

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 4560-C6UPC8
Issue Date: June 9, 2022

Masterloy Products Company
5663 Doncaster Rd
Gloucester, Ontario
K1G 3N4

Site Location: 5663 Doncaster Road
5663 Doncaster Rd Gloucester
Ottawa City,
K1G 3N4

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:

a facility producing crushed ferroalloy products, consisting of the following equipment and processes:

- one (1) pulse jet type baghouse dust collector (Mixing Dust Collector - source 1), to control emissions from raw materials weighing and handling operations performed up to 6 (six) hours per day, equipped with 604 square metres of HemiPleat Cellose filter media cartridges, discharging into the atmosphere at a nominal maximum volumetric flow rate of 5.66 actual cubic metres per second, through a stack, having an exit diameter of 0.61 metre, extending 11.69 metres above the grade;
- one (1) high efficiency Venturi scrubber unit (Wet Scrubber - source 2), to control particulate emissions from a dryer, a turntable and a fume hood over the reaction boxes (all processes running up to 1 (one) hour per day), operating at a nominal water circulation rate of 12.0 litres per second, exhausting into the atmosphere at a nominal volumetric flow rate of 9.1 cubic metres per second at an approximate temperature of 32 degrees Celsius through a stack, having an exit diameter of 0.80 metre, extending 13.4 metres above the roof and 24.4 metres above the grade;
- one (1) mechanical shaker type baghouse dust collector (Wheelabrator Baghouse - source 3), to control dust emission from cleaning of ferroalloys operations performed up to 1 (one) hour per day, equipped with 110 square metres of polyester felt filter bags, discharging into the atmosphere at a nominal volumetric flow rate of 0.56 actual cubic metre per second through a stack, having a rectangular exit 0.32 metre by 0.27 metre, extending 0.87 metre above the roof and 11.5 metres

above the grade;

- one (1) pulse jet type baghouse dust collector (Alloy Crush Dust Collector - source 4), to control emissions from crushing and grinding of ferroalloys operations performed up to 3 (three) hours per day, equipped with 336 square metres of synthetic cellulose media cartridges, discharging into the atmosphere at a nominal volumetric flow rate of 2.68 actual cubic metres per second through a stack, having a rectangular exit 0.36 metre by 0.21 metre, extending 1.03 metres above the roof and 14.5 metres above the grade;
- one (1) pulse jet type dust collector (Slag Crushing Dust Collector - source 5), to control emissions from slag crushing operations performed up to 4 (four) hours per day, equipped with 77 square metres of polyester filter bags, discharging into the atmosphere at a nominal volumetric flow rate of 2.83 actual cubic metres per second, through a stack, having an exit diameter of 0.49 metre, extending 3.53 metres above the roof and 11.0 metres above the grade;
- one (1) baghouse dust collector, to control emissions from bagging and packaging of finished products, discharging back into the building;
- outdoor storage of ferrovanadium slag and spent refractory materials;
- outdoor ferrovanadium slag crushing at the maximum crushing rates of 50 tonnes per hour, performed from July 1 to October 31 between 8:00 am and 4:00 pm;
- outdoor spent refractory materials crushing and screening at the maximum processing rate of 24 tonnes per hour, performed from July 1 to August 31 between 8:00 am and 4:00 pm;

all in accordance with the Environmental Compliance Approval Application submitted by Masterloy Products Company, dated April 30, 2021 and signed by Rui Rodrigues; the Emission Summary and Dispersion Modelling Report dated April 30, 2021 prepared by Jeff Zywicki (Golder Associates Ltd.); the emails from Jeff Zywicki(Golder Associates Ltd.) dated August 26, 2021 and April 22, 2022; Primary Noise Screening Method prepared by Rodrigues Rui, President Masterloy Products Company dated April 30, 2021 and all supporting information associated with the application.

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

1. "Action Plan" means "Masterloy Products Company - Vanadium Pentoxide Action Plan" from Masterloy Products Company dated April 22, 2022 and signed by Rui Rodrigues, President and Patrick Vachon, Plant Manager;
2. "Approval" means this Environmental Compliance Approval, including the application and supporting documentation listed above;
3. "BMPP" means "Best Management Practices Plan for the Control of Fugitive Dust , Version 2.0"

dated March 24, 2021 and prepared by Patrick Vachon;

4. "Company" means Masterloy Products Company operating as Masterloy Products Company 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;
5. "EPA" means the *Environmental Protection Act* , R.S.O. 1990, c.E.19;
6. "Equipment" means the dust collectors, crushers and screener described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;
7. "Facility" means the entire operation located on the property where the Equipment is located;
8. "Manual" means a document or a set of documents that provide written instructions to staff of the Company;
9. "Ministry" means the ministry of the government of Ontario responsible for the EPA and includes all officials, employees or other persons acting on its behalf;
10. "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.

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. OPERATION AND MAINTENANCE

1. The Company shall ensure that the Equipment is properly operated and maintained at all times. The Company shall:
 - a. prepare, not later than three (3) months after the date of this Approval, and update as necessary, a Manual outlining the operating procedures and a maintenance program for the Equipment, including:
 - i. routine operating and maintenance procedures in accordance with good engineering practices and as recommended by the Equipment suppliers;
 - ii. emergency procedures, including spill clean-up procedures;
 - iii. procedures for any record keeping activities relating to operation and maintenance of the Equipment;

- iv. all appropriate measures to minimize fugitive dust, noise and odorous emissions from all potential sources;
 - v. the frequency of inspection and replacement of the filter material in the Equipment; and
 - vi. prepare and implement procedures to monitor and keep records of operation hours of the equipment;
- b. implement the recommendations of the Manual; and
- c. retain, for a minimum of two (2) years from the date of their creation, all records on the maintenance, repair and inspection of the Equipment, and make these records available for review by staff of the Ministry upon request.
2. The Company shall implement the BMPP and the Action Plan. The BMPP and The Action Plan shall be updated as necessary or at the direction of the District Manager.

2. NOISE

1. The Company shall, at all times, ensure that the noise emissions from the Facility comply with the limits set out in Ministry Publication NPC-300.

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

1. Condition No. 1 is included to emphasize that the Equipment must be maintained and operated according to a procedure that will result in compliance with the EPA, the Regulations and this Approval.

In addition, the Company is required to keep records and to provide information to staff of the Ministry so that compliance with the EPA, the Regulations and this Approval can be verified.

2. Condition No. 2 is included to provide the minimum performance requirements considered necessary 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). 1714-9KSP7N issued on July 16, 2014.

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me, the Environmental Review 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 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:

The Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

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 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 Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.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 9th day of June, 2022



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

JK/

c: District Manager, MECP Ottawa
Jeff Zywicki, Golder Associates Ltd.