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Ministry of the Environment, Conservation and Parks Ministère de l'Environnement, de la Protection de la nature et des Parcs

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 0593-CDDKM2

Issue Date: September 20, 2022

Valbruna ASW Inc. 42 Centre Street Welland, Ontario L3B 5N9

Site Location:42 Centre Street Welland, Ontario

You have applied under section 20.2 of Part II.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

Description Section

A carbon, alloy and stainless steel mini mill facility, consisting of the following processes and support units:

- raw material (scrap, alloy, brick) receiving, handling and storage;
- steel making process carried out in an electric arc furnace (EAF);
- argon oxygen decarburization (AOD), vacuum degassing (VDG) and ladle metallurgical furnace (LMF) steel refining processes;
- · grinding, etching and pickling processes;
- · slag skull torch cutting; and
- slag processing storage, handling and shipping.

including the Equipment and any other ancillary and support processes and activities, operating at a Facility Production Limit of up to 910 tonnes per day and 218,400 tonnes per year carbon steel and 630 tonnes per day and 151,200 tonnes per year stainless steel discharging to the air as described in the Original ESDM Report.

For the purpose of this environmental compliance approval, the following definitions apply:

"ACB list" means the document entitled "Air Contaminants Benchmarks (ACB)
 List: Standards, guidelines and screening levels for assessing point of
 impingement concentrations of air contaminants", as amended from time to time

- and published by the Ministry and available on a Government website;
- 2. "Acceptable Point of Impingement Concentration" means a concentration accepted by the Ministry as not likely to cause an adverse effect for a Compound of Concern that,
 - a. is not identified in the ACB list, or
 - b. is identified in the ACB list as belonging to the category "Benchmark 2" and has a concentration at a Point of Impingement that exceeds the concentration set out for the contaminant in that document.
 With respect to the Original ESDM Report, the Acceptable Point of Impingement Concentration for a Compound of Concern mentioned above is the concentration set out in the Original ESDM Report;
- 3. "Acoustic Assessment Report" means the report, prepared in accordance with Publication NPC-233 and Appendix A of the Basic Comprehensive User Guide, by Fabian Alvarado, Chris Hugh, Samuel Arnold / Stantec and dated August 17, 2022 submitted in support of the application, that documents all sources of noise emissions and Noise Control Measures present at the Facility, as updated in accordance with Condition 5 of this Approval;
- 4. "Acoustic Assessment Summary Table" means a table prepared in accordance with the Basic Comprehensive User Guide summarising the results of the Acoustic Assessment Report, as updated in accordance with Condition 5 of this Approval;
- 5. "Acoustic Audit" means an investigative procedure consisting of measurements and/or acoustic modelling of all sources of noise emissions due to the operation of the Facility, assessed to determine compliance with the Performance Limits for the Facility regarding noise emissions, completed in accordance with the procedures set in Publication NPC-103 and reported in accordance with Publication NPC-233;
- 6. "Acoustic Audit Report" means a report presenting the results of an Acoustic Audit, prepared in accordance with Publication NPC-233;
- 7. "Acoustical Consultant" means a person currently active in the field of environmental acoustics and noise/vibration control, who is familiar with Ministry noise guidelines and procedures and has a combination of formal university education, training and experience necessary to assess noise emissions from a Facility;
- 8. "Approval" means this entire Environmental Compliance Approval and any Schedules to it;
- 9. "Basic Comprehensive User Guide" means the Ministry document titled "Basic Comprehensive Certificates of Approval (Air) User Guide" dated March 2011, as amended;

- 10. "Best Management Practices Plan" means a document or a set of documents which describe measures to minimize dust emissions from the Facility and/or Equipment.
- 11. "Company" means Valbruna ASW Inc. that is responsible for the construction or operation of the Facility and includes any successors and assigns in accordance with section 19 of the EPA;
- 12. "Compound of Concern" means a contaminant described in paragraph 4 subsection 26 (1) of O. Reg. 419/05, namely, a contaminant that is discharged from the Facility in an amount that is not negligible;
- 13. "Description Section" means the section on page one of this Approval describing the Company's operations and the Equipment located at the Facility and specifying the Facility Production Limit for the Facility;
- 14. "Director" means a person appointed for the purpose of section 20.3 of the EPA by the Minister pursuant to section 5 of the EPA;
- 15. "District Manager" means the District Manager of the appropriate local district office of the Ministry, where the Facility is geographically located;
- 16. "Emission Summary Table" means a table described in paragraph 14 of subsection 26 (1) of O. Reg. 419/05;
- 17. "Environmental Assessment Act" means the *Environmental Assessment Act*, R.S.O. 1990, c.E.18;
- 18. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19;
- 19. "Equipment" means equipment or processes described in the ESDM Report, this Approval and in the Schedules referred to herein and any other equipment or processes;
- 20. "Equipment with Specific Operational Limits" means any Equipment related to the thermal oxidation of waste or waste derived fuels, fume incinerators or any other Equipment that is specifically referenced in any published Ministry document that outlines specific operational guidance that must be considered by the Director in issuing an Approval;
- 21. "ESDM Report" means the most current Emission Summary and Dispersion Modelling Report that describes the Facility. The ESDM Report is based on the Original ESDM Report and is updated after the issuance of this Approval in accordance with section 26 of O. Reg. 419/05 and the Procedure Document;
- 22. "Facility" means the entire operation located on the property where the Equipment is located;
- 23. "Facility Production Limit" means the production limit placed by the Director on the main product(s) or raw materials used by the Facility;

- 24. "Independent Acoustical Consultant" means an Acoustical Consultant not representing the Company, and not involved in the noise impact assessment or the design/implementation of noise control measures for the Facility/Equipment. The Independent Acoustical Consultant shall not be retained by the consultant involved in the noise/vibration impact assessment or the design/implementation of noise/vibration control measures for the Facility/Equipment;
- 25. "Log" means a document that contains a record of each change that is required to be made to the ESDM Report and Acoustic Assessment Report, including the date on which the change occurred. For example, a record would have to be made of a more accurate emission rate for a source of contaminant, more accurate meteorological data, a more accurate value of a parameter that is related to a source of contaminant, a change to a Point of Impingement and all changes to information associated with a Modification to the Facility that satisfies Condition 2;
- 26. "Manager" means the Manager, Technology Standards Section, Standards Development Branch, or any other person who represents and carries out the duties of the Manager, as those duties relate to the conditions of this Approval;
- 27. "Melt Shop Baghouse" means the melt shop baghouse operating at the Facility and controlling emissions from the electric arc furnace;
- 28. "Melt Shop CFD Modelling Engineering Study" means the study completed by Tenova Goodfellow Inc titled "Valbruna ASW, Welland, Ontario, Modified Canopy Hood CFD Modeling Engineering Study Report, Project FM5168, March 2021";
- 29. "Minister" means the Minister of the Environment, Conservation and Parks or such other member of the Executive Council as may be assigned the administration of the EPA under the Executive Council Act:
- 30. "Ministry" means the ministry of the Minister;
- 31. "Modification" means any construction, alteration, extension or replacement of any plant, structure, equipment, apparatus, mechanism or thing, or alteration of a process or rate of production at the Facility that may discharge or alter the rate or manner of discharge of a Compound of Concern to the air or discharge or alter noise or vibration emissions from the Facility;
- 32. "Noise Control Measures" means measures to reduce the noise emissions from the Facility and/or Equipment including, but not limited to, silencers, acoustic louvres, enclosures, absorptive treatment, plenums and barriers. It also means the Noise Control Measures, as outlined in the Acoustic Assessment Report, and detailed in Schedule "B" of this Approval;
- 33. "O. Reg. 419/05" means Ontario Regulation 419/05: Air Pollution Local Air Quality, made under the EPA;
- 34. "Original ESDM Report" means the Emission Summary and Dispersion Modelling

Report which was prepared in accordance with section 26 of O. Reg. 419/05 and the Procedure Document by Allan Prits/Stantec Consulting Ltd. and dated September 30, 2021 with amendments dated February 4, 2022 submitted in support of the application, and includes any changes to the report made up to the date of issuance of this Approval;

- 35. "Point of Impingement" has the same meaning as in section 2 of O. Reg. 419/05;
- 36. "Point of Reception" means Point of Reception as defined by Publication NPC-300;
- 37. "Pre-Test Information" means the information outlined in Section 1 of the Source Testing Code;
- 38. "Procedure Document" means Ministry guidance document titled "Procedure for Preparing an Emission Summary and Dispersion Modelling Report" dated March 2018, as amended;
- 39. "Processes with Significant Environmental Aspects" means the Equipment which, during regular operation, would discharge one or more contaminants into the air in an amount which is not considered as negligible in accordance with section 26 (1) 4 of O. Reg. 419/05 and the Procedure Document;
- 40. "Professional Engineer" means Professional Engineer as defined within the Professional Engineers Act, R.S.O. 1990, as amended;
- 41. "Publication NPC-207" means the Ministry draft technical publication "Impulse Vibration in Residential Buildings", November 1983, supplementing the Model Municipal Noise Control By-Law, Final Report, published by the Ministry, August 1978, as amended;
- 42. "Publication NPC-233" means the Ministry Publication NPC-233, "Information to be Submitted for Approval of Stationary Sources of Sound", October, 1995, as amended;
- 43. "Publication NPC-300" means the Ministry Publication NPC-300, "Environmental Noise Guideline, Stationary and Transportation Sources Approval and Planning, Publication NPC-300", August 2013, as amended;
- 44. "Schedules" means the following schedules attached to this Approval and forming part of this Approval namely:
 - · Schedule A Supporting Documentation
 - Schedule B Noise Control Measures
 - Schedule C Source Testing Contaminants
- 45. "Source Testing" means sampling and testing to measure emissions resulting from operation of the Melt Shop Baghouse under process conditions which yield the

- worst case emissions of Test Contaminants and satisfies paragraph 1 of subsection 11(1) of O. Reg. 419/05;
- 46. "Source Testing Code" means the Ontario Source Testing Code, dated June 2010, prepared by the Ministry, as amended;
- 47. "Technical Bulletin: Management Approaches for Industrial Fugitive Dust Sources" means the Ministry publication "Technical Bulletin: management approaches for industrial fugitive dust sources", March 8, 2017, as amended;
- 48. "Test Contaminants" means the contaminants set out in Schedule C attached to this Approval;
- 49. "Toxicologist" means a qualified professional currently active in the field of risk assessment and toxicology that has a combination of formal university education, training and experience necessary to assess contaminants; and
- 50. "Written Summary Form" means the electronic questionnaire form, available on the Ministry website, and supporting documentation, that documents the activities undertaken at the Facility in the previous calendar year.

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. GENERAL

- 1. Except as otherwise provided by this Approval, the Facility shall be designed, developed, built, operated and maintained in accordance with the terms and conditions of this Approval and in accordance with the following Schedules attached hereto:
 - Schedule A Supporting Documentation
 - Schedule B Noise Control Measures
 - Schedule C Source Testing Contaminants

2. LIMITED OPERATIONAL FLEXIBILITY

- 1. Pursuant to section 20.6 (1) of the EPA and subject to Conditions 2.2 and 2.3 of this Approval, future construction, alterations, extensions or replacements are approved in this Approval if the future construction, alterations, extensions or replacements are Modifications to the Facility that:
 - a. are within the scope of the operations of the Facility as described in the Description Section of this Approval;

- b. do not result in an increase of the Facility Production Limit above the level specified in the Description Section of this Approval; and
- c. result in compliance with the performance limits as specified in Condition 4.
- 2. Condition 2.1 does not apply to,
 - a. the addition of any new Equipment with Specific Operational Limits or to the Modification of any existing Equipment with Specific Operational Limits at the Facility; and
 - b. Modifications to the Facility that would be subject to the Environmental Assessment Act.
- 3. Condition 2.1 of this Approval shall expire ten (10) years from the date of this Approval, unless this Approval is revoked prior to the expiry date. The Company may apply for renewal of Condition 2.1 of this Approval by including an ESDM Report and an Acoustic Assessment Report that describes the Facility as of the date of the renewal application.

3. REQUIREMENT TO REQUEST AN ACCEPTABLE POINT OF IMPINGEMENT CONCENTRATION

- 1. Prior to making a Modification to the Facility that satisfies Condition 2.1.a. and 2.1.b., the Company shall prepare a proposed update to the ESDM Report to reflect the proposed Modification.
- 2. The Company shall request approval of an Acceptable Point of Impingement Concentration for a Compound of Concern if the Compound of Concern is not identified in the ACB list as belonging to the category "Benchmark 1" and a proposed update to an ESDM Report indicates that one of the following changes with respect to the concentration of the Compound of Concern may occur:
 - a. The Compound of Concern was not a Compound of Concern in the previous version of the ESDM Report and
 - i. the concentration of the Compound of Concern exceeds the concentration set out for the contaminant in the ACB list; or
 - ii. the Compound of Concern is not identified in the ACB list; or
 - b. The concentration of the Compound of Concern in the updated ESDM Report exceeds the higher of,
 - i. the most recent Acceptable Point of Impingement Concentration, and
 - ii. the concentration set out for the contaminant in the ACB list, if the

contaminant is identified in that document.

- 3. The request required by Condition 3.2 shall propose a concentration for the Compound of Concern and shall contain an assessment, performed by a Toxicologist, of the likelihood of the proposed concentration causing an adverse effect at Points of Impingement.
- 4. If the request required by Condition 3.2 is a result of a proposed Modification described in Condition 3.1, the Company shall submit the request, in writing, to the Director at least 30 days prior to commencing to make the Modification. The Director shall provide written confirmation of receipt of this request to the Company.
- 5. If a request is required to be made under Condition 3.2 in respect of a proposed Modification described in Condition 3.1, the Company shall not make the Modification mentioned in Condition 3.1 unless the request is approved in writing by the Director.
- 6. If the Director notifies the Company in writing that the Director does not approve the request, the Company shall,
 - a. revise and resubmit the request; or
 - b. notify the Director that it will not be making the Modification.
- 7. The re-submission mentioned in Condition 3.6 shall be deemed a new submission under Condition 3.2.
- 8. If the Director approves the request, the Company shall update the ESDM Report to reflect the Modification.
- 9. Condition 3 does not apply if Condition 2.1 has expired.

4. PERFORMANCE LIMITS

- 1. Subject to Condition 4.2, the Company shall not discharge or cause or permit the discharge of a Compound of Concern into the air if,
 - a. the Compound of Concern is identified in the ACB list as belonging to the category "Benchmark 1" and the discharge results in the concentration at a Point of Impingement exceeding the Benchmark 1 concentration; or
 - b. the Compound of Concern is not identified in the ACB list as belonging to the category "Benchmark 1" and the discharge results in the concentration at a Point of Impingement exceeding the higher of,
 - i. if an Acceptable Point of Impingement Concentration exists, the most recent Acceptable Point of Impingement Concentration, and

- ii. the concentration set out for the contaminant in the ACB list, if the contaminant is identified in that document.
- 2. Condition 4.1 does not apply if the benchmark set out in the ACB list has a 10-minute averaging period and no ambient monitor indicates an exceedance at a Point of Impingement where human activities regularly occur at a time when those activities regularly occur.
- 3. The Company shall:
 - a. implement the Noise Control Measures as outlined in Schedule "B" of this Approval;
 - b. following the implementation of the Noise Control Measures, comply with the limits set out in Publication NPC-300;
 - c. ensure that all Noise Control Measures, are properly maintained and continue to provide the acoustical performance outlined in the Acoustic Assessment Report.
 - d. The Company shall submit, not later than three (3) years from the date of this Approval, an updated Acoustic Assessment Report, to the District Manager and the Director, for approval by the Director. The updated Acoustic Assessment Report shall incorporate the associated Revised Noise Abatement Action Plan including:
 - i. a description of the proposed Noise Control Measures, including deliverable acoustical performance insertion loss specification for the electric arc furnace, doghouse enclosure, as guaranteed by the manufacturer and verified by an independent acoustical consultant, to reduce the noise emissions from the Facility to comply with the sound level limits set in Publication NPC-300; and a detailed timetable for implementation of the Noise Control Measures acceptable to the District Manager
- 4. The Company shall ensure that the vibration emissions from the Facility comply with the limits set out in Ministry Publication NPC-207.
- 5. The Company shall operate any Equipment with Specific Operational Limits approved by this Approval in accordance with the Original ESDM Report.
- 6. Melt Shop CFD Modelling Engineering Study
 - a. The Company shall update the Melt Shop CFD Modelling Engineering Study as necessary when any modifications are made to Facility operations that will change the emission rate estimates developed by the study.

5. DOCUMENTATION REQUIREMENTS

- 1. The Company shall maintain an up-to-date Log.
- 2. No later than March 31 in each year, the Company shall update the Acoustic Assessment Report and shall update the ESDM Report in accordance with section 26 of O. Reg. 419/05 so that the information in the reports is accurate as of December 31 in the previous year.
- 3. The Company shall make the Emission Summary Table (see section 27 of O. Reg. 419/05) and Acoustic Assessment Summary Table available for examination by any person, without charge, by posting it on the Internet or by making it available during regular business hours at the Facility.
- 4. The Company shall, within three (3) months after the expiry of Condition 2.1 of this Approval, update the ESDM Report and the Acoustic Assessment Report such that the information in the reports is accurate as of the date that Condition 2.1 of this Approval expired.
- 5. Conditions 5.1 and 5.2 do not apply if Condition 2.1 has expired.

6. REPORTING REQUIREMENTS

- 1. Subject to Condition 6.2, the Company shall provide the Director no later than June 30 of each year, a Written Summary Form to be submitted through the Ministry's website that shall include the following:
 - a. a declaration of whether the Facility was in compliance with section 9 of the EPA, O. Reg. 419/05 and the conditions of this Approval;
 - b. a summary of each Modification satisfying Condition 2.1.a. and 2.1.b. that took place in the previous calendar year that resulted in a change in the previously calculated concentration at a Point of Impingement for any Compound of Concern or resulted in a change in the sound levels reported in the Acoustic Assessment Summary Table at any Point of Reception.
- 2. Condition 6.1 does not apply if Condition 2.1 has expired.

7. OPERATION AND MAINTENANCE

- 1. The Company shall prepare and implement, not later than three (3) months from the date of this Approval, operating procedures and maintenance programs for all Processes with Significant Environmental Aspects, which shall specify as a minimum:
 - a. frequency of inspections and scheduled preventative maintenance;
 - b. procedures to prevent upset conditions;
 - c. procedures to minimize all fugitive emissions;

- d. procedures to prevent and/or minimize odorous emissions;
- e. procedures to prevent and/or minimize noise emissions; and
- f. procedures for record keeping activities relating to the operation and maintenance programs.
- 2. The Company shall ensure that all Processes with Significant Environmental Aspects are operated and maintained in accordance with this Approval, the operating procedures and maintenance programs.

8. COMPLAINTS RECORDING AND REPORTING

- 1. If at any time, the Company receives an environmental complaint from the public regarding the operation of the Equipment approved by this Approval, the Company shall take the following steps:
 - a. Record and number each complaint, either electronically or in a log book. The record shall include the following information: the time and date of the complaint and incident to which the complaint relates, the nature of the complaint, wind direction at the time and date of the incident to which the complaint relates and, if known, the address of the complainant.
 - b. Notify the District Manager of the complaint within two (2) business days after the complaint is received, or in a manner acceptable to the District Manager.
 - c. Initiate appropriate steps to determine all possible causes of the complaint, and take the necessary actions to appropriately deal with the cause of the subject matter of the complaint.
 - d. Complete and retain on-site a report written within five (5) business days of the complaint date. The report shall list the actions taken to appropriately deal with the cause of the complaint and set out steps to be taken to avoid the recurrence of similar incidents.

9. RECORD KEEPING REQUIREMENTS

- 1. Any information requested by any employee in or agent of the Ministry concerning the Facility and its operation under this Approval, including, but not limited to, any records required to be kept by this Approval, shall be provided to the employee in or agent of the Ministry, upon request, in a timely manner.
- 2. Unless otherwise specified in this Approval, the Company shall retain, for a minimum of five (5) years from the date of their creation all reports, records and information described in this Approval, including,

- a. a copy of the Original ESDM Report and each updated version;
- b. a copy of each version of the Acoustic Assessment Report;
- c. supporting information used in the emission rate calculations performed in the ESDM Reports and Acoustic Assessment Reports;
- d. the records in the Log;
- e. copies of each Written Summary Form provided to the Ministry under Condition 6.1 of this Approval;
- f. records of maintenance, repair and inspection of Equipment related to all Processes with Significant Environmental Aspects; and
- g. all records related to environmental complaints made by the public as required by Condition 8 of this Approval.

10. REVOCATION OF PREVIOUS APPROVALS

1. This Approval replaces and revokes all Certificates of Approval (Air) issued under section 9 EPA and Environmental Compliance Approvals issued under Part II.1 EPA to the Facility in regards to the activities mentioned in subsection 9(1) of the EPA and dated prior to the date of this Approval.

11. ACOUSTIC AUDIT

- 1. The Company shall carry out Acoustic Audit measurements on the actual noise emissions due to the operations of the Facility. The Company:
 - a. shall carry out Acoustic Audit measurements in accordance with the procedures in Publication NPC-103; and
 - b. shall submit an Acoustic Audit Report on the results of the Acoustic Audit, prepared by an Independent Acoustical Consultant, in accordance with the requirements of Publication NPC-233, to the District Manager and the Director, not later than nine (9) months after fully implementing all Noise Control Measures for the Facility as detailed in the Acoustic Assessment Report as specified in condition 4.3.d.i of this Approval.

2. The Director:

- a. may not accept the results of the Acoustic Audit if the requirements of Ministry Publication NPC-233 were not followed; and
- b. may require the Company to repeat the Acoustic Audit if the results of the Acoustic Audit are found unacceptable to the Director.

12 FUGITIVE DUST CONTROL

1. The Company shall develop in consultation with the District Manager, a Best Management Practices Plan for the control of fugitive dust emissions. This

Best Management Practices Plan shall:

- a. at minimum, be prepared in accordance with Ministry Technical Bulletin: Management Approaches for Industrial Fugitive Dust Sources;
- b. consider the management of slag at the Facility, including:
 - i. the frequency and location of slag drops to grade; and
 - ii. the frequency of removing slag stockpiles from the Facility for shipping off-site;
- c. include a list of all Ministry comments received, if any, on the development of the Best Management Practices Plan, and a description of how each Ministry comment was addressed in the Best Management Practices Plan.
- 2. The Company shall submit the Best Management Practices Plan to the District Manager not later than three months after the date of this Approval or as otherwise indicated by the District Manager.
- 3. Upon acceptance of the Best Management Practices Plan by the District Manager, the Company shall immediately implement the Best Management Practices Plan for the control of fugitive dust emissions to provide effective dust suppression measures to any potential sources of fugitive dust emissions resulting from the operation of the Facility.
- 4. The Company shall update the Best Management Practices Plan as necessary or at the direction of the District Manager.

13. SOURCE TESTING

- 1. The Company shall perform Source Testing annually to determine the emission rates of the Test Contaminants outlined in Schedule C from the Melt Shop Baghouse.
- 2. For every Source Testing, the Company shall submit, three (3) months prior to the Source Testing, to the Manager a test protocol, including the Pre-Test Information for the Source Testing required by the Source Testing Code. The Company shall finalize the test protocol in consultation with the Manager.
- 3. For every Source Testing, the Company shall not commence the Source Testing until the Manager has accepted the test protocol.
- 4. For every Source Testing, the Company shall notify the Manager in writing of the location, date and time of any impending Source Testing required by this Approval, at least fifteen (15) days prior to each Source Testing.
- 5. For every Source Testing, the Company shall submit a report on each round of Source Testing to the Manager not later than three (3) months after

completing the Source Testing. The report shall be in the format described in the Source Testing Code, and shall also include, but not be limited to:

- a. an executive summary;
- b. procedures followed during the Source Testing and any deviation from the proposed test protocol and the reasons therefore;
- c. an overview of the melt shop processes at the mini mill and specifications of the steel made and the production rate during the testing of the Melt Shop Baghouse emissions;
- d. records of the operating conditions during Source Testing including any information required by the Manager to determine if the measurements taken are an accurate reflection of concentrations of contaminants, and at a minimum including the following:
 - i. measurement of operating parameters during testing that are required to determine the concentration of the Test Contaminants;
 - ii. comprehensive measurements across the range of operating conditions of the electric arc furnace from the commencement of a charging of the furnace to the commencement of the next charging of the furnace; and
 - iii. monitoring of the composition of the charge material loaded into the electric arc furnace during testing.
- e. results of the Melt Shop Baghouse Source Testing indicating the emission concentration of Test Contaminants, calculated in accordance with section 2.0.2 of O.Reg. 419/05;
- f. operating parameter measurements for the Source Testing shown in a way that correlates the data with the corresponding average measured Test Contaminant emission concentration, corresponding operating condition, and corresponding product specifications.
- 6. For every Source Testing, if the Source Testing does not meet the following requirements, the Company shall re-test in accordance with Condition No. 13:
 - a. the Source Testing Code and/or the test protocol were not followed; or
 - b. the Company did not notify the Manager of the Source Testing; or
 - c. the Company failed to provide a complete report on the Source Testing in accordance with Condition No. 13.5 of this Approval.

14. MONITORING

1. Bag leak detection

a. The Company shall ensure that the Melt Shop Baghouse is equipped with a bag leak detection system.

2. Paved Road Silt Loading

- a. The Company shall measure silt loading at two representative locations on paved Facility roads at least four times per year in the period beginning April 1 and ending October 31;
- b. The results of silt loading measurements shall be made available for review by the Ministry upon request and shall at a minimum include the following information:
 - i. The date and weather conditions when measurements were completed;
 - ii. The location of each measurement location;
 - iii. The sampling and analysis methodology used for collecting silt loading measurements;
- c. The ESDM Report shall be updated based on the results of the silt loading measurements;
- d. Despite Section 14.2.a, the District Manager may in writing relax the required frequency of annual silt loading measurements if the results of the measurements indicate consistent silt loading values are attained with the implementation of the Best Management Practices Plan.

3. Community Monitoring Plan

- a. The Company shall:
 - i. not later than six (6) months after the date of this Approval, develop and submit to the District Manager an air quality monitoring program in accordance with the requirements set out in the Operations Manual for Air Quality Monitoring in Ontario PIBS 6687e, dated March 2008, as amended that includes continuous ambient air quality monitoring for the measurement of suspended particulate matter (SPM) and metals; and
 - ii. implement the air quality monitoring program approved by the District Manager immediately.
- b. If the District Manager does not accept the ambient air quality monitoring program, the District Manager may require the Company to revise and re-submit the ambient air quality monitoring program.
- c. All aspects of the ambient air quality program are subject to audit at any time by Ministry designated personnel.

d. At the end of each calendar year the Company shall submit to the District Manager a written report summarizing the results of the air quality monitoring program in accordance with the Operations Manual for Air Quality Monitoring in Ontario PIBS 6687e, as amended, prepared by a Professional Engineer.

SCHEDULE A

Supporting Documentation

- 1. Environmental Compliance Approval Application, dated August 9, 2021, signed by Tim Clutterbuck, President and submitted by the Company;
- 2. Emission Summary and Dispersion Modelling Report, prepared by Allan Prits/Stantec Consulting Ltd. and dated September 30, 2021;
- 3. Amendments to the Emission Summary and Dispersion Modelling Report dated February 4, 2022; and
- 4. Acoustic Assessment Report, prepared by Fabian Alvarado, Chris Hugh, Samuel Arnold, of Stantec. and dated August 17, 2022.

SCHEDULE B

Noise Control Measures

Administrative

The Company shall implement the following Noise Control Measures upon issuance of this Approval

Time Period	Administrative Controls
Evening and Night time 19:00 to 07:00	No yard material handling
Evening and Night time	Melt Shop north door to be open for a maximum of one
19:00 to 07:00	(1) minute per sixty minute time period

Physical

The Company shall implement the following Noise Control Measures upon issuance of this Approval

Barrier #1: One (1) 35 metres long, 7 metres high acoustic barrier positioned 18 metres north of the north melt shop door, continuous without any holes, gaps and other

penetrations, and having a surface mass of at least 20 kilograms per square metre.

The Company shall implement the following Noise Control Measures not later than two (2) years after the date of this Approval.

Baghouse Main Induced Draft Fans: shall be equipped with an enclosure. The enclosure shall have at least the following minimum acoustical performance specifications in terms of sound insertion loss (IL) throughout the octave bands:

Octave Band Centre	63	125	250	500	1 k	2 k	4 k	8 k
Frequency (Hz)								
Insertion-Loss (dB)	16	17	23	34	47	55	57	57

Electric Arc Furnace Booster Fan: shall be equipped with an enclosure. The enclosure shall have at least the following minimum acoustical performance specifications in terms of sound insertion loss (IL) throughout the octave bands:

Octave Band Centre	63	125	250	500	1 k	2 k	4 k	8 k
Frequency (Hz)								
Insertion-Loss (dB)	3	3	5	7	7	6	6	6

The Company shall implement the following Noise Control Measures not later than four (4) years after the date of this Approval.

Electric Arc Furnace: shall be equipped with a doghouse enclosure. The doghouse enclosure shall have at least the following minimum acoustical performance specifications in terms of sound insertion loss (IL) throughout the octave bands:

Octave Band Centre Frequency (Hz)	63	125	250	500	1 k	2 k	4 k	8 k
Insertion-Loss (dB)	16	17	23	34	47	55	57	35

The Company shall implement the following Noise Control Measures not later than five (5) years after the date of this Approval.

Baghouse Main Induced Draft Fans Exhaust Stack: shall be equipped with a silencer. The silencer shall have at least the following minimum acoustical performance specifications in terms of sound insertion loss (IL) throughout the octave bands:

Octave Band Centre Frequency (Hz)	63	125	250	500	1 k	2 k	4 k	8 k
Insertion-Loss (dB)	8	13	16	16	14	10	10	0

New Surface Water Air Cooler: shall be equipped with an acoustic enclosure with silenced plenums for the intake and discharge. The acoustic enclosure shall have at least the following minimum acoustical performance specifications in terms of sound insertion loss (IL) throughout the octave bands:

Octave Band Centre	63	125	250	500	1 k	2 k	4 k	8 k
Frequency (Hz)								
Insertion-Loss (dB)	4	8	12	18	19	18	10	0

SCHEDULE C

Dioxins, Furans and Dioxin-like PCBs (Polychlorinated Biphenyls)

Toxicity equivalency factors (TEFs) are applied to 29 isomers of dioxins, furans and dioxin-like PCBs to convert them into 2,3,7,8-CDD (tetrachlorodibenzo-p-dioxin) toxicity equivalents. The conversion involves multiplying the concentration of each isomer by the appropriate TEF to yield the TEQ for this isomer. Summing the individual TEQ values for each of the isomers provides the total toxicity equivalent level for the sample mixture.

A table listing the 29 isomers and their TEFs can be found in the MECP publication titled: Summary of Standards and Guidelines to Support Ontario Regulation 416-05 – Air Pollution - Local Air Quality, PIBS 6569e01 dated April 2012 noted below.

No.	Dioxins, Furans, and Dioxin-like PCBs	CASRN	WHO 2005 Toxic Equivalency Factors [TEFs]
1	2,3,7,8-Tetrachlorodibenzo-p-dioxin [2,3,7,8-TCDD]	1746-01-6	1
2	1,2,3,7,8-Pentachlorodibenzo-p-dioxin [1,2,3,7,8-PeCDD]	40321-76-4	1
3	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin [1,2,3,4,7,8-HxCDD]	39227-28-6	0.1
4	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin [1,2,3,6,7,8-HxCDD]	57653-85-7	0.1
5	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin [1,2,3,7,8,9-HxCDD]	19408-74-3	0.1
6	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin [1,2,3,4,6,7,8-HpCDD]	35822-46-9	0.01
7	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin [1,2,3,4,6,7,8,9-OCDD]	3268-87-9	0.0003
8	2,3,7,8-Tetrachlorodibenzofuran [2,3,7,8-TCDF]	51207-31-9	0.1
9	1,2,3,7,8-Pentachlorodibenzofuran [1,2,3,7,8-PeCDF]	57117-41-6	0.03
10	2,3,4,7,8-Pentachlorodibenzofuran [2,3,4,7,8-PeCDF]	57117-31-4	0.3
11	1,2,3,4,7,8-Hexachlorodibenzofuran [1,2,3,4,7,8-HxCDF]	70648-26-9	0.1
12	1,2,3,6,7,8-Hexachlorodibenzofuran [1,2,3,6,7,8-HxCDF]	57117-44-9	0.1
13	1,2,3,7,8,9-Hexachlorodibenzofuran [1,2,3,7,8,9-HxCDF]	72918-21-9	0.1
No.	Dioxins, Furans, and Dioxin-like PCBs	CASRN	WHO 2005 Toxic Equivalency

			Factors [TEFs]
14	2,3,4,6,7,8-Hexachlorodibenzofuran [2,3,4,6,7,8-HxCDF]	60851-34-5	0.1
15	1,2,3,4,6,7,8-Heptachlorodibenzofuran [1,2,3,4,6,7,8-HpCDF]	67562-39-4	0.01
16	1,2,3,4,7,8,9-Heptachlorodibenzofuran [1,2,3,4,7,8,9-HpCDF]	55673-89-7	0.01
17	1,2,3,4,6,7,8,9-Octachlorodibenzofuran [1,2,3,4,6,7,8,9-OCDF]	39001-02-0	0.0003
18	3,3',4,4'-Tetrachlorobiphenyl [3,3',4,4'-tetraCB (PCB 77)]	32598-13-3	0.0001
19	3,4,4',5- Tetrachlorobiphenyl [3,4,4',5-tetraCB (PCB 81)]	70362-50-4	0.0003
20	3,3',4,4',5- Pentachlorobiphenyl (PCB 126) [3,3',4,4',5-pentaCB (PCB 126)]	57465-28-8	0.1
21	3,3',4,4',5,5'- Hexachlorobiphenyl [3,3',4,4',5,5'-hexaCB (PCB 169)]	32774-16-6	0.03
22	2,3,3',4,4'- Pentachlorobiphenyl [2,3,3',4,4'-pentaCB (PCB 105)]	32598-14-4	0.00003
23	2,3,4,4',5- Pentachlorobiphenyl [2,3,4,4',5-pentaCB (PCB 114)]	74472-37-0	0.00003
24	2,3',4,4',5- Pentachlorobiphenyl [2,3',4,4',5-pentaCB (PCB 118)]	31508-00-6	0.00003
25	2',3,4,4',5- Pentachlorobiphenyl [2',3,4,4',5-pentaCB (PCB 123)]	65510-44-3	0.00003
26	2,3,3',4,4',5- Hexachlorobiphenyl [2,3,3',4,4',5-hexaCB (PCB 156)]	38380-08-4	0.00003
25	2,3,3',4,4',5'- Hexachlorobiphenyl [2,3,3',4,4',5'-hexaCB (PCB 157)]	69782-90-7	0.00003
28	2,3',4,4',5,5'- Hexachlorobiphenyl [2,3',4,4',5,5'-hexaCB (PCB 167)]	52663-72-6	0.00003
29	2,3,3',4,4',5,5'- Heptachlorobiphenyl [2,3,3',4,4',5,5'- heptaCB (PCB 189)]	39635-31-9	0.00003

NOTE:

· Sum of toxicity equivalents of individual isomers

The TEF scheme is intended to be used with isomer specific analytical results. In cases where results are reported by congener group only, staff at *Ministry* 's Standards Development Branch shall be contacted for appropriate procedures to convert non-isomer specific data to TEQs.

The reasons for the imposition of these terms and conditions are as follows:

1. GENERAL

Condition number 1 is included to require the Approval holder to build, operate

and maintain the Facility in accordance with the Supporting Documentation in Schedule A considered by the Director in issuing this Approval.

2. LIMITED OPERATIONAL FLEXIBILITY, REQUIREMENT TO REQUEST AN ACCEPTABLE POINT OF IMPINGEMENT CONCENTRATION AND PERFORMANCE LIMITS

Conditions number 2, 3 and 4 are included to limit and define the Modifications permitted by this Approval, and to set out the circumstances in which the Company shall request approval of an Acceptable Point of Impingement Concentration prior to making Modifications. The holder of the Approval is approved for operational flexibility for the Facility that is consistent with the description of the operations included with the application up to the Facility Production Limit. In return for the operational flexibility, the Approval places performance based limits that cannot be exceeded under the terms of this Approval. Approval holders will still have to obtain other relevant approvals required to operate the Facility, including requirements under other environmental legislation such as the Environmental Assessment Act.

3. DOCUMENTATION REQUIREMENTS

Condition number 5 is included to require the Company to maintain ongoing documentation that demonstrates compliance with the performance limits as specified in Condition 4 of this Approval and allows the Ministry to monitor ongoing compliance with these performance limits. The Company is required to have an up to date ESDM Report and Acoustic Assessment Report that describe the Facility at all times and make the Emission Summary Table and Acoustic Assessment Summary Table from these reports available to the public on an ongoing basis in order to maintain public communication with regard to the emissions from the Facility.

4. REPORTING REQUIREMENTS

Condition number 6 is included to require the Company to provide a yearly Written Summary Form to the Ministry, to assist the Ministry with the review of the site's compliance with the EPA, the regulations and this Approval.

5. OPERATION AND MAINTENANCE

Condition number 7 is included to require the Company to properly operate and maintain the Processes with Significant Environmental Aspects to minimize the impact to the environment from these processes.

6. COMPLAINTS RECORDING AND REPORTING PROCEDURE

Condition number 8 is included to require the Company to respond to any environmental complaints regarding the operation of the Equipment, according to a procedure that includes methods for preventing recurrence of similar incidents and a requirement to prepare and retain a written report.

7. RECORD KEEPING REQUIREMENTS

Condition number 9 is included to require the Company to retain all documentation related to this Approval and provide access to employees in or agents of the Ministry, upon request, so that the Ministry can determine if a more detailed review of compliance with the performance limits as specified in Condition 4 of this Approval is necessary.

8. REVOCATION OF PREVIOUS APPROVALS

Condition number 10 is included to identify that this Approval replaces all Section 9 Certificate(s) of Approval and Part II.1 Approvals in regards to the activities mentioned in subsection 9(1) of the EPA and dated prior to the date of this Approval.

9. ACOUSTIC AUDIT

Condition No. 11 is included to require the Company to gather accurate information and submit an Acoustic Audit Report in accordance with procedures set in the Ministry's noise guidelines, so that the environmental impact and subsequent compliance with this Approval can be verified.

10. FUGITIVE DUST CONTROL

Condition No. 12 is included to emphasize that the fugitive dust emission must be controlled according to a procedure that will result in compliance with the EPA, the Regulations and this Approval.

11. SOURCE TESTING

Condition No. 13 is included to require the Company to gather accurate information so that the environmental impact and subsequent compliance with the EPA, the regulations and this Approval.

12. MONITORING

Condition No. 14 is included to prevent an adverse effect resulting from the operation of the Facility.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 0052-7L5QTN, 8-2386-95-006, 8-2031-88-006, 8-2182-87-006, 8-2148-87-006, 8-2149-87-006, 8-2110-81-006 issued on December 1, 2008, November 29, 1995, April 22, 1988, October 2, 1987, September 15, 1987, June 30, 1981

In accordance with Section 139 of the *Environmental Protection Act*, you may by written notice served upon me, the Ontario Land Tribunal and in accordance with Section 47 of the *Environmental Bill of Rights*, 1993, the Minister of the Environment, Conservation and Parks, within 15 days after receipt of this notice, require a hearing by the Tribunal. The Minister of the Environment, Conservation and Parks will place notice of your appeal on the Environmental Registry. Section 142 of the *Environmental Protection Act* provides that the notice requiring the hearing ("the Notice") shall state:

- a. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
- b. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

Pursuant to subsection 139(3) of the *Environmental Protection Act*, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

- 1. The name of the appellant;
- 2. The address of the appellant;
- 3. The environmental compliance approval number;
- 4. The date of the environmental compliance approval;
- 5. The name of the Director, and;
- 6. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

Registrar*
Ontario Land Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5
OLT.Registrar@ontario.ca

The Minister of the Environment,
Conservation and Parks
and 777 Bay Street, 5th Floor
Toronto, Ontario
M7A 2J3

The Director appointed for the purposes of Part II.1 of the *Environmental Protection Act* Ministry of the Environment, Conservation and Parks
135 St. Clair Avenue West, 1st Floor Toronto, Ontario
M4V 1P5

* Further information on the Ontario Land Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349 or 1 (866) 448-2248, or www.olt.gov.on.ca

This instrument is subject to Section 38 of the *Environmental Bill of Rights*, 1993, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek leave to appeal within 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry at https://ero.ontario.ca/, you can determine when the leave to appeal period ends.

The above noted activity is approved under s.20.3 of Part II.1 of the *Environmental Protection Act*.

DATED AT TORONTO this 20th day of September, 2022

Manay Ourpana

Nancy E Orpana, P.Eng.
Director
appointed for the purposes of Part
II.1 of the *Environmental Protection*Act

MS/

c: District Manager, MECP Niagara Allan Prits, Stantec Consulting Ltd.