UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

UNITED STATES OF AMERICA,	)	
	)	
Plaintiff,	)	
	)	No. 25 C 7461
v.	)	
	)	Judge
TRIALCO ALUMINUM, LLC,	)	
	)	
Defendant.	)	

CONSENT DECREE

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Plaintiff United States of America, on behalf of the United States Environmental Protection Agency ("EPA"), has filed a complaint in this action concurrently with this Consent Decree, alleging that Defendant, Trialco Aluminum, LLC, violated Sections 113(b) and 502(a) of the Clean Air Act ("Act"), 42 U.S.C. § 7410, *et seq*.

The Complaint against Defendant alleges that the Defendant has violated the National Emission Standards for Hazardous Air Pollutants ("NESHAP") for secondary aluminum processing, codified at 40 C.F.R. Part 63, Subpart RRR (hereinafter "Subpart RRR"), at Defendant's Chicago Heights, Illinois secondary aluminum processing facility. The alleged violations are memorialized in the Notice and Finding of Violation issued to Trialco on January 4, 2021 (2021 NOV/FOV) and the Notice and Finding of Violation issued to Trialco on March 27, 2023 (2023 NOV/FOV).

Prior to entering into this Consent Decree, and in an effort to achieve compliance with Subpart RRR requirements at its Chicago Heights facility, Defendant has completed the capital improvement projects and implemented the operational changes described in Appendix C of this Consent Decree.

Defendant does not admit any liability to the United States arising out of the transactions or occurrences alleged in the Complaint.

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 and 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 Section 113(b) of the Act, 42 U.S.C. § 7413(b), and over the Parties. Venue lies in this District pursuant to Section 113(b) of the Act, 42 U.S.C. § 7413(b), and 28 U.S.C. §§ 1391(b), (c) and 1395(a), because Defendant resides and is located in this judicial district and the violations alleged in the Complaint are alleged to have occurred in, and Defendant conducts business in, this judicial district. For purposes of this Decree, or any action to enforce this Decree, Defendant consents to the Court's jurisdiction over this Decree and any such action and over Defendant and consents to venue in this judicial district.

2. For purposes of this Consent Decree, Defendant agrees that the Complaint states claims upon which relief may be granted pursuant to Section(s) 113(b) and 502(a) of the Act.

II. APPLICABILITY

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

4. No transfer of ownership or operation of the Facility, whether in compliance with the procedures of this Paragraph or otherwise, shall relieve Defendant of its obligation to ensure that the terms of the Decree are implemented. At least 30 Days prior to such transfer, Defendant 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 EPA, DOJ, and the United States Attorney for the Northern District of Illinois, 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.

5. Defendant 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. Defendant shall condition any such contract upon performance of the work in conformity with the terms of this Consent Decree.

6. In any action to enforce this Consent Decree, Defendant 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

7. Terms used in this Consent decree that are defined in the Act or in regulations promulgated pursuant to the Act, including but not limited to Subpart RRR, have the meanings assigned to them in the Act or such regulations, unless otherwise provided in this Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions apply:

"Complaint" means the complaint filed by the United States in this action;

"Consent Decree" or "Decree" means this Decree and all appendices attached hereto (listed in Section XXIV);

"Day" means a calendar day unless expressly stated to be a business day. In computing any period of time for a deadline under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period runs until the close of business of the next business day;

"Defendant" means Trialco Aluminum, LLC, the entity named in the Complaint;

"DOJ" means the United States Department of Justice and any of its successor departments or agencies;

"EPA" means the United States Environmental Protection Agency and any of its successor departments or agencies;

"Effective Date" means the definition provided in Section XIV.

"Facility" means the secondary aluminum facility located at 900 East Lincoln Highway, Chicago Heights, Illinois and owned and operated by the Defendant.

"IEPA" means Illinois Environmental Protection Agency;

"Main Furnace" means the Facility's 52 Metric Million British Thermal Unit per hour (MMBtu/hour) natural gas-fired reverberatory aluminum melting furnace controlled by the South/ETA baghouse with lime and ammonia injection. The Main Furnace is regulated as a "Group 1 furnace with add-on control device" under Subpart RRR.

"Paragraph" means a portion of this Decree identified by an Arabic numeral;

"Parties" means the United States and Defendant;

"Section" means a portion of this Decree identified by a Roman numeral;

"Small Furnace" means the Facility's 19 MMBtu/hour natural gas-fired reverberatory aluminum melting furnace controlled by the North/Wheelabrator baghouse with lime and ammonia injection. The Small Furnace is regulated as a "Group 1 furnace with add-on control device" under Subpart RRR.

"State" means the State of Illinois.

"Subpart RRR" means 40 C.F.R. Part 63, Subpart RRR;

"United States" means the United States of America, acting on behalf of EPA;

IV. CIVIL PENALTY

8. Within 30 Days after the Effective Date, Defendant shall pay the sum of $1,000,000 as a civil penalty, together with interest accruing from the date on which the Consent Decree is lodged with the Court, at the rate specified in 28 U.S.C. § 1961 as of the date of lodging.

9. Defendant shall pay the civil penalty due, together with interest, to the United States by FedWire Electronic Funds Transfer ("EFT") to the DOJ account, in accordance with instructions provided to Defendant 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 Defendant shall use to identify all payments required to be made in accordance with this Consent Decree. The FLU will provide the payment instructions to:

Jay Armstrong
President
Trialco Aluminum, LLC
900 E. Lincoln Highway
Chicago Heights, IL 60411
(708)-757-4200
armstrong@trialco.net

on behalf of Defendant. Defendant may change the individual to receive payment instructions on its behalf by providing written notice of such change to DOJ and EPA in accordance with Section XIII (Notices).

10. At the time of payment, Defendant shall send notice that payment has been made: (i) to EPA via email at cinwd_acctsreceivable@epa.gov or via regular mail at EPA Cincinnati Finance Office, 26 W. Martin Luther King Drive, Cincinnati, Ohio 45268; (ii) to DOJ via email or regular mail in accordance with Section XIII; and (iii) to EPA 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 of America v. Trialco Aluminum, LLC,* and shall reference the civil action number, CDCS Number and DOJ case number 90-5-2-1-12888.

11. Defendant 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

12. General Compliance Requirement. Defendant shall comply with all applicable requirements of Subpart RRR, as well as the terms of Defendant's Federally Enforceable State Operating Permit No. 031045AES, issued by IEPA to the Facility on April 18, 2018 (2018 FESOP) unless the 2018 FESOP is superseded by another permit, such as a revised FESOP permit, in which case Defendant shall comply with the permit that supersedes the 2018 FESOP.

A. Capture and Collection Requirements

13. Initial Capture and Collection Engineering Assessment. Within 60 Days of the Effective Date of the Consent Decree, Defendant shall conduct an engineering assessment and submit a report that includes current hood, enclosure and curtain dimensions; process temperatures; volumetric flow measurements conducted in accordance with Paragraph 15; and other relevant capture and collection system design information and calculations demonstrating that each capture and collection system on the Main and Small Furnaces meets the engineering standards of 40 C.F.R. § 63.1506(c) for the minimum exhaust rate and facial inlet velocities, as contained in Chapters 3 and 5 of the ACGIH Guidelines. The Main and Small Furnace much each be enclosed to the maximum extent technically and practically feasible, allowing for operational and safety considerations. For the Small Furnace, the engineering assessment must be performed when the Small Furnace's hearth door damper is opened and when it is closed.

14. Capture and Collection System Inspection and Annual Flow Measurements. Defendant shall separately inspect the Main Furnace's and Small Furnace's capture and collection system, including conducting volumetric flow rate measurements in accordance with Paragraph 15, at least once per year in accordance with the requirements of 40 C.F.R. § 63.1510(d) to ensure that it is operating in accordance with the operating requirements in 40 C.F.R. § 63.1506(c). As part of the annual inspection, the Defendant shall do the following:

a. Perform and record the results of an inspection, including a visual inspection, of the integrity of the entire capture and collection system, including all hoods and ductwork. In inspecting the integrity of the capture and collection system, the Defendant shall make a good faith effort to place an emphasis on those parts of the system that are more likely to deteriorate (e.g., elbows, saddles, hoods and curtains). Defendant shall perform repairs and corrective actions, as needed within 60 days.

b. Measure and record the area of any openings in the capture and collection system to verify that the area of the openings is no greater than the area measured for the calculations performed pursuant to Paragraph 13 of this Consent Decree (the baseline area). If such measurements indicate that the area of the openings is greater than the baseline area, then within 60 days Defendant shall either make adjustments to the capture and collection system to reduce the open area to the baseline (e.g., install additional curtains, metal enclosures) or recalculate the minimum required exhaust rate and reassess the capture and collection systems compliance with 40 C.F.R. § 63.1506(c) in accordance with Paragraph 13.

c. Measure and record the actual volumetric flow rates separately at the Main and Small Furnace's capture and collection systems, following the requirements in

Paragraph 15, to demonstrate that the volumetric flow rates meet or exceed the calculated minimum exhaust rates for the capture and collection system. For the Small Furnace, the flow rate measurements must be performed when the Small Furnace's hearth door damper is opened and when it is closed.

15. Volumetric Flow Rate Measurements. The volumetric flow rate measurements required by Paragraphs 13 and 14, above, must be conducted in accordance with the methodologies prescribed in EPA Reference Methods 1 and 2 contained in 40 C.F.R. Part 60, Appendix A and the following requirements:

a. Take each actual volumetric flow rate measurement at a location in the duct work downstream of the furnace hood that is representative of the actual volumetric flow rate without the interference of leaks, the introduction of ambient air for cooling, or ducts manifolded from other hoods.

b. Where physical constraints of the existing ductwork or worker safety concerns do not allow the Defendant to measure the actual volumetric flow rate in accordance with the methodologies prescribed in EPA Reference Methods 1 and 2, the Defendant may submit a written proposal for EPA approval to measure the actual volumetric flow rate in an alternate location or use the alternative locations and methods previously approved by EPA via electronic mail to Trialco on March 17, 2022.

16. Inspection and Maintenance Program for Furnace Curtains. Defendant shall comply with its "Inspection and Maintenance Program for the Main Furnace Curtains" and "Inspection and Maintenance Program for the Small Furnace Curtains" which are included as Appendix A to the Consent Decree.

B. Operation, Maintenance, and Monitoring ("OM&M") Requirements

17. Defendant shall follow its most recent OM&M plan, dated December 23, 2024, required by 40 C.F.R. § 63.1510(b), which is included as Appendix B to this Decree. The OM&M Plan contains the following elements related to Subpart RRR compliance: process description, applicable emission limits, compliance test results (including operating parameter limit values), operating plan, monitoring plan, maintenance plan and corrective action plan and addresses the following operating requirements: labeling, capture and collection system, feed/charge weight, bag leak detection system (BLDS), baghouse inlet temperature (BIT), lime and ammonia injection, total reactive flux injection, molten metal level and startup/shutdown.

C. Permitting Requirements

18. FESOP Permit Application. Within 180 Days of the Effective Date, Defendant shall submit a revised FESOP permit application to the IEPA to amend the Facility operating permit to include a minimum ammonia injection rate limit value based on the average ammonia injection rate measured during the most recent compliant stack test.

19. Permits. Where any compliance obligation under this Section requires Defendant to obtain a federal, state, or local permit or approval, Defendant shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals. Defendant may seek relief under the provisions of Section VIII (Force Majeure) for any delay in the performance of any such obligation resulting from a failure to obtain, or a delay in obtaining, any permit or approval required to fulfill such obligation, if Defendant has submitted timely and complete applications and has taken all other actions necessary to obtain all such permits or approvals.

D. Additional Requirements

20. Approval of Deliverables. After review of any plan, report, or other item that is required to be submitted for approval pursuant to this Consent Decree, EPA will 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.

21. If the submission is approved pursuant to Paragraph 20(a), Defendant 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 20 (b) or (c), Defendant shall, upon written direction from EPA, take all actions required by the approved plan, report, or other item that EPA determines are technically severable from any disapproved portions.

22. If the submission is disapproved in whole or in part pursuant to Paragraph 20(c) or (d), Defendant shall, within 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, Defendant shall proceed in accordance with the preceding Paragraph.

23. If a resubmitted plan, report, or other item, or portion thereof, is disapproved in whole or in part, EPA may again require Defendant to correct any deficiencies, in accordance with the preceding Paragraphs, or may itself correct any deficiencies.

24. If Defendant elects to invoke Dispute Resolution as set forth in Section IX (Dispute Resolution) concerning a decision by EPA to disapprove, approve on specified conditions, or modify a deliverable, Defendant shall do so by sending a Notice of Dispute in

accordance with Paragraph 56 within 30 Days (or such other time as the Parties agree to in writing) after receipt of the applicable decision.

25. Any stipulated penalties applicable to the original submission, as provided in Section VII, accrue during the 45 Day period or other specified period, 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 Defendant's obligations under this Decree, the stipulated penalties applicable to the original submission shall be due and payable notwithstanding any subsequent resubmission.

VI. REPORTING REQUIREMENTS

26. Defendant shall submit the following reports to EPA and DOJ at the addresses set forth in Section XIII (Notices). By February 28th and August 31st of each year after the lodging of this Consent Decree, until termination of this Decree pursuant to Section XVII, Defendant shall submit, in addition to or as part of its semiannual report required by Subpart RRR, a semi-annual report for the preceding six months that includes the following records and information:

a. Status of all compliance measures outlined in this Consent Decree; problems encountered or anticipated, together with implemented or proposed solutions; status of permit applications; and summary of costs incurred since the previous report;

b. 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 or corrective actions taken, or to be taken, to prevent or minimize such violation;

c. The following records required to be maintained to ensure compliance of the Main and Small Furnaces with Subpart RRR and its FESOP permit:

i. For each BLDS, records of the number of total operating hours for

the affected source or emission unit during each 6-month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action(s) taken, required to be maintained by 40 C.F.R. § 63.1517(b)(1)(i);

ii. For each BLDS, records of any adjustments made to the system including the date and time of the adjustments and reasons for the adjustments to demonstrate compliance with 40 C.F.R. § 63.1510(f)(1)(x) and 40 CFR 63.10(b)(2)(xi);

iii. For each BLDS, records of quality control checks and calibrations, including, but not limited to, drift checks, response time checks, inspections and cleanings;

iv. For each BLDS, records of the continuous output signal;

v. Records of the 15-minute block average inlet temperatures for each lime-injected baghouse, including any period when the 3-hour block average temperature exceeds the compliant operating parameter value + 25 degrees Fahrenheit (°F), with a brief explanation of the cause of the excursion and the corrective actions taken, required to be maintained by 40 C.F.R. § 63.1517(b)(3);

vi. Records of the calibration of the thermocouples used to measure BIT in accordance with 40 C.F.R.§ 63.1510(h)(2) and 40 CFR 63.10(b)(2)(x);

vii. Records of all lime monitor or sensor output including any event

where blockage was found, with a brief explanation of the cause of the blockage and the corrective actions taken, required to be maintained by 40 C.F.R. § 63.1517(b)(4)(i);

viii. Records of the lime feeder setting, including records of any deviation of the feeder setting from the setting used in the performance test, with a brief explanation of the cause of the deviation and the corrective action taken. If a lime feeder has been repaired or replaced, provide records of the new feeder calibration and the feed mechanism set points necessary to maintain the lb/hr feed rate operating limit as required by 40 C.F.R. § 63.1517(b)(4)(ii);

ix. Records of the daily inspections of the ammonia feeder setting (volumetric or mass flow rate), including records of any deviation of the feeder setting from the setting used in the performance test, with a brief explanation of the cause of the deviation and the corrective action taken. If the ammonia feeder has been repaired or replaced, this action must be documented along with records of the new feeder calibration and the feed mechanism set points necessary to maintain the feed rate operating limit. These records must be maintained on site and available upon request pursuant to 40 C.F.R. § 63.1517(b)(4)(ii).

x. Records of calibration and certification of accuracy of each monitoring device, at least once every 6 months, in accordance

with the manufacturer's instructions, of the lime injection system load cell and electrostatic induction-type flow indicator and the ammonia injection system volumetric flow meter, required by 40 C.F.R. § 63.1510(b)(4)(i);

xi. Records of the monthly verification that the lime injection rate in lb/hour and the ammonia injection rate in ft^3/hr is no less than 90 percent of the corresponding lime or ammonia injection rate used to demonstrate compliance during the performance test, as required by 40 C.F.R. §§ 63.1510(i)(4), including adjustments and corrective actions;

xii. Record of the 15-minute block average weights of gaseous or liquid reactive flux injection; the identity, composition and weight of each addition of solid flux; and the total reactive flux injection rate and calculations, including records of any period the rate exceeds the compliant operating parameter value and corrective action taken, required to be maintained by 40 C.F.R. § 63.1517(b)(5);

xiii. Records demonstrating accuracy of each weight measurement device to within ±1 percent of the gaseous or liquid reactive flux weight being measured as required by 40 C.F.R. § 63.1510(j)(1)(ii).

xiv. Records of calibration of each gaseous or liquid weight measurement device in accordance with the schedule specified by

the manufacturer, or if no calibration schedule is specified, at least once every 6 months as specified in 40 C.F.R. § 63.1510(j)(1)(iii).

xv. Records of the feed/charge weights for each operating cycle or time period used in the performance test, required to be maintained by 40 C.F.R. § 63.1517(b)(7);

xvi. Records showing that all scales used to measure the feed/charge are certified by the original equipment manufacturer (OEM) to have an accuracy of +/- 1% and were calibrated within the previous 6 months to demonstrate compliance with 40 C.F.R. § 63.1510(e)(1) and (2);

xvii. Records of monthly inspections of the Main and Small Furnace labels, required to be maintained in accordance with 40 C.F.R. § 63.1517(b)(13);

xviii. Records of the annual inspections and flow measurements of the emission capture/collection and closed vent systems for the Main and Small Furnaces required to be maintained by 40 C.F.R. § 63.1517(b)(14);

xix. For each startup and shutdown of the Main and Small Furnaces, records of the date, time and quantities of feed/charge and flux introduced during each startup and shutdown and the types of fuel used to heat the unit during the startup and shutdown (or specification that no fuel was used), required to be maintained by 40 C.F.R. § 63.1517(b)(19)(i);

xx. Operating logs for the Main and Small Furnaces documenting conformance with the operating standard for maintaining the level of molten metal above the passage between the sidewell and hearth during reactive flux injection and for adding reactive flux only to the sidewell, required to be maintained by 40 C.F.R. § 63.1517(b)(10);

xxi. Records of actions taken during periods of malfunction to minimize emissions in accordance with § 63.1506(a)(5), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation, required to be maintained by 40 C.F.R. § 63.1517(b)(18)(ii);

xxii. With respect to deviations, if not provided in response to a separate requirement of this Decree, records of the emission unit ID, monitor ID, pollutant or parameter monitored, beginning date and time of the event, cause of the deviation or exceedance and corrective actions taken, required to be maintained by 40 C.F.R. § 63.1517(b)(18)(i);

xxiii. Any revised versions of the OM&M Plan submitted pursuant to C.F.R. § 63.1510(b); and

xxiv. Results of any emission testing done on the Main and Small Furnaces for any pollutant regulated by Subpart RRR or Defendant's most recent FESOP permit.

27. If Defendant violates, or has reason to believe that it may violate, any requirement of this Consent Decree, Defendant shall notify DOJ and EPA of such violation and its likely duration, in writing, within ten business days of the Day Defendant 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, Defendant shall so state in the report. Defendant 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 30 Days of the Day Defendant becomes aware of the cause of the violation. Nothing in this Paragraph or the following Paragraph relieves Defendant of its obligation to provide the notice required by Section VIII (Force Majeure).

28. Whenever any violation of this Consent Decree or of any applicable permits or any other event affecting Defendant's performance under this Decree may pose an immediate threat to the public health or welfare or the environment, Defendant shall notify EPA by telephone or email to David Sutlin at 312-353-8990or Sutlin.david@epa.gov, or to EPA at the contact information in Section XIII (including an email to R5airenforcement@epa.gov), as soon as possible, but no later than 24 hours after Defendant first knew of the violation or event. This procedure is in addition to the requirements set forth in the preceding Paragraph.

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

> I certify under penalty of perjury 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.

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

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

32. 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

33. Defendant 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, including any work plan or schedule approved under this Decree, according to all applicable requirements of this Decree and within the specified time schedules established by or approved under this Decree.

34. Late Payment of Civil Penalty. If Defendant fails to pay the civil penalty required to be paid under Section IV (Civil Penalty) when due, Defendant shall pay a stipulated penalty of $5,000 per Day for each Day that the payment is late.

35. Capture and Collection Requirements: Stipulated penalties shall accrue per violation per day for each of the following requirements for each capture and collection system of the Main and Small Furnaces:

a. Failure to conduct an initial analysis, including submittal of the associated report, demonstrating conformance with the engineering standards of 40 C.F.R. § 63.1506(c) for the minimum exhaust rate and facial inlet velocities in accordance with Paragraph 13;

b. Failure to inspect the capture and collection at least once per year, in accordance with 40 C.F.R. § 63.1510(d) and Paragraph 14;

c. As a result of the annual inspection required by 40 C.F.R. § 63.1510(d) and Paragraph 14, failure to perform corrective actions within 60 Days on those parts of the capture and collection system that have deteriorated, including but not limited to the curtains;

d. As a result of the annual inspection required by 40 C.F.R. § 63.1510(d) and Paragraph 14, failure to perform corrective actions within 60 Days to ensure that the area of any opening in the capture and collection system is no greater than the baseline area or recalculate the minimum required exhaust rate and reassess the capture and collection systems compliance with the ACGIH Guidelines requirements in accordance with Paragraph 13;

e. Failure to demonstrate that the capture and collection system meets the requirements of 40 C.F.R. § 63.1506(c) in accordance with Paragraphs13 and 15 or that the volumetric flow rate meets or exceeds the calculated minimum exhaust rate for the capture and collection system in accordance with the requirements of 40 C.F.R. § 63.1506(c) and Paragraphs 14 and 15:

Penalty Per Violation Per day	Period of Noncompliance
$250	1st through 14th Day
$750	15th through 30th Day

$2,000 .....31st Day and beyond

36. Inspection and Maintenance Program for the Main and Small Furnace Curtains. The following stipulated penalties shall accrue per violation per Day for each failure by Defendant to comply with either the "Inspection and Maintenance Program for the Main Furnace Curtains" or the "Inspection and Maintenance Program for the Small Furnace Curtains" included as Appendix A to this Decree:

Penalty Per Violation Per day	Period of Noncompliance
$250	1st through 14th Day
$500	15th through 30th Day
$1000	31st Day and beyond

37. Operating and Monitoring Parameters and Limits. Stipulated penalties shall accrue per violation per day for each of the following requirements for the Main and Small Furnaces, as follows:

a. Failure to follow the O&M plan in accordance with Paragraph 17;

b. Failure to monitor required operating parameters required by Subpart RRR in accordance with 40 C.F.R. § 63.1510 and the OM&M plan, or to have lapses in monitoring; or

c. Failure to meet the operating limits of 40 C.F.R. § 63.1506.

Penalty Per Violation Per day	Period of Noncompliance
$250	1st through 14th Day
$500	15th through 30th Day
$1,500	31st Day and beyond

38. Permits. For each failure by Defendant to timely submit a revised FESOP permit application as required by Paragraph 18, the following stipulated penalties shall accrue per violation per day:

Penalty Per Violation Per day	Period of Noncompliance
$500	1st through 14th Day
$1,000	15th through 30th Day
$3,000	31st Day and beyond

39. Reporting Requirements. The following stipulated penalties shall accrue per violation per Day for each violation of the reporting requirements of Section VI:

Penalty Per Violation Per Day	Period of Noncompliance
$500	1st through 14th Day
$1,000	15th through 30th Day
$3,000	31st Day and beyond

40. Transfer of Ownership. If Defendant fails to: (a) provide a copy of this Consent Decree to any proposed transferee; (b) provide written notice to the United States at least 30 Days prior to any transfer of any portion of the Facility; or (c) provide a copy of the proposed written agreement with the transferee as required by Paragraph 4, Defendant shall pay a stipulated penalty of $15,000 per occurrence.

41. 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.

42. Defendant shall pay any stipulated penalty within 30 Days of receiving the United States' written demand.

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

44. Stipulated penalties shall continue to accrue as provided in Paragraph 62, during any Dispute Resolution, but need not be paid until the following:

a. If the dispute is resolved by agreement of the Parties or by a decision of EPA that is not appealed to the Court, Defendant 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 EPA's decision or order.

b. If the dispute is appealed to the Court and the United States prevails in whole or in part, Defendant 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, Defendant shall pay all accrued penalties determined to be owing, together with interest, within 15 Days of receiving the final appellate court decision.

45. Defendant shall pay stipulated penalties owing to the United States in the manner set forth in Paragraph 8 and with the confirmation notices required by Paragraph 11, 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.

46. If Defendant fails to pay stipulated penalties according to the terms of this Consent Decree, Defendant 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 Defendant's failure to pay any stipulated penalties.

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

48. 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 Defendant's violation of this Decree or applicable law, including but not limited to an action against Defendant 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. FORCE MAJEURE

49. "Force majeure," for purposes of this Consent Decree, means any event arising from causes beyond the control of Defendant, of any entity controlled by Defendant, or of Defendant's contractors, that delays or prevents the performance of any obligation under this Consent Decree despite Defendant's best efforts to fulfill the obligation. Given the need to protect public health and welfare and the environment, the requirement that Defendant exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure and best efforts to address the effects of any potential force majeure (a) as it is occurring and (b) following the potential force majeure, such that any delay or non-performance is, and any adverse effects of the delay or non-performance are, minimized to the greatest extent possible. "Force majeure" does not include financial inability to perform any obligation under this Consent Decree.

50. If any event occurs for which Defendant will or may claim a force majeure, Defendant shall provide notice by telephone or email to David Sutlin at 312-353-8990 or Sutlin.david@epa.gov, or to EPA at the contact information in Section XIII (including an email

to R5airenforcement@epa.gov). The deadline for the initial notice is three days after Defendant first knew or should have known that the event would likely delay or prevent performance. Defendant shall be deemed to know of any circumstance of which any contractor of, subcontractor of, or entity controlled by Defendant knew or should have known.

51. Regardless of whether Defendant seeks to assert a claim of force majeure concerning the event, within seven Days after the notice under Paragraph 50, Defendant shall submit a further notice to EPA that includes (a) an explanation and description of the event and its effect on Defendant's completion of the requirements of the Consent Decree; (b) a description and schedule of all actions taken or to be taken to prevent or minimize the delay and/or other adverse effects of the event; (c) if applicable, the proposed extension of time for Defendant to complete the requirements of the Consent Decree; (d) Defendant's rationale for attributing such delay to a force majeure if it intends to assert such a claim; (e) a statement as to whether, in the opinion of Defendant, such event may cause or contribute to an endangerment to public health or welfare or the environment; and (f) all available proof supporting any claim that the delay was attributable to a force majeure.

52. Failure to submit a timely or complete notice or claim under Paragraph 50 or 51 regarding an event precludes Defendant from asserting any claim of force majeure regarding that event, provided, however, that EPA may, in its unreviewable discretion, excuse such failure if it is able to assess to its satisfaction whether the event is a force majeure, and whether Defendant has exercised its best efforts, under Paragraph 49.

53. After receipt of any claim of force majeure, EPA will notify Defendant of its determination whether Defendant is entitled to relief under Paragraph 53, and, if so, the excuse of, or the extension of time for, performance of the obligations affected by the force majeure. An

excuse of, or extension of the time for performance of, the obligations affected by the force majeure does not, of itself, excuse or extend the time for performance of any other obligation.

54. If Defendant elects to invoke the dispute resolution procedures set forth in Section IX (Dispute Resolution), it shall do so no later than 15 Days after receipt of EPA's notice. In any such proceeding, Defendant has the burden of proving that it is entitled to relief under Paragraph 53, that its proposed excuse or extension was or will be warranted under the circumstances, and that it complied with the requirements of Paragraphs 49-51. If Defendant carries this burden, the delay or non-performance at issue shall be deemed not to be a violation by Defendant of the affected obligation of this Consent Decree identified to EPA and the Court.

IX. DISPUTE RESOLUTION

55. 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. Defendant's failure to seek resolution of a dispute under this Section concerning an issue of which it had notice and an opportunity to dispute under this Section prior to an action by the United States to enforce any obligation of Defendant arising under this Decree precludes Defendant from raising any such issue as a defense to any such enforcement action.

56. 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 Defendant sends DOJ and EPA a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed 20 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 10 Days after the conclusion of the informal negotiation period, Defendant invokes formal dispute resolution procedures as set forth below.

57. Formal Dispute Resolution. Defendant shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by sending DOJ and EPA 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 Defendant's position and any supporting documentation relied upon by Defendant.

58. The United States will send Defendant its Statement of Position within 45 Days of receipt of Defendant'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 is binding on Defendant, unless Defendant files a motion for judicial review of the dispute in accordance with the following Paragraph.

59. Judicial Dispute Resolution. Defendant may seek judicial review of the dispute by filing with the Court and serving on the United States a motion requesting judicial resolution of the dispute. The motion (a) must be filed within ten Days of receipt of the United States' Statement of Position pursuant to the preceding Paragraph; (b) may not raise any issue not raised in informal dispute resolution pursuant to Paragraph 56, unless the Plaintiffs raise a new issue of law or fact in the Statement of Position; (c) shall contain a written statement of Defendant's position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and (d) shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree.

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

61. Standard of Review

a. Disputes Concerning Matters Accorded Record Review. Except as otherwise provided in this Consent Decree, in any dispute brought under Paragraph 57 pertaining to the adequacy or appropriateness of plans, procedures to implement plans, schedules or any other items requiring approval by 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, Defendant 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 Paragraph 57, Defendant shall bear the burden of demonstrating that its position complies with this Consent Decree and better furthers the objectives of the Consent Decree.

62. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of Defendant 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 44. If

Defendant does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section VII (Stipulated Penalties).

X. INFORMATION COLLECTION AND RETENTION

63. The United States and its representatives, including attorneys, contractors, and consultants, shall have the right of entry into any 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 Defendant or its representatives, contractors, or consultants;

d. obtain documentary evidence, including photographs and similar data; and

e. assess Defendant's compliance with this Consent Decree.

64. Upon request, Defendant shall provide EPA or its authorized representatives splits of any samples taken by Defendant. Upon request, EPA shall provide Defendant splits of any samples taken by EPA.

65. Until five years after the termination of this Consent Decree, Defendant 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 Defendant'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. At any time during this information-retention period, upon request by the United States, Defendant shall provide copies of any documents, records, or other information required to be maintained under this Paragraph.

66. At the conclusion of the information-retention period provided in the preceding Paragraph, Defendant 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, Defendant shall deliver any such documents, records, or other information to EPA. Defendant 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 Defendant 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 Defendant. 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.

67. Defendant 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. As to any information that Defendant seeks to protect as CBI, Defendant shall follow the procedures set forth in 40 C.F.R. Part 2.

68. 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 Defendant to maintain

documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

XI. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS

69. This Consent Decree resolves only the civil claims of the United States for the violations alleged in the Complaint filed in this action through the date of lodging.

70. 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 Act or implementing regulations, or under other federal laws, regulations, or permit conditions, except as expressly specified in Paragraph 69. The United States further reserves all legal and equitable remedies to address any conditions if there is or may be an imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, Defendant's Facility, whether related to the violations addressed in this Consent Decree or otherwise.

71. 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 Defendant's violations, Defendant shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, claim preclusion (res judicata), issue preclusion (collateral estoppel), 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 69.

72. This Consent Decree is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. Defendant is responsible for achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations,

and permits; and Defendant'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 Defendant's compliance with any aspect of this Consent Decree will result in compliance with provisions of the Act, 42 U.S.C. § 7410, *et seq.*, or with any other provisions of federal, State, or local laws, regulations, or permits.

73. This Consent Decree does not limit or affect the rights of Defendant 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 Defendant, except as otherwise provided by law.

74. 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

75. 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 Defendant.

XIII. NOTICES

76. Unless otherwise specified in this Decree, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and sent by mail or email (with a preference for email), addressed as follows:

As to DOJ by email (preferred):	eescdcopy.enrd@usdoj.gov Re: DJ # 90-5-2-1-12888
As to DOJ 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 # 90-5-2-1-12888
As to EPA by email (preferred):	EPA Region 5 Air Enforcement R5airenforcement@epa.gov
As to EPA by mail:	Sophie Grueterich USEPA REGION 5 77 West Jackson Boulevard Mail Code: C-14J Chicago, IL 60604-3507
As to Defendant:	Jay Armstrong President Trialco Aluminum, LLC 900 E. Lincoln Highway Chicago Heights, IL 60411 (708)-757-4200 armstrong@trialco.net

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

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

XIV. EFFECTIVE DATE

79. 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 Defendant 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.

XV. RETENTION OF JURISDICTION

80. 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.

XVI. MODIFICATION

81. 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.

82. 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 61, 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).

XVII. TERMINATION

83. After Defendant has completed the requirements of Section V (Compliance Requirements), has thereafter maintained continuous satisfactory compliance with this Consent Decree and Defendant's permit for a period of 18 months, and has paid the civil penalty and any accrued stipulated penalties as required by this Consent Decree, Defendant may serve upon the

United States a Request for Termination, stating that Defendant has satisfied those requirements, together with all necessary supporting documentation.

84. Following receipt by the United States of Defendant's Request for Termination, the Parties shall confer informally concerning the Request and any disagreement that the Parties may have as to whether Defendant 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.

85. If the United States does not agree that the Decree may be terminated, Defendant may invoke Dispute Resolution under Section IX. However, Defendant shall not seek Dispute Resolution of any dispute regarding termination until 45 Days after service of its Request for Termination.

XVIII. PUBLIC PARTICIPATION

86. 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. Defendant 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 Defendant in writing that it no longer supports entry of the Decree.

XIX. SIGNATORIES/SERVICE

87. Each undersigned representative of Defendant and the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice identified on the DOJ signature page below, certifies that that person is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Party that person represents to this document.

88. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. Defendant 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. Defendant need not file an answer to the complaint in this action unless or until the Court expressly declines to enter this Consent Decree.

XX. INTEGRATION

89. This Consent Decree, including deliverables that are subsequently approved pursuant to this Decree, constitutes the entire agreement among the Parties regarding the subject matter of the Decree and supersedes all prior representations, agreements and understandings, whether oral or written, concerning the subject matter of the subject matter of the Decree herein.

XXI. 26 U.S.C. SECTION 162(f)(2)(A)(ii) IDENTIFICATION

90. For purposes of the identification requirement in Section 162(f)(2)(A)(ii) of the Internal Revenue Code, 26 U.S.C. § 162(f)(2)(A)(ii), and 26 C.F.R. § 1.162-21(b)(2), performance of the obligations contained in Paragraphs 13 through 17 is restitution, remediation, or required to come into compliance with law.

XXII. HEADINGS

91. Headings to the Sections and Subsections of this Consent Decree are provided for convenience and do not affect the meaning or interpretation of the provisions of this Consent Decree.

XXIII. FINAL JUDGMENT

92. 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 Defendant. 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.

XXIV. APPENDICES

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

"Appendix A" is the Inspection and Maintenance Program for the Main and Small Furnace Curtains;

"Appendix B" is the Defendant's OM&M Plan dated December 23, 2024;

"Appendix C" is the List of Capital Improvement Projects and Operational Changes Implemented Prior to Lodging of this Consent Decree.

Dated and entered this __ day of _____, 20__

_____
UNITED STATES DISTRICT JUDGE

FOR THE UNITED STATES OF AMERICA:

ADAM GUSTAFSON
Assistant Attorney General
Environment and Natural Resources Division
United States Department of Justice

ANDREW S. BOUTROS
United States Attorney

June 30, 2025
Date

By: Nigel B. Cooney

NIGEL B. COONEY
Assistant United States Attorney
219 South Dearborn Street
Chicago, Illinois 60604
(312) 353-1996
nigel.cooney@usdoj.gov

FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY:

ROBERT KAPLAN

Digitally signed by ROBERT KAPLAN
Date: 2025.06.25 13:48:37 -05'00'

ROBERT KAPLAN
Regional Counsel
U.S. Environmental Protection Agency, Region 5

SOPHIE GRUETERICH

Digitally signed by SOPHIE GRUETERICH
Date: 2025.06.17 11:42:58 -05'00'

SOPHIE GRUETERICH
Assistant Regional Counsel
U.S. Environmental Protection Agency, Region 5
Office of Regional Counsel

FOR TRIALCO ALUMINUM, LLC:

May 31, 2025
Date

JAY ARMSTRONG
President
Trialco Aluminum, LLC
900 E. Lincoln Highway
Chicago Heights, Illinois 60411

6/9/2025
Date

CHRISTOPHER HOTALING
Nixon Peabody LLP
70 West Madison, Suite 5200
Chicago, Illinois 60602

Counsel for Trialco Aluminum, LLC

Appendix A

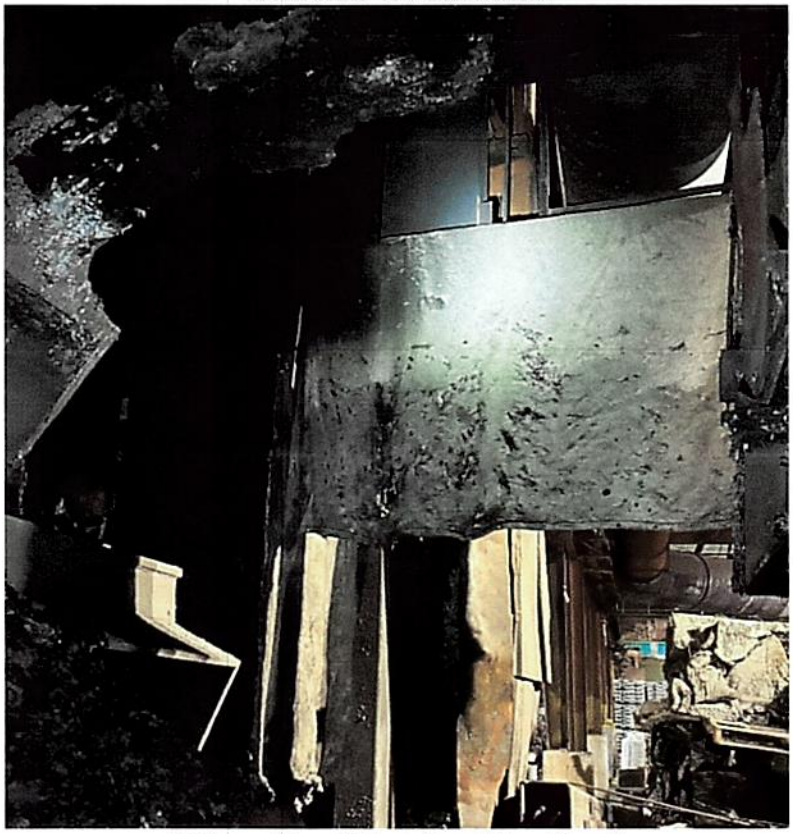
*** * CHECK INDEX BEFORE USE * ***

SOP: July 1, 2025
RESPONSIBILITY: Maintenance Supervisor
SUBJECT: Furnace Equipment Capture and Collection Systems
PROCEDURE: Inspection and Maintenance Program for the Main Furnace Curtains

Main Furnace Charge Well and Pump Well Curtains Reference Conditions

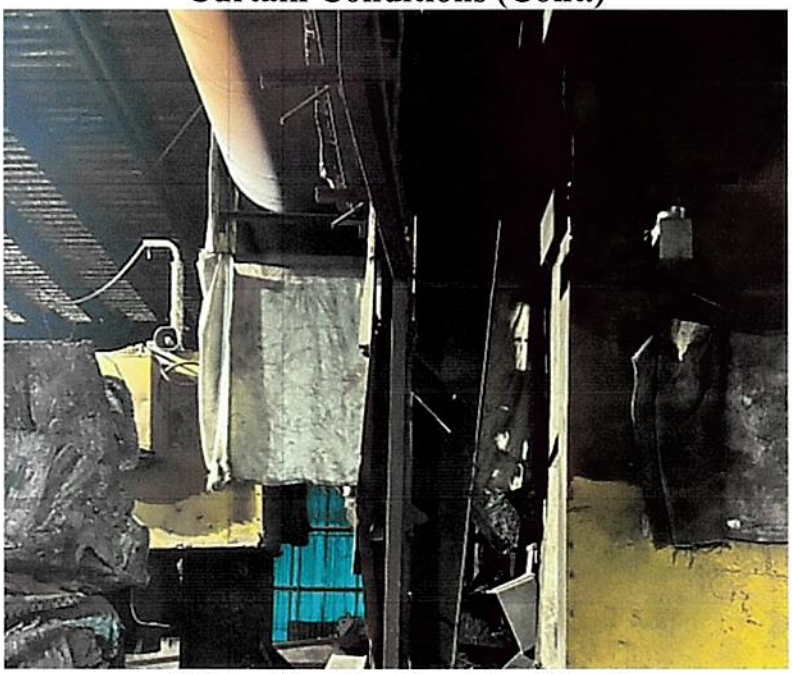
- The following Figures 1 through 3 are provided as a visual indicator of an acceptable condition for the Main Furnace charge well and pump well curtains as reflected within the most recent Capture and Collection System Engineering Assessment conducted in accordance with 40 CFR 63:1506(c).

Figure 1. Acceptable Charge Well Dross Skimming Hood Extension Curtain Conditions



(View #1 – West Looking East)

Figure 1. Acceptable Charge Well Dross Skimming Hood Extension Curtain Conditions (Cont.)



(View #2 – East Looking West)

Figure 2. Acceptable Charge Well Hood Side Face Curtain Conditions
(View – North Looking South for South Hood Face)

Figure 3. Acceptable Pump Well Curtain Conditions
(View – East Looking West)

Main Furnace Charge Well and Pump Well Curtains Inspection Procedure and Corrective Actions

1. A daily visual inspection of the Main Furnace charge well and pump well curtains depicted in Figures 1 to 3 is to be completed once per calendar day by maintenance personnel and marked on the daily baghouse inspection sheet.
2. Any abnormal/unacceptable curtain conditions that compromise curtain functionality (ripped, hanging from missing bolts or all other damage) need to be noted on the form. Such abnormal/unacceptable conditions are then to be reported to the Maintenance Manager through a Work Order Request Form.
3. Curtain repairs will be completed within 30 days by Maintenance personnel at the direction of the Maintenance Manager where the repair date and time will be noted in the closed Work Order documentation.

RECORDS/OBJECTIVE EVIDENCE
Completed Work Order Request Forms
This SOP is not under the ISO 9001:2015 system and shall not be audited.

OBSOLETE INSTRUCTION
All equipment repairs will be reviewed by the President of Trialco.

Approval Signature: _____

*** * CHECK INDEX BEFORE USE * ***

SOP: July 1, 2025
RESPONSIBILITY: Maintenance Supervisor
SUBJECT: Furnace Equipment Capture and Collection Systems
PROCEDURE: Inspection and Maintenance Program for the Small Furnace Curtains

SF Furnace Charge Well and Pump Well Curtains Reference Conditions

- The following Figures 1 through 3 are provided as a visual indicator of an acceptable condition for the SF Furnace charge well and pump well curtains as reflected within the most recent Capture and Collection System Engineering Assessment conducted in accordance with 40 CFR 63:1506(c).

Figure 1. Acceptable Charge Well Curtain Conditions
(View – North Looking South)

Figure 2. Acceptable Pump Well Curtain Conditions
(View – North Looking South)

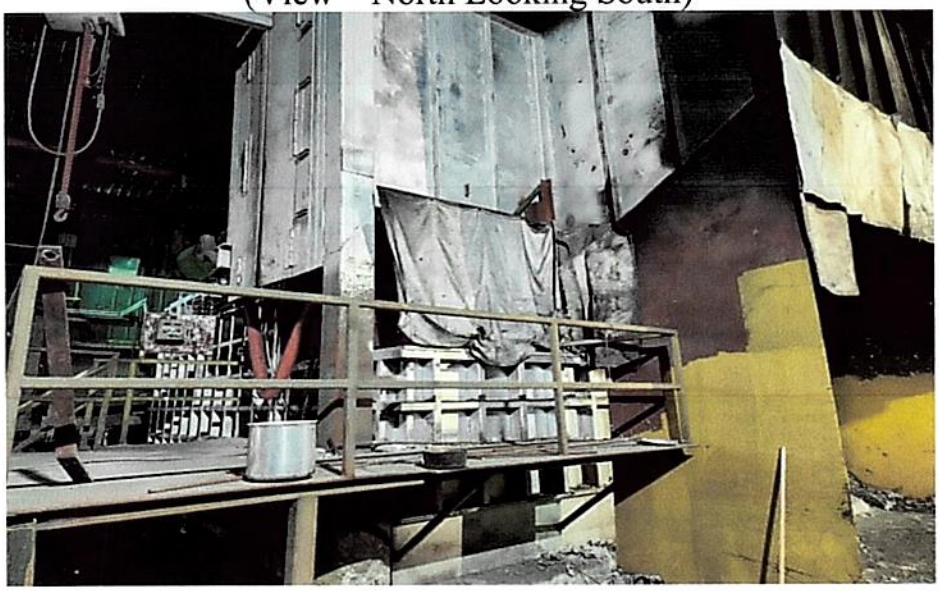


Figure 3. Acceptable Charge Well Dross Skimming Access Point Curtain Conditions
(View – West Looking East)

SF Furnace Charge Well and Pump Well Curtains Inspection Procedure and Corrective Actions

1. A daily visual inspection of the SF Furnace charge well and pump well curtains depicted in Figures 1 to 3 is to be completed once per calendar day by maintenance personnel and marked on the daily baghouse inspection sheet.
2. Any abnormal/unacceptable curtain conditions that compromise curtain functionality (ripped, hanging from missing bolts or all other damage) need to be noted on the form. Such abnormal/unacceptable conditions are then to be reported to the Maintenance Manager through a Work Order Request Form.
3. Curtain repairs will be completed within 30 days by Maintenance personnel at the direction of the Maintenance Manager where the repair date and time will be noted in the closed Work Order documentation.

RECORDS/OBJECTIVE EVIDENCE
Completed Work Order Request Forms
This SOP is not under the ISO 9001:2015 system and shall not be audited.

OBSOLETE INSTRUCTION
All equipment repairs will be reviewed by the President of Trialco.

Approval Signature: _____

Appendix B

SMACT OPERATION, MAINTENANCE, AND MONITORING PLAN

Trialco Aluminum, LLC / Chicago Heights Facility

Version 003 – December 23, 2024

Supersedes: Version 002 – November 10, 2023

Prepared By:

Trialco Aluminum, LLC
Illinois EPA Facility I.D. No. 031045AES
900 E. Lincoln Hwy.
Chicago Heights, Illinois 60411
708-757-4200

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CERTIFICATION STATEMENT

In accordance with 40 CFR 63.1510(b), I certify under penalty of law that I have examined and am familiar with the information in the enclosed documents, including all attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are, to the best of my knowledge and belief, true and complete. I hereby declare that, based on information and belief formed after reasonable inquiry, this Operation, Maintenance and Monitoring plan satisfies all requirements and is otherwise consistent with the requirements of §63.1510(b). I am aware that there are significant penalties for knowingly submitting false statements and information, including the possibility of fines or imprisonment pursuant to section 113(c)(2) of the Act, and 18 U.S.C. §§ 1001 and 1341.

Jay Armstrong
President

1. INTRODUCTION

Trialco Aluminum, LLC (Trialco) currently owns and operates a secondary aluminum production facility in Chicago Heights, Illinois (Chicago Heights facility). The facility is classified as a synthetic minor source under the Title V operating permit program and currently operates in accordance with Federally Enforceable State Origin Permit (FESOP) Application No. 12040047, initially issued by the Illinois Environmental Protection Agency (Illinois EPA) in April 2018.

Certain emission units at the facility are affected sources under 40 CFR §63 Subpart RRR, the National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production, referred to herein as "SMACT". Pursuant to §63.1510(b) of SMACT, Trialco is required to develop and submit a written operation, maintenance, and monitoring plan (OMMP) that outlines the procedures for the proper operation and maintenance of all regulated process equipment, monitoring devices, and air pollution control devices that are part of SMACT affected sources. This document constitutes the OMMP for Trialco's SMACT affected sources at the Chicago Heights facility.

The OMMP must be submitted within 90 days after conducting the repeat performance test for the affected furnaces. The most recent Main and SF Furnace performance test program was completed on August 12, 2023 setting the applicable OMMP submission deadline to November 10, 2023 for the prior Version 002. This OMMP Version 002 and the associated Notice of Compliance Status Report (NOCSR) were submitted to Illinois EPA and EPA Region 5 within this regulatory deadline. The current Version 003 of the OMMP is not directly associated with a performance testing event. Rather, Trialco has developed an updated Version 003 of the OMMP in coordination with the planned incorporation as Appendix B of the federal SMACT Consent Decree. This version contains various administrative updates to ensure consistency with the SMACT compliance obligations summarized in the Consent Decree.

Trialco is required to operate, monitor, and maintain all affected equipment in a manner that minimizes air emissions by continuously complying with applicable SMACT emission limits at all times. An attendant requirement of the SMACT is that Trialco conduct a performance tests for each emission unit that is an affected source and is subject to an emission limit in §63.1505. During any compliance tests required by §63.1511, operating parameters of process equipment and control devices must be recorded to establish a minimum or maximum operating parameter value, or operating parameter range, to ensure compliance with the applicable emission limit. Thus, in addition to these operating and monitoring procedures, this OMMP includes the operating parameter values and ranges that were established during the most recently completed compliance tests of the affected sources. To ensure that the process units and control devices operate within the parameter values established during the compliance tests, the SMACT requires the utilization of certain monitoring systems. This OMMP describes in detail the method of operation for each required monitoring device.

1.1 Affected Sources

The following emission units at the Chicago Heights facility are affected sources under SMACT pursuant to §63.1500(b), with each type of affected source being defined at §63.1503:

1.1.1.1 Two (2) Group 1 Furnaces with Add on Air Pollution Control Devices

- One (1) 52 MMBtu/hour natural gas-fired aluminum melting furnace (Main Furnace) controlled by a baghouse (a.k.a., fabric filter) with lime and ammonia injection (South/ETA Baghouse)
  - Regulated as a Group 1 furnace with add-on control device located at an area source of hazardous air pollutants (HAP) under SMACT and subject only to the dioxins and furans (D/F) emissions standard.
- One (1) 19 MMBtu/hour natural gas-fired aluminum melting furnace (SF Furnace) controlled by a baghouse with lime and ammonia injection (North/ Wheelabrator Baghouse)
  - Also, regulated as a Group 1 furnace with add-on control device located at an area source of HAP under SMACT subject only to the D/F emissions standard.

1.2 Organization of OMMP

Following this introduction, a general overview of the operations at the Chicago Heights facility is provided in Section 2. The remainder of the OMMP is organized by each affected process unit group. Contents of the OMMP for each affected operation are generally organized into the following elements:

- **Process Description:** Describes the purpose of the particular process unit in the overall operations scheme of the process area and details the basic operating principles that are relevant to proper operation and maintenance.
- **Applicable Emission Limits:** Describes SMACT emission limits that apply to the process unit and any associated control device.
- **Compliance Test Results**: Describes the emissions rates and operating parameter values or ranges established in the most recent compliance test, as applicable.
- **Operating Plan:** Describes the operating procedures for the process unit and associated control device that ensure compliance with all applicable emission limits and operating and monitoring requirements in the SMACT.
- **Monitoring Plan:** Describes the operating or control device parameter monitoring systems, the associated monitoring schedule, and any required monitoring device calibrations.
- **Maintenance Plan:** Describes both routine and long-term maintenance tasks and the schedule by which they will be completed.
- **Corrective Action Plan:** Describes the general corrective action procedures that are to be taken if a deviation or excursion from the operating parameter values or operating parameter ranges determined during the most recent performance test of the unit occurs (if required).

1.3 Regulatory Conformance of OMMP

This OMMP explicitly addresses all of the applicable OMMP content requirements in §63.1510(b). **Table 1-1** cites each applicable SMACT OMMP content provision and indicates the location in each emission unit specific section of this plan where the provision is either directly or indirectly addressed.

Table 1-1. SMACT OMMP Content Requirements

Citation	Requirement Type	Required OMMP Content	Section of OMMP Covering Requirement
§63.1510(b)(1)	*Operating Parameter Summary*	Process and control device parameters to be monitored to determine compliance, along with established operating levels or ranges, as applicable, for each process and control device.	*Monitoring Plan:* Complete list of parameters monitored. *Compliance Test Results:* Parameter levels and ranges established in the most recent performance test.
§63.1510(b)(2)	*Monitoring Schedule*	Monitoring schedule for each affected source and emission unit.	*Monitoring Plan*
§63.1510(b)(3)	*Process Unit and Control Device Operation*	Procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable SMACT emission limits	*Operating Plan*
§63.1510(b)(4)	*Monitoring Device Operation and Maintenance*	Procedures for the proper operation and maintenance of monitoring devices or systems used to determine compliance	*Monitoring Plan*
§63.1510(b)(5)	*Parametric Monitoring*	Procedures for monitoring process and control device parameters	*Monitoring Plan*
§63.1510(b)(6)	*Corrective Action Plan*	Corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in the OMMP.	*Corrective Action Plan*
§63.1510(b)(7)	*Maintenance Plan*	Maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.	*Maintenance Plan*
§63.1510(b)(8)	*Process Unit Operation*	Work practices and pollution prevention measures to meet applicable SMACT emission limits and monitoring plan for Group 1 Furnaces without add-on control devices.	*Operating Plan* *Monitoring Plan*
§63.1510(b)(9)	*Procedures for Changing Furnace Classifications*	Procedures to be followed when changing furnace classifications.	*N/A – All furnaces are designated as Group 1 furnaces with no current FESOP accommodation to change furnace classifications.*

1.4 OMMP Revision History

Pursuant to § 63.1517(b)(16), Trialco is required to maintain a current copy and any revisions of the OMMP along with records documenting conformance with the plan. **Table 1-2** provides a historical index of the revisions.

If the permitting authority requests revisions to the OMMP based on the determination that the plan does not satisfy the requirements of SMACT or if Trialco determines that any other revisions to the OMMP are necessary, Trialco will submit to the permitting authority a description of the changes and a revised plan incorporating those changes. Such revisions will become effective and will be implemented once submittal to the permitting authority has occurred. Specifically with respect to OMMP revisions required due to the establishment of new performance test emission rates or operating parameter values or ranges, Trialco will revise and submit the OMMP as soon as possible, but no longer than 90 days after receiving approval by the permitting authority of the test report upon which the new emission rates and operating values are based.[1] Plans submitted will be accompanied by a written certification stating that the OMMP satisfies all requirements of §63.1510(b) and is otherwise consistent with the requirements of the SMACT.

Table 1-2. Index and Description of OMMP Revisions

Version	Description of Change	Effective Date
000 (Legacy Version)	MACT Guidelines including Operation Procedures, Startup & Shutdown Procedures, Maintenance Guidelines, and Malfunction Reaction	January 31, 2020 (provided as Appendix 10a to *Response to Environmental Protection Agency Request for Information pursuant to the Clean Air Act*)
001	Revised OMMP for Main and SF Furnace Re-Test	February 3, 2023
002	Revised OMMP for Main ad SF Furnace Re-Test; Gaseous Chlorine Flow Monitoring System Configuration Change; Update Various References to No Longer Using Main Furnace Hearth Door Hood	November 10, 2023
003	Administrative Consistency Updates for SMACT Consent Decree	December 23, 2024

[1] Pursuant to §63.1510(b), an OMMP (or OMMP revision) for a new affected source is due within 90 days of successful completion of the initial performance test. While repeat performance tests or tests to establish new operating parameters or emission rates on existing units necessitating OMMP revisions do not meet the criteria in §63.1510(b), Trialco is assuming that a similar regulatory timeframe would apply to these types of revisions as would apply for revisions based on the operation of new sources.

2. PROCESS DESCRIPTION

Trialco's secondary aluminum process begins with the issuance of a purchase order for raw materials. Trialco runs a batch operation for the production of small form aluminum ingots/sows using secondary aluminum inputs. To accommodate aluminum alloy changes and to meet specific customer specification, Trialco can pour molten aluminum from the two (2) melting furnaces to a completely empty and dry state. At other times, Trialco leaves a molten heel in the furnaces and adds feed/charge materials to the furnace. The range of feed/charge materials for the furnaces includes various forms of post-consumer and post-industrial scrap (i.e., "other than clean charge" under SMACT), pure aluminum (a.k.a., prime aluminum and designated as clean charge under SMACT), remelted ingot [i.e., remelt secondary ingot (RSI) designated as clean charge] and alloying agents (e.g., non-aluminum metals that impart desirable metallurgical properties designated as clean charge). The purchase order identifies the specific materials being purchased and, where relevant includes specifications for feed/charge material properties (e.g., limitations on selected contaminants). Trialco maintains a wide range of feed/charge material inventory items in the raw material storage section of the Chicago Heights facility.

Raw materials are inspected upon arrival for the following parameters:

- *Weight* – The material must be in compliance with the shipping papers and within 10% of the purchase order-specified weight. Only raw materials with an existing purchase order are accepted. Trialco does not buy mixed loads from the open scrap market.
- *Visual Appearance* - The material must be free of any contamination not listed on the purchase order or acceptable within the category of raw material being purchased.

If the material appears to be contaminated, material is to be checked for chemistry compliance. Once compliance with operating procedures has been obtained, the raw materials are scheduled to be consumed into the furnaces.

Each of the two (2) "sidewell-type" furnace operates via a batch operating cycle and completely independently from one another. The end aluminum ingot production requirements in terms of metal chemistry/alloy specifications and total quantity of metal output are fully specified by the customer requirements and ultimately dictate the specific operating practices of a given batch operating cycle. The feed/charge material mix (e.g., amount and type of "other than clean charge" scrap materials versus the amount and type of "clean charge" materials in the form of prime, RSI, hard charge from molten metal drains, and various other forms of aluminum), feed/charge rate, and molten aluminum pour rate are also influenced by the customer specifications. The finished product manufactured by the aluminum melting furnaces is clean aluminum solids cast into small form sow or ingot molds.

Hard charge materials such as prime aluminum and RSI sows can be placed in one (1) of two (2) preheaters [designated as the "1.0 MMBtu/hour Natural Gas-Fired Dryer (Small Heater) (Dryer)" and "2.0 MMBtu/hour Natural Gas-Fired Dryer (Large Heater (Dryer))" within the FESOP] prior to being charged into the hearth of the furnaces. The purpose of the preheater is to ensure there is no moisture present in these hard charge materials when fed to the furnace's molten bath. Any moisture which is charged into a molten bath and is heavy enough to submerge into the molten bath can result in the moisture being transformed into steam and causing an explosion. The preheaters are used for operational safety and melting efficiency purposes only and do not serve as a delacquering, decoating, or scrap treatment operation as defined within the SMACT.

As soon as the molten metal is above the archways between the hearth, the pump well, and the charge well, the molten metal pump is lowered slowly into the molten metal bath. It is important to note that the pump can only operate when the molten metal is above the archways; below that level, the pump will tear itself apart. Once the molten metal pump is running and the molten metal exceeds 1,300 deg. F, scrap and alloying agents can be added to the charge well. The proper charge sequence is determined by adding scrap only when the molten metal temperature is above 1,325 deg. F. The scrap is put into charge hoppers and weighed. The type of scrap and approximate feed/charge weights are entered on the production records referred as "heat sheets", but these feed/charge weights are not formally used for SMACT compliance tracking purposes (i.e., because Trialco uses the aluminum production tracking option by weighing finished product ingot/sow weights by the bundle). The charge hopper is lifted and the alloying elements or scrap slides into the molten metal bath. The action of the molten metal pump introduces hot molten metal onto the scrap in the charge well. The heat of the molten metal coming out of the pump converts the scrap from a solid to a liquid state, which achieves maximum aluminum recovery and melting efficiency.

The batch-wise charging continues along with regular sampling of the molten metal to ensure that the chemistry desired is being obtained. Chlorine gas and nitrogen are introduced into the molten metal through the molten metal pump. This is the only way chlorine can be introduced into the molten metal. The purpose of the gaseous chlorine reactive fluxing agent introduce below the surface of the molten bath is three-fold:

1. The chlorine cleans the molten metal of any trapped oxides or other inclusions.
2. The chlorine or the combination of the chlorine and nitrogen develops a positive pressure within the molten metal and drives out any dissolved hydrogen in the metal (the industry term for this process is "degassing").
3. The chlorine will react with calcium, sodium, and magnesium in the metal and form salts which float to the top of the molten metal as "dross."
    a. These are the only elements which can be removed from the molten metal. All other elements can only be diluted with additional aluminum content to lower their concentration. It is economically necessary to be able to remove these minor active metals.

Several alloys manufactured by Trialco cannot be made without this relatively unique high volume gaseous chlorine injection process. Typically, most sidewell-type aluminum melting furnaces would only use solid chlorine fluxing agents in the form of chloride-based salt fluxes for metal purification and would rely on a downstream in-line fluxer for low volume gaseous chlorine injection to accomplish the "degassing" function. Trialco's relatively unique array of aluminum alloys produced mandates a different gaseous chlorine injection practice than is commonly applied at most other secondary aluminum production facilities manufacturing more common alloys (e.g., beverage container-based 3XXX and 5XXX series alloys, automotive body sheet - based 5XXX and 6XXX series alloys, and general building and construction-based 5XXX series alloys).

Once the furnace is filled with molten aluminum to the desired volume, the metal has been cleaned via fluxing and drossing, and the chemistry specifications have been met, the furnace is opened at the tap hole to discharge molten aluminum into a trough feeding the ingot pouring machine or sow molds in a process referred to as "pouring." If the same or similar alloy is being made in the subsequent heat, a molten heel can be left in the furnace. Leaving a heel of molten metal allows the pump to stay in the furnace. In the event Trialco is completely changing alloys, the procedure is similar for both furnaces. The furnace in question would be drained, the pump pulled, the furnace cleaned, a new heel is introduced, and the process begins anew.

The next "heat" (batch operating cycle) would begin by charging the appropriate scrap in the charge well, repeating the process described above. It is difficult to measure exact furnace volumes and associated aluminum weight since the density of Trialco's different alloys vary dramatically. Trialco produces alloys with 7%+ zinc content, which are much denser than a pure aluminum alloy, as well as alloys with 7%+ magnesium content, which are much less dense than a pure aluminum alloy. This variability in aluminum density makes the process of targeting a specific heel weight more of an estimation than an exact measurement. Regardless, the formal aluminum weight tracking process for SMACT compliance purposes is based on the directly measured finished product ingot/sow weights, so the approximation of the remaining heel weight is not a relevant factor for compliance tracking purposes.

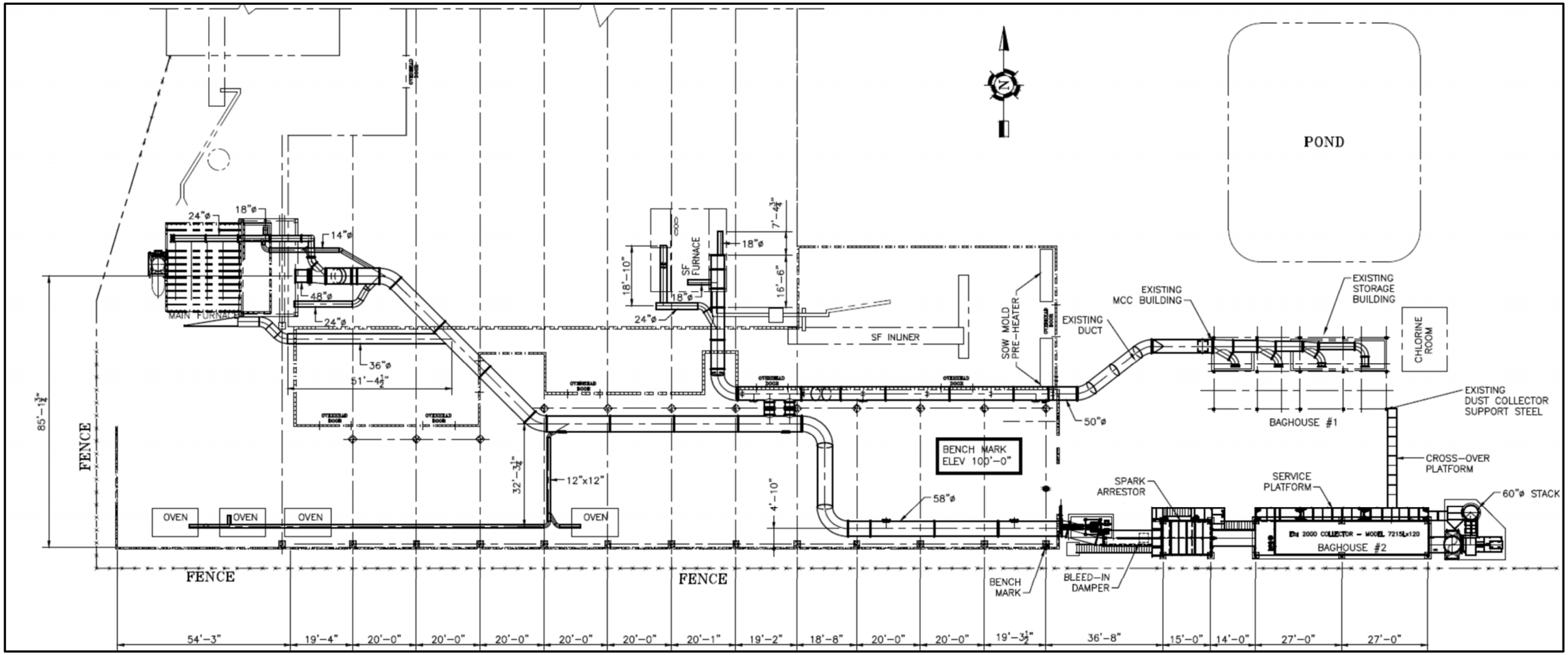
During pouring, the metal is guided through a trough and introduced into ingot molds via a pouring wheel or manually fed into sow molds. The ingots are then stamped with heat number and alloy and water is introduced to start the cooling process. The steam generated is captured in a hood and exhausted into the atmosphere. The ingots are stacked and moved to an open storage place. The ingots then air cool and are banded, weighed, and entered into inventory. Once the chemistry has been checked, weights verified, the ingot will be shipped to customers throughout North America for the production of a variety of aluminum parts through die casting, permanent mold, sand foundries, and other casting methods.

A reference site layout drawing is provided in **Figure 2-1**.[2] The Main Furnace sidewell is located on the right side of the object representing the furnace. The Main Furnace's main hearth door is located on the bottom of the furnace object. The Main Furnace's main hearth door hood duct connection shown in the figure has been blinded off/removed. The Main Furnace's charge well hood duct is the 48" duct segment connected to the right side of the furnace object. The Main Furnace's pump well hood is now served by a single 18" duct entering the top of the hood and connecting back to the charge well duct as a replacement the 24" primary duct and 14" secondary duct shown in the site layout drawing. The preheaters are noted as "ovens" and are shown as having ducts connected to the South/ETA baghouse (labelled as Baghouse #2 in the site layout drawing). The tap hole and trough for producing ingots/sows from the Main Furnace are located on the top left side of the main hearth chamber and traverses upward to the ingot pouring machine.

The smaller footprint SF Furnace has a sidewell located on the top of the furnace object with the pump well located on the right side of this sidewell chamber. The SF Furnace's main hearth door is located on the left side of the furnace object, and the main hearth door hood is not specifically shown in the drawing, but it serves the same function as the Main Furnace's main hearth door hood. The SF Furnace's charge well hood, pump well hood, and main hearth door hood ducts all combine into a main trunk line and are routed to the North/Wheelabrator Baghouse (labelled as "Baghouse #1" in the site layout drawing). The tap hole and trough for producing ingots/sows from the SF Furnace are located on the bottom right side of the main hearth chamber and traverses to the right to the ingot pouring machine (labelled as the "SF Inliner" in the site layout drawing).

[2] Note: The site layout drawing in Figure 2-1 is provided as a general reference only because it does not reflect the latest updates to the Main and SF Furnace duct work made to ensure the overall capture and collection systems conforms to ACGIH design guidelines specified in 40 CFR 63.1506(c). In coordination with the "Initial Capture and Collection Engineering Assessment" requirement of the Consent Decree due to be submitted within 60 days of the effective date, Trialco will work to update this site layout drawing to be fully representative of the Main and SF Furnace's duct layouts.

Figure 2-1. Facility Site Layout Drawing (Reference Only)



3. GENERAL OMMP REQUIREMENTS

The following subsections summarize the generally applicable OMMP requirements for subsequent cross-referencing in the remaining emission unit-specific sections of this plan.

3.1 Unit Labeling and Label Inspection

As required by §63.1506(b), an easily visible label must be maintained at each Group 1 furnace that identifies any applicable emission limits and the means for achieving compliance. The labels must include the type of source under §63.1503, any applicable operational standards, and a description of any control methods used to comply with any applicable emissions standards.

An example of a label may contain the following information, as applicable to each unit:

- Name of Affected Unit:
- Unit Classification:
- Operational Standards:
  - Charge Materials
  - Reactive Flux Addition
- Emission Limits:
- Control Method:
- Control Device Standards:
  - Lime Feed Rate
  - Baghouse Inlet Temperature
  - Bag Leak Alarms
  - Alarm Corrective Action
- **Corrective Action:** For each parametric deviation, initiate corrective action to restore the unit to its normal mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

If revisions to the information contained in the label are required due to changes in performance test operating parameters or other reason, Trialco will revise the label within a reasonable timeframe.

In accordance with §63.1510(c), Trialco inspects the labels for the Group 1 furnaces once per calendar month. The results of the monthly inspection are recorded in accordance with §63.1517(b)(13) and records are retained on file for a minimum of five (5) years.

3.2 Capture & Collection System Design and Inspections

Pursuant to §63.1506(c)(1), all affected units under the SMACT that use an add-on pollution control device to comply with an SMACT emission standard must design and install a system for the capture and collection (CCS) of emissions that meets the engineering standards for minimum exhaust rates established by the American Conference of Governmental Industrial Hygienists (ACGIH) in Chapters 3 and 5 of "Industrial

Ventilation: A Manual of Recommended Practice" (the Manual). The specific configuration of the CCS is detailed in the Group 1 Furnace-specific **Section 4**.

Pursuant to §63.1510(d)(2), Trialco will annually inspect SMACT regulated portions of the CCS used in conjunction with associated equipment to ensure that it meets the design standards in Chapters 3 and 5 of the ACGIH Ventilation Manual. As discussed in the emission unit specific CCS discussion, Trialco initially measured the exhaust flow rates for the hoods to ensure that they meet the minimum exhaust rates calculated in the design analysis, which will be documented and maintained on file for review.

As part of the ongoing annual inspections, Trialco will visually inspect (and repair if necessary) the hoods and their associated duct work to ensure proper operation in the future. In accordance with §63.1510(d)(2)(i), Trialco will, as a part of the annual inspection, conduct annual flow rate measurements using EPA Methods 1 and 2 for the SMACT regulated ducts to ensure that the measured flow rates meet the minimum exhaust rates calculated in the design analysis.

Records of annual capture and collection system inspections are retained on file for a minimum of five (5) years in accordance with §63.1517(b)(14). Records of annual capture and collection system inspections performed in support of the SMACT are provided by third-party engineering contractors, and Trialco retains files on-site for inspection.

4. GROUP 1 FURNACES WITH ADD-ON CONTROLS

As furnaces that utilize reactive fluxing, the Main and SF Furnaces are classified as Group 1 furnaces with add-on controls under §63.1503 of SMACT. The Main and SF Furnaces use feedstocks other than clean charge and support both gaseous and solid reactive chlorine fluxing. In accordance with all of the relevant OMMP requirements in §63.1510(b), the operating, monitoring, and maintenance procedures for the Group 1 furnaces are described in detail below.

4.1 Process Description

As a supplement to the general process description presented in **Section 2**, the following subsections describe the relevant process steps for a typical operating cycle of the Main and SF Furnaces and basic design and operating details for the lime-injected baghouses used for SMACT regulated pollutant emissions control.

4.1.1 Process Unit

4.1.1.1 Main Furnace

The Main Furnace is used to melt scrap and hard charge aluminum at a nominal maximum hourly feed/charge rate of approximately 12,000 pounds per hour (lb/hr) and a nominal maximum hourly ingot/sow pouring (aluminum production) rate of approximately 20,000 lb/hr. The Main Furnace is made up of two (2) main compartments: the furnace "sidewell" and the furnace main hearth. The sidewell is comprised of two (2) sections referred to as the pump well and charge well. The sidewell and main hearth are separated by refractory-lined walls with archways below the molten metal level to allow for thermal distribution and metal circulation between compartments. Charge materials to the sidewell melt furnaces are fed through two (2) distinct mechanisms: 1) charging predominantly loose scrap to the sidewell, or 2) feeding clean "hard charge" to the main hearth. A molten metal pump is used in the pump well to distribute scrap into molten aluminum present in the sidewell. Scrap melting in the sidewell occurs due to transfer of heat between the molten aluminum present in the sidewell and the aluminum scrap charged to the furnace. Molten aluminum from the sidewell of each furnace is circulated into the main hearth chamber of the sidewell furnace through the use of the circulating molten metal pump. For the purpose of melting the scrap/hard charge aluminum, the Main Furnace combusts natural gas at a maximum hourly heat input of up to 52 million British thermal units per hour (MMBtu/hr).

In conjunction with the furnace charging sequence, the following additional activities can be completed during a furnace's batch operating cycle:

- Main hearth, charge well, and/or pump well areas can be skimmed for dross removal,
- Alloy chemistry can be adjusted (if needed),
- Molten metal bath can be purified with gaseous and/or solid reactive chlorine flux addition (as needed),
- Molten metal bath is readied for transfer to the ingot/sow pouring process by being brought to the desired temperature and sampled for verification of product specifications meeting customer requirements
- Furnace tap plug is pulled to initiate transfer of molten aluminum to the ingot/sow pouring process

- After desired ingot/sow production volume is obtain, furnace tap plug is replaced to halt the flow of molten aluminum to the ingot/sow pouring process.

The Main Furnace charge well and pump well hoods are controlled by a lime (or compatible sorbent) injected South/ETA Baghouse dedicated to the furnace.

The operating cycle for Main Furnace is defined as the period from "first tap-to-final tap", which begins when the plug is replaced ending the previous ingot/sow pouring process, through charging, fluxing, tapping for the next ingot/sow pour, and ending when the plug is replaced again for the final time. Multiple sequences of charging and pouring may occur within a single operating cycle depending on customer requirements, so the end of the operating cycle would not occur until the full amount of aluminum production targeted for the cycle was achieved. The duration of and aluminum production from a typical operating cycle for the Main Furnace can vary considerably depending on customer requirements, but representative average values would be 17 to 23 hours for operating cycle duration and approximately 150,000 pounds for aluminum production over the cycle.

4.1.1.2 SF Furnace

The SF Furnace is used to melt scrap and hard charge aluminum at a nominal maximum hourly feed/charge rate of approximately 6,000 pounds per hour (lb/hr) and a nominal maximum hourly ingot/sow pouring (aluminum production) rate of approximately 18,000 lb/hr. For the purpose of melting the scrap/hard charge aluminum, the SF Furnace combusts natural gas at a maximum hourly heat input of up to 19 MMBtu/hr. The fundamental design and operating practices for the SF Furnace are effectively equivalent to the Main Furnace and are not reiterated here. The SF Furnace charge well, pump well, and main hearth door hood are controlled by a lime (or compatible sorbent) injected North/Wheelabrator Baghouse dedicated to the furnace. The same "first tap-to-final tap" operating cycle definition for the Main Furnace also applies for the SF Furnace. The duration of and aluminum production from a typical operating cycle for the SF Furnace also varies considerably depending on customer requirements, but a representative average values would be 19 to 21 hours for operating cycle duration and 90,000 pounds for aluminum production over the cycle.

4.1.2 Associated Control Device

Trialco has installed a CCS to route emissions generated from the furnaces to the baghouses. Pickup points for the CCS are located in the following positions on each furnace, where the location numbering scheme references from the July 2022 SMACT CCS Design Analysis Report:

- Main Furnace CCS Duct Connections
  - Main Furnace Pump Well Primary Duct (Location #1)
  - Main Furnace Pump Well Secondary Duct (Location #2) (REMOVED)
  - Main Furnace Charge Well Duct (no location number due to inability to directly measure flow)
  - Main Furnace Isolated Main Hearth Door Hood Duct (Location #3) (REMOVED)
- SF Furnace CCS Duct Connections
  - SF Furnace Charge Well Duct (Location #5)
  - SF Furnace Pump Well Duct (Location #6)

- SF Furnace Isolated Main Hearth Door Hood Duct (no location number due to inability to directly measure flow)

The South Baghouse, manufactured by ETA, is a multi-compartment system with felted filter media and a pulse jet cleaning system. Air flow through the system is maintained by a single induced draft fan downstream of the baghouse with an actual flow rate range of approximately 40,000 to 60,000 acfm and a nominal flow rate capacity of 70,000 acfm.

The North Baghouse, manufactured by Wheelabrator, is a multi-compartment system with "DUSTUBE" style filter bags and a shaker-type cleaning system. Air flow through the system is maintained by a single induced draft fan downstream of the baghouse with a nominal flow rate capacity of 60,000 acfm.

4.2 Applicable Emission Limits

Pursuant to §63.1505(i), as Group 1 furnaces not implementing the secondary aluminum process unit (SAPU) compliance option, the Main Furnace and SF Furnace are subject to the following individual source emission limits in **Table 4-1**.

Table 4-1. Applicable SMACT Emission Limits for Group 1 Furnaces

Pollutant	Emission Limit
D/F	2.1E-04 gr of D/F/ton of feed/charge

4.3 Compliance Test Results

The repeat compliance test for the Main and SF Furnaces was conducted on August 7-12, 2023, to demonstrate compliance with the SMACT emission limits. The 6-day testing program consisted of the first 3 days of testing covering the Main Furnace and the second three days of testing covering the SF Furnace. As required by §63.1510(b)(1), the operating parameter values or ranges established during the test are summarized in **Section 4.3.3** below.

4.3.1 Emissions Data for Main Furnace

The initial compliance test measured the emission rate of D/F over the course of three (3) test runs each lasting the duration of an operating cycle with sampling performed at the baghouse stacks. Emissions were measured at the South/ETA baghouse stack while the Main Furnace was operating under a worst-case regulated pollutant emissions profile. The compliance test emission rates for each test run are presented in **Table 4-2** below.

Table 4-2. Main Furnace Compliance Test Emission Rates (August 7-9, 2023)

Emission Results	Units	Limit	Run 1	Run 2	Run 3	Avg.
D/F						
Concentration	gr/dscf	-	1.09E-11	2.25E-11	2.12E-11	1.82E-11
Mass Emissions Rate	gr/ton	2.1E-04	9.33E-06	2.04E-05	1.91E-05	1.63E-05

Source: Data from the test report prepared by Alliance on October 11, 2023 and cover letter prepared by Trialco on October 11, 2023.

4.3.2 Emissions Data for SF Furnace

The initial compliance test measured the emission rate of D/F over the course of three (3) test runs each lasting the duration of an operating cycle with sampling performed at the baghouse stack. Emissions were measured at the North/Wheelabrator baghouse stack while the SF Furnace was operating under a worst-case regulated pollutant emissions profile. The compliance test emission rates for each test run are presented in **Table 4-3** below.

Table 4-3. SF Furnace Compliance Test Emission Rates (August 10-12, 2023)

Emission Results	Units	Limit	Run 1	Run 2	Run 3	Avg.
D/F						
Concentration	gr/dscf	-	9.83E-12	1.43E-11	1.33E-11	1.25E-11
Mass Emissions Rate	lb/ton	2.1E-04	6.99E-06	9.28E-06	9.01E-06	8.43E-06

Source: Data from the test report prepared by Alliance on October 11, 2023 and cover letter prepared by Trialco on October 11, 2023.

4.3.3 Operating Parameter Data

Pursuant to §63.1511(g), during a performance test, a minimum or maximum operating parameter value or range must be established for all parameters that are required to be monitoring under §63.1510. The following list summarizes the parametric monitoring data required for the Main Furnace, SF Furnace, and each associated baghouse from the August 7-12, 2023 test event.

- Main Furnace with South/ETA Baghouse
  - Total reactive chlorine flux injection rate: <72.0 lb Cl/ton aluminum
  - Baghouse inlet temperature: <152 °F
  - Baghouse lime feed rate: >22 lb/hr
  - Baghouse ammonia flow rate: >21.6 ft^3/hr

- SF Furnace with North/Wheelabrator Baghouse
  - Total reactive chlorine flux injection rate: <52.6 lb Cl/ton aluminum
  - Baghouse inlet temperature: <150.2°F
  - Baghouse lime feed rate: >16 lb/hr
  - Baghouse ammonia flow rate: > 13.2 ft^3/hr

4.4 Operating Plan

In accordance with §63.1510(b)(3), the following subsections of this OMMP describe the operating procedures of the Main and SF Furnaces that are required to ensure operation in accordance with the provisions of SMACT.

4.4.1 Capture and Collection System

As described in Section 4.1.1, the sidewell hoods are operated to control SMACT regulated emissions from the Main and SF furnaces. Since fluxing is never performed in the main hearths of the Main and SF Furnaces and Trialco ensures no fluxing occurs in the sidewell when the metal level falls below the archway, any emissions produced by the main hearth are not regulated by SMACT, however the SF Furnace main hearth is equipped with a hood to capture emissions during periodic drossing and charging events in the main hearth. The SF Furnace main hearth door hood connects into the sidewell hood duct and is routed to the North/Wheelabrator baghouse. The Main Furnace main hearth door has an open-duct type hood which is no longer used for the collection of emissions during periodic drossing.

To evaluate the design of each furnace CCS in relation to the ACGIH guidelines, a field study was initially conducted by Monstardi Platt on July 10 and 23, 2022. Subsequent annual flow studies have also been performed to validate the design and actual flow rate performance of the CCS in relation to the minimum flow rates established in the most recent CCS engineering assessment. These flow studies confirm that the Main and SF Furnace CCS actual flow measurements exceeded the minimum calculated design flow required to meet the ACGIH engineering standards.

4.4.2 Aluminum Feed/Charge or Production

Pursuant to §63.1506(d) and §63.1510(e) as described in Section 4.5.1, Trialco logs the aluminum feed/charge and formally measures the aluminum production for the Main Furnace and SF Furnace. These aluminum production measurements are used to calculate aluminum production per operating cycle to satisfy the recordkeeping requirements in §63.1517(b)(7) for logging feed/charge or production weights for each operating cycle. The aluminum production measurement devices are calibrated and maintained according to the manufacturer's specifications such that they meet the accuracy requirements in the SMACT.

4.4.3 Flux Addition

Pursuant to §63.1506(m)(5) and as described in Section 4.5.2, Trialco monitors the amount of reactive flux added to the Main Furnace and SF Furnace during each operating cycle to ensure that the total reactive flux injection rate does not exceed the value established during the most recent performance test.

4.4.4 Lime and Ammonia Injected Baghouse

As a lime-injected fabric filters used to control emissions from Group 1 furnaces, both the South/ETA baghouse and North/Wheelabrator baghouse are subject to the following operating provisions in §63.1506(m).

- Use of a bag leak detection system [§63.1506(g)(2)]
- Monitoring of baghouse inlet temperature [§63.1506(g)(4)]
- Use of lime (or ammonia as an alkaline reagent) flow indicator to maintain free-flowing lime (ammonia) [§63.1506(g)(5)]

4.5 Monitoring Plan

4.5.1 Aluminum Feed/Charge or Production

For the Main and SF Furnaces, the monitoring strategy is based on weighing the finished product ingot/sow weights by the bundle using scales calibrated within +/- 1% accuracy. In accordance with §63.1510(e)(2), the product scales are certified by the OEM to have an accuracy of +/- 1% and are calibrated at least once every 6 months.

Aluminum feed/charge and production records are maintained for a minimum of five (5) years from the date of collection in accordance with §63.1517(b)(7). Although Trialco does maintain charge records and associated raw material inventory accounting records on a per batch operating cycle (aka "heat") basis, it is not required that individual charge material types be tracked separately for Group 1 furnaces with add-on control devices, when the aluminum production tracking option is being used for formal SMACT compliance demonstration purposes.

4.5.2 Flux Addition

In accordance with §63.1510(j)(3) and (4), to ensure that the amount of reactive flux added to the Main and SF Furnaces during any operating cycle does not exceed the limit established in the most recent performance test, Trialco records the total weight of flux added during each operating cycle.

In accordance with the total reactive flux injection rate monitoring requirements in §63.1510(j)(4), for solid reactive flux injection rate tracking, Trialco uses the composition of the salt, the amount of salt added, and the amount of aluminum production during the operating cycle to calculate the solid reactive flux contribution to the total reactive flux injection rate (in units of lb Cl/ton of aluminum produced) following the procedure in §63.1512(o). Records of the weight of flux additions, start and end time of solid reactive flux addition, and the total reactive chlorine flux injection rate for each operating cycle are retained for a minimum of five (5) years from the date of collection in accordance with §63.1517(b)(5).

For the gaseous flux, Trialco maintains a Production SOP (ID No. PR09012) addressing gaseous chlorine injection to the Main and SF Furnaces. The chlorine flow to the molten metal pump is controlled by a manually operated valve. A centralized chlorine storage location contains chlorine cylinders tied into a dedicated piping manifold for each individual furnace. Chlorine inventory/usage measurement devices comprising of load cells provide the weight of the chlorine gas to each furnace from in the dedicated chlorine cylinder storage location. This continuously monitored per furnace chlorine inventory weight is displayed on a digital screen located on the manufacturing floor, so operators always know how much chlorine is available to be used in the furnaces. The continuously monitored per furnace chlorine inventory weight is also logged in a process data historian.

Trialco uses the continuous gaseous chlorine weight measurement data to calculate chlorine usage within the operating cycle to meet the applicable requirements in 40 CFR 63.1510(j). The gaseous reactive flux injection monitoring program includes the following features.

- Installation, calibration, operation, and maintenance of the chlorine cylinder weigh scales dedicated to each furnace individually as devices to continuously measure and record the weight of gaseous reactive flux injected to the furnaces on an individual furnace/affected unit basis.
- Use of the process data historian chlorine usage information to record the weight for each 15-minute block period, during which reactive fluxing occurs, over the operating cycle.
- Demonstration of the accuracy of the weight measurement device to within ±1 percent of the gaseous reactive flux weight being measured.
- Calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every 6 months.

With a dedicated chlorine supply piping network for each of the Main and SF Furnaces, the gaseous chlorine monitoring allows for direct measurement of chlorine usage rate at each individual furnace with no need to apportion any of the chlorine mass to other potential sources of chlorine consumption.

4.5.3 Baghouse Inlet Temperature

In accordance with §63.1510(h), to ensure that the South/ETA and North/Wheelabrator baghouse inlet temperatures do not exceed the limit set during the most recent performance test, Trialco measures the inlet temperatures or each baghouse and records the readings in the facility's process data historian. The process data historian uses the available temperature measurements (as long as at least one (1) measurement is obtained each 15 minutes) from the thermocouple to compute 3-hr block averages when the associated emission units are in operation for comparison against the limit set during the most recent performance test. Records of the 3-hour block average baghouse inlet temperature are retained on file for a minimum of five (5) years in accordance with §63.1517(b)(3).

4.5.3.1 Calibration Requirements

In accordance with §63.1510(b)(4)(i) and §63.1510(h)(2), Trialco calibrates the thermocouple used to measure the baghouse inlet temperature every 6 months.

4.5.4 Baghouse Lime and Ammonia Injection

In accordance with the §63.1510(i)(1), Trialco ensures that lime is continuously free-flowing through installing, operating, and maintaining a load cell and/or carrier gas/lime flow indicator (i.e., an electrostatic induction-type flow indicator). The load cell involves use of a "loss in weight" scale on the lime hopper feeding the pneumatic conveyance system for supplying lime to the baghouse. This load cell continuously measures the weight of lime in the hopper as it progresses through routine emptying and re-filling cycles controlled by the lime feed system programmable logic controller (PLC). Using the load cell signal, Trialco can confirm lime is being discharged into the pneumatic conveyance system in a free-flowing manner and is being fed at a rate which is no less than 90 percent the lime injection rate used to demonstrate compliance during the most recent performance test. The lime flow indicator option involves continuously measuring the flow of lime by monitoring the static charge created as the lime flows through the feed pipes. If no flow is present, an alarm sounds notifying an operator of the problem. The operator can then determine whether the alarm is valid and promptly initiate corrective actions in the case of all true alarms. If this free flowing lime verification compliance option is used, Trialco continuously measures the alarm state for the flow indicator to ensure that the system is on-line and will alarm if triggered. Any records of the alarm state from

the flow indicator used for compliance demonstration purposes are retained on file for a minimum of five (5) years in accordance with §63.1517(b)(4)(i).

In accordance with the §63.1510(i)(1), Trialco ensures that ammonia is continuously free-flowing through installing, operating, and maintaining a monitoring system that measures the volumetric flow rate of ammonia supplied to each baghouse. The flow meter also has a simple "rotometer-based" position setting that can control the amount of ammonia flowing to the baghouses and ensure it remains at no less than 90 percent of the ammonia injection rate used to demonstrate compliance during the most recent performance test.

In accordance with the §63.1510(i)(2), Trialco records the lime feeder and ammonia supply system flow meter setting at least once each day of operation to ensure that it remains at the level established during the most recent performance test. The process data historian records the lime feeder and ammonia supply system flow setting continuously. However, as long as a single daily reading is available, the records for lime feeder setting and ammonia supply system flow meter setting are considered to be adequate for demonstrating compliance with the applicable requirements in §63.1510(i)(2). Records of the lime feeder and ammonia supply system flow setting are retained on file for a minimum of five (5) years in accordance with §63.1517(b)(4)(ii).

4.5.4.1 Calibration Requirements

As required by §63.1510(b)(4)(i), the load cell and electrostatic induction-type flow indicator and ammonia volumetric flow meter are calibrated at least once every 6 months following the procedures specified by the manufacturer. In accordance with the §63.1510(i)(4), to ensure that the lime feeder setting continues to correspond to the flow rate measured during the most recent performance test, Trialco conducts a manual test of the lime flow rate monthly by diverting flow over a given period of time and recording the weight of lime collected over that period. If the observed rate is less than 90% of the rate during the most recent performance test, the feeder setting is adjusted and flow measurements are reperformed until the observed rate matches the performance test value.

4.5.5 Baghouse Bag Leak Detection

In accordance with the §63.1510(f)(1), Trialco operates and maintains a bag leak detection system to ensure that operators are notified if malfunctions to either baghouse causing excess emissions occur. The bag leak detector measures PM loadings by measuring the charge produced as emissions emanate from the baghouse stack. The leak detector meets all of the measurement accuracy and sensitivity requirements in §63.1510(f). As required by §63.1512(q) and §63.1515(b)(6), Trialco submitted information in the NOCSR verifying the bag leak detection system meets all the required specifications. Trialco continuously measures the raw output signal from the leak detection system to ensure that the system is on-line and will alarm if triggered.

Whenever the measured PM loading out of either baghouse stack exceeds a preset level (100 pA for a period of 90 seconds), a "HIHI" alarm from the PM100 PRO system is triggered and an visual/audible alarm alerts an operator to a potential problem with the operation of the baghouse. In accordance with §63.1506(m)(1), in the case of valid alarms, operators will initiate corrective action within one (1) hour. Through proper operation and maintenance of the baghouse, Trialco will maintain the amount of alarm time for the bag leak detection system to less than 5% of the operating time for the Main Furnace and SF Furnace in the 6-month block reporting period. In accordance with §63.1517(b)(1)(i), Trialco retains the following records on file for a minimum of five (5) years:

- Total number of operating hours for Main Furnace and SF Furnace during each 6-month block reporting period,
- Time and date of any alarms in the reporting period,
- Times corrective action was initiated and completed for each valid alarm in the reporting period, and
- Description of the cause of any alarms and of the corrective actions taken.

4.5.5.1 Calibration Requirements

In accordance with §63.1510(b)(4)(i), to ensure that the bag leak detection system operates properly, Trialco conducts calibrations at least once every 6 months according to the procedures specified by the manufacturer.

4.6 Maintenance Plan

In accordance with §63.1510(b)(7), the following subsections describe the maintenance procedures for meeting the general maintenance requirements in the SMACT relevant to the furnaces.

4.6.1 Process Unit

In accordance with Maintenance Standard Operating Procedure (SOP) (ID No. MN09007), once per week, the Maintenance Supervisor is to evaluate the status of the equipment outlined in the Weekly Preventative Maintenance (PM) Checklist. All evaluation findings are to be recorded on the weekly checklist. Possible results are if the equipment in question is correct, incorrect, or corrected at the time of the evaluation. If the piece of equipment in question is not able to be corrected or fixed, at the time of the weekly evaluation, then a maintenance work order is completed for each item. Work Orders are the be completed per the applicable Maintenance SOP (ID No. MN09010). Copies of the Weekly PM Checklists are to be turned in to the Quality Manager, weekly. Only those PM items relevant to SMACT regulated pollutant emissions performance of the Main and SF Furnace would become operative maintenance records under this OMMP.

Specific weekly PM evaluation items relevant to SMACT regulated pollutant emissions performance, may included but are not limited to the following:

- Greasing moving/rotating equipment components
- Check combustion system
- Inspection of critical electrical systems
- Inspect furnace and transfer trough for cracked refractory
- Inspect the following furnace components
  - Metal frame and support
  - Cracked welds, hot spots, metal fatigue
  - Hood and supports
  - Furnace piping, gas plant air, combustion and exhaust ductwork
  - Burner piping

4.6.2 Control Device

Trialco maintains a "Weekly Baghouse Inspection" log sheet containing daily fields for documenting findings from the once per day baghouse performance evaluation checks. The following baghouse performance checks and associated maintenance tasks are performed on the baghouses in response to findings from the daily checks.

- Review of continuously monitored differential pressure data to determine if baghouse performance troubleshooting is required due to an out of range reading (at least weekly)
- Check lime feeder to make sure lime supply is available, lime feeder is running properly, and no lime flow indicator alarms are active on a daily basis
- Check ammonia level in tank and confirm ammonia supply is being correctly measured by the flow meters on a daily basis
- Check bleed in air dampers to ensure that damper is in the proper position and in good condition on a weekly basis
- Check spark arrestor to ensure it is running and discharge is not full on a weekly basis
- Check for excessive vibration on the main induced draft fans on a weekly basis
- Check pulse jet cleaning mechanism on South/ETA Baghouse and shaker cleaning mechanism on North/Wheelabrator house to ensure proper operation on a weekly basis
- Check baghouse dust hopper levels to ensure "high level" alarms are not triggered and dust discharge system is functioning properly on a weekly basis
- Check and grease baghouse fan bearings monthly
- Clean sensor probe on BLDS as needed based on "self-diagnostic" function of the PM100 PRO system
- Check filter bags for buildup, damage, or other similar performance issues during planned furnace outages on at least a semiannual basis

4.7 Corrective Action

In accordance with §63.1510(b)(6), Section 5 of the OMMP describes the general corrective action procedure that will be employed if an operating parameter value or range deviates from a value or range established in the most recent performance test for the Main and SF Furnaces. These values and ranges are listed in Section 4.3.3. In cases of bag leak detection system alarms for the baghouse, the general procedures in Section 5 will be followed but, as required by §63.1506(m)(1), corrective action will be initiated within one (1) hour of the alarm.

5. CORRECTIVE ACTION PLAN

In accordance with §63.1510(b)(6), Trialco implements corrective action procedures that are employed if an operating parameter value or range deviates from that established in the most recent performance test for the relevant emission unit. For each of the operating parameters that are required to be monitored, Trialco will:

1. Attempt to determine and then record the cause of the deviation or excursion,
2. Record the date and time the deviation or excursion begins and ends,
3. Record a description of any corrective action taken, and
4. Record the date and time corrective action is initiated and completed.

In the case of any deviation or excursion, the corrective actions taken will occur in a timely manner after a deviation or excursion is discovered and will follow the general duty clause of SMACT to minimize emissions in accordance with good air pollution control practice.[3] To ensure proper documentation of each deviation and excursion, Trialco will record the deviations on the "Weekly Baghouse Inspection" if related to performance of the lime injected fabric filter control devices or as part of the supporting documentation for the "Equipment Malfunctions & Miscellaneous" SOP (ID No. MN09008). All such incident reports are stored and are retained on file for a minimum of five (5) years.

[3] §63.1506(a)(5)

Appendix C

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

UNITED STATES OF AMERICA,	)	
	)	
Plaintiff,	)	
	)	No. -- C -----
v.	)	
	)	Judge
TRIALCO ALUMINUM, LLC,	)	
	)	
Defendant.	)	

CONSENT DECREE APPENDIX C

List of Capital Improvement Projects and
Operational Changes Implemented Prior to Lodging of this Consent Decree

In order to achieve compliance with the National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production, codified at 40 C.F.R. Part 63 Subpart RRR, Trialco has completed the following capital improvement projects and implemented the following operational changes at its Chicago Heights facility.

a. Installed and implemented an enhanced compliance monitoring system which included improvements to the baghouse Programmable Logic Controller (PLC) and data historian systems to monitor and record NESHAP and permit operating parameters and the on/off status of facility furnaces and baghouses and to notify operators when corrective actions are necessary.

b. Installed the required furnace labels on each Group 1 furnace to meet the requirements of 40 C.F.R. § 63.1506(b);

c. Implemented improvements to the capture and collection system on each Group 1 furnace, including installing steel plates to reduce open areas to increase capture and collection, installing a larger 60,000 cubic feet per meter (cfm) fan downstream of the Small Furnace Wheelabrator baghouse, permanently closing the Main Furnaces hearth door, and conducting an initial engineering assessment to ensure each capture and collection system meets the requirements of 40 C.F.R. § 63.1506(c);

d. Installed test ports on each furnace's capture and collection system to enable flow measurements and began performing the annual flow rate testing required by 40 C.F.R. § 63.1510(d);

e. Installed a new bag leak detection system (BLDS) on each of the facility's baghouses, conducted the necessary calibration and operational adjustments, and established the baseline output and the alarm set points and delay time, as required by 40 C.F.R. § 63.1510(f);

f. Implemented improvements to the lime injection system, including the installation of additional air blowers and modifications to the hopper to prevent lime clogs and the installation of continuous lime sensors to track flow into each baghouse to meet the requirements of 40 C.F.R. §§ 63.1506(m)(4) and 63.1510(i);

g. Modified the gaseous chlorine injection system to enable the monitoring and recording of chlorine gas into each individual Group 1 furnace; and

h. Stack tested each furnace to establish operating parameter values for baghouse inlet temperature, lime injection, total reactive flux injection rate as required by 40 C.F.R. § 63.1512(n), (o) and (p) of the NESHAP.