

## ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER A-500-1195263740

Version: 1.0

Issue Date: February 2, 2024

*Pursuant to section 20.3 of the Environmental Protection Act, Revised Statutes of Ontario (R.S.O.) 1990, c. E. 19 and subject to all other applicable Acts or regulations this Environmental Compliance Approval is issued to:*

TERRAPURE BR LTD.

1333 TONOLLI ROAD  
MISSISSAUGA ONTARIO  
L4Y 4C2

*For the following site:*

1333 Tonolli Road , Mississauga, MISSISSAUGA, ONTARIO, CANADA, L4Y 4C2

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s) 1198-8Q7KM6, issued on September 3, 2013.

*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 secondary lead smelting facility manufacturing lead and lead alloys, consisting of the following processes and support units:

- battery breaking and shredding operations;
- CX system including paste separation;
- smelting furnaces and refining kettles; and
- casting operations

including the Equipment and any other ancillary and support processes and activities, operating at a Facility Production Limit of up to 90,000 tonnes of lead bearing waste (mainly scrap batteries) processed per year, discharging to the air as described in the Original ESDM Report.

## DEFINITIONS

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

1. "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 Northern Applied Sciences Inc. and dated May 30, 2023 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. "Ambient Air Quality Monitoring Program" means the document "Ambient Air Monitoring Plan for Community TSP and Lead, submitted to the Ministry of Environment and Climate Change in fulfilment of ECA# 1198-8Q7KM6 Condition 11", dated April 2017, submitted by Revolution VSC Acquisition GP Inc., (formerly Tonolli Canada Ltd.), which describes the ambient air monitoring and reporting program at the Facility.
6. "Approval" means this entire Environmental Compliance Approval and any Schedules to it;
7. "Baghouse Leak Detection System" means a system that is capable of continuously monitoring relative particulate matter loadings in the exhaust of a baghouse to detect bag leaks and other upset conditions, and is equipped with an alarm system. The alarm system shall be configured so that alarms are promptly detected by operating personnel at the Facility by way of visual and/or audible alerts when an increase in particulate matter emissions over a preset level is detected and alert the operating personnel of the upset condition and the need for implementing corrective action.
8. "Basic Comprehensive User Guide" means the Ministry document titled "Basic Comprehensive Certificates of Approval (Air) User Guide" dated March 2011, as amended;
9. "Company" means TERRAPURE BR LTD. 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;
10. "Compound of Concern" means a contaminant that is 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;
11. "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;
12. "Differential Pressure Monitoring Plan" means a plan for the installation, calibration, operation and maintenance of a Differential Pressure Monitoring System, prepared by Church & Trought Inc., dated July 2013, as amended, prepared in accordance with the specifications provided in USEPA Standards for Secondary Lead Smelters, and acceptable to the Director.
13. "Differential Pressure Monitoring System" means a system (a) to continuously monitor and record differential pressure in enclosures/buildings, (b) equipped with an alarm system which is configured so that alarms are promptly detected by operating personnel at the Facility by way of visual and/or audible alerts when a predetermined differential pressure criteria is exceeded, and (c) complying with the requirements for differential pressure monitoring equipment, monitoring locations, data recording equipment, equipment calibration, and any other parameters specified in the Differential Pressure Monitoring Plan, and any plan updates approved in writing by the Director.
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. "Fugitive Dust Management Plan" means the document "Best Management Practices Plan For Fugitive Dust", prepared by WSP E&I Canada Limited, version 1 dated November 7, 2022, as amended, which includes procedures to minimize fugitive emissions from all applicable sources at the Facility.
25. "Highest Ranking Person" means the highest ranking person regularly present at the Facility who has management responsibilities relating to the Facility.
26. "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;
27. "Malfunction" means any sudden, unplanned, infrequent and not reasonably preventable failure of equipment to operate in a normal manner, excluding failures that may be caused in part by improper maintenance or negligent operation.
28. "Manager" means the Manager, Technology Standards Section, Technical Assessment and Standards Development Branch, or any other person who represents and carries out the duties of the Manager, Technology Standards Section, Technical Assessment and Standards Development Branch, as those duties relate to the conditions of this Approval;
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;
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 WSP E&I Canada Limited, 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. "Pre-Test Plan" means a plan for the Source Testing including the information required in Section 5 of the Source Testing Code;

37. "Procedure Document" means Ministry guidance document titled "Procedure for Preparing an Emission Summary and Dispersion Modelling Report" dated March 2018, as amended;
38. "Procedure for the Separation of Plastic Bearing Material" means a procedure for the separation of plastic bearing material from furnace feed material, prepared by Church and Trought Inc, dated June 20, 2013, 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. "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;
41. "Publication NPC-233" means the Ministry Publication NPC-233, "Information to be Submitted for Approval of Stationary Sources of Sound", October, 1995, as amended;
42. "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;
43. "Schedules" means the following schedules attached to this Approval and forming part of this Approval namely:
  - Schedule 1 - Supporting Documentation;
  - Schedule 2 - Procedures for Reporting - Differential Pressure Monitoring
  - Schedule 3 - Procedure for Source Testing
  - Schedule 4 - Source Testing- Targeted Sources and Test Contaminants
44. "Source Testing" means site-specific sampling and testing to measure emissions resulting from operating the Targeted Sources under operating conditions that will derive an emission rate that, for the relevant averaging period of the contaminant, is at least as high as the maximum emission rate that the source of contaminant is reasonably capable of, or a rate approved by the Manager within the approved operating range of the Targeted Sources which satisfies paragraph 1 of subsection 11(1) of O. Reg. 419/05;
45. "Source Testing Code" means the Ontario Source Testing Code, dated June 2010, prepared by the Ministry, as amended;
46. "Sulphur Dioxide Abatement Plan" means the plan to control sulphur dioxide emissions from Furnace #5 contained in the document Sulphur Dioxide Abatement Plan- Update#4, dated October 26, 2023, as amended;
47. "Targeted Sources" means the sources listed in Schedule 4;
48. "Test Contaminants" means the contaminants listed in Schedule 4;
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. "USEPA Standards for Secondary Lead Smelters" means the United States Environmental Protection Agency document "40 CFR Part 63- Subpart X- National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting" dated January 5, 2012, as amended.
51. "Written Summary Form" means the electronic questionnaire form, available on the Ministry website, that documents whether Modifications were undertaken at the Facility and compliance with the Approval, in the previous calendar year.

## TERMS AND CONDITIONS

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

### 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 1 - Supporting Documentation
- Schedule 2 - Procedures for Reporting - Differential Pressure Monitoring
- Schedule 3 - Procedure for Source Testing
- Schedule 4 - Source Testing- Targeted Sources and Test 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 describe 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 ensure that the noise emissions from the Facility comply with the limits set out in Ministry Publication NPC-300.
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.

#### **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. WRITTEN SUMMARY FORM**

1. Subject to Condition 6.2, the Company shall prepare, and make available to the Ministry upon request, no later than June 30 of each year, a Written Summary Form signed by the Highest Ranking Person.
2. Condition 6.1 does not apply if:
  - a. Condition 2.1 has expired; and
  - b. the Written Summary Form has been completed for the year in which Condition 2.1 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, including but not limited to those for the baghouses, gas scrubbers, Baghouse Leak Detection System and the Differential Pressure Monitoring System installed at the Facility;
  - 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.
3. The Company shall operate, calibrate and maintain each Baghouse Leak Detection System for all baghouses at the Facility noted in the Original ESDM report in a manner consistent with the manufacturer's written specifications and recommendations.
4. The Company shall minimize the combustion of plastic bearing material such as battery polyethylene separators and battery casings in any of the smelting furnaces in accordance with the Procedure for the Separation of Plastic Bearing Material.

## **8. SULPHUR DIOXIDE ABATEMENT PLAN**

1. The issuance of, and compliance with the conditions of this Approval, does not:
  - a. relieve the Company of any obligation to comply with any provision of any applicable statute, regulation or other legal requirement; or
  - b. limit in any way the authority of the Ministry to require certain steps to be taken or to request that any additional information, related to compliance with this Approval or any applicable regulatory requirement, be provided to the Ministry.
2. The Company shall revise the Sulphur Dioxide Abatement Plan in consultation with the District Manager to include a timeframe for the installation and commissioning of the Furnace#5 sulphur dioxide scrubber system. The revised Sulphur Dioxide Abatement Plan shall be submitted to the Director and the District Manager not later

than April 30, 2024, or not later than a date agreed to in writing with the District Manager.

3. The Director may not accept the Sulphur Dioxide Abatement Plan if the Director is of the opinion that the implementation timeframe for the revised Sulphur Dioxide Abatement Plan is not acceptable.
4. If the Director does not accept the Sulphur Dioxide Abatement Plan, the Director may, upon written notification require the Company to submit a revised Sulphur Dioxide Abatement Plan within the time frame specified in the notification.
5. The Company shall implement the Sulphur Dioxide Abatement Plan upon its acceptance by the Director.
6. The Company shall operate the Furnace#5 sulphur dioxide scrubber system in accordance with the manufacturer specified operating procedures and maintenance program. All operating parameters necessary shall be recorded continuously and data provided to the Ministry upon request.
7. A copy of the operating procedures and maintenance program for the Furnace#5 sulphur dioxide scrubber system shall be provided to the District Manager within 6 months from the date of commencement of operation of the Furnace#5 sulphur dioxide scrubber system. The operating procedures and maintenance program shall at a minimum contain the following aspects:
  - a. the operating procedures and preventive maintenance measures;
  - b. overview of the operating parameters necessary for the functioning of the control system with the design control efficiency and reliability;
  - c. components and specifications of the continuous monitoring of operating parameters including data acquisition, retention, communication and reporting systems; and
  - d. configured alarm/messaging systems that would be used to assist and alert operators of any malfunctions to enable timely corrective action.

## **9. BUILDING DIFFERENTIAL PRESSURE**

1. The Company shall ensure that process fugitive emissions discharged to the air from the Facility buildings identified below are negligible by ventilating and ducting these emissions through air pollution control equipment and maintaining negative pressure in these Facility buildings, excluding any time periods of Malfunction, startup and shutdown of the equipment associated with maintaining and monitoring negative pressure in these facility buildings and the supplier recommended maintenance of the Differential Pressure Monitoring System:
  - a. Battery breaking and crushing area (Battery Building and CX Building);
  - b. Lead paste handling area (Paste Building);
  - c. Smelting furnaces, Smelting furnace charging areas, Refining kettles and casting areas, lead taps, slag taps and moulds during tapping (Refinery Building and Furnace No. 5 Building);
  - d. Slag handling area (Slag Building);
  - e. Baghouse dust slurry preparation and handling (Slurry Room); and
  - f. any additional Facility buildings/areas housing the processes identified in this condition, which may be created due to Modifications of existing buildings/areas or construction of new buildings/areas.
2. The negative pressure referred in condition 9.1 of this Approval shall be at least 0.013 mm of mercury on a one-hour rolling average basis, in each of the pressure monitors installed as a part of the Differential Pressure Monitoring System, excluding any time periods of Malfunction, startup and shutdown of the equipment associated with maintaining and monitoring negative pressure in these facility buildings and the supplier recommended maintenance of the Differential Pressure Monitoring System.
3. The Company shall implement the Differential Pressure Monitoring System at the Facility buildings/areas identified in condition 9.1 of this Approval and comply with the reporting requirements in accordance with the



Differential Pressure Monitoring Plan and the procedure attached in Schedule 2 of this Approval.

4. The Company shall prepare and make available for inspection at the Facility, an Action Plan to be followed in the event that the differential pressure inside any of the Facility buildings/areas identified in condition 9.1 of this Approval does not comply with the criteria specified in condition 9.2 of this Approval, including when such events occur during time periods of Malfunction, startup and shutdown of the equipment associated with maintaining and monitoring negative pressure in these facility buildings and the supplier recommended maintenance of the Differential Pressure Monitoring System. The Action Plan shall be made available for inspection at the Facility and at a minimum include procedures for promptly:
  - a. identifying the causes of the loss of sufficient negative pressure;
  - b. minimizing the escape of any uncontrolled fugitive emissions from these buildings/areas by:
    - i. maintaining all points of ingress/egress of the affected building/area closed to the maximum extent practicable;
    - ii. implementing remedial measures to restore negative pressure to at least 0.013 mm of mercury in the affected buildings/areas; and
    - iii. where necessary, reducing activities that generate fugitive lead dust emissions at the Facility.
  - c. notifying the incident to the Ministry in accordance with conditions 9.6 and 9.7 of this Approval.
5. Any Modification that is deemed by a qualified industrial ventilation practitioner to substantially affect the maintenance of negative pressure in any of the buildings/areas identified in condition 9.1 of this Approval, shall be carried out only after a ventilation study carried out by a qualified industrial ventilation practitioner verifies that the Facility will be capable of maintaining negative pressure after the implementation of the proposed Modification. A copy of the ventilation study report(s) shall be maintained at the Facility for review by staff of the Ministry upon request.
6. The Company shall promptly notify the Spills Action Centre of the Ministry at 1-800-268-6060, if the differential pressure in any of the buildings/areas identified in condition 9.1 of the Approval does not meet the minimum differential pressure criteria specified in condition 9.2 of this Approval, including when such events occur during time periods of Malfunction, startup and shutdown of the equipment associated with maintaining and monitoring negative pressure in these facility buildings and the supplier recommended maintenance of the Differential Pressure Monitoring System.
7. For any notification provided under condition 9.6, the Company shall within one (1) week of the event provide to the District Manager a written summary of the following:
  - a. details of the incident including the affected building/area;
  - b. the time, date and duration of the incident;
  - c. the suspected cause of the incident, if known;
  - d. details of the action measures that were implemented to minimize the release of uncontrolled fugitive emissions into the atmosphere and to restore negative pressure in the affected building/area;
  - e. the wind direction, wind speed and other weather conditions at the time of the incident; and
  - f. the name(s) of and position of the Company personnel responsible for handling the incident.

## 10. FUGITIVE EMISSIONS CONTROL

1. The Company shall:
  - a. implement at all times, the most recent version of the Fugitive Dust Management Plan;
  - b. review and evaluate the Fugitive Dust Management Plan on an annual basis or at the direction of the District Manager;

- c. record the results of each annual review and update the Fugitive Dust Management Plan as required within two (2) months of the completion of the annual review; and
  - d. maintain the updated Fugitive Dust Management Plan at the Facility and provide a copy to the District Manager within one (1) month of the update.
2. The Company shall record, either electronically or in a log book, each time a specific preventative and control measure described in the Fugitive Dust Management Plan is implemented. The Company shall record, as a minimum:
- a. the date when each emission control measure is implemented, including a description of the control measure;
  - b. the date when each new preventative measure or operating procedure to minimize emissions is implemented, including a description of the preventative measure or operating procedure; and
  - c. the date, time of commencement, and time of completion of each periodic activity conducted to minimize emissions, including a description of the preventative measure/procedure and the name of the individual performing the periodic activity.

## 11. SOURCE TESTING

1. The Company shall perform Source Testing in accordance with the procedures in Schedule 3 to determine the rates of emissions of the Test Contaminants from the Targeted Sources listed in Schedule 4, within 6 months from the date of commencement of operation of the Furnace #5 sulphur dioxide scrubber system, or a date agreed upon, in consultation with the District Manager.
2. The Company shall notify the District Manager in writing of the details of the installed equipment, date of installation and date of commencement of operation of Furnace #5 sulphur dioxide scrubber system within two (2) weeks of the installation and the commencement of operation.
3. Subsequent to the Source Testing conducted under condition 11.1 of this Approval, the Company shall conduct Source Testing for sulphur dioxide for sources NEWSCR, Furnace#5 flue gas outlet and BRICKST noted in Schedule 4 of this Approval, once every calendar year in accordance with the procedures in Schedule 3. At the request of the Company, the District Manager may relax the frequency and/or scope of the annual Source Testing required under this condition if the results of a minimum of three consecutive annual source tests indicate that the emissions and Point of Impingement concentrations of sulphur dioxide consistently comply with the Performance Limits. The sample collection from the sources NEWSCR and Furnace#5 flue gas outlet must occur simultaneously to calculate the sulphur dioxide control efficiency as required in Schedule 3.

## 12. AMBIENT AIR MONITORING

1. The Company shall carry out ambient air quality monitoring in accordance with the Ambient Air Quality Monitoring Program for the measurement of the following parameters:
  - a. Lead;
  - b. Total Suspended Particulate Matter; and
  - c. Meteorological data
2. The Company may make changes to the Ambient Air Monitoring Program by applying to the Ministry for an amendment to this Approval. Any change to the Ambient Air Monitoring Program shall be in accordance with the publication titled "Operations Manual for Air Quality Monitoring in Ontario, Ministry of the Environment Operations Division Technical Support Section" published in March 2008, as amended.
3. The Company shall submit quarterly and annual reports on the ambient air monitoring results to the District Manager and shall, during regular business hours, make a copy available for inspection at the Facility by any interested member of the public.
4. The Company shall notify the District Manager within three (3) days of receiving the monitoring results if the measured values of the monitored parameters are found to exceed the criteria listed in the publication "Ontario

### 13. 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. The notification shall include:
    - i. a description of the nature of the complaint;
    - ii. the time, date and location of the incident;
    - iii. the wind direction and other weather conditions at the time of the incident; and
    - iv. the name(s) of Company personnel responsible for handling the incident.
  - 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 one (1) week 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.
  - e. If requested by the complainant, the Company shall provide a summary of the actions taken in the report referred in condition 8.1(d) of this Approval to the complainant.

### 14. 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 prepared under Condition 6.1 of this Approval;
  - f. records of maintenance, repair and inspection of Equipment related to all Processes with Significant Environmental Aspects;
  - g. records related to environmental complaints made by the public as required under Condition 8 of this Approval.
  - h. records related to operating parameters monitoring of the Furnace#5 sulphur dioxide control system as required by the section titled "Sulphur Dioxide Abatement Plan" of this Approval;
  - i. records related to differential pressure monitoring as required by the section titled "Building Differential Pressure" of this Approval;

- j. records related to the prevention and control measures implemented as required by the section titled "Fugitive Emissions Control" of this Approval;
- k. records related to Source Testing events as required by the section titled "Source Testing" of this Approval;
- l. records related to the operation, maintenance and calibration of the Baghouse Leak Detection System and the Differential Pressure Monitoring System; and
- m. records related to the Ambient Air Monitoring Program as required by the section titled "Ambient Air Monitoring" of this Approval.

## 15. 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.

## REASONS

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

### 1. GENERAL

Condition No. 1 is included to require the Approval holder to build, operate and maintain the Facility in accordance with the Supporting Documentation in Schedule 1 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 No. 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 No. 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 on-going 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 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. WRITTEN SUMMARY FORM

Condition No. 6 is included to require the Company to prepare, and make available to the Ministry upon request, a yearly Written Summary Form, 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 No. 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. SULPHUR DIOXIDE ABATEMENT PLAN

Condition No. 8 is included to clarify the legal rights and responsibilities of the Company under the Approval and to provide the minimum performance requirements considered necessary to prevent an adverse effect resulting from the operation of the Facility.

#### **7. BUILDING DIFFERENTIAL PRESSURE AND FUGITIVE EMISSIONS CONTROL**

Condition Nos. 9 and 10 are included to emphasize that the Equipment and Facility must be maintained and operated in accordance with a procedure that will result in compliance with the EPA, Regulation 419/05 and this Approval; to require the Company to gather accurate information on a continuous basis, so that compliance with the performance requirements of this Approval can be verified and to require the Company to keep records and to provide information to staff of the Ministry so that compliance with the EPA, Regulation 419/05 and this Approval can be verified.

Condition 9.6 is included to ensure that the Ministry receives prompt notification of losses of negative pressure, whether or not such losses constitute a spill.

#### **8. SOURCE TESTING**

Condition No. 11 is included to require the Company to gather and retain accurate information so that compliance with the EPA, Regulation 419/05 and this Approval may be verified.

#### **9. AMBIENT AIR MONITORING**

Condition No. 12 is included to assist the Ministry in gathering information on ambient air concentrations of lead near the Facility, to document overall community exposure from all sources.

#### **10. COMPLAINTS RECORDING AND REPORTING PROCEDURE**

Condition No. 13 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.

#### **11. RECORD KEEPING REQUIREMENTS**

Condition No. 14 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.

#### **12. REVOCATION OF PREVIOUS APPROVALS**

Condition No. 15 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.

# APPEAL PROVISIONS

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In accordance with Section 139 of the *Environmental Protection Act*, you may by written notice served upon me and the Ontario Land Tribunal, within 15 days after the service of this notice, require a hearing by the Tribunal. You must also provide notice to, the Minister of the Environment, Conservation and Parks in accordance with Section 47 of the *Environmental Bill of Rights, 1993* who 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:

- I. 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;
- II. 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:

- I. The name of the appellant;
- II. The address of the appellant;
- III. The environmental compliance approval number;
- IV. The date of the environmental compliance approval;
- V. The name of the Director, and;
- VI. 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 <a href="mailto:OLT.Registrar@ontario.ca">OLT.Registrar@ontario.ca</a>	and	The Minister of the Environment, Conservation and Parks 777 Bay Street, 5th Floor Toronto, Ontario M7A 2J3	and	The Director appointed for the purposes of Part II.1 of the <i>Environmental Protection Act</i> Ministry of the Environment, Conservation and Parks 135 St. Clair Avenue West, 1st Floor Toronto, Ontario M4V 1P5
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**\* 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](http://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 [ero.ontario.ca](http://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 2nd day of February, 2024



Nancy Orpana

Director

appointed for the purposes of Part II.1 of the Environmental Protection Act

c: Scott M Sangster

Mano Narayanan, WSP E and I Canada Limited

Stephen Kuchma, SDK Environmental

The following schedules are a part of this environmental compliance approval:

# SCHEDULE 1

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## Supporting Documentation

1. Environmental Compliance Approval Application, dated November 11, 2022, signed by Scott M. Sangster and submitted by the Company;
2. Emission Summary and Dispersion Modelling Report, prepared by WSP E&I Canada Limited and dated November 13, 2023;
3. Additional air emissions related information provided by emails dated April 14, 2023, October 20, 2023, October 30, 2023 and November 15, 2023 by Mano Narayanan, WSP E&I Canada Limited;
4. Acoustic Assessment Report, prepared by Northern Applied Sciences Inc. dated May 30, 2023, and signed by Stephen Kuchma, P. Eng.



## SCHEDULE 2

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### Procedures for Reporting - Differential Pressure Monitoring

1. The Company shall submit details of any proposed modifications to the Differential Pressure Monitoring Plan to the District Manager. Modifications to the Differential Pressure Monitoring System shall be carried out only after acceptance of the Differential Pressure Monitoring Plan by the District Manager.
2. The Company shall prepare and submit to the District Manager, a semi-annual report on the readings of the Differential Pressure Monitoring System, within forty five (45) days after the end of each semester of January to June and July to December of each calendar year. The report shall at a minimum include:
  - a. a summary of the minimum, maximum and average, one-hour rolling average differential pressure readings for each monitored building/area over the reporting period
  - b. a graphical representation of the results for each monitored building/area over time
  - c. records of the following events:
    - i. time periods/dates and differential pressure readings where the one-hour rolling average differential pressure in any of the differential pressure monitors falls below the negative pressure criteria specified in condition 9.2 of this Approval; and
    - ii. suspected cause of any incident in Condition 2 (c) (i) of Schedule 2 along with details of any time periods when power was lost to the Differential Pressure Monitoring System and/or to the air handling system responsible for maintaining negative pressure in the buildings/areas identified in Condition 9.1 of this Approval; and
  - d. a summary of remedial measures including managerial or operational changes to restore negative pressure and a summary of any changes made to the Fugitive Dust Management Plan to avoid the recurrence of similar incidents.

# SCHEDULE 3

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## Source Testing Procedures

1. The Company shall submit, not later than three (3) months prior to the Source Testing, to the Manager a Pre-Test Plan for the Source Testing required under this Approval. The Company shall finalize the Pre-Test Plan in consultation with the Manager.
2. The Company shall not commence the Source Testing required under this Approval until the Manager has approved the Pre-Test Plan.
3. The Company shall notify the Manager, the District Manager and the Director in writing of the location, date and time of any impending Source Testing required by this Approval, at least fifteen (15) days prior to the Source Testing.
4. The Company shall submit a report (electronic format) on the Source Testing to the Manager, the District Manager and the Director 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. an identification of the applicable North American Industry Classification System code (NAICS) for the Facility;
  - c. records of operating conditions at the time of Source Testing, including but not limited to the following:
    - i. production data and equipment operating rate as a percentage of maximum equipment capacity. This is to determine how the testing data should be interpreted in relation to the operating scenarios defined in the ESDM report for comparison purposes.
    - ii. Facility/process information related to the operation of the Targeted Sources;
    - iii. description of the emission sources controlled by the Targeted Sources at the time of testing;
  - d. results of Source Testing, including the emission rates, emission concentrations, and relevant emission factors of the Test Contaminants from the Targeted Sources;
  - e. sulphur dioxide control efficiency as determined by the test results of the Furnace#5 sulphur dioxide scrubber system;
  - f. a tabular comparison of calculated emission rates and emission factors based on Source Testing results for the Test Contaminants to relevant estimates described in the ESDM Report.
5. The Director may not accept the results of the Source Testing if:
  - a. the Source Testing Code or the requirement of the Manager were not followed;
  - b. the Company did not notify the Manager, the District Manager and Director of the Source Testing; or
  - c. the Company failed to provide a complete report on the Source Testing.
6. If the Director does not accept the result of the Source Testing, the Director may require re-testing. If re-testing is required, the Pre-Test Plan strategies need to be revised and submitted to the Manager for approval. The actions taken to minimize the possibility of the Source Testing results not being accepted by the Director must be noted in the revision.
7. The Company shall update their ESDM Report in accordance with Section 26 of O. Reg. 419/05 and the Procedure Document with the results from the Source Testing if any of the calculated emission factors or calculated emission rates are higher than the predicted rates in the ESDM report, not later than three (3) months after the submission of the Source Testing report and make these records available for review by staff of the Ministry upon request.

## SCHEDULE 4

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### Targeted Sources and Test Contaminants for Source Testing

Targeted Sources	Description	Test Contaminants
NEWSCR	Stack attached to the Furnace #5 sulphur dioxide scrubber system.	<ol style="list-style-type: none"><li>1. Total Suspended Particulate Matter</li><li>2. Lead</li><li>3. Sulphur dioxide</li></ol>
Furnace#5 flue gas outlet	Gas stream discharged from Furnace #5 and entering the sulphur dioxide scrubber system.	<ol style="list-style-type: none"><li>1. Sulphur dioxide</li></ol>
BRICKST	Stack attached to 6 Compartment Baghouse for Furnace#4.	<ol style="list-style-type: none"><li>1. Sulphur dioxide</li></ol>