document, as approved. If the submission is conditionally approved or approved only in part pursuant to Paragraph 61 (b) or (c), AZR shall, upon written direction from U.S. EPA, take all actions required by the approved plan, report, or other item that U.S. EPA determines are technically severable from any disapproved portions, subject to AZR's right to dispute only the specified conditions or the disapproved portions, under Section IX (Dispute Resolution).

63. If the submission is disapproved in whole or in part pursuant to Paragraph 61 (c) or (d), AZR shall, within forty-five (45) days or such other time as the Parties agree to in writing, correct all deficiencies and resubmit the plan, report, or other item, or disapproved portion thereof, for approval, in accordance with the preceding Paragraphs. If the resubmission is approved in whole or in part, AZR shall proceed in accordance with the preceding Paragraph 62 of this Consent Decree.

64. Any stipulated penalties applicable to the original submission, as provided in Section VII, shall accrue during the forty-five (45) day period or other specified period as the Parties agree to in writing, but shall not be payable unless the resubmission is untimely or is disapproved in whole or in part; provided that, if the original submission was so deficient as to constitute a material breach of AZR's obligations under this Decree, the stipulated penalties applicable to the original submission shall be due and payable notwithstanding any subsequent resubmission.

65. If a resubmitted plan, report, or other item, or portion thereof, is disapproved in whole or in part, U.S. EPA may again require AZR to correct any deficiencies, in accordance with the preceding paragraphs, subject to AZR's right to invoke Dispute Resolution and the right of U.S. EPA to seek stipulated penalties as provided in this Subsection V.H.

VI. REPORTING REQUIREMENTS

66. Semiannual Compliance Status Reports (“Semiannual Compliance Report(s)”). By no later than six (6) months after the Effective Date of this Consent Decree, and every six months thereafter until termination of this Decree pursuant to Section XVII (Termination), AZR shall submit to U.S. EPA a written Semiannual Compliance Report that shall contain information on implementation of this Consent Decree for the preceding six-month period. AZR shall include in each Semiannual Compliance Report information on the following reporting obligations set forth in this Consent Decree:

- a. The status of compliance with all requirements in Subsection V.A, including (i) a statement setting forth the deadlines and other terms that AZR is or was required to meet by the Consent Decree since the date of the last Semiannual Compliance Report; (ii) whether and to what extent AZR has met these requirements; (iii) a general description of the projects and activities conducted during the reporting period pursuant to this Consent Decree for the purpose of complying with the requirements of Subsection V.A of this Consent Decree; (iv) a summary of costs incurred; and (v) a projection of work to be performed pursuant to this Consent Decree during the next reporting period. Notification to U.S. EPA of any anticipated delay shall not, by itself, excuse the delay;
- b. Any deviation(s) that occurred during monitoring to demonstrate compliance with the applicable standards for visible emissions, pursuant to Paragraph 40;
- c. Any deviation(s) that occurred during monitoring to demonstrate compliance with Bag Collector Stack Opacity limits, pursuant to Paragraph 41;
- d. Results of required monitoring to demonstrate compliance with the obligation to maintain Negative Pressure at the Curing and Blending Building pursuant to Paragraph 42, including Test Ports anemometer monitoring, fan amperage monitoring for any day that a deviation(s) occurred, and annual airflow monitoring;
- e. Results of required monitoring to demonstrate compliance with Minimum Airflow Rates at the Process Emissions Source Capture and Control Systems, pursuant to Paragraph 43, including fan amperage monitoring for any day that a deviation(s) occurred, and annual airflow monitoring;
- f. Results of required monitoring to demonstrate compliance with pressure drop, pursuant to Paragraph 44, including daily pressure drop monitoring during interim Existing Bag Collector operations and continuous pressure drop monitoring of Bag Collectors and Product Collectors for any day on which a deviation(s) occurred;
- g. Records of monthly petroleum coke and metallurgical coke usage at Waelz Kiln 1 and Waelz Kiln 2, pursuant to Paragraph 46;
- h. Any deviation(s), investigation(s), and corrective action(s) taken under Section V.E. (Required Response Actions Based on Parametric Performance Indicators), related to requirements under Paragraphs 47(Visible Emissions from Buildings), 48 (Bag Collector Stack Opacity), 49 (Fan Amperage), 50 (Airflow), and 51 (Pressure Drop), and whether and for how long AZR elected to cease operations of any Process Emissions Source, Curing and Blending Building, or Waelz Kiln(s) pursuant to Paragraph 52;

- i. Status of any permit application(s) pursuant to Subsection V.G. (Permits) of this Consent Decree, including copies of any submitted permit application, state-proposed permit, and issued permit;
- j. The operation, maintenance, and corrective action activities performed pursuant to Subsection V.F.; and
- k. A description of any problems encountered or anticipated, together with implemented or proposed solutions.

67. Each report submitted by AZR under this Section shall also include a description of any non-compliance with the requirements of this Consent Decree and an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If AZR violates, or has reason to believe that it may violate, any requirement of this Consent Decree, AZR shall notify the United States of such violation and its likely duration, in writing, within ten (10) working Days of the Day AZR first becomes aware of the violation, with an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If the cause of a violation cannot be fully explained at the time the report is due, AZR shall so state in the report. AZR shall investigate the cause of the violation and shall then submit an amendment to the report, including a full explanation of the cause of the violation, within thirty (30) Days of the Day AZR becomes aware of the cause of the violation. Nothing in this Paragraph or the following Paragraph relieves AZR of its obligation to provide the notice required by Section VIII (Force Majeure).

68. Whenever any violation of this Consent Decree or of any applicable permits or any other event affecting AZR's performance under this Consent Decree, or the performance of the Facility, may pose an immediate threat to the public health or welfare or the environment, AZR shall notify U.S. EPA orally or by electronic transmission as soon as possible, but no later than twenty-four (24) hours after AZR first knew of the violation or event or potential violation or event. This procedure is in addition to the requirements set forth in the preceding Paragraph 67 of this Consent Decree.

69. All reports shall be submitted to the persons designated in Section XIII (Notices).

70. Each report submitted by AZR under this Section shall be signed by an official of the submitting party and include the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information,

including the possibility of fine and imprisonment for knowing violations.

71. This certification requirement does not apply to emergency or similar notifications where compliance would be impractical.

72. The reporting requirements of this Consent Decree do not relieve AZR of any reporting obligations required by the CAA or implementing regulations, or by any other federal, state, or local law, regulation, permit, or other requirement.

73. Any information provided pursuant to this Consent Decree may be used by the United States in any proceeding to enforce the provisions of this Consent Decree and as otherwise permitted by law.

VII. STIPULATED PENALTIES

74. AZR shall be liable for stipulated penalties to the United States for violations of this Consent Decree as specified below, unless excused under Section VIII (Force Majeure). A violation includes failing to perform any obligation required by the terms of this Decree, according to all applicable requirements of this Decree and within the specified time schedules established by or approved under this Decree.

75. Late Payment of Civil Penalty. If AZR fails to pay the civil penalty required to be paid under Section IV (Civil Penalty) when due, AZR shall pay a stipulated penalty of \$2,500 per Day for each Day that the payment is late.

76. For failure to commence and continue to operate a New Capture and Control System at the Feed Transfer Tower in accordance with Paragraph 14, the following stipulated penalties shall accrue per violation per Day of noncompliance:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$2,000	1st through 14th day
\$4,000	15th through 30th day
\$6,000	31st day and beyond

77. The following stipulated penalties shall accrue per violation per Day of noncompliance for failure to install and continue to operate monitoring and recordkeeping systems for the New Capture and Control System at the Feed Transfer Tower, following commencement of operation of such New Capture and Control System, in accordance with Paragraph 14 and the applicable requirements of Subsection V.D:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$1,000	1st through 14th day
\$2,000	15th through 30th day
\$4,000	31st day and beyond

78. For failure to commence and continue to operate a New Capture and Control System at the IRM Kiln Discharge Area in accordance with Paragraph 15, the following stipulated penalties shall accrue per violation for each Day of noncompliance:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$2,000	1st through 14th day
\$4,000	15th through 30th day
\$6,000	31st day and beyond

79. The following stipulated penalties shall accrue per violation for each Day of noncompliance for failure to install and continue to operate monitoring and recordkeeping systems for the New Capture and Control System at the IRM Kiln Discharge Area, following commencement of operation of such New Capture and Control System, in accordance with Paragraph 15 and the applicable requirements of Subsection V.D:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$1,000	1st through 14th day
\$2,000	15th through 30th day
\$4,000	31st day and beyond

80. For failure to commence and continue to operate a New Capture and Control System at the Feed Handling Building in accordance with Paragraph 16, the following stipulated penalties shall accrue per violation for each Day of noncompliance:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$2,000	1st through 14th day
\$4,000	15th through 30th day
\$6,000	31st day and beyond

81. The following stipulated penalties shall accrue per violation for each Day of noncompliance for failure to install and continue to operate monitoring and recordkeeping systems for the New Capture and Control System at the Feed Handling Building, following commencement of operations of such New Capture and Control System, in accordance with Paragraph 16 and the applicable requirements of Subsection V.D:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$1,000	1st through 14th day
\$2,000	15th through 30th day
\$4,000	31 st day and beyond

82. For failure to commence and continue to operate a Modified Capture and Control System at the Curing and Blending Building in accordance with Paragraph 17, the following stipulated penalties shall accrue per violation for each Day of noncompliance:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$2,000	1st through 14th day
\$4,000	15th through 30th day
\$6,000	31st day and beyond

83. The following stipulated penalties shall accrue per violation for each Day of noncompliance for failure to install and continue to operate monitoring and recordkeeping systems for the Modified Capture and Control System at the Curing and Blending Building, following commencement of operation of such New Capture and Control System, in accordance with Paragraph 17 and the applicable requirements of Subsection V.D:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$1,000	1st through 14th day
\$2,000	15th through 30th day
\$4,000	31 st day and beyond

84. For failure to commence and continue to operate a New Capture and Control System at the point of Material Transfer from Coke Conveyor CB-1 to Belt EB-5 in accordance with Paragraph 18, the following stipulated penalties shall accrue per violation for each Day of noncompliance:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$2,000	1st through 14th day
\$4,000	15th through 30th day
\$6,000	31st day and beyond

85. The following stipulated penalties shall accrue per violation for each Day of noncompliance for failure to install and continue to operate monitoring and recordkeeping systems for the New Capture and Control System at the point of Material Transfer from Coke Conveyor CB-1 to Belt EB-5, following commencement of operation of such New Capture and Control System, in accordance with Paragraph 18 and the applicable requirements of Subsection V.D:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$1,000	1st through 14th day
\$2,000	15th through 30th day
\$4,000	31st day and beyond

86. The following stipulated penalties shall accrue per violation for each Day of noncompliance for failure to operate monitoring and recordkeeping systems for Product Collector 10 at Waelz Rotary Kiln 2 or Product Collector 3 at Waelz Rotary Kiln 1 as required by Paragraph 19 and the applicable requirements of Subsection V.D:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$1,000	1st through 14th day
\$2,000	15th through 30th day
\$4,000	31st day and beyond

87. For failure to install new ductwork and/or modify existing ductwork designed to achieve a minimum design velocity set forth in and in accordance with any requirement of Paragraph 20, the following stipulated penalties shall accrue per violation for each Day of noncompliance:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$1,000	1st through 14th day
\$2,000	15th through 30th day
\$4,000	31st day and beyond

88. For failure to satisfy standards applicable to Visible Emissions of Particulate Matter from a Process Emission Source or the Curing and Blending Building, in accordance with any requirement of Paragraph 22, (and for failure to monitor as required by Paragraph 40), the following stipulated penalties shall accrue per violation for each Day of noncompliance, subject to Paragraph 47.a:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$1,000	1st through 14th day
\$2,000	15th through 30th day
\$4,000	31st day and beyond

89. For failure to satisfy standards applicable to Visible Emissions of Particulate Matter from any Bag Collector stack, in accordance with any requirement of Paragraph 23, (and for failure to monitor as required by Paragraph 41), the following stipulated penalty shall accrue per violation for each Day of noncompliance, subject to Paragraph 48.a:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$1,000	1st through 14th day
\$2,000	15th through 30th day
\$4,000	31st day and beyond

90. For failure to operate an Existing Bag Collector or Product Collector within the applicable interim pressure drop operating range or to operate a New/Modified Capture and Control System within the applicable pressure drop operating range in accordance with any requirement of Paragraph 24 (and for failure to monitor as required by Paragraph 44), the following stipulated penalties shall accrue per violation for each Day of noncompliance, subject to Paragraph 51.a:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$1,000	1st through 14th day
\$2,000	15th through 30th day
\$4,000	31st day and beyond

91. For failure to operate the Curing and Blending Building in accordance with the requirements of Paragraph 25, including for failure to ensure that the in-draft velocity at each Test Port in the Building is no less than 200 FPM when monitored, (and for failure to monitor as required by Paragraph 42), the following stipulated penalties shall accrue per violation for each Day of noncompliance, subject to Paragraphs 25.b(4), 47.a, 48.a, 49.a, and 50.a:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$1,000	1st through 14th day
\$2,000	15th through 30th day
\$4,000	31st day and beyond

92. For failure to satisfy any requirement of Paragraph 25.b(1) concerning completion of the Initial Airflow Study, the following stipulated penalties shall accrue per violation for each Day of noncompliance: \$500 per Day.

93. For failure to operate a Process Emission Source’s New/Modified Capture and Control System in accordance with the requirements of Paragraph 26 (and for failure to monitor as required by Paragraph 43), the following stipulated penalties shall accrue per violation for each Day of noncompliance, subject to Paragraphs 47.a, 48.a, 49.b, and 50.b:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$1,000	1st through 14th day
\$2,000	15th through 30th day
\$4,000	31st day and beyond

94. For failure to limit the carbon source for either Waelz Kiln 1 or Waelz Kiln 2 to no more than 10 percent petroleum coke, as set forth in Paragraph 27, the following stipulated penalties shall accrue per violation for each period of noncompliance: \$10,000 per violation of a monthly block average.

95. For failure to permanently cease operation of the Crude Zinc Oxide Bin in accordance with any requirement of Paragraph 28, the following stipulated penalties shall accrue per violation for each Day of noncompliance:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$1,000	1st through 14th day
\$2,000	15th through 30th day
\$4,000	31st day and beyond

96. For failure to conduct a Set Point Determination for a New/Modified Capture and Control System in accordance with any requirement of Paragraph 29, the following stipulated penalties shall accrue per violation for each Day of noncompliance:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$1,000	1st through 14th day
\$2,000	15th through 30th day
\$4,000	31st day and beyond

97. For failure to provide a Set Point Determination Report or an Initial PM Performance Test Protocol in accordance with any requirement of Paragraph 31, the following stipulated penalties shall accrue per violation for each Day of noncompliance: \$500 per Day

98. For failure to perform a Fan Amperage Determination for a Bag Collector in accordance with any requirement of Paragraph 32, the following stipulated penalties shall accrue per violation for each day of noncompliance: \$1,000 per Day.

99. For failure to complete an Initial PM Performance Test in accordance with any requirement of Paragraph 33, the following stipulated penalties shall accrue per violation for each Day of noncompliance: \$1,000 per Day.

100. For failure to submit an Initial PM Performance Test Report in accordance with any requirement of Paragraph 35, the following stipulated penalties shall accrue per violation for each Day of noncompliance: \$500 per Day

101. For failure to perform an Initial CO Performance Test in accordance with any requirement in Paragraph 36, the following stipulated penalties shall accrue per violation for each Day of noncompliance: \$1,000 per Day.

102. For failure to submit an Initial CO Performance Test Protocol in accordance with any requirement of Paragraph 37, the following stipulated penalties shall accrue per violation for each Day of noncompliance: \$500 per Day

103. For failure to submit an Initial CO Performance Test Report in accordance with any requirement of Paragraph 39, the following stipulated penalties shall accrue per violation for each Day of noncompliance: \$500 per Day.

104. For failure to install or maintain a visible and audible warning system for fan amperage or pressure drop at a Bag Collector in accordance with a requirement of Paragraph 45, the following stipulated penalties shall accrue per violation per Day of noncompliance: \$1,000 per Day.

105. For failure to monitor and record petroleum coke, metallurgical coke, and other carbon source usage in accordance with the requirements of Paragraph 46, the following stipulated penalties shall accrue per violation per Day of noncompliance:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$1,000	1st through 14th day
\$2,000	15th through 30th day
\$4,000	31st day and beyond

106. For failure to submit or operate in accordance with an Operation, Maintenance, and Corrective Action Plan for or a New/Modified Capture and Control System in accordance with a requirement of Paragraph 53, the following stipulated penalties shall accrue per violation per each Day of noncompliance (provided however that no stipulated penalty shall apply under this paragraph to the extent that AZR is otherwise subject to a stipulated penalty pursuant to this Section VII for the same underlying action or omission):

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$500.....	1st through 14th day
\$1,000.....	15th through 30th day
\$3,000.....	31st day and beyond

107. Permitting Requirements. For the failure to timely apply for any permit in accordance with the requirements of Section V.G (Permits) of this Consent Decree, the following stipulated penalties shall accrue per violation per Day of noncompliance: \$1,000 per Day.

108. Reporting Requirements. For each violation of any reporting requirements under Section VI (Reporting Requirements), the following stipulated penalties shall accrue per violation per Day of noncompliance: \$500 per Day.

109. For failure to comply with the Transfer of Ownership or Operation Requirements of Paragraph 5 of this Consent Decree, the following stipulated penalties shall accrue per violation per Day of noncompliance:

<u>Penalty Per Violation Per day</u>	<u>Period of Noncompliance</u>
\$1,000.....	1st through 14th day
\$2,000.....	15th through 30th day
\$4,000.....	31st day and beyond

110. Any Other Violation of this Decree: For failure to comply with any other requirement of this Consent Decree, the following stipulated penalties shall accrue per violation per Day of noncompliance, provided however that this Paragraph 110 shall not result in the application of any stipulated penalty to any circumstance and time period for which this Consent Decree expressly provides that stipulated penalties will not apply: \$500 per Day.

111. Stipulated penalties under this Section shall begin to accrue on the Day after performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Stipulated penalties shall accrue simultaneously for separate violations of this Consent Decree.

112. AZR shall pay any stipulated penalty within thirty (30) Days of receiving the United States' written demand.

113. The United States may in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due under this Consent Decree.

114. Stipulated penalties shall continue to accrue as provided in Paragraph 111 during any Dispute Resolution, but need not be paid until the following:

- a. If the dispute is resolved by agreement or by a decision of U.S. EPA that is not appealed to the Court, AZR shall pay accrued penalties determined to be owing, together with interest, to the United States within 30 Days of the effective date of the agreement or the receipt of U.S. EPA's decision or order.

- b. If the dispute is appealed to the Court and the United States prevails in whole or in part, AZR shall pay all accrued penalties determined by the Court to be owing, together with interest, within 60 Days of receiving the Court's decision or order, except as provided in subparagraph c, below.
- c. If any Party appeals the District Court's decision, AZR shall pay all accrued penalties determined to be owing, together with interest, within 15 Days of receiving the final appellate court decision.

115. AZR shall pay stipulated penalties owing to the United States in the manner set forth and with the confirmation notices required by Paragraph 147, except that the transmittal letter shall state that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid.

116. If AZR fails to pay stipulated penalties according to the terms of this Consent Decree, AZR shall be liable for interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the United States from seeking any remedy otherwise provided by law for AZR's failure to pay any stipulated penalties.

117. The payment of penalties and interest, if any, shall not alter in any way AZR's obligation to complete the performance of the requirements of this Consent Decree.

118. Non-Exclusivity of Remedy. Stipulated penalties are not the United States' exclusive remedy for violations of this Consent Decree. Subject to the provisions of Section XI (Effect of Settlement/Reservation of Rights), the United States expressly reserves the right to seek any other relief it deems appropriate for AZR's violation of this Decree or applicable law, including but not limited to an action against AZR for statutory penalties, additional injunctive relief, mitigation or offset measures, and/or contempt. However, the amount of any statutory penalty assessed for a violation of this Consent Decree shall be reduced by an amount equal to the amount of any stipulated penalty assessed and paid pursuant to this Consent Decree.

VIII. DISPUTE RESOLUTION

119. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. AZR's failure to seek resolution of a dispute under this Section shall preclude AZR from raising any such issue as a defense to an action by the United States to enforce any obligation of AZR arising under this Decree.

120. Informal Dispute Resolution. Any dispute subject to Dispute Resolution under this Consent Decree shall first be the subject of informal negotiations. The dispute shall be considered to have arisen when AZR sends the United States a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed thirty (30) Days from the date the dispute arises, unless that period is modified by written agreement. If the Parties cannot resolve a dispute by informal negotiations, then the position advanced by the United States shall be considered binding unless, within 30 Days after

the conclusion of the informal negotiation period, AZR invokes formal dispute resolution procedures as set forth below.

121. Formal Dispute Resolution. AZR shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by serving on the United States a written Statement of Position regarding the matter in dispute. The Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting AZR's position and any supporting documentation relied upon by AZR.

122. The United States shall serve its Statement of Position within forty-five (45) Days of receipt of AZR's Statement of Position. The United States' Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting that position and any supporting documentation relied upon by the United States. The United States' Statement of Position shall be binding on AZR, unless AZR files a motion for judicial review of the dispute in accordance with the following Paragraph.

123. AZR may seek judicial review of the dispute by filing with the Court and serving on the United States, in accordance with Section XIII (Notices), a motion requesting judicial resolution of the dispute. The motion must be filed within thirty (30) Days of receipt of the United States' Statement of Position pursuant to the preceding Paragraph. The motion shall contain a written statement of AZR's position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree.

124. The United States shall respond to AZR's motion within the time period allowed by the Local Rules of this Court. AZR may file a reply memorandum, to the extent permitted by the Local Rules.

125. Standard of Review

- a. Disputes Concerning Matters Accorded Record Review. Except as otherwise provided in this Consent Decree, in any dispute brought under Section V (Compliance Requirements) pertaining to the adequacy or appropriateness of plans, procedures to implement plans, schedules or any other items requiring approval by U.S. EPA under this Consent Decree; the adequacy of the performance of work undertaken pursuant to this Consent Decree; and all other disputes that are accorded review on the administrative record under applicable principles of administrative law, AZR shall have the burden of demonstrating, based on the administrative record, that the position of the United States is arbitrary and capricious or otherwise not in accordance with law.
- b. Other Disputes. Except as otherwise provided in this Consent Decree, in any other dispute brought under this Consent Decree, AZR shall bear the burden of demonstrating that its position complies with this Consent Decree and furthers the objectives of this Consent Decree, and that Defendant is entitled to relief under applicable principles of law.

126. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of AZR under this Consent Decree, unless and until final resolution of the dispute so provides. Stipulated penalties with respect to the disputed matter shall continue to accrue from the first Day of noncompliance, but payment shall be stayed pending resolution of the dispute as provided in Paragraph 114. If AZR does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section VII (Stipulated Penalties).

IX. FORCE MAJEURE

127. “Force majeure,” for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of AZR, of any entity controlled by AZR, or of AZR’s contractors, that delays or prevents the performance of any obligation under this Consent Decree despite AZR’s best efforts to fulfill the obligation. The requirement that AZR exercise “best efforts to fulfill the obligation” includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any potential force majeure event (a) as it is occurring and (b) following the potential force majeure, such that the delay and any adverse effects of the delay are minimized. “Force Majeure” does not include AZR’s financial inability to perform any obligation under this Consent Decree.

128. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, whether or not caused by a force majeure event, AZR shall provide notice orally or by electronic or facsimile transmission to U.S. EPA, within seven (7) days of when AZR first knew that the event might cause a delay. Within fifteen (15) days thereafter, AZR shall provide in writing to U.S. EPA an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; AZR’s rationale for attributing such delay to a force majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of AZR, such event may cause or contribute to an endangerment to public health, welfare or the environment. AZR shall include with any notice all available documentation supporting the claim that the delay was attributable to a force majeure. Failure to comply with the above requirements shall preclude AZR from asserting any claim of force majeure for that event for the period of time of such failure to comply, and for any additional delay caused by such failure. AZR shall be deemed to know of any circumstance of which AZR, any entity controlled by AZR, or AZR’s contractors knew or should have known.

129. If U.S. EPA agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Consent Decree that are affected by the force majeure event will be extended by U.S. EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. U.S. EPA will notify AZR in writing of the extension and the length of the extension, if any, for performance of the obligations affected by the force majeure event.

130. If U.S. EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, U.S. EPA will notify AZR in writing of its decision.

131. If AZR elects to invoke the dispute resolution procedures set forth in Section IX (Dispute Resolution), it shall do so no later than thirty (30) days after receipt of U.S. EPA's notice. In any such proceeding, AZR shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that AZR complied with the requirements of Paragraphs 127 and 128. If AZR carries this burden, the delay at issue shall be deemed not to be a violation by AZR of the affected obligation of this Consent Decree identified to U.S. EPA and the Court.

X. INFORMATION COLLECTION AND RETENTION AND RECORD KEEPING

132. The United States and its representatives, including attorneys, contractors, and consultants, shall have the right of entry into the Facility covered by this Consent Decree, at all reasonable times, upon presentation of credentials, to:

- a. monitor the progress of activities required under this Consent Decree;
- b. verify any data or information submitted to the United States in accordance with the terms of this Consent Decree;
- c. obtain samples and, upon request, splits of any samples taken by AZR or its representatives, contractors, or consultants;
- d. obtain documentary evidence, including photographs and similar data; and
- e. assess AZR's compliance with this Consent Decree.

133. Upon request, AZR shall provide U.S. EPA or its authorized representatives splits of any samples taken by AZR. Upon request, U.S. EPA shall provide AZR splits of any samples taken by U.S. EPA.

134. For two years after the termination of this Consent Decree, AZR shall retain, and shall instruct its contractors and agents to preserve, all non-identical copies of all documents, records, or other information (including documents, records, or other information in electronic form) in its or its contractors' or agents' possession or control, or that come into its or its contractors' or agents' possession or control, and that relate in any manner to AZR's performance of its obligations under this Consent Decree. This information-retention requirement shall apply regardless of any contrary corporate or institutional policies or procedures. This retention requirement does not apply to voicemail or text messages, so long as those forms of communication are not used for substantive discussions concerning compliance with this Consent Decree. At any time during this information-retention period, upon request by the United States, AZR shall provide copies of any documents, records, or other information required to be maintained under this Paragraph.

135. At the conclusion of the information-retention period provided in the preceding Paragraph, AZR shall notify the United States at least 90 Days prior to the destruction of any documents, records, or other information subject to the requirements of the preceding Paragraph and, upon request by the United States, AZR shall deliver any such documents, records, or other information to U.S. EPA. AZR may assert that certain documents, records, or other information

is privileged under the attorney-client privilege or any other privilege recognized by federal law. If AZR asserts such a privilege, it shall provide the following: (a) the title of the document, record, or information; (b) the date of the document, record, or information; (c) the name and title of each author of the document, record, or information; (d) the name and title of each addressee and recipient; (e) a description of the subject of the document, record, or information; and (f) the privilege asserted by AZR. However, no documents, records, or other information created or generated pursuant to the requirements of this Consent Decree shall be withheld on grounds of privilege.

136. AZR may also assert that information required to be provided under this Section is protected as Confidential Business Information (“CBI”) under 40 C.F.R. Part 2. For any information that AZR seeks to protect as CBI, AZR shall follow the procedures set forth in 40 C.F.R. Part 2.

137. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States pursuant to applicable federal laws, regulations, or permits, nor does it limit or affect any duty or obligation of AZR to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

XI. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS

138. This Consent Decree resolves the civil claims of the United States for the violations alleged in the Complaint filed in this action through the Date of Lodging. This Consent Decree also resolves the potential civil claims of the United States for the violations alleged in the NOV/FOV through the Date of Lodging.

139. The resolution of liability in Paragraph 138 is conditioned on AZR’s payment and the United States’ receipt and retention of the full cash amount specified in Paragraph 9.a (as opposed to a reduced cash amount paid as a distribution for allowed claims in the Horsehead Bankruptcy Case), as well as the distribution under the Reorganization Plan for the Allowed EPA Chicago Claim referenced in Paragraph 9.b. AZR shall not take any action in the Horsehead Bankruptcy Case that is inconsistent with the terms and provisions of this Consent Decree.

140. The United States reserves all legal and equitable remedies available to enforce the provisions of this Consent Decree. This Consent Decree shall not be construed to limit the rights of the United States to obtain penalties or injunctive relief under the CAA or implementing regulations, or under other federal laws, regulations, or permit conditions. The United States further reserves all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, AZR’s Facility, whether related to the violations addressed in this Consent Decree or otherwise

141. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive relief, civil penalties, other appropriate relief relating to the Facility or AZR’s violations, AZR shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United

States in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to Paragraph 138.

142. This Consent Decree is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. AZR is responsible for achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations, and permits; and AZR's compliance with this Consent Decree shall be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein. The United States does not, by its consent to the entry of this Consent Decree, warrant or aver in any manner that AZR's compliance with any aspect of this Consent Decree will result in compliance with provisions of the CAA, 42 U.S.C. § 7401, *et seq.*, or with any other provisions of federal, State, or local laws, regulations, or permits.

143. This Consent Decree does not limit or affect the rights of AZR or of the United States against any third parties, not party to this Consent Decree, nor does it limit the rights of third parties, not party to this Consent Decree, against AZR, except as otherwise provided by law.

144. This Consent Decree shall not be construed to create rights in, or grant any cause of action to, any third party not party to this Consent Decree.

XII. COSTS

145. The Parties shall bear their own costs of this action, including attorneys' fees, except that the United States shall be entitled to collect the costs (including attorneys' fees) incurred in any action necessary to collect any portion of the civil penalty or any stipulated penalties due but not paid by AZR.

XIII. 26 U.S.C. § 162(f)(2)(A)(ii) IDENTIFICATION

146. For purposes of the identification requirement of Section 162(f)(2)(A)(ii) of the Internal Revenue Code, 26 U.S.C. § 162(f)(2)(A)(ii), performance of Section II (Applicability), Paragraph 6; Section V (Compliance Requirements), Paragraphs 14–20, 21.b, 22–27, 29–51, , and 53–57; Section VI (Reporting Requirements), Paragraphs 66–71; and Section X (Information Collection and Retention and Record Keeping), Paragraphs 132–135, is restitution or required to come into compliance with law.

XIV. NOTICES

147. Unless otherwise specified in this Decree, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

As to the United States by email: eescdcopy.enrd@usdoj.gov
Re: DJ # 90-5-2-1-11205

As to the United States by mail: EES Case Management Unit
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Washington, D.C. 20044-7611
Re: DJ # 90-5-2-1-11205

As to U.S. EPA by email: cantello.nicole@epa.gov
r5airenforcement@epa.gov

As to AZR by email: tbasilone@azr.com
gwhitaker@azr.com

As to AZR by mail: Vice President – Environmental Affairs
American Zinc Recycling Corp.
3000 GSK Drive
Suite 201
Moon Township, PA 15108

Office of General Counsel
American Zinc Recycling Corp.
3000 GSK Drive, Suite 201
Moon Township, PA 15108

148. Any Party may, by written notice to the other Parties, change its designated notice recipient or notice address provided above.

149. Notices submitted pursuant to this Section shall be deemed submitted upon mailing, unless otherwise provided in this Consent Decree or by mutual agreement of the Parties in writing.

XV. EFFECTIVE DATE

150. The Effective Date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted, whichever occurs first, as recorded on the Court's docket; provided, however, that AZR hereby agrees that it shall be bound to perform duties scheduled to occur prior to the Effective Date. In the event the United States withdraws or withholds consent to this Consent Decree before entry, or the Court declines to enter the Consent Decree, then the preceding requirement to perform duties scheduled to occur before the Effective Date shall terminate.

XVI. RETENTION OF JURISDICTION

151. The Court shall retain jurisdiction over this case until termination of this Consent Decree, for the purpose of resolving disputes arising under this Decree or entering orders modifying this Decree, pursuant to Sections IX and XVI, or effectuating or enforcing compliance with the terms of this Decree.

XVII. MODIFICATION

152. The terms of this Consent Decree, including any attached appendices, may be modified only by a subsequent written agreement signed by all the Parties. Where the modification constitutes a material change to this Decree, it shall be effective only upon approval by the Court.

153. Any disputes concerning modification of this Decree shall be resolved pursuant to Section IX (Dispute Resolution), provided, however, that, instead of the burden of proof provided by Paragraph 125, the Party seeking the modification bears the burden of demonstrating that it is entitled to the requested modification in accordance with Federal Rule of Civil Procedure 60(b).

XVIII. TERMINATION

154. After AZR has completed the requirements to (a) install and commence Continuous Operation of all New/Modified Capture and Control Systems pursuant to Paragraphs 14-19; (b) achieve the applicable standards for minimum design velocity pursuant to Paragraph 20; (c) demonstrate initial compliance with the applicable standards for visible emissions, opacity, pressure drop, negative pressure, airflow, and petroleum coke usage pursuant to Paragraphs 22-27, and commence implementation of the related monitoring standards in Section V.D.; (d) perform the initial compliance demonstration, fan amperage determination, and initial performance tests for PM and CO pursuant to Section V.C.; (e) prepare and submit an Operation, Maintenance, and Corrective Action Plan for Emissions Capture and Control Systems and Environmental Management System pursuant to Section V.F.; (f) and secure all required permits pursuant to Section V.G.; and has maintained continuous satisfactory compliance with this Consent Decree for a period of two (2) years, and has paid the civil penalty and any accrued stipulated penalties as required by this Consent Decree, AZR may serve upon the United States a Request for Termination, stating that AZR has satisfied the aforementioned requirements, together with all necessary supporting documentation.

155. Following receipt by the United States of AZR's Request for Termination, the Parties shall confer informally concerning the Request and any disagreement that the Parties may have as to whether AZR has satisfactorily complied with the requirements for termination of this Consent Decree. If the United States agrees that the Decree may be terminated, the Parties shall submit, for the Court's approval, a joint stipulation terminating the Decree.

156. If the United States does not agree that the Decree may be terminated, AZR may invoke Dispute Resolution under Section IX. However, AZR shall not seek Dispute Resolution of any dispute regarding termination until ninety (90) Days after service of its Request for Termination.

XIX. PUBLIC PARTICIPATION

157. This Consent Decree shall be lodged with the Court for a period of not less than 30 Days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations indicating that the Consent Decree is inappropriate, improper, or inadequate. AZR consents to entry of this Consent Decree without further notice and agrees not to withdraw from or oppose entry of this Consent Decree by the Court or to challenge any provision of the Decree, unless the United States has notified AZR in writing that it no longer supports entry of the Decree.

XX. SIGNATORIES/SERVICE

158. Each undersigned representative of AZR and the undersigned official with the Environment and Natural Resources Division of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Party he or she represents to this document.

159. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. AZR agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

XXI. INTEGRATION

160. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Decree and supersedes all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein. Other than deliverables that are subsequently submitted and approved pursuant to this Decree, the Parties acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressly contained in this Consent Decree.

XXII. FINAL JUDGMENT

161. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment of the Court as to the United States and AZR. The Court finds that there is no just reason for delay and therefore enters this judgment as a final judgment under Fed. R. Civ. P. 54 and 58.

XXIII. APPENDICES

162. The following Appendices are attached to and part of this Consent Decree:

“Appendix 1” is the NOV/FOV; and
“Appendix 2” is the Test Port Schematic.

Consent Decree Signature Page in *United States v. American Zinc Recycling Corp.* (N.D. Ill.)

Dated and entered this ___ day of _____, 2020

UNITED STATES DISTRICT JUDGE

Consent Decree Signature Page in *United States v. American Zinc Recycling Corp.* (N.D. Ill.)

FOR THE UNITED STATES OF AMERICA:

Karen S. Dworkin
Deputy Chief
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice

**RANDALL
STONE**

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RANDALL STONE
Date: 2020.04.27
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Randall M. Stone
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Consent Decree Signature Page in *United States v. American Zinc Recycling Corp.* (N.D. Ill.)

FOR THE U.S. ENVIRONMENTAL PROTECTION
AGENCY:

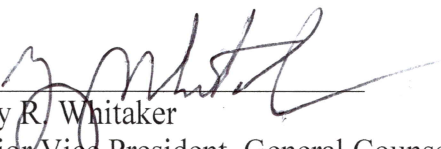
**T. Leverett
Nelson**

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Leverett Nelson
Date: 2020.04.27 09:51:02
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T. Leverett Nelson
Regional Counsel
U.S. Environmental Protection Agency, Region 5

FOR AZR CORPORATION:

April 10, 2020
Date



Gary R. Whitaker
Senior Vice President, General Counsel and Secretary
American Zinc Recycling Corp.

Consent Decree Appendix 1: April 2014 EPA Notice and Finding of Violation

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:)
)
Horsehead Corporation) NOTICE AND FINDING OF
Chicago, Illinois) VIOLATION
)
) EPA-5-14-IL-10
Proceedings Pursuant to)
the Clean Air Act)
42 U.S.C. § § 7401 et seq)

NOTICE AND FINDING OF VIOLATION

The U.S. Environmental Protection Agency (EPA) is issuing this Notice and Finding of Violation (NOV/FOV) to Horsehead Corporation (Horsehead) to notify you that we have found violations of the Clean Air Act, 42 U.S.C. §§ 7401-7671q (CAA), and the Illinois State Implementation Plan (SIP) at the facility located at 2701 East 114th Street, Chicago, Illinois (Facility). The relevant statutory and regulatory background, factual background, notice and finding of violations, and environmental impact of these violations are set forth in detail below.

This NOV/FOV is issued in accordance with Section 113(a)(1) and (a)(3) of the Act, 42 U.S.C. § 7413(a)(1) and (a)(3), which authorize the Administrator to take certain enforcement actions after notifying a person that it is in violation of the Act. The authority to issue this NOV/FOV has been delegated by the Administrator to the Regional Administrator and re-delegated to the Director of the Air and Radiation Division for Region 5 of the EPA.

Relevant Statutory and Regulatory Background

Title V Requirements

1. Title V of the Act, 42 U.S.C. §§ 7661-7661f, established an operating permit program for major sources of air pollution. Section 502(d) of the Act, 42 U.S.C. § 7661a (d), provides that each state must submit to the EPA a permit program meeting the requirements of Title V.
2. In accordance with Section 502(b) of the Act, 42 U.S.C. § 7661a (b), the EPA promulgated regulations implementing Title V of the Act. *See* 57 Fed. Reg. 32295 (July 21, 1992). Those regulations are codified at 40 C.F.R. Part 70.
3. Section 502(a) of the Act, 42 U.S.C. § 7661a (a), and 40 C.F.R. § 70.7(b) provide that, after the effective date of any permit program approved or promulgated under Title V of the Act, no source subject to Title V may operate except in compliance with a Title V permit. *See also* 40 C.F.R. § 70.7(b).

4. Section 503 of the CAA, 42 U.S.C. § 7661c (a), requires that each Title V permit include enforceable emission limitations and standards, a schedule of compliance, and other conditions necessary to assure compliance with applicable requirements, including those contained in a state implementation plan.
5. The rule at 40 C.F.R. § 70.6(b)(1) provides that Title V permits are federally enforceable and that all terms and conditions of a Title V permit are enforceable by the EPA.
6. The rule at 40 C.F.R. § 70.2 defines “major source” as, among other things, any stationary source belonging to a single major industrial grouping and that directly emits or has the potential to emit greater than 100 tons per year (tpy) or more of any air pollutant subject to regulation. *See also* 42 U.S.C. § 7661(2)(A).
7. The rule at 40 C.F.R. § 70.5(a) provides that “for each part 70 source, the owner or operator shall submit a timely and complete permit application in accordance with this section.”
8. The rule at 40 C.F.R. § 70.5(c) specifies the information to be provided in a permit application for that application to be considered complete. The required information includes all emissions of pollutants for which the source is major, and all emissions of regulated air pollutants. A permit application shall describe all emissions of regulated air pollutants emitted from any emissions unit, except where such units are exempted under this paragraph (c) of this section. For insignificant activities which are exempted because of size or production rate, a list of such insignificant activities must be included in the application.
9. The rule at 40 C.F.R. § 70.5(d) requires that the permit application contain a certification by a responsible official of its truth, accuracy, and completeness.
10. The EPA approved of the Illinois Title V program on December 4, 2001. 66 Fed. Reg. 62946. The approved Illinois Title V program is known as the Illinois Clean Air Act Permit Program (CAAPP).

Title V Permit

11. The Illinois Environmental Protection Agency (IEPA) issued a CAAPP Permit, Application No.: 96030189 (Title V Permit), to Horsehead on May 15, 2002.

12. The significant emission units in the Title V Permit and their associated emission capture equipment that are relevant to this FOV/NOV are:

Emission Unit	Description	Commenced Construction	Emission Control Equipment
Process Emission Source	Carbon Material Pneumatic Displacement Transfer System	11/93	Bag Collector 15
	Carbon Material Bin	11/93	Bag Collector 16
	Curing and Blending Building	1/92	Bag Collectors 11A, 11B, and 12
	Feed Handling System	3/87	Bag Collectors 2, 7, 8, 9, and 13
	Crude Zinc Oxide Bin	3/87	Bag Collectors 5, 6
	Iron Rich Material Transfer Area	6/93	Bag Collector 14
	Iron-Rich Material Kilns Discharge Area	4/87	Bag Collector 1
Waelz Kiln System	Rotary Kiln 1 and 2	Kiln 1 3/42 Kiln 2 4/93	Product Collectors 3 and 10
Fugitive Particulate Emissions	Facility Roadways		
	Carbon Storage Pile		
	Carbon Handling by a Conveyor		
	Iron-Rich Material Handling		

13. Condition 5.1.1. of the Title V Permit states that Horsehead is a major source of NOx emissions as defined by Title V of the CAA.
14. Condition 5.2.3.a. of the Title V Permit states that the facility shall operate under the provisions of a fugitive particulate matter operating program prepared by the Permittee and submitted to Illinois EPA for its review.
15. Condition 5.2.3.b. of the Title V Permit states that the fugitive particulate matter operating program shall be amended from time to time by the Permittee so that the operating program is current.

16. Condition 5.2.8. of the Title V Permit states that the facility is required to prepare and submit a contingency measure plan reflecting the PM₁₀ emission reductions as set forth in 35 Illinois Administrative Code (IAC) 212.703.
17. Condition 7.1.5. of the Title V Permit states that the Permittee shall operate and maintain bag collectors controlling the process emission sources, including periodic inspection, routine maintenance, and prompt repair of defects, if any, that assures compliance with the conditions of the process emission sources section.
18. Condition 7.1.6. of the Title V Permit states that the particulate matter (PM) emission limits for the Curing and Blending building are 1.0 lb/hr and 4.4 tpy. This condition also states: "the above limitation was established in permit 85120055, pursuant to Title I of the CAA, Major Stationary Sources Construction and Modification and 40 C.F.R. 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to these rules."
19. Condition 7.1.6. of the Title V Permit also states that the total emissions limit for the carbon material pneumatic displacement transfer system, carbon material bin, feed handling system, crude zinc oxide bin, iron-rich material transfer area, and the iron-rich material kilns discharge area shall not exceed 35.1 tons per year. This condition also states that "the above limitations are being established in this permit pursuant to Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modifications and/or 40 C.F.R. 52.21, PSD. The source has requested that the IEPA established emissions limitation and other appropriate terms and conditions in this permit that limit the PM emission from the affected process emission source operation below the levels that would trigger the applicability of these rules, consistent with the information provided in the CAAPP application."
20. Condition 7.1.9.a.i. of the Title V Permit states that the permittee shall maintain records of periodic inspection of the bag collectors with the date, name of individual performing the inspection, and the nature of the inspection for the bag collectors controlling the process emission sources.
21. Conditions 7.1.9.a.ii. of the Title V Permit states that the permittee shall maintain records of prompt repair of defects of the bag collectors controlling process emissions with the identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
22. Condition 7.1.9.b. of the Title V Permit states that the permittee shall maintain records of the inlet flow rates per respective bag collector controlling process emissions.
23. Condition 7.1.12.a. of the Title V Permit states that compliance with Condition 7.1.6. for the process emission units shall be based on an emissions calculation that accounts for bag collector inlet flow rate and bag collector efficiency.

24. Condition 7.2.9. e.i. of the Title V Permit states that the permittee shall maintain records of prompt repair of defects of the bag collectors controlling emissions from Kilns 1 and 2 with the identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
25. Conditions 7.2.9.e.ii. of the Title V Permit states that the permittee shall maintain records of prompt repair of defects of the bag collectors controlling emissions from Kiln 1 and Kiln 2 with the identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
26. Condition 7.4.2. of the Title V Permit states that the sources of fugitive emissions are facility roadways, carbon storage piles, carbon-handling by a conveyor and iron-rich material handling.

PSD Requirements

27. The PSD provisions of Part C of Title I of the Act require preconstruction review and permitting of stationary sources in attainment/unclassifiable areas. 42 U.S.C. §§ 7470-7492. Pursuant to applicable regulations, if a major stationary source located in an attainment area is planning to make a major modification, then that source must obtain a PSD permit before beginning actual construction. 40 C.F.R. § 52.21. To obtain this permit, the source must, among other things, undergo a technology review and apply Best Available Control Technology (BACT), perform a source impact analysis, perform an air quality analysis and modeling, submit appropriate information and conduct additional impact analyses as required.
28. Section 165(a) of the Act, 42 U.S.C. § 7475(a) prohibits the construction and subsequent operation of a “major emitting facility” in an area designated as attainment or unclassifiable unless a permit has been issued that is consistent with the requirements of Section 165 and the facility employs BACT for each pollutant subject to regulation under the Act that is emitted from the facility.
29. On June 19, 1978, EPA issued regulations implementing the federal PSD program at 40 C.F.R. § 52.21. 43 Fed. Reg. 26,388, 26, 403 (June 19, 1978) (federal PSD program). Since that time, the federal PSD regulations have been revised, with subsequent revisions incorporated under 40 C.F.R. § 52.21 et seq.
30. Sections 110(a) and 161 of the CAA, 42 U.S.C. §§ 7410(a) and 7471, require each state to adopt a state implementation plan (SIP) that contains emission limitations and such other measures as may be necessary to prevent significant deterioration of air quality in areas designated as attainment or unclassifiable.
31. The requirements of 40 C.F.R. §52.21(j) through (r) apply to the construction of any new major stationary source or the major modification of any existing major stationary source, except as this section otherwise provides. 40 C.F.R. § 52.21(a)(2)(ii).

32. The rule at 40 C.F.R. § 52.21(r)(1) states that any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to this section or with the terms of any approval to construct, or any owner or operator of a source or modification subject to this section who commences construction after the effective date of these regulations without applying for and receiving approval hereunder, shall be subject to appropriate enforcement action.
33. “Major Stationary Source” for the purpose of PSD means any of the stationary sources of air pollution in 40 C.F.R. § 52.21(b)(1)(iii) which emits, or has the potential to emit, 100 tpy or more of a regulated NSR pollutant. 40 C.F.R. § 52.21(b)(1)(i)(a).
34. “Major modification” means any physical change in or change in the method of operation of a major stationary source that would result in a significant emissions increase of a regulated NSR pollutant and a significant net emissions increase of that pollutant from the major stationary source. 40 C.F.R. § 52.21(b)(2)(i).
35. “Net emissions increase” means, with respect to any regulated NSR pollutant emitted by a major stationary source, the amount by which the sum of the following exceeds zero:
(a) The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to 40 C.F.R. § 52.21(a)(2)(iv); and
(b) Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. 40 C.F.R. § 52.21(b)(3)(i).
36. “Significant emissions increase” means, for a regulated NSR pollutant, an increase in emissions that is significant for that pollutant. 40 C.F.R. § 52.21(b)(40).
37. “Significant” means, in reference to a net emissions increase or the potential of a source to emit a rate of emissions that would equal or exceed any of the following rates: PM, 25 tpy; PM₁₀, 15 tpy; and PM_{2.5}, 10 tpy. 40 C.F.R. § 52.21(b)(23)(i).

Additional Illinois SIP Provisions

38. The rule at 35 IAC 201.144 states that no person shall cause or allow the operation of any existing emission source or any existing air pollution control equipment without first obtaining an operating permit from the Agency.
39. The rule at 35 IAC 212.324(a)(1)(B) states that this section shall apply to any process emission unit located in an area in the vicinity of Lake Calumet in Cook County.
40. The rule at 35 IAC 212.324(f) states that for any process emission unit subject to 35 IAC 212.324(a), the owner or operator shall maintain and repair all air pollution control equipment in a manner that assures that the emission limits and standards in this Section shall be met at all times. Proper maintenance shall include visual inspections of air pollution control equipment; maintenance of an adequate inventory of spare parts, and expeditious repairs.

41. The rule at 35 IAC 212.324(g)(1) requires written records of inventory and documentation of inspection, maintenance, and repairs of all air pollution control equipment kept in accordance with 35 IAC 212.324(f).

Relevant Factual Background

42. Horsehead owns and operates an EAF dust processing facility located at 2701 East 114th Street in Chicago, Illinois (the Facility). The facility operates two Waelz kilns that convert EAF dust at high temperatures to crude zinc oxide and iron rich material.
43. Horsehead is located in Cook County, Illinois, and is located in the vicinity of Lake Calumet. The Lake Calumet Area was designated as a PM₁₀ nonattainment area prior to September 8, 2005. On that date, EPA redesignated the area as attainment for PM₁₀. *See also 70 Fed. Reg. 55612.*
44. On August 1, 2012, and again on March 31, 2014, EPA conducted inspections of the facility.
45. On November 14, 2012, EPA issued an information request to the Company pursuant to Section 114 of the CAA, 42 U.S.C. § 7414.
46. In response to the information request, Horsehead failed to provide a copy of current and past fugitive particulate matter operating program. Horsehead stated in the 2011 CAAPP Compliance Report that the facility was in the process of developing the program to be submitted to IEPA and was out of compliance with the requirements at Condition 5.2.3.a. of the Title V Permit. EPA obtained a copy of the operating program for fugitive particulate matter control in May of 2013.
47. Horsehead stated in the 2011 CAAPP Compliance Report that the facility was out of compliance with the PM₁₀ contingency measure plan requirements at Condition 5.2.8. of the Title V Permit.

48. In response to the information request, Horsehead stated that the company manually records the differential pressure readings at the bag collectors on a weekly basis. The records showed that the normal operating range is a 4 – 8 inches water column at each bag collector. The table below, from May 1, 2009 to November 26, 2012, provides: the percentage of weekly differential pressure readings missed and the percentage of daily differential pressure readings that deviated from the normal operating range. No information was provided for bag collector 15.

Bag Collector	% of Missed Readings	% of Out of Range Readings
1	6.9	88.4
11A	6.9	64.3
11B	6.9	81.5
16	6.9	100.0
2	18.3	100.0
12	18.6	100.0
14	18.6	100.0
3	15.5	21.3
10	15.5	69.7
7	5.8	97.1
8	5.8	42.0
17	5.8	99.6
9	19.2	96.4
13	18.8	87.1

49. In response to the information request, Horsehead provided measured inlet volumetric flow rates for each bag collector controlling process emission sources. Horsehead also provided baghouse capacities and fan capacities for each bag collector. Horsehead did not provide inlet volumetric flow rates for bag collector 15 or 16. The measured inlet volumetric flow rates for each bag collector were significantly lower than the baghouse capacity and fan capacity for each bag collector.
50. In response to the information request, Horsehead provided records of inspections and repairs for the bag collectors and product collectors. From May 1, 2009 to November 26, 2012, only one inspection was conducted on bag collectors 3, 10, 9, 13, and 8. No documented inspections have occurred on the remaining bag collectors. The records provided did not contain the name of the individual performing the inspections or the nature of the inspections.
51. The repair records provided did not contain the effect on emissions or the date of repairs. The records also did not consistently contain the identification and description of defects and nature of repairs.
52. During the EPA inspection on August 1, 2012, Horsehead personnel stated that iron rich material was stored in piles on the property and that there were no fugitive controls for the piles.

Notice and Finding of Violations

Violations of the Title V Permit and the Illinois SIP

53. By failing to prepare a fugitive particulate matter operating program, operate according to the program, and periodically amend the program, Horsehead violated Condition 5.2.3.a. of the Title V Permit.
54. By failing to submit a PM10 contingency measure plan, Horsehead violated Condition 5.2.8. of the Title V Permit.
55. By failing to inspect the bag collectors on a periodic basis, by failing to operate the bag collectors within a differential pressure range that indicates normal operation, failing to measure differential pressure on a weekly basis, and failing to repairs defects at the bag collectors indicated by differential pressure, Horsehead violated Condition 7.1.5. of the Title V Permit and 35 IAC 212.324(f).
56. By failing to include all required elements in the inspection records, Horsehead violated Conditions 7.1.9.a.i. and 7.2.9.e.i. of the Title V Permit and 35 IAC 212.324(g)(1).
57. By failing to include all required elements in the maintenance records, Horsehead violated Conditions 7.1.9.a.ii. and 7.2.9.e.ii. of the Title V Permit.
58. From at least 2010 to 2012, Horsehead has exceeded the PM emission limits in Condition 7.1.6., as evidenced by the bag collector efficiency in the Title V Permit and the discrepancies between the measured inlet flow rates and the bag collector capacities and fan capacities.
59. By failing to include the Iron Rich Material storage piles in the 1996 and 2006 permit applications and failing to submit correct information, Horsehead violated 40 C.F.R. § 70.5(a), 70.5(c), and 70.5(d).
60. By failing to obtain an operating permit for the Iron Rich Material storage piles, Horsehead violated and 35 IAC 201.144.

Violations of PSD

61. From at least 2010 to 2012, Horsehead's operation of the process emission sources has resulted in a significant net emissions increase of PM in violation of 40 C.F.R. § 52.21, as evidenced by the bag collector efficiency in the Title V Permit and the discrepancies between the measured inlet flow rates and the bag collector capacities and fan capacities.

Environmental Impact of Violations

62. These violations have caused excess emissions of PM. PM, especially fine particulates contains microscopic solids or liquid droplets, which can get deep into the lungs and cause serious health problems. PM exposure contributes to irritation of the airways, coughing, and difficulty breathing, decreased lung function, aggravated asthma, chronic bronchitis, irregular heartbeat, nonfatal heart attacks and premature death in people with heart or lung disease.
63. These violations have also likely resulted in increased emissions of Hazardous Air Pollutants (HAPs), including, but not limited to, manganese, lead, and cadmium. Chronic inhalation exposure of manganese results impacts the nervous systems and results in slower visual reaction time and impaired eye-hand coordination. Inhalation exposure also causes respiratory effects such as bronchitis, dyspnea during exercise, and an increase susceptibility to infectious lung disease. In children, low levels of lead in the blood can result in permanent damage to the brain and nervous system, leading to behavior and learning problems, lower IQ, hearing problems, slowed growth, and anemia. In adults, lead has nervous system effects, cardiovascular effects, and causes decreased kidney function. The acute affect on cadmium inhalation causes bronchial and pulmonary irritation. Chronic inhalation can cause kidney disease, bronchiolitis, and emphysema. HAP emissions may also cause harmful environmental and ecological effects.

Date

4/14/14


George T. Czerniak
Director
Air and Radiation Division

CERTIFICATE OF MAILING

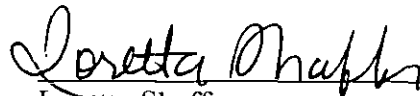
I, Loretta Shaffer, certify that I sent a Notice and Finding of Violation, EPA-5-14-IL-10,
by Certified Mail, Return Receipt Requested, to:

John A. Marta
Plant Manager
Horsehead Corporation
2701 East 114th Street
Chicago, Illinois 60617

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

Eric Jones, Manager
Compliance Unit
Bureau of Air
Illinois Environmental Protection Agency
P.O. Box 19506
Springfield, Illinois 62794

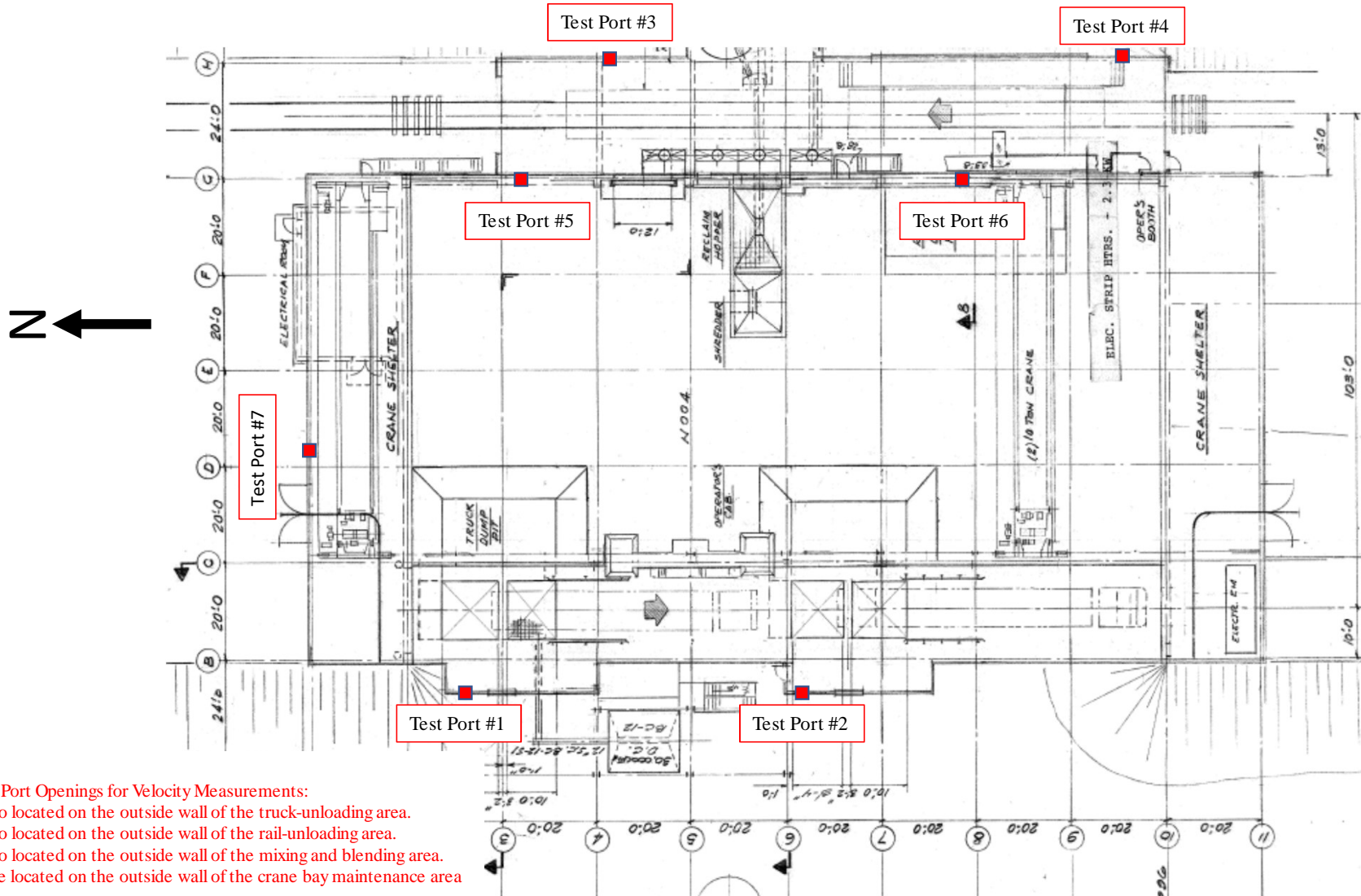
On the 14 day of APRIL 2014.



Loretta Shaffer
Program Technician
AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER: 7009 1680 0000 7676 2632

Consent Decree Appendix 2: Curing and Blending Building Test Port Schematic



- Test Port Openings for Velocity Measurements:
- Two located on the outside wall of the truck-unloading area.
 - Two located on the outside wall of the rail-unloading area.
 - Two located on the outside wall of the mixing and blending area.
 - One located on the outside wall of the crane bay maintenance area