Industry Standard – Mini Mills

This consultation draft is intended to facilitate dialogue concerning the proposed Technical Standard for Mini Mills. Note that it will not become law unless it is added through an amendment to the Technical Standards publication. Should the decision be made to proceed with the Technical Standard, the comments received during consultation will be considered during the final preparation of the Technical Standard. The content, structure, form and wording of the consultation draft are subject to change as a result of the consultation process and as a result of review, editing and correction by the Ministry of the Environment, Conservation and Parks.

PART I - GENERAL

Definitions

1. (1) For the purposes of this industry standard for mini mills,

"Act" means the Environmental Protection Act;

- "air pollution control device" means equipment used to control emissions in agaseous stream;
- "alloy additive" means a solid additive intended to be added to molten metal for the purposes of refining the molten metal and includes non-metal additives such as lime but does not include scrap metal;
- "alloy additive management area" means an area of a mini mill in which alloy additive is unloaded from a vehicle, stored, handled using a conveyor or otherwise handled;
- "annual maximum production" means, with respect to a mini mill, the annual maximum facility production set out in the application for registration in the Ministry's Technical Standards Registry – Air Pollution in respect of the mini mill and this industry standard or, if notice of a change in this information was required to be given under subsection 39 (6) of O.Reg. 419/05, the annual maximum facility production set out in the most recent notice;
- "baghouse" means an air pollution control device that uses a fabric bag or cartridge filter to remove a contaminant from a gaseous stream;

- "Best Practices Procedure" means the collection of records required to be made and maintained under section 60 of this industry standard;
- "Best Practices Table" means the table prepared and maintained in accordance with subsection 60 (3);
- "bucket fed electric arc furnace" means an electric arc furnace that is charged using a bucket feed process;
- "Capture Efficiency Assessment Report" means a report, referred to in section 8, which sets out the percentage of emissions from an electric arc furnace that are captured by melt shop ventilation systems and summarizes how that percentage was determined;
- "cold weather day" means,
 - (a) any day that occurs in the period beginning November 1 and ending April 30 in the following year, and
 - (b) any other day on which the mean hourly air temperature at the mini mill is predicted to be less than zero degrees Celsius;
- "Community Monitoring Plan" means a plan outlining how to measure the impact of discharges of particulate matter and registered contaminants set out in Appendix 10-C (Metals) from a mini mill on places described in subsection 1 (5) through monitors located outside of the site measuring the concentration of particulate matter and registered contaminants set out in Appendix 10-C (Metals):
- "continuous fed electric arc furnace" means an electric arc furnace that is charged using a continuous feed process;
- "continuous feed tunnel" means the portion of the mechanism used to feed scrap metal into a continuous fed electric arc furnace in which the scrap metal is heated before entering the furnace by the hot gases exiting the furnace;
- "critical duct" means, in the reasonable opinion of the ventilation coordinator, a duct whose design and proper operation is critical to the proper operation of the ventilation system in which it is located;
- "Direct Evacuation Control System Operating Parameter Summary Table" means a table prepared and maintained in accordance with section 23;
- "direct evacuation control system" means a system of ventilation systems and air pollution control devices that captures and controls emissions directly from a furnace;

- "Electric Arc Furnace Baghouse Source Testing Report" means a report referred to in section 11 which summarizes the results of source testing to measure the concentration of dioxins, furans and dioxin-like PCBs emitted from a baghouse to which emissions from an electronic arc furnace are conveyed;
- "electric arc furnace" means a furnace that produces molten steel by heating charge materials with electric arcs from one or more carbon electrodes:
- "emissions management system" means a system of ventilation systems and air pollution control devices used to capture and control emissions;
- "Equipment Operating Parameter Summary Table" means a table prepared and maintained in accordance with section 19:
- "existing mini mill" means a mini mill,
 - (a) the construction of which was completed or began before July 1, 2016, or
 - (b) for which an application was made on or before July 1, 2016 for an environmental compliance approval in respect of the facility;
- "facility" means all plants, structures, equipment, apparatuses, mechanisms or things, including surfaces and storage piles, that function as an integrated operation on a site and for which a registered person has ownership, management or control;
- "highest ranking individual" means the highest ranking person regularly present at the mini mill who has management responsibilities relating to the mini mill;
- "Inspection and Maintenance Summary Table" means the table prepared and maintained in accordance with section 29:
- "licensed engineering practitioner" means a person who holds a licence, limited licence or temporary licence under the *Professional Engineers Act*;
- "main fan" means, in the reasonable opinion of the ventilation coordinator, a fan that is essential to driving the operation of the ventilation system in which it is located;
- "management method" means the use of one or more procedures, equipment, things or techniques to prevent, minimize or reduce the discharge of a registered contaminant into the air from an originating source;
- "melt shop" means an area within a mini mill where an electric arc furnace, ladle refining furnace or argon oxygen decarburization vessel and related equipment is operated;

- "mini mill" means a facility identified by NAICS code 331110 that is a steel mill that primarily produces carbon steel, steel alloy, specialty steel or stainless steel from steel scrap using an electric arc furnace;
- "new mini mill" means a mini mill that is not an existing mini mill;
- "O.Reg. 419/05" means Ontario Regulation 419/ (Air Pollution Local Air Quality) made under the Act;
- "originating source" means a piece of equipment, place or thing that discharges a registered contaminant, whether the discharge is into the natural environment or into an enclosed building, structure, equipment or other place or thing;
- "Outdoor Originating Source Monitoring Parameter Summary Table" means the table prepared and maintained in accordance with section 51;
- "particulate matter" means any material, except water in an uncombined form, that is or may become suspended in air;
- "pg/m3" means picograms per cubic metre at reference conditions;
- "prevailing wind" means the wind direction most frequently observed at a specified location;
- "reference conditions" mean conditions at which the temperature is 25 degrees Celsius and the pressure is 101.3 kilopascals;
- "registered contaminant" means a contaminant for which a registered person is registered in respect of this industry standard;
- "registered person" and "person registered" mean a person who is registered on the Ministry's Technical Standards Registry Air Pollution in respect of this industry standard;
- "shredder fluff" means the by-product residue produced by the shredding of end-of-life vehicles and other metal-containing material;
- "site", with respect to a facility, means the property on which the facility is located;
- "Site Plan" means the diagram set out in the Best Practices Procedure and required by subsection 60 (2);
- "slag" means the waste residue produced from the process of melting scrap metal in a furnace;

- "slag management area" means an area of a mini mill in which slag is cooled, stored, handled using a conveyor, crushed, screened or loaded into a vehicle for shipment;
- "Ventilation Operating Parameter Summary Table" means a table prepared and maintained in accordance with section 26;
- "ventilation coordinator" means an individual appointed under subsection 15 (1);
- "ventilation system" means equipment, including ducts, hoods, fans, and dampers, that are used to capture and convey emissions;
- "Visual Inspection Summary Table" means the table prepared and maintained in accordance with section 57.
- (2) Words and expressions used in this industry standard have the same meaning as in the Act and O. Reg. 419/05, unless the context requires otherwise.
- (3) A reference in this industry standard to a date of registration is the date on which a registered person is first registered in the Ministry's Technical Standards Registry Air Pollution in respect of the mini mill, this industry standard and a contaminant set out in Appendix 10-A (All Contaminants).
- (4) When this industry standard refers to a wind barrier the wind barrier can be natural or artificial and may include trees, another natural feature or fencing.
- (5) A reference in this industry standard to a place listed in this subsection is a reference to any point on the property on which one or more of the following places is located, unless the place is located on the same site as the mini mill:
 - 1. A health care facility.
 - 2. A senior citizens' residence or long-term care facility.
 - 3. A child care facility.
 - 4. An educational facility.
 - A dwelling.
 - 6. In respect of a mini mill, a place specified by the Director in a written notice to the registered person as a place where discharges of a registered contaminant may cause a risk to human health.
- (6) Before the Director gives a person a notice under paragraph 6 of subsection (5), the Director shall give the person a draft of the notice and an opportunity to make

written submissions to the Director during the period that ends five business days after the draft is given.

- (7) In this industry standard, a reference to the Director means,
 - (a) the Director appointed under section 5 of the Act in respect of the section of this industry standard in which the reference appears;
 - (b) if no Director described in clause (a) has been appointed in respect of Part IV of this industry standard, any Director appointed under section 5 of the Act in respect of paragraph 2 of subsection 11 (1) of O. Reg. 419/05; or
 - (c) if no Director described in clause (a) has been appointed in respect of a provision, other than a provision mentioned in clause (b), any Director appointed under section 5 of the Act in respect of section 27.1 or paragraph 3 of subsection 11 (1) of O. Reg. 419/05.

Application

2. A person who is registered with respect to a facility set out in Column 1 of Table 10-2 and one or more of the contaminants listed in an Appendix set out in Column 2 of the Table opposite the facility, shall comply with the sections set out opposite the Appendix in Column 3 of the Table in respect of the facility.

TABLE 10-2: Application

	Column 1	Column 2	Column 3			
Item	Facility Type	Appendix	Applicable Sections			
1.	Mini Mill	Appendix 10-A (All Contaminants): All Contaminants	1-4, 6-10, 15-32, 69-73, 76-80			
2.	Mini Mill Appendix 10-B (SPM): SPM		5, 33-41, 43-68, 74-75			
3.	Mini Mill	Appendix 10-C: Metals	5, 33-41, 43-68, 74-75			
4.	Mini Mill	Appendix 10-D (Dioxins and	11-14, 42			

	Furans): Dioxins and furans	
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Tables, initial preparation

- **3.** (1) A registered person shall ensure that the first version of each of the following tables required under this industry standard are prepared no later than the date that is six months following the date of registration:
 - 1. Equipment Operating Parameter Summary Table.
 - 2. Direct Evacuation Control System Operating Parameter Summary Table.
 - 3. Ventilation Operating Parameter Summary Table.
 - 4. Inspection and Maintenance Summary Table.
 - 5. Outdoor Originating Source Monitoring Parameter Summary Table.
 - 6. Visual Inspection Summary Table.
 - 7. Best Practices Table.
- (2) Information contained in a table required to be prepared and maintained by this industry standard shall be current to the date that the table was prepared or amended.

Part II - Technology Specifications

Electric arc furnace – requirements

- **4.** (1) A registered person shall ensure that an emissions management system is used to capture and control emissions resulting from the operation of each electric arc furnace at the mini mill.
- (2) The emissions management system required by subsection (1) shall satisfy the following requirements:
 - 1. The emissions management system shall include a direct evacuation control system and a secondary ventilation system.
 - 2. The emissions management system shall convey captured emissions to a baghouse.
- (3) A direct evacuation control system used to meet the requirements of subsection (2) shall include,

- (a) an elbow if the electric arc furnace is a bucket fed electric arc furnace;
- (b) a continuous feed tunnel if the electric arc furnace is a continuous fed electric arc furnace;
- (c) a combustion and dilution air gap to enhance the combustion and dilution of emissions from the electric arc furnace;
- (d) a combustion chamber; and
- (e) a cooling chamber.
- (4) A secondary ventilation system used to meet the requirements of subsection (2) shall capture emissions from the electric arc furnace using a,
 - (a) canopy hood located above the electric arc furnace;
 - (b) doghouse that encloses the electric arc furnace; or
 - (c) system that captures and conveys emissions originating within the melt shop such that it provides total building evacuation.
- (5) A person registered in respect of a contaminant set out in Appendix 10-D (Dioxins and Furans) shall ensure that an emissions management system used to meet the requirements of subsection (1) includes one of the following pieces of technology, if one of the criteria set out in subsection (6) is met:
 - Technology to inject adsorption agents into the stream of captured emissions to adsorb dioxins and furans before the captured emissions enter the baghouse.
 - Selective Catalytic Reduction technology to control dioxins and furans in the stream of captured emissions before the captured emissions enter the baghouse.
 - 3. A technology that in the opinion of the Director controls captured dioxins and furans as effectively as or better than the technology set out in paragraphs 1 or 2.
 - (6) The criteria referred to in subsection (5) are the following:
 - 1. The emissions management system is installed in a new mini mill.
 - 2. The emissions management system is installed in an existing mini mill and one or both of the following criteria are met:

- The annual maximum production of the mini mill has increased by 50 per cent compared to the annual maximum production on the date of registration.
- ii. At any time since the date of registration the electric arc furnace associated with the emissions management system was replaced by an electric arc furnace with a rated capacity more than 25 per cent greater than the previous electric arc furnace.
- 3. The cooling chamber mentioned in clause (3)(e) is not a rapid quench chamber.
- (7) A baghouse used to meet the requirements of subsection (2) shall be equipped with a bag leak detection system if,
 - (a) the baghouse was installed on or after July 1, 2016;
 - (b) the baghouse is installed at a new mini mill;
 - (c) the baghouse is installed at an existing mini mill and the related electric arc furnace is first located at the mini mill on or after July 1, 2016; or
 - (d) the baghouse is installed at an existing mini mill and the annual maximum production of the mini mill has increased by 50 per cent compared to the annual maximum production on the date of registration.
- (8) A registered person shall ensure that a stack that is of a height designed in accordance with good engineering practice is connected to a baghouse used to meet the requirements of subsection (2) if,
 - (a) the baghouse was installed on or after July 1, 2016;
 - (b) the baghouse is installed at a new mini mill;
 - (c) the baghouse is installed at an existing mini mill and the related electric arc furnace is a continuous fed electric arc furnace that is first located at the mini mill on or after July 1, 2016;
 - (d) the baghouse is installed at an existing mini mill and the annual maximum production of the mini mill has increased by 50 per cent compared to the annual maximum production on the date of registration; or
 - (e) the baghouse is installed at an existing mini mill and at any time since the date of registration the electric arc furnace associated with the emissions

management system was replaced by an electric arc furnace with a rated capacity more than 25 per cent greater than the previous electric arc furnace.

- (9) If, in addition to an emissions management system required by subsection (1), emissions from an electric arc furnace are captured by a close fitting hood, the registered person shall ensure that the emissions captured by the close fitting hood are conveyed to a baghouse.
- (10) Despite subsection (2), before the date that is ten years from the date this industry standard is published, an emissions management system required by subsection (1) is not required to include a direct evacuation control system if the following criteria are met:
 - 1. The system is used to capture and control emissions from an electric arc furnace that is a bucket fed electric arc furnace.
 - 2. The system is installed at an existing mini mill and did not include a direct evacuation control system on or before July 1, 2016.
 - 3. The system is used to capture and control emissions from an electric arc furnace that was first located at the mini mill on or before July 1, 2016.

Ladle refining furnaces and argon oxygen decarburization vessels - requirements

- **5.** (1) A registered person shall ensure that an emissions management system that meets the requirements in subsection (2) is used to control emissions resulting from the operation of each ladle refining furnace and argon oxygen decarburization vessel.
- (2) An emissions management system used to meet the requirements of this section shall satisfy the following requirements:
 - 1. The emissions management system shall capture emissions from the ladle refining furnace or argon oxygen decarburization system using a canopy hood or a close fitting hood.
 - The emissions management system shall convey captured emissions to a baghouse.
- (3) A registered person shall ensure that a baghouse that is used to meet the requirements of subsection (2) include both of the following things, if one or both of the criteria set out in subsection (4) are met:
 - 1. A bag leak detection system.
 - 2. A stack that is of a height that follows good engineering practice.

- (4) The criteria referred to in subsection (3) are the following:
 - 1. The baghouse is installed on or after July 1, 2020.
 - 2. The baghouse is used to control emissions from a ladle refining furnace or an argon oxygen decarburization vessel first located at the mini mill on or after July 1, 2020.
- (5) Despite paragraph 2 of subsection (2), an emissions management system mentioned in subsection (1) may convey captured emissions to a wet scrubber instead of a baghouse if,
 - (a) the wet scrubber was installed before July 1, 2020; and
 - (b) the emissions are captured from a ladle refining furnace or an argon oxygen decarburization vessel that was first located at the mini mill before July 1, 2020.

Part III - Capture Efficiency Assessment

Capture Efficiency Assessment Report, new facility

- **6.** (1) A person registered in respect of a new mini mill shall ensure that a Capture Efficiency Assessment Report is prepared in accordance with section 8 in respect of each melt shop at the mini mill and submitted to the Director no later than the date that is 12 months from the date that the person is first registered in respect of this industry standard and the mini mill.
- (2) If a new mini mill is not operational on the date of registration, the registered person shall prepare the Capture Efficiency Assessment Report required under subsection (1) using design specifications rather than operational measurements and the following provisions of section 8 do not apply in respect of the Capture Efficiency Assessment Report:
 - 1. Subsection (4).
 - 2. Paragraphs 4 to 6 of subsection (6).
 - 3. Paragraphs 5 and 6 of subsection (8).
 - 4. Subsections (9), (10) and (14).
- (3) If subsection (2) applies to a Capture Efficiency Assessment Report submitted by ta new mini mill, an updated Capture Efficiency Assessment Report shall be prepared in

accordance with section 8 and submitted to the Director no later than 12 months after the date that the mini mill begins to operate as a mini mill.

(4) If a Capture Efficiency Assessment Report is required by subsection (1), the registered person shall ensure that an updated Capture Efficiency Assessment Report is prepared in accordance with section 8 and submitted to the Director no later than 5 years after the date that a report was required to be submitted to the Director by subsection (1), or subsection (3) if an updated report was required under that subsection.

Capture Efficiency Assessment Report, facility modifications

- **7.** (1) Before a registered person takes any of the following actions in respect of a mini mill, the registered person shall prepare and submit to the Director a Capture Efficiency Assessment Report in accordance with section 8 and subsection (2) in respect of each melt shop connected to the action:
 - 1. Increasing the annual maximum production of the mini mill from an amount less than a modification threshold to an amount greater than or equal a modification threshold.
 - 2. Replacing an electric arc furnace with an electric arc furnace with a rated capacity more than 25 per cent greater than the previous electric arc furnace.
 - 3. Making a change to the emissions management system of the melt shop that may significantly affect the capture efficiency of the melt shop ventilation system such as changing the size of an air pollution control device that is part of the emissions management system or changing the size of the secondary ventilation system.
- (2) The Capture Efficiency Assessment Report required by subsection (1) shall demonstrate that as designed, the proposed action will not cause a decrease in the percentage of emissions from an electric arc furnace that are captured by the melt shop ventilation systems.
- (3) If a Capture Efficiency Assessment Report is required under subsection (1), the registered person shall ensure that an updated Capture Efficiency Assessment Report showing the capture efficiency of the melt shop ventilation systems with the action referred to in subsection (1) commissioned is prepared in accordance with section 8 and submitted to the Director no later than 12 months after the date of the,
 - (a) increase to the annual maximum production referred to in subsection (1);
- (b) replacement of the electric arc furnace referred to in subsection (1); or 12 | Consultation Draft

- (c) change to the emissions management system referred to in subsection (1).
- (4) In this section,
- "50 factor" means any multiple of the amount that is equal to 50 per cent of the annual maximum production of the mini mill on the date of registration;
- "modification threshold" means an annual maximum production that is equal to the sum of the annual maximum production of the mini mill on the date of registration and a 50 factor:

Capture Efficiency Assessment Report

- **8.** (1) A Capture Efficiency Assessment Report shall be prepared in accordance with this section and in accordance with plans approved by the Director under subsection (7).
- (2) A registered person shall revise a Capture Efficiency Assessment Report and give the revised report to the Director if the Director notifies the registered person that the Director is of the opinion that,
 - (a) the report has not been prepared in accordance with the requirements of this industry standard;
 - (b) the report may not accurately reflect the capture efficiency of the melt shop ventilation systems; or
 - (c) additional information is needed in order for the Director to form an opinion as to whether the report accurately reflects the capture efficiency of the melt shop ventilation systems.
- (3) A registered person preparing a Capture Efficiency Assessment Report shall determine the percentage of emissions from any electric arc furnace in the melt shop that are captured by the melt shop ventilation systems using,
 - (a) a physical model;
 - (b) a computational fluid dynamics model; or
 - (c) a model acceptable to the Director as equivalent or better at determining the capture efficiency of a ventilation system.
- (4) A model used for the purposes of preparing a Capture Efficiency Assessment Report shall be developed in accordance with a Capture Efficiency Methods Plan

approved by the Director using measurements taken at the melt shop in accordance with a Process Information Plan approved by the Director.

- (5) A registered person preparing a Capture Efficiency Assessment Report required by subsection 7 (1) shall, using the model referred to in subsections (3) and (4), in addition to determining the capture efficiency of the melt shop ventilation systems as required by subsection (3), determine the anticipated capture efficiency of the melt shop ventilation systems after the proposed action, as designed.
 - (6) A Capture Efficiency Assessment Report shall include the following components:
 - 1. Drawings of the melt shop in which the electric arc furnace is located and all ventilation systems that capture emissions within the melt shop.
 - A description of and a process flow diagram of the ventilation systems that capture emissions from equipment within the melt shop in which the electric arc furnace is located.
 - 3. A description of and a process flow diagram of the melt shop processes.
 - 4. The information described by paragraph 4 of subsection (8), together with identification of which operating scenarios were in effect when the measurements used to develop the model used to prepare the report were taken.
 - 5. The measurements that were taken for the purpose of developing the capture efficiency assessment model used and any other information that was collected contemporaneously with those measurements.
 - 6. A description of how the measurements used for the development of the model were taken, how the model was developed and how the capture efficiency of the ventilation systems was calculated.
 - 7. A description of the capture efficiency of the ventilation systems and a quantification of the capture efficiency of the ventilation systems, as a percentage, in capturing emissions from the electric arc furnace during the scenarios described in the Overall Capture Efficiency Assessment Plan in accordance with paragraph 4 of subsection (7)).
 - 8. If the report is required by subsection 6 (3), a comparison of the quantified capture efficiency referred to in paragraph 7 of the commissioned mini mill to the quantified capture efficiency set out in the report required by subsection 6 (2) for the mini mill as designed.

- 9. If the report is required by subsection 7 (3), a comparison of the quantified capture efficiency referred to in paragraph 7 of the mini mill with the commissioned modification to the facility to the quantified capture efficiency set out in the report required by subsection 7 (1) of the melt shop ventilation systems before the action referred to in subsection 7 (1) was taken.
- (7) Before developing a model to be used for the purposes of preparing a Capture Efficiency Assessment Report, a registered person shall submit the following plans to the Director for approval:
 - 1. Overall Capture Efficiency Assessment Plan.
 - 2. Process Information Plan.
 - 3. Capture Efficiency Methods Plan.
 - 4. Modelling Plan.
- (8) An Overall Capture Efficiency Assessment Plan mentioned in paragraph 1 of subsection (7) shall provide an overview of the melt shop processes and ventilation systems and an overview of how the Capture Efficiency Assessment Report is proposed to be prepared, including the following information:
 - 1. A description of the melt shop processes that may be engaged in at the melt shop.
 - 2. A description of the industrial ventilation systems and air pollution control devices that capture and control emissions from the melt shop.
 - 3. A description of the types of steel products that are made at the mini mill.
 - 4. A description of each operating scenario that may occur in the melt shop, including,
 - scenarios for all possible combinations of each possible operating condition of the equipment in the melt shop;
 - ii. the identification of the operating scenario that would result in the greatest amount of emissions of registered contaminants from the melt shop; and
 - iii. the identification of the operating scenario that occurs most frequently.
 - 5. An explanation as to how the proposed taking of measurements referred to in subsection (4) will be representative of the range of operating conditions that may occur in the melt shop.

- 6. A description of the type of information that will be collected during the assessment relating to the melt shop processes and production.
- 7. Identification of the model that is intended to be used in the assessment.
- (9) A Process Information Plan mentioned in paragraph 2 of subsection (7) shall provide detailed information regarding the melt shop processes and ventilation systems and detailed information about the measurements that will be taken for the purposes of developing the model to be used to prepare the Capture Efficiency Assessment Report, and shall include the following information in particular:
 - 1. A description of each type of steel product made at the mini mill together with the maximum annual rate of production and typical annual rate of production of each product.
 - 2. A description of each melt shop process described in the Overall Capture Efficiency Assessment Plan, including a description of ventilation systems that capture emissions from the process and air pollution control devices that control emissions from the process, together with a description of what process parameters will be measured while the measurements referred to in paragraph 6 are made and how and when the process parameters will be measured.
 - 3. For each melt shop process described in paragraph 2, a process flow diagram showing the process, ventilation systems and air pollution control devices described, and the location where the process parameters will be measured.
 - 4. Drawings of the melt shop and all ventilation systems and air pollution control devices that capture emissions within the melt shop. The drawings shall include a building drawing that shows all openings into the building such as doors, windows, louvers and bays. The drawings shall include cross-sectional drawings of the melt shop that show the dimensions and arrangement of the equipment and structures in the melt shop.
 - 5. A description of the operating conditions that will be in effect when measurements are proposed to be taken for the purposes of developing the model to be used to prepare the Capture Efficiency Assessment Report.
 - 6. A description of what measurements are proposed to be taken to quantify capture of emissions and how the measurements will be recorded.
 - 7. A description of what information about operating conditions in effect when measurements are taken is proposed to be recorded.

- (10) A Process Information Plan mentioned in paragraph 2 of subsection (7) shall provide for the following:
 - 1. Taking measurements to quantify capture of emissions using one of the following methods:
 - Tracer gas evaluation.
 - ii. Plume photography.
 - iii. A method that is acceptable to the Director as equivalent or better at determining the movement of gases.
 - 2. Taking measurements referred to in paragraph 1 during operating conditions that are representative of the full range of operating conditions that may occur in the melt shop including pre-heating of the electric arc furnace before charging the furnace and the range of operating conditions from the commencement of a charging of the furnace to the commencement of the next charging of the furnace.
 - 3. Collecting the following information contemporaneously with the taking of measurements referred to in paragraph 1:
 - i. The rate of production of the melt shop.
 - ii. The equipment in use.
 - iii. The ladle chemistry.
 - iv. Any operating issues encountered with equipment in the melt shop.
 - v. Building conditions during the measurements such as whether doors in the building were open.
 - vi. Outdoor weather conditions including temperature, precipitation and dominant wind direction.
 - vii. Any other information that may affect the development of the model.
- (11) A Capture Efficiency Methods plan mentioned in paragraph 3 of subsection (7) shall include a description of how the capture efficiency of the emissions management system will be determined, including:
 - 1. A description of the proposed development and use of the capture efficiency assessment model.

- A description of how the measurements and other information proposed to be collected in the Process Information Plan are proposed to be used to develop a capture efficiency assessment model.
- 3. A description of the calculations to be used to estimate the capture efficiency and fugitive emissions from the building include sample calculations and all assumptions used in the samples.
- (12) A Modelling Plan mentioned in paragraph 4 of subsection (7) shall provide detailed information regarding the type of model proposed to be used to assess capture efficiency of the melt shop ventilation systems, including the following information:
 - 1. A basic description of the model theory.
 - 2. A description of all modelling assumptions that will be made in the use of the model.
 - 3. A description of the model's limitations.
- (13) The Director may require that a Capture Efficiency Assessment Report be in whole or in part submitted in an acceptable electronic form.
- (14) A registered person shall provide a minimum of 30 days notice to the Director, in writing, of each date on which the measurements described in subsection (4) will be taken and representatives of the Ministry must be given an opportunity to witness the testing.
- (15) With the written approval of the Director, an updated Capture Efficiency Assessment Report required under subsection 6 (4), subsection 7 (1), subsection 7 (3) or section 9 may,
 - (a) be prepared using a model that has previously been approved by a Director and has been updated to reflect changes to the melt shop; and
 - (b) omit information that would otherwise be required under this section if the information is included in a previous Capture Efficiency Assessment Report.

Requirement to continue updating Capture Efficiency Assessment Reports

9. If an updated Capture Efficiency Assessment Report is required to be prepared under subsections 6 (4) or 7 (3), , the registered person shall ensure that an updated Capture Efficiency Assessment Report is thereafter prepared in accordance with section 8 and submitted to the Director no later than every five years after the date that the last updated Capture Efficiency Assessment Report was submitted to the Director.

Actions Required in relation to Capture Efficiency Assessment Report

10. If a Capture Efficiency Assessment Report required by this Part shows that the percentage of emissions from an electric arc furnace that are captured by the melt shop ventilation systems has decreased as compared to a previous Capture Efficiency Assessment Report for the melt shop, the registered person, within 12 months of submitting the report to the Director, shall ensure that a plan to increase the percentage of emissions that are captured is prepared and implemented, with the objective of eliminating the decrease in capture efficiency.

Part IV – Source Testing for Dioxins, Furans and Dioxin-like PCBs

Electric Arc Furnace Baghouse Source Testing Report

- **11**. (1) A person registered in respect of a contaminant set out in Appendix 10-D shall ensure that an Electric Arc Furnace Baghouse Source Testing Report is prepared and submitted to the Director in accordance with this Part at least once in each 12-month period.
- (2) An Electric Arc Furnace Baghouse Source Testing Report shall summarize the results of the tests required by section 12 and shall include:
 - 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 baghouse emissions.
 - 2. Records of the operating conditions during the testing of the baghouse emissions including the results of the monitoring of the operating parameters described by paragraph 4 of subsection 12 (4) and any other information required by the Director to determine if the measurements taken are an accurate reflection of concentrations of contaminants to be measured.
 - 3. The results of the electric arc furnace baghouse test indicating the emission concentration of dioxins, furans and dioxin-like PCBs, calculated in accordance with subsection 1 (2.0.2) of O.Reg. 419/05 expressed in pg/m³.
 - 4. Operating parameter measurements for the test shown in a way that correlates the data with the corresponding measured dioxins, furans and dioxin-like PCBs emission concentration, corresponding operating condition, and corresponding product specifications.

- (3) A registered person shall revise an Electric Arc Furnace Baghouse Source Testing Report and give the revised report to the Director if the Director notifies the registered person that the he or she is of the opinion that,
 - (a) the report has not been prepared in accordance with the requirements of this industry standard;
 - (b) the measurements taken during the test mentioned in subsection 12 (1) may not be an accurate reflection of concentrations of dioxins, furans and dioxinlike PCBs; or
 - (c) additional information is required in order for the Director to form an opinion as
 to whether the measurements taken during the test mentioned in subsection
 12 (1) are an accurate reflection of concentrations of dioxins, furans and
 dioxin-like PCBs.

Electric Arc Furnace Baghouse Source Testing

- **12.** (1) The registered person shall ensure that at least once in each 12-month period the exhaust of each baghouse to which emissions from an electronic arc furnace are conveyed is tested in accordance with this Part to determine the concentration of dioxins, furans and dioxin-like PCBs discharged from the baghouse.
- (2) The concentration of dioxins, furans and dioxin-like PCBs shall be calculated in accordance with subsection 1 (2.0.2) of O. Reg. 419/05.
- (3) The testing required by subsection (1) shall be done in accordance with a source-testing plan approved by the Director.
 - (4) The source-testing plan required by subsection (3) shall provide for the following:
 - 1. Measuring the amount or concentration of each contaminant set out in Schedule 8 of O. Reg. 419/05.
 - 2. Measuring operating parameters during testing that are required to determine the concentration of dioxins, furans and dioxin-like PCBs.
 - 3. Taking the measurements described in paragraphs 1 and 2 comprehensively 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.

- 4. Monitoring and recording the following information about factors that may affect the concentration of dioxins, furans and dioxin-like PCBs emitted from the baghouse in accordance with the following:
 - i. For each piece of equipment set out in Column 1 of Table 10-11, the operating parameters set out in Column 2 of the Table opposite the equipment shall be monitored at a frequency set out in Column 3 and at a location set out in Column 4 of the Table opposite the equipment.
 - ii. The composition of the charge material loaded into the electric arc furnace is monitored.
- (5) The registered person shall ensure that the following steps are performed:
 - 1. Submit a source-testing plan to the Director for approval at least 120 days before the measurements are proposed to be taken.
 - 2. After receiving approval of the plan mentioned in paragraph 1, provide written notice to the Director at least 30 days before the measurements are taken.
 - Provide an opportunity for representatives of the Ministry to witness the taking of the measurements.
- (7) A registered person shall ensure that a record is made of the following information for each test mentioned in subsection (1):
 - 1. Each measurement taken during the test together with the date and time the measurement was taken.
 - 2. The operating conditions of the melt shop during the test.

Table 10-11: Operating Parameters to be measured and recorded during source testing

Item	Column 1	Column 2	Column 3	Column 4		
	Equipment	Operating Parameter	Measurement Frequency	Measurement Location		
1.	Bucket fed electric arc furnace	1.Temperature 2. Concentration of carbon monoxide 3. Concentration of oxygen	Continuous	Between the elbow and the combustion chamber		

		4. Static pressure inside the furnace		
2.	Continuous Feed Tunnel	Concentration of carbon monoxide Concentration of carbon monoxide Concentration of oxygen Static pressure inside the continuous feed tunnel	Continuous	At the inlet of the tunnel or, if it is not possible to measure at the inlet, at another point in the continuous feed tunnel specified in the source-testing plan
3.	Combustion Chamber	Temperature Static pressure	Continuous	At least one point between the furnace and outlet of combustion chamber
4.	Rapid Quench System	 Inlet temperature Outlet temperature Static pressure 	Continuous	For inlet temperature: at the inlet of the rapid quench system For outlet temperature: at the outlet of the rapid quench system or at another point specified in the source-testing plan For static pressure: at the inlet or at the outlet of the rapid quench system
5.	Baghouse	Temperature Static Pressure	Continuous	A point at the inlet of the baghouse and a point at the outlet of the baghouse
6.	Secondary ventilation system used to meet the requirement	Temperature Static Pressure	Continuous	In the connecting inlet duct at a point near the connection between the hood and the duct

of subsection 4 (5)			
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Electric arc furnace baghouse testing - operational adjustment

- **13.** (1) If an Electric Arc Furnace Baghouse Source Testing Report shows that a concentration of dioxins, furans and dioxin-like PCBs of greater than 100 pg/m³ was measured in the exhaust of a baghouse, the registered person shall make one or more operational adjustments intended to increase the control of dioxins, furans and dioxin-like PCBs in emissions from the baghouse within 12 months of the report.
- (2) If one or more operational adjustments are required to be made under subsection (1), the registered person shall ensure that a record is made of each operational adjustment made together with the date on which the operational adjustment was made.

Electric arc furnace baghouse testing - dioxin and furan study

- **14.** (1) If three consecutive Electric Arc Furnace Baghouse Source Testing Reports for a single baghouse show that a concentration of dioxins, furans and dioxin-like PCBs of greater than 100 pg/m³ was measured in the exhaust of the baghouse, the registered person shall ensure a study is prepared that does the following:
 - 1. Determines whether there is a correlation between the concentration of dioxins, furans and dioxin-like PCBs measured and the operating parameters described in Table 10-11.
 - 2. Makes recommendations on how to,
 - i. optimize operation of the electric arc furnace, combustion chamber, rapid quench system or technology used to comply with subsection 4 (6) to reduce the emission of dioxins, furans and dioxin-like PCBs, including a recommended normal operating range for each operating parameter set out in the Direct Evacuation Control System Operating Parameter Summary Table; and
 - ii. reduce contamination of scrap metal used in the electric arc furnace.
- (2) If the study prepared under paragraph 1 of subsection (1) determines there is no correlation between the concentration of dioxins, furans and dioxin-like PCBs measured and the operating parameters described in Table 10-11, the registered person shall ensure that a study is prepared that assesses the potential emission reduction from the adoption or use of the technology referred to in subsection 4 (6).

- (3) A single Electric Arc Furnace Baghouse Source Testing Report shall not be counted towards the three consecutive Electric Arc Furnace baghouse testing reports referred to in subsection (1) more than once.
- (4) If a study is required by subsection (1) or (2), the registered person shall ensure that the District Manager is notified as soon as practicable,
 - (a) that the study is required, and
 - (b) of the date by which the study will be completed, which shall not be more than 12 months from the date of notification.
- (5) If a registered person was required to notify the District Manager in accordance with subsection (4), the registered person shall notify the District Manager as soon as practicable of each subsequent Electric Arc Furnace Baghouse Source Testing Report for the same baghouse that measures a concentration of greater than 100 pg/m³ of dioxins, furans and dioxin-like PCBs until an Electric Arc Furnace Baghouse Source Testing Report for the baghouse measures a concentration of equal to or less than 100 pg/m³ of dioxins, furans and dioxin-like PCBs.

Part V - Industrial Ventilation

Ventilation Program

- **15.** (1) A registered person shall appoint a ventilation coordinator to have responsibility for,
 - (a) maintaining the record required by subsection (2);
 - (b) coordinating the study referred to in subsection 14 (1); and
 - (c) coordinating preparation of Capture Efficiency Assessment Reports.
- (2) A registered person shall ensure a record of the following information respecting the mini mill is maintained:
 - 1. A description of each ventilation system that captures and conveys emissions from the melt shop.
 - 2. For each ventilation system described for the purpose of paragraph 1, the specifications of each fan in the system, including the design and actual volumetric flow rate, static pressure, revolutions per minute and fan curves, and an indication of which fans are main fans.

- 3. A process flow diagram of each ventilation system described for the purpose of paragraph 1 that includes the following information:
 - i. Each piece of equipment, that discharges emissions that may be captured by the ventilation system.
 - ii. Each air pollution control device associated with the ventilation system.
 - iii. Key information about the ventilation system, including volumetric flow rates.
 - iv. An indication of which ducts are critical ducts.
- 4. A drawing of each ventilation system described for the purpose of paragraph 1 that reflects as-built condition. The drawing shall be based on the specifications of the system that was installed, not the design specifications.

Management of Changes to Ventilation Equipment

- **16.** (1) A registered person shall ensure that prior to the implementation of a change to a ventilation system that captures emissions from a melt shop, the following information is recorded:
 - 1. A description of the proposed change to the ventilation system.
 - 2. An evaluation of the possible impacts of the proposed change on the ability of the ventilation system to capture contaminants under anticipated operating scenarios.
 - 3. An evaluation of the possible impacts of the proposed change to the ability of the overall industrial ventilation in the melt shop to capture contaminants under anticipated operating scenarios.
- (2) A registered person shall ensure that if an evaluation recorded for the purpose of paragraph 2 of subsection (1) indicates that a proposed change to a ventilation system will reduce the ability of the ventilation system to capture contaminants under an anticipated operating scenario, the change will not be implemented unless a written record is created indicating that the highest ranking individual has reviewed the proposed change.
- (3) No later than three months after a change mentioned in subsection (1) is implemented, the registered person shall ensure that the information required by section 15 is updated and a record is made of the date on which the change was implemented.

PART VI - MONITORING OF OPERATING PARAMETERS

Baghouse equipment operating parameters, performance limit

- **17.** (1) A registered person shall not operate or cause or permit the operation of a baghouse for more than four continuous hours with the differential pressure outside of the normal operating range set out for the baghouse in the Equipment Operating Parameter Summary Table.
- (2) A registered person shall not operate or cause or permit the operation of a baghouse for more than four continuous hours with the temperature outside of the normal operating range set for the baghouse in the Equipment Operating Parameter Summary Table.
- (3) If a baghouse differential pressure or temperature has been outside of the normal operating range set out for the operating parameter in the Equipment Operating Parameter Summary Table for four continuous hours, the registered person shall immediately cease operating any electric arc furnace the emissions from which are conveyed to the baghouse until the baghouse operating parameter is brought within the normal operating range.

Source of recommendations for operating parameter summary tables

- **18.** (1) Where Table 10-19, 10-23 or 10-26 requires that an operating parameter, measurement frequency, measurement location or normal operating range be determined in accordance with a recommendation from a source set out in this subsection, the operating parameter, measurement frequency, measurement location or normal operating range shall be determined using one of the following sources:
 - 1. An operating and maintenance manual prepared by the related equipment manufacturer.
 - 2. Written instructions provided by the related equipment supplier or equipment manufacturer.
 - 3. Written advice from a licensed engineering practitioner that has relevant experience with respect to the subject matter of the recommendation, together with the rationale for the advice.
- (2) If an operating parameter, measurement frequency, measurement location or normal operating range set out in the Equipment Operating Parameter Summary Table, Direct Evacuation Control System Operating Parameter Summary Table or Ventilation Operating Parameter Summary Table is determined in accordance with a

recommendation from a source set out in subsection (1), the source of the recommendation used shall also be set out in the table.

- (3) If an operating parameter, measurement frequency, measurement location or normal operating range set out in the Equipment Operating Parameter Summary Table, Direct Evacuation Control System Operating Parameter Summary Table or Ventilation Operating Parameter Summary Table is determined in accordance with a recommendation from a source set out in subsection (1), the Director may order a registered person in writing to amend the table to substitute an operating parameter, measurement frequency, measurement location or normal operating range set out in the order if the Director is of the opinion that the amendment is appropriate to assess the effectiveness or operation of the equipment or system whose effectiveness or operation is being assessed by measuring the operating parameter.
- (4) Despite any other requirement of sections 19, 23 or 26, an Equipment Operating Parameter Summary Table, Direct Evacuation Control System Operating Parameter Summary Table or Ventilation Operating Parameter Summary Table shall be amended and maintained in accordance with an order made under subsection (3).

Equipment Operating Parameter Summary Table

- **19.** (1) A registered person shall ensure that a table titled "Equipment Operating Parameter Summary Table" is prepared and maintained in accordance with this section and section 18.
- (2) Column 3 of the table shall separately list each air pollution control device in use at the mini mill that is described in Column 3 of Table 10-19.
- (3) Columns 1 and 2 and 4 to 8 of the table shall contain the following information in respect of each air pollution control device listed in Column 3 of the table in accordance with subsection (2):
 - 1. Column 1 shall set out each originating source of emissions of registered contaminants controlled by the air pollution control device.
 - 2. Column 2 shall set out opposite each originating source set out in Column 1, each ventilation system that captures and conveys emissions from the originating source to the air pollution control device in Column 3 of the table.
 - 3. Column 4 shall set out the operating parameters to be used to assess the effectiveness of the air pollution control device in Column 3 of the table.
 - 4. Column 5 shall set out the measurement frequency for each operating parameter.

- 5. Column 6 shall set out the measurement location for each operating parameter.
- 6. Column 7 shall set out the normal operating range within which the air pollution control device is considered to be operating normally.
- 7. Column 8 shall set out for each operating parameter the circumstances in which notification must be given to the Ministry in accordance with section 22.
- (4) The information required to be set out in the Equipment Operating Parameter Summary Table by paragraphs 3 to 7 subsection (3) shall be determined in accordance with the text contained in Columns 4 through 7 of Table 10-19 that is set out opposite the related category of air pollution control device in Column 3 of that Table.
- (5) The information in the table shall be updated to reflect any material changes in the use or operation of air pollution control devices listed in Column 3 of the table, including a change to a source described in subsection 18 (1), no later than five days after the change is made.

Table 10-19: Equipment Operating Parameter Summary Table

Item	Column 1 Originating source	Column 2 Ventilatio n system	Column 3 Air Pollution Control Device	Column 4 Operating parameter	Column 5 Measurement frequency for the operating parameter	Column 6 Measurement location for the operating parameter	Column 7 Normal operating range for the operating parameter	Column 8 Notification circumstance s
1.	Originating source associated with baghouse	Ventilatio n systems	Baghouse	i. Differential pressure ii. Temperature iii. If the baghouse has a bag leak detection system, an operating parameter determined in accordance with a recommendati on from a source set out in subsection 18 (1) for each compartment of the baghouse	The measurement frequency for each operating parameter is continuous	i. Differential pressure is measured at the inlet and outlet of the baghouse. ii. Temperature is measured at the inlet of the baghouse. iii. If the baghouse. iii. If the baghouse has a bag leak detection system, the relevant operating parameter is measured at a location determined in accordance with a recommendat ion from a source set out in subsection 18 (1) for each compartment of the baghouse	The normal operating range for each operating parameter is determined in accordance with a recommendat ion from a source set out in subsection 18 (1)	i. Differential pressure is outside of the normal operating range for four continuous hours. ii. Temperature exceeds the upper end of the normal operating range for four continuous hours iii. The operating range for four continuous hours iii. The operating range for four continuous hours

Item	Column 1 Originating source	Column 2 Ventilatio n system	Column 3 Air Pollution Control Device	Column 4 Operating parameter	Column 5 Measurement frequency for the operating parameter	Column 6 Measurement location for the operating parameter	Normal operating range for the operating parameter	Column 8 Notification circumstance s
2.	Originating source associated with wet scrubber	Ventilatio n systems	Wet scrubber	i. Differential pressure ii. Scrubbing liquid flow rate iii. Velocity pressure	The measurement frequency for each operating parameter is continuous	The measurement location for each operating parameter is determined in accordance with a recommendat ion from a source set out in subsection 18 (1)	The normal operating range for each operating parameter is determined in accordance with a recommendat ion from a source set out in subsection 18 (1)	None
3.	Originating source associated with electrostatic precipitator	Ventilatio n systems	Electro- static precipitator	An operating parameter determined in accordance with a recommendati on from a source set out in subsection 18 (1)	The measurement frequency for the operating parameter is determined in accordance with a recommendat ion from a source set out in subsection 18 (1)	The measurement location for the operating parameter is determined in accordance with a recommendat ion from a source set out in subsection 18 (1)	The normal operating range for the operating parameter is determined in accordance with a recommendat ion from a source set out in subsection 18 (1)	None

Measurement of equipment operating parameters

- **20.** (1) A registered person shall ensure that the operating parameters set out in Column 4 of the Equipment Operating Parameter Summary Table are measured at the frequency and location set out for the operating parameter in Columns 5 and 6 of the table.
- (2) Despite subsection (1), a registered person is not required to measure an operating parameter set out in respect of an air pollution control device that has been in use for less than six months.
- (3) A registered person shall ensure that a record is made containing the following information for each measurement required to be taken under subsection (1):

- 1. The operating parameter being measured together with the air pollution control device to which the operating parameter relates.
- 2. The date on which the measurement was taken.
- 3. The value of the measurement.

Deviations from normal operating range, equipment operating parameters

- **21.** (1) Subject to subsection (2), for the purposes of this industry standard, a deviation from the normal operating range in respect of the operation of an air pollution control device listed in the Equipment Operating Parameter Summary Table has occurred if a measured value of the operating parameter taken under subsection 20 (1) is outside of the normal operating range as set out in Column 7 of the table.
- (2) Subsection (1) does not apply with respect to a value for a baghouse operating parameter if the operating parameter is the operating parameter required to be monitored for each compartment of the baghouse and the operating parameter was recorded during a bag cleaning cycle.
- (3) If a deviation described in subsection (1) has occurred, the registered person shall ensure that one or more operational adjustments are made in respect of the air pollution control device as soon as practicable such that the operational adjustments stop the deviation from continuing.
- (4) If an operational adjustment is required to be made under this section the registered person shall ensure that a record is made containing the following information:
 - 1. The operating parameter to which the operating adjustments relate.
 - 2. The air pollution control device for which the operating parameter was measured.
 - 3. The normal operating range for the operating parameter.
 - 4. The measurements that were outside of the normal operating range.
 - 5. The date, time and duration of the measurements that were outside of the normal operating range.
 - 6. An explanation of the suspected cause of measurements that were outside of the normal operating range.

- 7. A description of each operational adjustment made and the date each operational adjustment was completed.
- 8. The position title of each person who assigned a person to make an operational adjustment described in paragraph 7.

Notification of deviation from normal operating range, equipment operating parameters

- **22.** (1) If notification circumstances are set out for an operating parameter in an Equipment Operating Parameter Summary Table, the registered person shall ensure that a provincial officer is notified in writing as soon as practicable after the notification circumstances occur.
- (2) If notification is required under subsection (1) more than one time in a 24 hour period, the person may, instead of complying with subsection (1), notify a provincial officer in writing as soon as practicable after the end of the 24 hour period of the number of deviations that occurred during the period.

Direct Evacuation Control System Operating Parameter Summary Table

- **23.** (1) A registered person shall ensure that a table titled "Direct Evacuation Control System Operating Parameter Summary Table" is prepared and maintained in accordance with this section.
- (2) Column 1 of the table shall separately list each electric arc furnace at the mini mill unless pursuant to subsection 4 (11) the emissions from the operation of the electric arc furnace are not required to be captured and conveyed by a direct evacuation control system.
- (3) Columns 2 to 8 of the table shall contain the following information in respect of each electric arc furnace listed in Column 1 of the table in accordance with subsection (2):
 - 1. Column 2 shall set out the direct evacuation control system associated with the electric arc furnace and any additional ventilation systems that are connected to the direct evacuation control system.
 - 2. Column 3 shall set out each baghouse associated with the direct evacuation control system set out in Column 2 of the table.
 - 3. Column 4 shall set out the operating parameters to be used to assess the effectiveness of the direct evacuation control system set out in Column 2 of the table.

- 4. Column 5 shall set out the measurement frequency for each operating parameter.
- 5. Column 6 shall set out the measurement location for each operating parameter.
- 6. Column 7 shall set out the normal operating range within which the direct evacuation control system in Column 2 of the table is considered to be operating normally.
- (4) The information required to be set out in the Direct Evacuation Control System Operating Parameter Summary Table by paragraphs 3 to 6 of subsection (3) shall be determined in accordance with the text contained in Columns 5 to 8 of Table 10-23 set out for Item 1 of the table.
- (5) Following the information described in subsections (2) and (3), Column 3 of the table shall separately list the following pieces of equipment at the mini mill:
 - 1. An elbow associated with a bucket fed electric arc furnace at a new mini mill.
 - A continuous feed tunnel associated with a continuous fed electric arc furnace.
- (6) Columns 1 to 2 and 4 to 7 of the table shall contain the following information in respect of each piece of equipment listed in Column 3 of the table in accordance with subsection (5):
 - 1. Column 1 shall set out the electric arc furnace associated with the piece of equipment.
 - 2. Column 2 shall set out the direct evacuation control system associated with the piece of equipment.
 - 3. Column 4 shall set out the operating parameters to be used to assess the effectiveness of the direct evacuation control system set out in Column 2 of the table.
 - 4. Column 5 shall set out the measurement frequency for each operating parameter.
 - 5. Column 6 shall set out the measurement location for each operating parameter.

- 6. Column 7 shall set out the normal operating range within which the direct evacuation control system set out in Column 2 is considered to be operating normally.
- (7) The information required to be set out in the Direct Evacuation Control System Operating Parameter Summary Table by paragraphs 3 to 6 of subsection (6) shall be determined in accordance with the text contained in Columns 4 through 7 of Table 10-23 set out for,
 - (a) Item 2 of the table if the electric arc furnace is a bucket fed electric arc furnace; or
 - (b) Item 3 of the table if the electric arc furnace is a continuous fed electric arc furnace.
- (8) Following the information described in subsections (5) and (6), Column 3 of the table shall separately list each combustion chamber or cooling chamber in use at the mini mill.
- (9) Columns 1 to 2 and 4 to 7 of the table shall contain the following information in respect of each management method listed in Column 3 of the table in accordance with subsection (8):
 - 1. Column 1 shall set out the electric arc furnace associated with the management method.
 - 2. Column 2 shall set out the direct evacuation control system associated with the management method.
 - 3. Column 4 shall set out the operating parameters to be used to assess the effectiveness of the management method.
 - 4. Column 5 shall set out the measurement frequency for each operating parameter.
 - 5. Column 6 shall set out the measurement location for each operating parameter.
 - 6. Column 7 shall set out the normal operating range within which the management method is considered to be operating normally.
- (10) The information required to be set out in the Direct Evacuation Control System Operating Parameter Summary Table by paragraphs 3 to 6 of subsection (9) shall be determined in accordance with the text contained in Columns 4 through 7 of Table 10-

- 23 that is set out opposite the related category of management method in Column 3 of that Table.
- (11) The information in the table shall be updated to reflect any material changes in the use or operation of an electric arc furnace, direct evacuation control system or management method listed in Column 3 of the table, including a change to a source described in subsection 18 (1), no later than five days after the change is made.
- (12) Despite any other requirement of this section, the table shall be amended in accordance with a recommendation from a study referred to in section 14.

Table 10-23: Direct Evacuation Control System Operating Parameter Summary Table

Item	Column 1 Originating source	Column 2 Ventilatio n system	Column 3 Manageme nt method or other equipment	Column 4 Operating parameter	Column 5 Measurement frequency for the operating parameter	Column 6 Measurement location for the operating parameter	Normal operating range for the operating parameter
1.	Electric arc furnace	Direct evacuation control system and other ventilation systems connected to the direct evacuation control system	Baghouse	Static pressure of the electric arc furnace head space	Continuous during melting and refining stages of electric arc furnace operation	A location determined in accordance with a recommendat ion from a source set out in subsection 18 (1)	The normal operating range for the operating parameter is determined in accordance with a recommendation from a source set out in subsection 18 (1)
2.	Electric arc furnace	Direct evacuation control system	Elbow associated with a bucket fed electric arc furnace at a new mini mill	Oxygen, carbon monoxide and carbon dioxide flow rate	Continuous	At the elbow	The normal operating range for the operating parameter is determined in accordance with a recommendation from a source set out in subsection 18 (1)

Item	Column 1 Originating source	Column 2 Ventilatio n system	Column 3 Manageme nt method or other equipment	Column 4 Operating parameter	Column 5 Measurement frequency for the operating parameter	Column 6 Measurement location for the operating parameter	Normal operating range for the operating parameter
3.	Electric arc furnace	Direct evacuation control system	Continuous feed tunnel associated with a continuous fed electric arc furnace	Temperature	Continuous	Outlet of the continuous feed tunnel	The normal operating range for the operating parameter is determined in accordance with a recommendation from a source set out in subsection 18 (1)
4.	Electric arc furnace	Direct evacuation control system	Combustio n chamber	Temperature	Continuous	Outlet of the combustion chamber	The normal operating range for the operating parameter is determined in accordance with a recommendation from a source set out in subsection 18 (1)
5.	Electric arc furnace	Direct evacuation control system	Cooling chamber	Temperature	Continuous	Inlet and outlet of cooling chamber. If temperature cannot be measured at the inlet, then at a location where the temperature is representative of the cooling chamber inlet temperature.	The normal operating range for the operating parameter is determined in accordance with a recommendation from a source set out in subsection 18 (1)

Measurement of direct evacuation control system operating parameters

- **24.** (1) A registered person shall ensure that the operating parameters set out in Column 4 of the Direct Evacuation Control System Operating Parameter Summary Table are measured at the frequency and location set out for the operating parameter in Columns 5 and 6 of the table.
- (2) Despite subsection (1), a registered person is not required to measure an operating parameter in each of the following circumstances:
 - 1. The operating parameter is set out in accordance with subsection 23 (3) and the related direct evacuation control system has been in use for less than six months.
 - 2. The operating parameter is set out in accordance with subsection 23 (9) and the related management method has been in use for less than six months.
- (3) A registered person shall ensure that a record is made containing the following information for each measurement required to be taken under subsection (1):
 - 1. The operating parameter being measured together with the management method to which the operating parameter relates.
 - 2. The date on which the measurement was taken.
 - 3. The value of the measurement.

Deviations from normal operating range, direct evacuation control system operating parameters

- **25.** (1) For the purposes of this industry standard, a deviation from the normal operating range in respect of the operation of a direct evacuation control system or management method listed in the Direct Evacuation Control System Operating Parameter Summary Table has occurred if a measured value of the operating parameter taken under subsection 24 (1) is outside of the normal operating range as set out in Column 7 of the table.
- (2) If a deviation described in subsection (1) has occurred, the registered person shall ensure that one or more operational adjustments are made in respect of the direct evacuation control system or management method as soon as practicable such that the operational adjustments stop the deviation from continuing.
- (3) If an operational adjustment is required to be made under this section the registered person shall ensure that a record is made containing the following information:

- 1. The operating parameter to which the operating adjustments relate.
- 2. The management method for which the operating parameter was measured.
- 3. The normal operating range for the operating parameter.
- 4. The measurements that were outside of the normal operating range.
- 5. The date, time and duration of the measurements that were outside of the normal operating range.
- The explanation of the suspected cause of measurements that were outside of the normal operating range.
- 7. A description of each operational adjustment made and the date each operational adjustment was completed.
- 8. The position title of each person who assigned a person to make an operational adjustment described in paragraph 7.

Ventilation Operating Parameter Summary Table

- **26.** (1) A registered person shall ensure that a table titled "Ventilation Operating Parameter Summary Table" is prepared and maintained in accordance with this section.
- (2) Column 3 of the table shall separately list each baghouse fan in use at the mini mill.
- (3) Columns 1 to 2 and 4 to 7 of the table shall contain the following information in respect of each fan listed in Column 3 of the table:
 - 1. Column 1 shall set out each originating source from which emissions of registered contaminants are controlled by the baghouse in which the fan is located.
 - 2. Column 2 shall set out opposite each originating source set out in Column 1, each ventilation system that captures and conveys emissions from the originating source to the baghouse in which the fan is located.
 - 3. Column 4 shall set out the baghouse in which the fan is located.
 - 4. Column 5 shall set out the operating parameter to be used to assess the effectiveness of the fan.
 - 5. Column 6 shall set out the measurement frequency for each operating parameter.

- 6. Column 7 shall set out the measurement location for each operating parameter.
- 7. Column 8 shall set out the normal operating range within which the fan is considered to be operating normally.
- (4) The information required to be set out in the Ventilation Operating Parameter Summary Table by paragraphs 4 to 7 of subsection (3) shall be determined in accordance with the text contained in Columns 5 to 8 of Table 10-26 set out for.
 - (a) Item 1 of the table if the related baghouse is a positive pressure baghouse; or
 - (b) Item 2 of the table if the related baghouse is a negative pressure baghouse.
- (5) Following the information described in subsection (2), Column 3 of the table shall separately list each critical duct section at the mini mill.
- (6) Columns 1 to 2 and 4 to 7 of the table shall contain the following information in respect of each critical duct section listed in Column 3 of the table:
 - 1. Column 1 shall set out each originating source served by the critical duct.
 - 2. Column 2 shall set out the ventilation system in which the critical duct section is located.
 - 3. Column 4 shall set out each air pollution control that the ventilation system set out in Column 2 conveys contaminants to.
 - 4. Column 5 shall set out the operating parameter to be used to assess the effectiveness of the ventilation system set out in Column 2.
 - 5. Column 6 shall set out the measurement frequency for each operating parameter.
 - 6. Column 7 shall set out the measurement location for each operating parameter.
 - 7. Column 8 shall set out the normal operating range within which the ventilation system in Column 2 is considered to be operating normally.
- (7) The information required to be set out in the Ventilation Operating Parameter Summary Table by paragraphs 4 to 7 of subsection (6) shall be determined in accordance with the text contained in Columns 5 to 8 of Table 10-26 for item 3 of the table.

(8) The information in the table shall be updated to reflect any material changes in the use or operation of ventilation systems listed in Column 3 of the table or electric arc furnaces listed in Column 1 of the table, including a change to a source described in subsection 18 (1), no later than five days after the change is made.

Table 10-26: Ventilation Operating Parameter Summary Table

Item	Column 1 Originating source	Column 2 Ventilation systems	Column 3 Baghouse fan or critical duct section	Air pollution control device	Column 5 Operating parameter	Column 6 Measurement frequency for the operating parameter	Column 7 Measurement location for the operating parameter	Column 8 Normal operating range for the operating parameter
1.	Originating sources associated with baghouse	Ventilation systems	Baghouse fan	Positive pressure baghouse	Static pressure	Continuous	Fan inlet and outlet	The normal operating range for the operating parameter is determined in accordance with a recommendat ion from a source set out in subsection 18 (1)
2.	Originating sources associated with baghouse	Ventilation systems	Baghouse fan	Negative pressure baghouse	Static pressure	Continuous	Fan inlet	The normal operating range for the operating parameter is determined in accordance with a recommendat ion from a source set out in subsection 18 (1)

Item	Column 1 Originating source	Column 2 Ventilation systems	Column 3 Baghouse fan or critical duct section	Air pollution control device	Column 5 Operating parameter	Column 6 Measurement frequency for the operating parameter	Column 7 Measurement location for the operating parameter	Normal operating range for the operating parameter
3.	Originating sources served by critical duct section	Ventilation system in which critical duct is located	Critical duct section	Associated air pollution control device	Static pressure	Continuous	In critical duct sections	The normal operating range for the operating parameter is determined in accordance with a recommendat ion from a source set out in subsection 18 (1)

Measurement of ventilation operating parameters

- **27.** (1) A registered person shall ensure that the operating parameters set out in Column 4 of the Ventilation Operating Parameter Summary Table are measured at the frequency and location set out for the operating parameter in Columns 5 and 6 of the table.
- (2) Despite subsection (1), a registered person is not required to measure an operating parameter set out in respect of a critical duct if the ventilation system in which the critical duct is located has been in use for less than six months.
- (3) A registered person shall ensure that a record is made containing the following information for each measurement required to be taken under subsection (1):
 - 1. The operating parameter being measured together with the baghouse fan or critical dust to which the operating parameter relates.
 - 2. The date on which the measurement was taken.
 - 3. The value of the measurement.

Deviations from normal operating range, ventilation operating parameters

28. (1) For the purposes of this industry standard, a deviation from the normal operating range in respect of the operation of a fan or ventilation system listed in the Ventilation Operating Parameter Summary Table has occurred if a measured value of

the operating parameter taken under subsection 27 (1) is outside of the normal operating range as set out in Column 7 of the table.

- (2) If a deviation described in subsection (1) has occurred, the registered person shall ensure that one or more operational adjustments are made in respect of the relevant fan or ventilation system as soon as practicable such that the operational adjustments stop the deviation from continuing.
- (3) If an operational adjustment is required to be made under this section the registered person shall ensure that a record is made containing the following information:
 - 1. The operating parameter to which the operating adjustments relate.
 - 2. The equipment whose operation is being assessed by measuring the operating parameter.
 - 3. The normal operating range for the operating parameter.
 - 4. The measurements that were outside of the normal operating range.
 - 5. The date, time and duration of the measurements that were outside of the normal operating range.
 - 6. The explanation of the suspected cause of measurements that were outside of the normal operating range.
 - 7. A description of each operational adjustment made and the date each operational adjustment was completed.
 - 8. The position title of each person who assigned a person to make an operational adjustment described in paragraph 7.

PART VII - INSPECTION AND MAINTENANCE

Inspection and Maintenance Summary Table

- **29.** (1) A registered person shall ensure that a table titled "Inspection and Maintenance Summary Table" is prepared and maintained in accordance with this section.
- (2) Column 1 of the Inspection and Maintenance Summary Table shall separately list each piece of equipment in use at the mini mill that is described in Column 1 of Table 10-29.

- (3) Columns 2 and 3 of the Inspection and Maintenance Summary Table shall contain the following information in respect of each piece of equipment listed in the table:
 - 1. The inspection frequency.
 - 2. The maintenance objectives taken from Table 10-29 that are set out opposite the related category of equipment and inspection frequency.
- (4) The information required to be set out in the Inspection and Maintenance Summary Table by paragraph 1 of subsection (3) shall be determined by applying the text contained in Column 2 of Table 10-29 that is set out opposite the related category of equipment in Column 1 of that Table.
- (5) Where an inspection frequency may be determined in accordance with a recommendation from a source set out in this subsection, the frequency shall be taken from one of the following sources:
 - 1. An operating and maintenance manual prepared by the related equipment manufacturer.
 - 2. Written instructions provided by the related equipment supplier or related equipment manufacturer.
 - 3. Written advice from a licensed engineering practitioner that has relevant experience with respect to the subject matter of the recommendation, together with the rationale for the advice.
- (6) If an inspection frequency set out in the Inspection and Maintenance Summary Table is determined in accordance with a recommendation from a source set out in subsection (5), the Director may order a registered person to amend the Inspection and Maintenance Summary Table to substitute an inspection frequency set out in the order if the Director is of the opinion that the amendment is necessary to,
 - (a) prevent, minimize or reduce the discharge of a registered contaminant from a piece of equipment; or
 - (b) ensure the normal operation of any equipment described in Column 1 of Table 10-29.
- (7) A registered person shall ensure that where there has been a change to the operation of the mini mill or the application of this industry standard to the mini mill that would necessitate an amendment to an Inspection and Maintenance Summary Table if

subsection (2) or (3) were applied, that the Table is updated in accordance with this section within 30 days.

- (8) Despite any other requirement of this industry standard, a registered person shall ensure that an Inspection and Maintenance Summary Table is amended and applied in accordance with an order made under subsection (6).
 - (9) For the purposes of this section,

"maintenance shut down" means when melt shop operation is stopped in order to perform maintenance on melt shop equipment and ventilation systems.

TABLE 10-29: Inspection and Maintenance Summary Table

Item	Column 1 Equipment	Column 2 Inspection Frequency	Column 3 Maintenance Objective
1.	Baghouse	Monthly	i. No holes or other visual evidence of wear in the baghouse housing ii. No visual evidence of dents or dust accumulation that may cause flow constrictions in air conduits within the baghouse iii. Bag leak detection system, if any, is working properly iv. Dust hopper alarm, if any, is working properly
2.	Baghouse that does not have a dust hopper alarm	The inspection frequency shall be determined in accordance with a recommendation from a source set out in subsection 29 (5)	Dust accumulation within dust hopper is not likely to overflow

Item	Column 1 Equipment	Column 2 Inspection Frequency	Column 3 Maintenance Objective
			i. No visual evidence of damage to the bags, cleaning mechanism components or dampers
			ii. Spare parts are available if needed
		At least one time in every six-month period	iii. No visual evidence of erosion of conveyor system housing, including airlock
3.	Baghouse		iv. No unusual vibration from the fan or blower dust removal system
			v. No sounds that may indicate the improper operation of the fan or blower dust removal system
			vi. All bearings in the fan and blower dust removal system are tested to ensure they are adequately lubricated
			i. No visual evidence of corrosion on any weld, joint or seal
			ii. No sign of excessive wear on baffle plates and tube sheets
4.	Baghouse	Yearly	iii. All fasteners are tested to ensure they are tightly in place
			iv. No visual evidence of dust accumulation in ducts within the baghouse

Item	Column 1 Equipment	Column 2 Inspection Frequency	Column 3 Maintenance Objective
5.	Continuous feed tunnel of a direct evacuation control system	Yearly	i. No holes or other visual evidence of wear in the continuous feed tunnel housing ii. No dents in the continuous feed tunnel housing that may cause a flow constriction
6.	Combustion chamber in a direct evacuation control system	Yearly	 i. No holes or other visual evidence of wear in the combustion chamber walls ii. No dents in the combustion chamber walls that may cause flow constrictions iii. No evidence of water leaks from water-cooled panels
7.	Combustion chamber in a direct evacuation control system	Each maintenance shut down of the related melt shop	No excessive dust accumulation that may cause flow constrictions
8.	Cooling chamber in a direct evacuation control system	Yearly	 i. No holes or other visual evidence of wear in the quench chamber walls ii. No dents in the combustion chamber walls that may cause flow constrictions iv. No evidence of low pressure in water system serving the piping system of the spray nozzles

Item	Column 1 Equipment	Column 2 Inspection Frequency	Column 3 Maintenance Objective
9.	Cooling chamber in a direct evacuation control system	Once every six month period	Spray nozzles are performing optimally
10.	Cooling chamber in a direct evacuation control system	Each maintenance shut down of the related melt shop	No excessive dust accumulation in the chamber that may cause flow constrictions
11.	Ducts that are part of an emissions management system that captures emissions from an electric arc furnace	Yearly	 i. No holes or other visual evidence of wear in the ducts ii. No dents in the ducts that may cause flow constrictions iii. No visual evidence of leaks caused by holes in expansion joints iv. No visible reduction in the thickness of the critical ducts v. Expansion joints are free of damage and performing as intended
12.	Accessible ducts that are part of an emissions management system that captures emissions from an electric arc furnace	Each maintenance shut down of the related melt shop	No excessive dust accumulation in the ducts that may cause flow constrictions

Item	Column 1 Equipment	Column 2 Inspection Frequency	Column 3 Maintenance Objective
13.	Dampers located on critical ducts that are part of an emissions management system that captures emissions from an electric arc furnace	Once in every four month period	Dampers are positioned in accordance with the design of the ventilation system
14.	Fans in an emissions management system that captures emissions from an electric arc furnace	Monthly if the fan is a positive pressure fan or every 6 months if the fan is a negative pressure fan	i. Fan bearings are free of excessive wear and damage ii. Belts, if any, and impellers in the fan are not loose and are free of wear and damage iii. Impellers in the fan are free of dust accumulation iv. Impellers in the fan are properly balanced v. If the fan is a main fan, vibration from the fan when operating is within manufacturer's specifications
15.	Fans in an emissions management system that captures emissions from an electric arc furnace	Monthly	Oil or grease gauge shows that the oil or grease level of the fan motor is acceptable

Item	Column 1 Equipment	Column 2 Inspection Frequency	Column 3 Maintenance Objective
16.	A monitoring device used to take a measurement required by this industry standard	Yearly	Monitoring device is measuring accurately

Inspection and maintenance activities

- **30.** (1) A registered person shall ensure that each piece of equipment set out in Column 1 of the Inspection and Maintenance Summary Table is inspected at the frequency set out for the piece of equipment to confirm whether the maintenance objectives set out for the piece of equipment and related inspection frequency have been met.
- (2) A registered person shall ensure that a record is made containing the following information in respect of each inspection conducted for the purposes of this section:
 - 1. The equipment inspected.
 - 2. The date of the inspection.
 - 3. The maintenance objectives that were not met, if any.
 - 4. The position title of each person who assigned a person to perform the inspection.
- (3) On or before the fifth day of each month a registered person shall ensure that the records required by subsection (2) are reviewed to determine if each inspection required by this section to have been performed in the preceding month was performed at the required frequency.
- (4) If it is determined that an inspection was not performed at the required frequency, the registered person shall ensure that a record is made containing the following information:
 - 1. A description of the inspection that was to be performed, including the equipment that was to be the subject of the inspection.
 - 2. The date on which the inspection was to be performed.

- 3. The reason the inspection was not performed at the required frequency.
- 4. A description of the actions to be taken to ensure future inspections will be performed at the required frequency.
- 5. The position title of each personnel who assigned a person to take an action mentioned in paragraph 4.

Deviations – inspection and maintenance

- **31.** (1) If a maintenance objective listed in the Inspection and Maintenance Summary Table is confirmed to have not been met during an inspection required under section 30, the registered person shall ensure that one or more actions are taken without delay until the maintenance objective is met.
- (2) If an action is required to be taken under subsection (1) the registered person shall ensure that a record is made containing the following information in respect of each action taken:
 - 1. The equipment inspected.
 - 2. The date of the inspection.
 - 3. The maintenance objective that was not met.
 - 4. The reason the maintenance objective was not met.
 - 5. A description of each action taken, and that will be taken if applicable, to ensure the maintenance objective or objectives is met.
 - 6. The date on which each action mentioned in paragraph 5 was or will be taken.
 - 7. The position title of each person who required another person to take an action that was taken or will be taken.

Re-occuring malfunctions

- **32.** (1) If a piece of equipment listed in the Inspection and Maintenance Summary Table malfunctions in the same way more than one time in any six-month period, the registered person shall ensure that the highest ranking individual at the mini mill is notified, in writing, of the malfunction no later than five days after the second malfunction.
- (2) If notification is required to be made under subsection (1), the registered person shall ensure that the ventilation coordinator, as soon as practicable after the date of the

second malfunction, prepares and implements a plan to address and prevent a recurrence of the malfunction.

Part VIII - Slag Management Area Requirements

Slag cooling

- **33.** A registered person shall use at least one of the following methods to reduce the discharge of particulate matter from slag that is being cooled:
 - 1. Shielding the slag from wind through the use of a wind barrier.
 - 2. Surrounding the slag on three sides with walls that are higher than the slag.
 - 3. Cooling the slag in a half dome.
 - 4. Cooling the slag in an enclosed building.
 - 4.1 Using a method that ensures that the slag has sufficient moisture to prevent the discharge of particulate matter into the air.
 - 5. Using a method that, in the opinion of the Director, reduces the discharge of particulate matter into the air from the slag.

Slag storage

- **34.** (1) A registered person shall ensure that when cooled slag is being stored the surface of the slag contains sufficient moisture to prevent the discharge of particulate matter into the air.
- (2) A registered person shall use at least one of the following methods to reduce the discharge of particulate matter from cooled slag that is being stored:
 - 1. Shielding the slag from the wind through the use of a wind barrier.
 - 2. Storing the slag such that its longitudinal axis is parallel to the prevailing wind direction.
 - 3. Surrounding the stored slag on three sides with walls that are higher than the slag.
 - Storing the slag in a half dome.
 - 5. Using a method that, in the opinion of the Director, reduces the discharge of particulate matter into the air from the stored slag.

(3) Subsection (2), does not apply to an existing mini mill on any day before July 1, 2021.

Slag conveyors

- **35.** (1) A registered person shall ensure that a conveyor that is used to handle slag,
 - (a) is located inside an enclosed building,
 - (b) has a covered conveyor belt, or
 - (c) has a curtained conveyor belt
- (2) Subsection (1) does not apply if one of the following circumstances apply:
 - 1. It is before January 1, 2021 and the conveyor only handles slag that contains sufficient moisture to prevent the discharge of particulate matter into the air.
 - 2. It is on or after January 1, 2021, every point on the conveyor is one kilometre or more from a place described in subsection 1 (5) and the conveyor was either:
 - i. installed before January 1, 2021 and uses water spray equipment that causes the slag to contain sufficient moisture to prevent the discharge of particulate matter into the air, or
 - ii. installed on or after January 1, 2021 and uses adjustable water spray equipment together with a variable speed conveyor that causes the slag to contain sufficient moisture to prevent the discharge of particulate matter into the air.
- (3) Water spray equipment used for the purposes of subparagraphs 2i or ii of subsection (2) is required to be operated when the conveyor is in use, unless it is a cold weather day.
- (4) This section does not apply to a conveyor attached to a vehicle except where the conveyor is used in conjunction with a crusher or screener.

Slag processing

- **36.** (1) Subject to subsection (2), a registered person shall ensure that slag is not crushed or screened at a location outside of an enclosed building unless,
 - (a) the slag that is crushed or screened contains sufficient moisture to prevent the discharge of particulate matter into the air during the crushing or screening process;

- (b) the wind speed is less than the maximum wind speed set out in the Best Practices Procedure for the crushing or screening of slag in the slag management area; and
- (c) the registered person uses at least one of the following methods to minimize the discharge of particulate matter from the crusher or screener,
 - (i) a wind barrier,
 - (ii) walls that surround the crusher or screener on three sides and are at least the height of the crusher or screener,
 - (iii) the crusher or screener is used inside a half dome, or
 - (iv) a method that, in the opinion of the Director, reduces the discharge of particulate matter into the air from the crushing or screening.
- (2) Subsection (1) does not apply in respect of a crusher or screener if,
 - (a) particulate matter discharged from the crushing or screening is captured and conveyed to a baghouse; and
 - (b) the registered person uses at least one of the following methods to minimize the discharge of particulate matter from the crusher or screener:
 - (i) a wind barrier,
 - (ii) walls that surround the crusher or screen on three sides and are at least the height of the crusher or screener,
 - (iii) the crusher or screener is used inside a half dome, or
 - (iv) a method that, in the opinion of the Director, reduces the discharge of particulate matter into the air from the crushing or screening.
- (3) Despite subsection (1), clauses (1) (a) and (c) do not apply on any day before July 1, 2021.

Slag loading

- **37.** If slag is loaded into a vehicle for shipment outside of an enclosed building, , a registered person shall ensure that,
 - (a) the slag contains sufficient moisture to prevent the discharge of particulate matter into the air; and

- (b) at least one of the following requirements is satisfied:
 - the wind speed is less than the maximum wind speed set out in the Best Practices Procedure for the loading of slag into a vehicle for shipment in the slag management area;
 - (ii) a wind barrier is used to minimize the discharge of particulate matter from the slag; or
 - (iii) the drop height during the loading is less than the maximum drop height set out in the Best Practices Procedure for the loading of slag into a vehicle for shipment.

Slag management area - records

- **38.** A registered person shall ensure that each day that water is applied to slag in a slag management area for the purposes of this Part a record is made containing the following information:
 - 1. The date.
 - 2. The unique identifiers assigned in accordance with section 60 for the slag management area and for each area within the slag management area in which water is applied for the purposes of this Part.
 - 3. The volume of water applied within the slag management area on the day.
 - 4. The title of each personnel who assigned a person to apply water to the slag.

Part IX – Alloy additive storage and handling requirements

Alloy additive storage

- **39.** (1) A registered person shall ensure that alloy additive that may contain or discharge a registered contaminant is stored in accordance with this section.
- (2) A person registered in respect of a new mini mill shall ensure that alloy additive is stored inside an enclosed building.
- (3) A person registered in respect of an existing mini mill shall ensure that alloy additive is stored,
 - (a) in a below grade pit such that the height of the stored alloy additive is below the top of the pit;
 - (b) inside an enclosed container; or

(c) inside an enclosed building.

Alloy additive conveyors

40. On and after January 1, 2021, a registered person shall ensure that any part of a conveyor that is used to handle alloy additive that may contain or discharge a registered contaminant and is not located inside an enclosed building, has a conveyor belt that is covered or curtained.

Alloy additive handling

- **41.** (1) A person registered in respect of a new mini mill shall ensure that alloy additive that may contain or discharge a registered contaminant is only transferred or otherwise handled inside an enclosed building.
- (2) A person registered in respect of an existing mini mill shall ensure that at least one of the following requirements is met when alloy additive that may contain or discharge a registered contaminant is unloaded from of a vehicle at the mini mill:
 - 1. The unloading takes place inside an enclosed building.
 - 2. The alloy additive is transferred from the vehicle inside an enclosed container.
 - 3. The alloy additive is transferred from the vehicle directly into a below grade pit.
 - (4) This section does not apply in the following circumstances:
 - 1. The handling of alloy additive by a conveyor.
 - 2. The handling of an enclosed container containing alloy additive.

Part X – Scrap Management

Scrap purchasing

- **42.** (1) A registered person shall ensure that a written procedure is developed and implemented to,
 - (a) reduce the amount plastic, oils and other chloride containing materials contained in purchased scrap metal; and
 - (b) perform periodic inspections of purchased scrap metal for plastics, oils and other chloride containing materials.
- (2) The written procedure required by subsection (1) shall specify an amount plastic, oils and other chloride containing materials permissible in purchased scrap metal.

- (3) A registered person shall ensure that if purchased scrap metal is determined to contain plastic, oils or other chloride containing materials in excess of the amount specified in the written procedure, the scrap metal is not processed at the mini mill.
- (4) A registered person shall keep a record of any purchasing documents that show the implementation of the procedure referred to in subsection (1).

Scrap metal sorting

- **43.** A registered person shall ensure that at least one of the following requirements are met when scrap metal is sorted at the mini mill outside of an enclosed building:
 - 1. The wind speed is less than the maximum wind speed set out in the Best Practices Procedure for the location and the material being handled.
 - 2. A wind barrier is used to minimize the discharge of particulate matter from the scrap sorting area.

Torch cutting scrap metal

- **44.** (1) A registered person shall ensure that torch cutting of scrap metal,
 - (a) takes place inside an enclosed building; and
 - (b) the discharges from the torch cutting are captured and conveyed to a baghouse.
- (2) Despite subsection (1), torch cutting of scrap metal is not required to meet the requirements of subsection (1) if the scrap being cut is too large for the torch cutting to be performed inside an enclosed building.
- (3) A registered person shall ensure that torch cutting of scrap metal that, in accordance with subsection (2), may be performed outside an enclosed building, meets at least one of the following requirements:
 - 1. The wind speed is less than the maximum wind speed set out in the Best Practices Procedure for the torch cutting area.
 - 2. A wind barrier is used to minimize the discharge of particulate matter from the torch cutting area.
 - 3. The torch cutting takes place within a mobile structure which covers the part of scrap metal that is being torch cut and the discharges from the torch cutting are captured and conveyed to a baghouse.

- (4) For each item of scrap metal that was not torch cut inside an enclosed building, a registered person shall ensure that a record is made of the following information:
 - 1. The date, time and duration that torch cutting took place outside of an enclosed building.
 - 2. A description of the size of the scrap that could not be cut inside.
 - 3. A description of any steps taken to prevent or minimize the discharge of a registered contaminant set out in Appendix 10-C (Metals) into the air in the time that the torch cutting took place outside of an enclosed building.
- (5) If a mini mill receives a complaint regarding the discharge of particulate matter in relation to torch cutting of scrap metal outside of an enclosed building, the registered person shall ensure an operational adjustment is made to reduce the likelihood of receiving a similar complaint in the future.
 - (6) This section does not apply before July 1, 2021.

Scrap metal shredding

- **45.** (1) A registered person shall ensure that a shredder used to shred scrap metal is operated in accordance with the following requirements:
 - 1. The shredder is operated inside an enclosed building.
 - 2. The shredder is equipped with a water spray system and the system is in operation at all times that the shredder is operated.
 - 3. Particulate matter discharged from the z-box is conveyed to a baghouse.
- (2) A registered person shall ensure that each day a shredder that complies with paragraph 2 of subsection (1) is operated, a record is made of the volume of water sprayed on the shredder on that day.

Shredder fluff storage

- **46.** A registered person shall ensure that shredder fluff is stored inside an enclosed building unless at least one of the following requirements are met:
 - 1. The stored shredder fluff is shielded from the wind through the use of a wind barrier.
 - 2. The shredder fluff is stored such that its longitudinal axis is parallel to the prevailing wind direction.

- 3. The stored shredder fluff is surrounded by walls on three sides and is below the height of the lowest wall.
- 4. The shredder fluff is stored inside a half dome.
- 5. The stored shredder fluff contains sufficient moisture to prevent the discharge of particulate matter into the air.
- 6. The stored shredder fluff is protected from the wind by a method that, in the opinion of the Director, reduces the discharge of particulate matter into the air from the stored shredder fluff.

Part XI - Roads

Signs, requirement to post

- **47.** A registered person shall ensure that one or more signs indicating the following are posted so that they are visible to each direction of travel on each road at the mini mill:
 - 1. The maximum speed that a vehicle may travel on the road, in kilometres per hour.
 - A phone number that can be used to contact the mini mill in respect of particulate matter discharged to air from the road or vehicles travelling on the road.

Vehicles using roads – requirements

- **48.** A registered person shall ensure that each vehicle carrying slag, alloy additive or shredder fluff in an unenclosed truck bed meets the following requirements while travelling on a road at the mini mill:
 - 1. The vehicle does not exceed the speed limit indicated on a sign required under section 47.
 - 2. If the vehicle is carrying slag or alloy additive, the slag or alloy additive is covered
 - 3. If the vehicle is carrying shredder fluff, at least one of the following requirements are met:
 - No shredder fluff is visible above the top of the portion of the vehicle in which the shredder fluff is carried
 - ii. The shredder fluff is covered.

iii. The shredder fluff contains sufficient moisture to prevent the discharge of particulate matter into the air.

New roads

- **49.** (1) A registered person shall ensure that a road constructed at the mini mill on or after January 1, 2021 is paved with a layer or layers of asphalt, concrete or asphalt emulsion if any part of the road is located less than one kilometre from a place described in subsection 1 (5).
- (2) Subsection (1) does not apply to a segment of road that is regularly used by overweight vehicles.
 - (3) For the purposes of this section,

"overweight vehicle" means a vehicle that is prohibited from being operated on a highway by Part VIII of the Highway Traffic Act.

Road maintenance

- **50.** (1) A registered person shall ensure that the following actions are undertaken in respect of each road at the mini mill:
 - 1. For each part of a road that is paved,
 - i. vacuum the road using a vacuum truck at a frequency that is equal to or greater than the minimum frequency recorded in the Best Practices Procedure; or
 - ii. wash the road using high pressure water at a frequency that is equal to or greater than the minimum frequency recorded in the Best Practices Procedure.
 - 2. For each part of a road that is unpaved,
 - apply chemical dust suppressant or water to any part of a road that is unpaved at a frequency that is equal to or greater than the minimum frequency recorded in the Best Practices Procedure; and
 - ii. compact, grade or cover the surface of the road with aggregate material at a frequency that is equal to or greater than the minimum frequency recorded in the Best Practices Procedure.
- (2) A registered person shall ensure that a record is made containing the following information in respect of each road at the mini mill:

- 1. The date the road is vacuumed or washed.
- 2. The date chemical dust suppressant or water is applied to it and the quantity applied.
- 3. The date the surface is compacted, graded or aggregate material is added.
- 4. The date the road is resurfaced or paved.

Part XII - Outdoor Originating Source and Meteorological Monitoring

Outdoor Originating Source Monitoring Parameter Summary Table

- **51.** (1) A registered person shall ensure that a table titled "Outdoor Originating Source Monitoring Parameter Summary Table" is prepared and maintained in accordance with this section.
- (2) Column 1 of the table shall separately list the following originating sources at the mini mill together with their related unique identifiers assigned in accordance with section 60:
 - 1. Slag management areas.
 - 2. Alloy additive management areas.
 - 3. Areas where scrap metal is sorted.
 - 4. Areas where shredder fluff is stored.
 - Paved and unpaved roads.
 - (3) Subsection (2) does not apply to the following:
 - 1. Areas within an enclosed building or structure.
 - 2. Areas that are protected by a structure with a roof and at least three sides or a half dome.
- (4) Column 2 of the table shall contain the management methods described in the Best Practices Table that are used in respect of each originating source listed in the table.
- (5) Columns 3 to 6 of the table shall contain the following information taken from a plan approved under section 52 in respect of each originating source in the table:

- 1. The monitoring or sampling method or methods to be used to assess the effectiveness of the related management methods listed in accordance with subsection (4).
- 2. The parameter to be monitored or sampled.
- 3. The locations where monitoring or sampling will be undertaken.
- 4. The measurement frequency for each location.
- (6) Column 7 of the table shall, for each location where monitoring or sampling will be undertaken, contain the annual normal operating range or monthly normal operating ranges for the parameter determined in accordance with subsection (10) within which the related management methods listed in accordance with subsection (4) are considered to be functioning such that they are minimizing or reducing the discharge of a registered contaminant.
 - (7) For the purposes of paragraph 2 of subsection (5),
 - (a) either particulate matter loading or particulate matter concentration shall be used as the parameter to assess management methods related to an originating source that is not a road;
 - (b) silt content, particulate matter loading or particulate matter concentration shall be used as the parameter to assess management methods related to an unpaved road; and
 - (c) silt loading, particulate matter loading or particulate matter concentration shall be used as the parameter to assess management methods related to a paved road.
 - (8) For the purposes of paragraph 4 of subsection (5),
 - (a) particulate matter loading and particulate matter concentration shall be measured for the months of April, May, June, July, August, September and October; and
 - (b) silt content and silt loading shall be measured at least four times in the period beginning April 1 and ending October 31.
- (9) Despite subsection (8), silt content or silt loading may be measured less than four times but no fewer than two times in the period beginning April 1 and ending October 31 in respect of a sampling location, but only if the weather conditions during that period

were such that it was not practical to take more than two samples and a confirmation record has been made to that effect.

- (10) For the purposes of subsection (6), a normal operating range for a monitoring or sampling location shall be determined in accordance with the following rules:
 - 1. If the parameter measured is particulate matter loading or particulate matter concentration a separate normal operating range for the monitoring location shall be determined for each of April, May, June, July, August, September, and October, and the upper value of the monthly normal operating range shall be determined by multiplying 1.34 by the lowest three-year rolling average that can be determined from the monthly averages for the respective month that are calculated using measurements from the following sources:
 - i. Measurements for the month taken at the monitoring location under section 53.
 - ii. Measurements for the month for the monitoring location that are contained in alternative monitoring data that is required in a plan approved under section 52 to be used for the purposes of determining the upper value of the operating range.
 - 2. If the upper value of a monthly normal operating range cannot be determined for the purposes of paragraph 1 because the measurements to be considered in respect of that month contain less than three consecutive years of particulate matter loading or particulate matter concentration measurements, the text "not applicable" shall be entered into Column 7 instead of a normal operating range for that month.
 - 3. If the parameter measured is silt content or silt loading an annual normal operating range for the sampling location shall be determined and the upper value of the annual normal operating range shall be determined by multiplying 1.34 by the lowest three-year rolling average that can be determined using annual averages from the following sources:
 - i. Annual averages calculated for the sampling location under section 53.
 - ii. Annual average calculated for the sampling location using measurements that are contained in alternative monitoring data that is required in a plan approved under section 52 to be used for the purposes of determining the upper value of the operating range.

- If the upper value of an annual normal operating range cannot be determined for the purposes of paragraph 3 because the annual averages to be considered in accordance with that paragraph contain less than three consecutive years of silt content or silt loading annual averages, the text "not applicable" shall be entered into Column 7 instead of a normal operating range.
- (11) The normal operating ranges set out in Column 7 of the table shall be updated in accordance with subsection (10) and no later than March 31 in every calendar year after the year in which this section first applied to the registered person.

Monitoring plan

- **52.** (1) A registered person shall ensure that an application is made to the Director for the approval of a plan specifying the information to be included in Column 3 to 6 of the Outdoor Originating Source Monitoring Parameter Summary Table in accordance with this section.
- (2) An application for approval of a plan under this section shall include a proposed plan that details the following:
 - 1. The location, size and orientation of each originating source listed in accordance with subsection 51 (2).
 - 2. For each originating source the following information:
 - The monitoring or sampling method to be used to assess the effectiveness of the related management methods.
 - ii. Whether the parameter to be measured by the monitoring or sampling method is particulate matter loading, particulate matter concentration, silt content or silt loading, and their related units of measurement.
 - iii. The location of each monitoring or sampling point.
 - iv. The type of monitors or sampling methods to be used.
 - v. The sampling frequencies and collection periods.
 - vi. The sampling and analysis methodologies.
 - vii. Any monitoring data related to the discharge of a registered contaminant from an originating source that was collected in the three years preceding the application.

- viii. How the data submitted under paragraph vii is proposed to be used for the purposes of calculating the upper value of a normal operating range for the purposes of subparagraphs 1 ii or 3 ii of subsection 51 (10).
- 3. The prevailing wind direction at the site.
- (3) After considering the information submitted by the applicant under subsection (1), the Director shall consider whether the proposed plan is adequate to allow for the monitoring and assessment of the effectiveness of the management methods associated with the originating sources in the table and the Director may approve or refuse to approve a proposed plan, and if the Director approves a proposed plan, the Director may impose terms and conditions in the approval.
- (4) When approving a plan under this section the Director may require that the registered person use alternative monitoring data submitted in accordance with subparagraph 2 vii of subsection (2) for the purposes of determining a normal operating range in accordance with subsection 51 (10) and how that data must be used for that purpose.
- (5) A registered person shall ensure that an application is made to the Director for the approval of proposed amendments to a plan approved under subsection (3) in the following circumstances:
 - 1. An originating source described in subsection 51 (2) is added to the mini mill.
 - 2. An amendment to the table is required to ensure that measurements taken in accordance with section 53 are adequate to allow for the monitoring and assessment of the effectiveness of management methods associated with the originating sources described in subsection 51 (2).
- (6) If a registered person is required to apply to the Director under subsection (5), the registered person shall ensure that the application is made within 30 days of the circumstance described in subsection (5).
- (7) A registered person shall ensure that an Outdoor Originating Source Monitoring Parameter Summary Table is updated to reflect the most recent plan approved under this section no later than the date determined by applying the following:
 - 1. The day that is 60 days after the day the most recent plan was approved, if the plan was approved in the month of February, March, April, May, June or July.
 - 2. March 31, if the plan was approved in the month of January, August, September, October, November or December.

Measurement of monitoring parameters

- **53.** (1) A registered person shall ensure that the parameters set out in Column 4 of the Outdoor Originating Source Monitoring Parameter Summary Table are measured,
 - (a) at the locations and frequencies set out in Columns 5 and 6 of the table; and
 - (b) in accordance with the applicable plan approved under section 52.
- (2) A registered person shall ensure that a record is made containing the following information for each measurement required to be taken under subsection (1):
 - 1. The value of the measurement.
 - 2. The date on which the measurement was taken.
 - 3. The location at which the measurement was taken.
 - 4. The start and end date for the taking of each sample used to determine the measurement.
 - 5. The duration of sampling in number of days, or, if the parameter is particulate matter concentration, in number of hours.
- (3) A registered person shall ensure that a record is made of the following values of the measurements taken under subsection (1) in respect of each monitoring or sampling location:
 - 1. A value for each of April, May, June, July, August, September and October if the parameter is particulate matter concentration or particulate matter loading.
 - 2. An annual average if the parameter is silt content or silt loading.

Deviations from normal operating range, monitoring parameters

- **54.** (1) For the purposes of this industry standard, a deviation from a normal operating range listed in Column 7 of the Outdoor Originating Source Monitoring Parameter Summary Table has occurred in respect of the effective operation of management methods used in respect of an originating source if,
 - (a) the monthly value of the particulate matter loading or particulate matter concentration measurements taken under section 53 for a monitoring or sampling location in respect of the originating source exceeds the upper value of the parameter's monthly normal operating range; or

- (b) any one silt content or silt loading measurement taken under section 53 in respect of the originating source exceeds the upper value of the parameter's annual normal operating range.
- (2) If a deviation described in subsection (1) has occurred, the registered person shall ensure that one or more operational adjustments are made in respect of the originating source as soon as practicable so that the measurements required to be taken in respect of the parameter in subsequent months do not result in a deviation described in subsection (1).
- (3) If one or more operational adjustments are required to be made under subsection (2), the registered person shall ensure that consideration is given to taking one or more of the following actions in respect of that originating source and updating the Best Practices Procedure accordingly:
 - 1. Reduce the surface area of stored material by combining material stored separately.
 - 2. Reduce the number of material transfer points.
 - 3. Reduce the height from which material is dropped from equipment, including conveyor belts, mechanical shovels and mechanical grabs.
 - 4. Reduce the speed of an adjustable speed conveyor.
 - 5. Increase the water application rate on a conveyor.
 - 6. Reduce the maximum wind speed at which slag may be crushed or screened for the purposes of subsection 36 (1).
 - 7. Increase the minimum frequency at which a paved road is vacuumed or washed using high pressure water for the purposes of section 50.
 - 8. Increase the minimum frequency at which chemical dust suppressant or water is applied to an unpaved road for the purposes of section 50.
 - 9. Change the type of chemical dust suppressant applied to unpaved roads.
 - 10. Increase the minimum frequency at which an unpaved road is covered by aggregate material, compacted or graded for the purposes of section 50.
 - 11. Require certain vehicles to drive over a wheel shaker before the vehicle leaves the site.

- (4) If an operational adjustment is required to be made under subsection (2) the registered person shall ensure that a record is made containing the following information:
 - 1. The operating parameter and originating source to which the operational adjustments relate.
 - 2. The management methods to which the operating parameter relates.
 - 3. The normal operating range for the operating parameter.
 - 4. The measurements that were outside of the normal operating range.
 - 5. An explanation of the suspected cause of measurements that were outside of the normal operating range.
 - 6. A description of each operational adjustment made and the date each operational adjustment was completed.
 - 7. The position title of each person who assigned a person to make an operational adjustment described in paragraph 6.
- (5) This section does not apply in respect of a monitoring or sampling location in respect of an originating source set out in the Outdoor Originating Source Monitoring Table for which subsection 51 (10) requires Column 7 in respect of that originating source to contain the text "not applicable".

Alternative dust suppressant study

- **55.** (1) The Director may order a registered person to test dust suppressants and report on their effectiveness at the mini mill if the Director is of the opinion that it is advisable to do so in order to prevent or reduce the number of deviations that may occur within the meaning of subsection 54 (1).
 - (2) A report required under this section shall contain the following information:
 - 1. A list of the dust suppressants available for use at the mini mill.
 - 2. A list of the dust suppressants tested at the mini mill in accordance with the order.
 - 3. A description of the testing methodologies used.
 - 4. The results of the tests.
 - 5. An analysis of the effectiveness of each dust suppressant tested.

(3) A person who receives an order under subsection (1) shall submit the report required under this section to the Director no later than the date specified in the order.

Meteorological monitoring

- **56.** A registered person shall ensure that each day a record is made containing the following information with respect to the weather at or near the mini mill forecasted for the day together with the source of the information:
 - 1. The minimum temperature.
 - 2. The maximum wind speed.
 - 3. The prevailing wind direction.
 - 4. Whether precipitation is forecasted.

Part XIII – Visual Inspection Summary Table

Visual Inspection Summary Table

- **57.** (1) A registered person shall ensure that a table titled "Visual Inspection Summary Table" is prepared and maintained in accordance with this section.
- (2) Column 1 of the Visual Inspection Summary Table shall separately list each originating source at the mini mill that is described in Column 1 of Table 10-57.
- (3) Columns 2 and 3 of the Visual Inspection Summary Table shall contain the following information in respect of each originating source listed in the table:
 - 1. The inspection frequency taken from Table 10-57 that is set out opposite the related category of originating source.
 - 2. The inspection objectives taken from Table 10-57 that are set out opposite the related category of originating source and inspection frequency.
- (4) A registered person shall ensure that where there has been a change to the operation of the mini mill that would necessitate an amendment to the Visual Inspection Summary Table if subsection (2) or (3) were applied, that the Table is updated in accordance with this section within 30 days of the change.
- (5) A road is considered to be infrequently used for the purposes of this section if the road is intended to be used no more than twice in a calendar year and the road ceases to be considered an infrequently used road for the remainder of the year if the road is used more than twice in a calendar year.

TABLE 10-57: Visual Inspection Summary Table

Item	Column 1	Column 2	Column 4
	Originating source	Inspection Frequency	Inspection Objective
1.	Slag management area	Daily on each day that slag is handled in the slag management area	No visible discharge of particulate matter to the air beyond the slag management area
2.	Cooling slag	Each time slag is deposited in the slag cooling area	No visible discharge of particulate matter to the air beyond the slag cooling area
3.	Stored slag	Daily	i. No visible discharge of particulate matter to the air beyond the storage area ii. The area around the stored slag is free of loose slag.
4.	A conveyor used to handle slag that is not located inside an enclosed building	Daily on each day that the conveyor is used	The conveyor belt's curtain or cover is in place or the slag being conveyed contains sufficient moisture to prevent discharge of particulate matter into the air
5.	A crusher or screener used to crush or screen slag	Daily on each day that the crusher or screener is used	i. No visible discharge of particulate matter from the crusher or screener while the crusher or screener is operating ii. The area around the crusher or screener is free of loose slag
6.	A location where slag is loaded into a vehicle for shipment that is not located inside an enclosed building	Daily on each day that slag is loaded into a vehicle at the location	The ground at the location is free of loose slag
7.	A conveyor used to handle alloy additive that is in whole or in part not enclosed in a building	Daily on each day that the conveyor is used	The conveyor belt's curtain or cover is in place
8.	Alloy additive stored outdoors in a below grade pit	Daily	No visible discharge of particulate matter from the stored alloy additive
9.	A location where alloy additive is unloaded from a vehicle that is	Daily on each day that alloy additive is unloaded from a vehicle at the location	i. No visible discharge of particulate matter to the air beyond the area in which the

	not located inside an enclosed building		alloy additive is unloaded during the unloading ii. The ground at the location is free of loose alloy additive
10.	Area in which scrap metal is sorted that is not enclosed in a building	Daily	i. No visible discharge of particulate matter to the air beyond the scrap metal sorting area ii. The area around the scrap sorting area is free of loose scrap
11.	Area in which scrap metal is torch cut outside of an enclosed building	Daily when scrap metal is torch cut in the area	i. No visible discharge of particulate matter to the air beyond the torch cutting area during torch cutting ii. The area around the torch cutting area is free of loose scrap metal
13.	Stored scrap metal	Daily	No visible discharge of particulate matter to the air beyond the scrap metal storage area
14.	Shredder fluff stored outside of an enclosed building	Daily	No visible discharge of particulate matter to the air beyond the shredder fluff storage area
15.	Any part of a conveyor that is outdoors other than one that is used to handle slag or alloy additive	Daily on each day that the conveyor is used	No visible discharge of particulate matter to the air from the conveyor
16.	Paved road	Daily from April 1 to October 31	i. No visible discharge of particulate matter to the air beyond the road ii. The road is not damaged
17.	Paved road	Weekly from November 1 to March 31	i. No visible discharge of particulate matter to the air beyond the road ii. The road is not damaged
18.	Unpaved road other than an infrequently used road	Twice daily from April 1 to October 31	i. No visible discharge of particulate matter to the air beyond the road ii. The road is not damaged

19.	Unpaved road other than an infrequently used road	Weekly from November 1 to March 31	i. No visible discharge of particulate matter to the air beyond the road ii. The road is not damaged
20.	Infrequently used unpaved road	Annually	i. No visible discharge of particulate matter to the air beyond the road ii. The road is not damaged

Visual inspection activities

- **58.** (1) A registered person shall ensure that each originating source set out in Column 1 of the Visual Inspection Summary Table is inspected at the frequency set out for the source to confirm whether the inspection objectives set out for the source and related frequency have been met.
- (2) A registered person shall ensure that a record is made containing the following information in respect of each inspection conducted for the purposes of this section:
 - 1. The date of the inspection.
 - 2. The inspection objectives that were not met, if any.
 - 3. Whether the inspection occurred within the required frequency.
 - 4. The position title of each person who assigned a person to perform the inspection.
- (3) On or before the fifth day of each month, a registered person shall ensure that the record required by subsection (2) is reviewed to determine if each inspection required by this section to have been performed in the preceding month was performed at the required frequency.
- (4) If it is determined under subsection (3) that an inspection was not performed at the required frequency, the registered person shall ensure that a record is made containing the following information:
 - 1. A description of the inspection that was to be performed.
 - 2. The date on which the inspection was to be performed.
 - 3. The reason the inspection was not performed at the required frequency.

- 4. A description of the actions to be taken to ensure that future inspections will be performed at the required frequency.
- 5. The position title of each person who assigned a person to take an action described in paragraph 4.

Deviations – visual inspections

- **59.** (1) If an inspection objective listed in the Visual Inspection Summary Table is found to have not been met during an inspection required under section 58, the registered person shall ensure that one or more actions are taken without delay until the inspection objective is met.
- (2) A registered person shall ensure that the following actions are considered when determining which actions to take for the purposes of subsection (1):
 - 1. Apply water or chemical dust suppressant to stored slag or unpaved roads.
 - 2. Reduce the speed of an adjustable speed conveyor.
 - 3. Increase the water application rate on a conveyor.
 - 4. Clean the paved roads with a vacuum truck or water.
 - 5. Apply water to material before it is transferred, processed or otherwise handled.
- (3) If an action is required to be taken under subsection (1), the registered person shall ensure that a record is made containing the following information in respect of each action taken:
 - 1. The date of the inspection.
 - 2. The inspection objective or objectives that were not met.
 - The suspected reason the inspection objective or objectives were not met.
 - 4. A description of each action taken, and that will be taken if applicable, to ensure the inspection objective or objectives are met.
 - 5. The date on which each action mentioned in paragraph 4 was or will be taken.
 - 6. The title of each person who assigned a person to take an action that was taken or will be taken.

Part XIV - Site Plan and Best Practices

Particulate matter management – Best Practices Procedure

- **60.** (1) A registered person shall ensure that a record titled "Best Practices Procedure" is prepared, maintained and implemented in accordance with this section.
- (2) The Best Practices Procedure shall include a site plan diagram drawn to scale that shows the following:
 - 1. The boundaries of the site.
 - 2. Roads and the portions of those roads that are paved or unpaved.
 - 3. Each slag management area on the site that is not inside an enclosed building and the location within the slag management area where each of the following activities take place:
 - Slag cooling.
 - ii. Slag storage.
 - iii. Handling of slag using conveyors.
 - iv. Slag crushing.
 - v. Slag screening.
 - vi. Loading slag into a vehicle for shipment.
 - 4. Each alloy additive management area on the site and the location within the alloy additive management area where each of the following activities take place:
 - i. Alloy storage.
 - ii. Handling of alloy additive using conveyors.
 - iii. Unloading of alloy additive from a vehicle.
 - 5. Areas on the site where scrap metal is sorted outside of an enclosed building.
 - 6. Areas on the site where scrap metal is torch cut outside of an enclosed building and the building or buildings within which torch cutting takes place.
 - 7. Which buildings on the site shredding of scrap metal takes place within.

- 8. Areas on the site where scrap metal is stored outside of an enclosed building.
- 9. Areas on the site where shredder fluff is stored outside of an enclosed building.
- 10. Wind barriers on the site.
- 11. Outdoor conveyors on the site other than conveyors that handle slag or alloy additive.
- 12. Each additional originating source on the site that is not in an enclosed building.
- 13. All structures, including buildings and fences.
- 14. Each place listed in subsection 1 (5) that is located within one kilometre of the site boundary.
- 15. The minimum distance from each place described in paragraph 14 and the boundary of the site.
- 16. The monitoring locations of each parameter set out in the Outdoor Originating Source Monitoring Parameter Summary Table.
- 17. The monitoring locations for measuring particulate matter in accordance with Part XV.
- 18. If meteorological equipment is located on the site for the purposes of section 56, the location of that equipment.
- 19. The unique identifiers required to be included in the Best Practices Table.
- 20. A wind rose showing prevailing wind direction at the site.
- (3) The Best Practices Procedure shall include a table titled "Best Practices Table" that contains the following information:
 - 1. Column 1 of the table shall separately list each originating source at the mini mill that is described in Column 1 of Table 10-60.
 - 2. For each originating source listed in Column 1 of the table, Column 2 of the table shall set out a unique identifier for the originating source.
 - 3. Column 3 of the table shall set out the information described in Column 3 of Table 10-60 in respect of the related originating source.

4. Column 4 of the table shall set out the management methods described in Column 4 of Table 10-60 in respect of each originating source described in Column 1 of the table.

TABLE 10-60: Best Practices Table

Item	Column 1	Column 2	Column 3	Column 4
	Originating source	Unique identifier	Information about originating source	Management methods
1.	Slag management areas	Unique Identifier	Not applicable	i. A description of any management methods used for handling slag, other than by a conveyor, crushing, screening or loading into a vehicle for shipment, in each slag management area
2.	Slag cooling areas	Unique Identifier	A description of slag cooling method and equipment	i. A description of how the requirements of section 33 are met ii. A description of any other management methods used with respect to cooling slag in the area
3.	Areas where slag, alloy additive, scrap metal or shredder fluff is stored outdoors	Unique Identifier	i. The material stored and a description of the storage area ii. The section of this industry standard that applies to the storage of the material	i. A description of how the requirements of any section of this industry standard that applies to the storage of the material are met ii. If the stored material is slag, the minimum frequency with which water is applied to the slag iii. A description of any other management methods used with respect to each storage area
4.	Areas where slag is crushed or screened	Unique identifier	A description of the size of the material being crushed or screened and the crushing or screening process	i. A description of how the requirements of section 36 are met ii. The maximum wind speed beyond which slag will not be crushed or screened in the area in accordance with clause 36 (1) (b)

				iii. A description of any other management methods used with respect to crushing or screening slag in the area
5.	Areas where slag is loaded into a vehicle for shipment	Unique identifier	Not applicable	i. A description of how the requirements of section 37 are met ii. Unless a wind barrier is used to protect the area, the maximum wind speed beyond which slag will not be loaded or the maximum drop height for loading slag in the area iii. A description of any other management methods used with respect to loading slag in the area
6.	Outdoor conveyors including conveyors that are partially outdoors and partially indoors	Unique identifier	i. The material being conveyed ii. A description of the conveyor ii. The section of this industry standard that applies to the conveyor, if any	i. A description of how the requirements of any section of this industry standard that apply to the conveyor are met iii. A description of any other management methods used with respect to the conveyor
7.	Alloy additive management areas outside of an enclosed building	Unique identifier	i. The material handled in the area ii. A description of the handling that takes place in the area, including a description of the transfer points in the area, and whether there are any conveyors that handle the alloy additive	A description of any management methods used for handling alloy additive in the area, other than by a conveyor or unloading from a vehicle
8.	Areas in which scrap metal is received at the mini mill and otherwise handled, other than handled for sorting or torch cutting	Unique identifier	i. The material handled in the area. ii. A description of the handling that takes place in the area, including a description of the transfer points in the area, and	A description of any management methods used for handling scrap metal in the area

			whether there are	
			any conveyors that	
			handle the scrap	
0	Aroos where	Unique	metal	i A description of how the
9.	Areas where scrap metal is	Unique identifier	i. A description of the area and the	i. A description of how the requirements of section 43
	sorted outside of		scrap metal sorted	are met
	an enclosed		in the area	
	building			ii. Unless a wind barrier is used to protect the area, the
				maximum wind speed or
				speeds beyond which scrap
				metal will not be sorted in the area
				iii. A description of any other
				management methods used
				when sorting scrap metal in the area
10.	Areas where	Unique	A description of the	i A description of how the
10.	scrap metal is	Unique identifier	A description of the area, the scrap	i. A description of how the requirements of section 44
	torch cut outside		metal torch cut in	are met
	of an enclosed building		the area, and the torch cutting	ii. Unless a wind barrier is used to protect the area, the
	building		process used in the	maximum wind speed beyond
			area	which torch cutting will not be
				performed in the area iii. A description of any other
				management methods used
				when torch cutting scrap
				metal in the area
11.	Areas where	Unique	A description of the	A description of any
	scrap metal is shredded	identifier	building in which shredding takes	management methods used when shredding scrap metal in
			place, the type of	the area
			material shredded	
			and the shredding process	
12.	Paved roads	Unique	Not applicable	i. The maximum speed in
		identifier		kilometres per hour that vehicles are permitted to travel
				over the road
				ii. The minimum frequency at
				which the road will be vacuumed or washed using
				high pressure water
				iii. A description of any other
				management methods used with respect to the road
13.	Unpaved roads	Unique	Not applicable	i. The maximum speed in
	-	identifier		kilometres per hour that
			l	

				vehicles are permitted to travel over the road ii. The minimum frequency at which chemical suppressant or water will be applied to the road or the road will be covered by aggregate material, compacted or graded iii. A description of any other management methods used with respect to the road
14.	Any other outdoor originating sources required on the Site Plan	Unique identifier	A description of the originating source	A description of any management methods used with respect to the originating source

- (4) A maximum wind speed for the purposes of the Best Practices Table is one that, when the related activity is engaged in, it is not likely to cause a visible discharge of particulate matter beyond the area in which the activity takes place.
- (5) A minimum frequency for the purposes of the Best Practices Table is one that, when an activity is engaged in, the frequency of the activity is one that is likely to prevent a visible discharge of particulate matter beyond the area in which the activity takes place.
- (6) The Best Practices Procedure shall be updated at least once in each year on or before March 31 and shall be reflective of the operation of the mini mill to at least December 31 in the preceding year.
- (7) When updating the Best Practices Procedure, the registered person shall consider any updates as may be required to:
 - 1. Prevent a deviation from occurring within the meaning of section 54.
 - 2. Incorporate operational adjustments taken during the preceding year in accordance with section 54.
 - 3. Meet the inspection objectives set out in the Visual Inspection Summary Table.
 - 4. Incorporate actions taken during the preceding year in accordance with section 59 as a result of an inspection objective not being met.
 - 5. Take into account concentration and loading measurements taken in accordance with Part XV.

- (8) Any changes to the Best Practices Procedure shall be documented together with the rationale for the change, and shall include a description of,
 - (a) any changes made to the Site Plan and the reason for the change; and
 - (b) any changes made to the Best Practices Table and the reason for the change.
- (9) A registered person shall ensure that all workers at the mini mill receive such training as may be required to ensure the effective implementation of the Best Practices Procedure.
- (10) A registered person shall ensure that a record is made of the following information with respect to the training provided in accordance with subsection (8):
 - 1. The name of each person who has received the training.
 - 2. Each date each person received the training.
 - (11) For the purposes of subsection (9),

"worker" has the same meaning as in the Occupational Health and Safety Act.

Part XV – COMMUNITY MONITORING

Proposed Community Monitoring Plan

- **61.** (1) If one or more places described in subsection 1 (5) are located one kilometre or less from the site on which a mini mill is located, the registered person shall submit to the Director a proposal for a Community Monitoring Plan to measure the impact of discharges of particulate matter and registered contaminants set out in Appendix 10-C (Metals) other than Chromium Compounds (Hexavalent) from the mini mill on the places described in subsection 1(5).
- (2) A registered person shall submit the Community Monitoring Plan referred to in subsection (1) to the Director on or before the date that is six months after the date of registration.
- (3) A proposed Community Monitoring Plan submitted under this section shall provide for the measurement of the concentration of particulate matter and registered contaminants set out in Appendix 10-C (Metals) through monitors located outside of the site and include the following information:
 - The number of monitors and their proposed locations along with the location of each place described in subsection 1 (6) that is located one kilometre or less from the site.

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- 2. The proposed methods of measuring the concentration of particulate matter and each registered contaminant set out in Appendix 10-C (Metals), including the kinds of monitors to be used.
- 3. If any monitor is not a continuous monitor, the proposed sample period for the monitor.
- 4. The proposed frequency for collecting measurements from each monitor.
- 5. Explanations for why the registered person is proposing the applicable locations, methods, sample periods and measurement frequency.
- (4) A registered person shall promptly submit to the Director proposed amendments to a Community Monitoring Plan approved under section 62 if the measurements taken in accordance with the plan are not or will not accurately assess the impact of the discharge of particulate matter and registered contaminants set out in Appendix 10-C (Metals) on places described in subsection 1 (5) located one kilometre or less from the site.

Approval of Community Monitoring Plans

- **62.** (1) The Director shall consider whether a proposed Community Monitoring Plan or proposed amendments to an approved Community Monitoring Plan submitted under section 61 will provide for an accurate assessment of the impact of the discharge of particulate matter and registered contaminants set out in Appendix 10-C (Metals) on places described in subsection 1 (5) and may approve or refuse to approve the proposed Community Monitoring Plan or proposed amendment, and if the Director approves a proposed Community Monitoring Plan or proposed amendments, the Director may impose terms and conditions in the approval.
- (2) Prior to making a determination under subsection (1), the Director may require the registered person to submit additional information as part of a proposed Community Monitoring Plan.

Implementation of Community Monitoring Plans

- **63.** (1) A registered person shall ensure that measurements are made of the amount of particulate matter and registered contaminants set out in Appendix 10-C (Metals) other than Chromium Compounds (Hexavalent) in the air in accordance with the Community Monitoring Plan approved by the Director under section 62.
- (2) Subsection (1) applies on and after the date that is six months from the date that the first Community Monitoring Plan applicable to the mini mill is approved by the Director under section 62.

Records, Community Monitoring

- **64.** (1) A registered person shall record the following information in respect of measurements required to be taken by section 63:
 - 1. If measurements are taken by a monitor that is not a continuous monitor, the value of each measurement taken.
 - 2. If measurements are taken by a monitor that is a continuous monitor, the daily average of the measurements taken.
- (2) The following rules apply for the purposes of determining the value to be used in respect of any measurement taken by a monitor for the purposes of determining the value to be recorded under subsection (1):
 - 1. If the value of a measurement taken by the monitor is less than the detection limit for the monitor or the analytical method used to assess the measurement, the value used shall be half of that detection limit.
 - 2. If the value of a measurement taken by the monitor cannot be determined for a reason other than the value of the measurement is less than the detection limit for the monitor or analytical method used to assess the measurement, no value shall be used and the record required under subsection (1) shall indicate why the monitor failed to record a measurement.

Calculation of community monitor annual averages

- **65.** (1) On or before March 31 in each year, a registered person shall calculate the annual average of particulate matter and each registered contaminant set out in Appendix 10-C (Metals) other than Chromium Compounds (Hexavalent) for each monitor using measurements taken in accordance with section 63 in the preceding calendar year.
- (2) Subsection (1) applies to a registered person in each year after the monitor at the monitoring location has operated for at least nine months prior to the year end.
- (3) A Director may, despite subsection (2), provide written notice to a registered person that the person does not have to calculate an annual average for a monitor for the first calendar year in which the monitor is operated if,
 - (a) the monitor has not operated for the full calendar year; and
 - (b) in the Director's opinion insufficient data has been collected in the calendar year to provide an accurate assessment of the impact of discharges of

particulate matter and registered contaminants set out in Appendix 10-C (Metals) from the facility on the places described in subsection 1 (5).

Calculation of community monitor baseline

- **66.** (1) On or before March 31 in each year, a registered person shall determine a baseline for particulate matter and each registered contaminant set out in Appendix 10-C (Metals) other than Chromium Compounds (Hexavalent) for the current calendar year in respect of each monitoring location set out in the Community Monitoring Plan approved under section 63.
- (2) The baseline for a monitoring location shall be determined by calculating the lowest three-year rolling average that can be determined using annual averages calculated under section 65.
- (3) Subsection (1) applies to a registered person in each year after there are three annual averages calculated under section 65.

Community monitoring – baseline analysis records

- **67.** A registered person shall make a record of the following information for each monitoring location required by the Community Monitoring Plan approved under section 63 for each calendar year:
 - 1. The annual average calculated under section 65.
 - 2. The baseline determined under section 66.

Notification – community monitoring

- **68.** (1) A registered person shall, as soon as practicable, notify a provincial officer in writing if an annual average calculated under section 65 for particulate matter or any registered contaminant set out in Appendix 10-C (Metals) other than Chromium Compounds (Hexavalent) in respect of a calendar year is greater than the baseline determined in respect of that monitoring location for that calendar year under section 66.
- (2) No later than one month after notice is required to be given under subsection (1), the registered person shall submit the following written information to a provincial officer:
 - 1. The annual average for particulate matter or the applicable registered contaminant set out in Appendix 10-C (Metals) other than Chromium Compounds (Hexavalent).

- 2. The monitor's baseline for particulate matter or the applicable registered contaminant set out in Appendix 10-C (Metals) other than Chromium Compounds (Hexavalent).
- 3. The suspected reason the average exceeded the baseline.
- 4. A description of any steps taken or that will be taken to prevent, minimize or reduce the risk that future annual averages exceed the baseline.
- 5. An indication of the date by which each step mentioned in paragraph 4 will be implemented.
- A written explanation of how each step mentioned in paragraph 4 will prevent, minimize or reduce the risk of any future annual averages exceed the baseline.

Part XVI – Requirement to continue the use of management methods to manage emissions

Identifying indoor managed sources

- **69.** (1) A registered person shall ensure that a table is prepared in accordance with this section and updated in accordance with section 71.
 - (2) The table required by subsection (1) shall contain the following information:
 - 1. Column 1: Each piece of equipment at the mini mill, other than a piece of equipment located outside of an enclosed building or structure, from which the discharge of a registered contaminant is prevented, minimized or reduced by a management method mentioned in subsection (3).
 - 2. Column 2: Opposite each piece of equipment in column 1, each ventilation system, if any, that captures a registered contaminant from the piece of equipment in a non-negligible amount.
 - Column 3: Opposite each piece of equipment in column 1, a description of each management method described in subsection (3) that prevents, minimizes or reduces the discharge of a registered contaminant from the piece of equipment.
- (3) The management methods mentioned in paragraphs 1 and 3 of subsection (2) are:
 - 1. The use of an air pollution control device.

- 2. The operation of a process or piece of equipment in a manner that prevents, minimizes or reduces the discharge of a registered contaminant into the air.
- 3. The design, installation and operation of a stack in a manner that increases the dispersion of contaminants.
- (4) If a mini mill is not constructed at the time of registration, the equipment, ventilation systems and management methods required to be listed in the table required by subsection (1) shall, until the construction is complete, be the proposed equipment, ventilation systems and management methods.

Requirement to continue the management of indoor sources

- **70.** A registered person shall not operate or cause or permit the operation of a piece of equipment set out in the table required by section 69 unless,
 - (a) the discharge of registered contaminants from the piece of equipment is prevented, minimized or reduced by the management method that is required to be listed opposite the piece of equipment in Column 3 of the table, as required to be updated by subsection 71 (1); and
 - (b) the discharge of registered contaminants from the piece of equipment is captured by a ventilation system that is required to be listed opposite the piece of equipment in Column 2 of the table, as required to be updated by subsection 71 (1).

Changes to indoor managed sources

- **71.** (1) No later than 30 days after any of the following changes occur at a mini mill, the table required by section 69 shall, having regard to subsection (2), by updated in accordance with the following rules:
 - 1. If a management method is added or replaced at the mini mill, the table shall be updated to reflect the change.
 - 2. If a ventilation system that captures a registered contaminant is added or replaced at the mini mill, the table shall be updated to reflect the change.
 - 3. If a piece of equipment that may discharge or from which may be discharged a registered contaminant is added or replaced at the mini mill, the table shall be updated to reflect the change.
 - 4. If a piece of equipment set out in the table is removed from the mini mill facility, the piece of equipment shall be removed from the table.

- 5. If all equipment associated with a management method set out in the table have been removed from the table, the management method shall be removed from the table.
- 6. If all equipment associated with a ventilation system set out in the table have been removed from the table, the ventilation system shall be removed from the table.
- 7. If a notice given under subsection (4) indicates that a management method is no longer necessary, the ventilation shall be removed from the table.
- 8. If a notice given under subsection (4) indicates that a ventilation system is no longer necessary, the ventilation system shall be removed from the table.
- 9. If the table is updated in accordance with paragraphs 7 and 8 such that no management method or ventilation system is set out opposite a piece of equipment in the table, the piece of equipment shall be removed from the table.
- (2) Subject to subsections (3) and (4), a change to the operations of the facility shall not be made unless the following criteria are met:
 - A change that adds, replaces or otherwise alters a management method shall add, replace or alter the management method in a manner that is at least as effective at preventing, reducing or minimizing the discharge of registered contaminants as the management method that was listed in the table immediately prior to the change.
 - 2. A change that adds, replaces or otherwise alters a ventilation system shall add, replace or alter the ventilation system in a manner that is at least as effective at capturing registered contaminants as the ventilation system that was listed in the table immediately prior to the change.
 - 3. A change that adds a piece of equipment that is similar to a piece of equipment required to be set out in the table shall only be made if,
 - i. a ventilation system that is at least as effective at capturing contaminants as the most effective ventilation system associated with a similar piece of equipment set out in the table is used to capture registered contaminants from the piece of equipment, and
 - ii. a management method that is at least as effective at preventing, minimizing or reducing the discharge of registered contaminants as the

most effective management method associated with a similar piece of equipment set out in the table is used to prevent, minimize or reduce the discharge of registered contaminants from the piece of equipment.

- (3) Subsection (2) does not apply if the change to the operations of the facility is required or permitted by Part II of this industry standard.
- (4) The Director may, upon request, give a registered person written notice indicating that a change to the operations of the facility that does not meet the requirements mentioned in subsection (2) may be made, in accordance with the notice, if the Director is of the opinion that at least one of the following statements is true:
 - 1. The effectiveness of the management method or ventilation system that is the subject of the request is comparable to the effectiveness of the management method or ventilation system that would be required by subsection (2).
 - 2. Any adverse effect would likely not be better prevented, eliminated or ameliorated if a management method or ventilation system required by subsection (2) were used.
 - 3. No adverse effect is likely to occur.
- 4. The registered contaminants affected by the change are discharged in an amount that is negligible.
- (5) A request mentioned in subsection (4) shall be made by a registered person and shall include the following information:
 - 1. A rationale for the request.
 - 2. Each piece of equipment associated with the management method or ventilation system that is the subject of the request.
- (6) Before the Director gives a person a notice under subsection (4), the Director shall give the person a draft of the notice and an opportunity to make written submissions to the Director during the period that ends 30 days after the draft is given.

Specified management of indoor sources

- **72.** The Director may order a registered person to use a ventilation system or management method that is or was set out in the table required by section 69 if,
 - (a) a change was made to a management method or ventilation system that, in the opinion of the Director, does not meet the criteria set out in subsection 71 (2); or

(b) a piece of equipment is or was previously listed in the table required by section 69 and the Director is of the opinion that discharges from the piece of equipment may cause an adverse effect.

Notification of change

- **73.** (1) Subject to subsection (2), no later than 30 days after a change to the operations of the facility mentioned in subsection 71 or 72 is made at a mini mill, the registered person shall ensure that a provincial officer is notified in writing of the change.
 - (2) The notification required by subsection (1) shall include the following information:
 - 1. A description of the change, including a description of the equipment and methods affected by the change and the date that the change was made.
 - 2. One of the following with respect to the change mentioned in paragraph 1:
 - i. An explanation of how the change meets the criteria set out in subsection 71 (2).
 - ii. If subsection 71 (3) applies, the sections of this industry standard that permit the change.
 - iii. If the change was authorized by a notice given under subsection 71 (4), the reference number of the notice.
 - iv. If the change was required by an order given under section 72, the reference number of the order.

Requirement to continue the management of originating sources, Best Practices Table

- **74.** (1) A registered person shall ensure that the use of a management method required to be listed in the Best Practices Table is not discontinued unless,
 - (a) the change to the operations of the facility is required or permitted by Parts VIII to XI of this industry standard;
 - (b) the related originating source or sources no longer exist; or
 - (c) the Director has authorized the discontinuance in writing.
- (2) A Director may provide an authorization described in clause (1) (c) in the following situations:

- 1. Any discharges that would be attributable to the originating source would be negligible if the use of the management method were discontinued.
- 2. The likelihood of an adverse effect being caused by the discharges from the originating source would not be increased if the use of the management method were discontinued.
- 3. The management method to be discontinued will be replaced by another method or methods that are at least as effective as, or better at reducing, minimizing or preventing the discharge of the related registered contaminant.
- 4. The management method to be discontinued will be replaced by another method or methods that are comparable in effectiveness at reducing, minimizing or preventing the discharge of the related registered contaminant.
- (3) The Best Practices Table shall be updated to reflect any changes made in accordance with subsection (2).

Management methods for new originating sources, Best Practices Table

75. A registered person shall ensure that all new originating sources required to be listed in the Best Practices Table established at the mini mill are managed using one or more management methods that are as effective as or better than the methods that are used for similar sources listed in the Best Practices Table.

PART XVII - COMPLAINTS, ANNUAL SUMMARY REPORTS AND RECORDS

Complaint procedure

- **76.** (1) A registered person shall ensure that the following steps are taken in response to each complaint received in respect of the mini mill that relates to a matter addressed in this industry standard.
 - 1. A prompt response is provided to the complainant, unless the person requests that a response not be made or fails to provide contact information.
 - 2. Appropriate actions are taken to address the cause of the complaint.
 - 3. A written record of the complaint is made that includes the following information about the complaint and the event that is suspected to have led to the complaint:
 - i. A description of the complaint.
 - ii. The date and time that the complaint was received.

- iii. If the complaint relates to a discharge of a contaminant to air, the date, time and suspected cause of the complaint, including any originating source that may have contributed to the event.
- iv. If the complaint relates to a discharge of a contaminant to air, ambient temperature and approximate wind direction and speed at the time of the discharge to which the complaint relates and other general weather conditions.
- v. A description of any actions taken to address the matter to which the complaint relates and the date each action was completed.
- vi. A description of any actions taken to prevent a similar future complaint and the date each action was completed.
- (2) If a complaint mentioned in subsection (1) relates to the discharge of a contaminant to air from the mini mill, the registered person shall ensure that the Ministry's Spills Action Centre is notified of the complaint as soon as practicable after the complaint is made.
- (3) No later than five days after notification is required to be given under subsection (2), the registered person shall ensure that the record mentioned in paragraph 3 of subsection (1) is submitted to a provincial officer.

Annual Summary Reports

- **77.** (1) A registered person shall ensure that annual summaries for each calendar year are made in accordance with this section.
- (2) The annual summaries shall be completed by March 31 in a year and contain information in respect of the previous calendar year.
 - (3) The annual summaries required under this section are the following:
 - 1. A table titled "Implementation Summary Table" containing a summary of the provisions of this industry standard that apply to the mini mill, in accordance with section 2, and for each provision that applies,
 - i. the date on which the provision first applied to the mini mill, and
 - ii. if compliance with the provision has been achieved, the date on which compliance was achieved.
 - 2. A table titled "Performance Summary Table" containing,

- i. the date and time each notification was given under section 22 in respect of operation of a baghouse with an operating parameter outside of the normal operating range for four continuous hours or outside of the normal operating range for more than the specified number of compartments,
- ii. the date and time each notification was given under section 68 in respect of an annual average concentration greater than the relevant baseline, and
- iii. an indication of whether any orders were given to the registered person under subsection 18 (3) or 29 (6).
- 3. A summary of any changes made to the Equipment Operating Parameter Summary Table, the Direct Evacuation Control System Operating Parameter Summary Table or the Ventilation Operating Parameter Summary Table.
- 4. A summary of any changes made to the Inspection and Maintenance Summary Table.
- 5. A summary of any changes made to the Outdoor Originating Source Monitoring Parameter Summary Table.
- 6. A record titled "Summary of Deviations" containing,
 - i. a summary of the information contained in the following records:
 - A. A record made under subsections 21 (3), 25 (3) or 28 (3) in relation to operational adjustments made in respect of a deviation.
 - B. A record made under subsection 54 (3) in relation to operational adjustments made in respect of a deviation.
 - C. A record made under subsections 59 (3) or (4) in relation to actions taken in respect of a visual inspection objective that has not been met.
 - D. A record made under subsection 31 (2) in relation to actions taken in respect of a maintenance objective that has not been met,
 - ii. the number of deviations requiring an operational adjustment to have been made under sections 21, 25, 28 or 54, the number of times that one or more actions were required to be taken under section 59 because a visual inspection objective was not met, and the number of time that one or more actions were required to be taken under section 31 because a maintenance objective was not met,

- iii. a comparison between the numbers reported under subparagraph ii and the numbers reported in the Summary of Deviations prepared under this section for the previous year,
- iv. whether any one of the events described in subparagraph ii warrant an assessment of whether further action by the registered person is required, and
- v. an assessment of whether one or more of the events described in subparagraph ii and any events that occurred in previous years are indicative of underlying chronic operational issues that need to be addressed and any actions taken to address those issues.
- 7. A graphical representation of each measurement required to be taken under section 53 in the preceding ten years.
- 8. A summary containing the information required in a record prepared for the purposes of subsection 60 (8).
- 9. A summary of the dates on which any steps were taken as described in paragraph 4 of subsection 68 (2) in relation to an annual average concentration greater than the relevant baseline.
- 10. A report titled "Community Monitor Report" that sets out,
 - i. a map showing the following:
 - A. the location of each monitor required under a plan approved under section 62, and
 - B. each place described in subsection 1 (5) that is associated with a monitor required under a plan approved under section 62.
 - ii. for each location at which the concentration of particulate matter and registered contaminants set out in Appendix 10-C (Metals) is measured in accordance with section 63.
 - A. each measured concentration of particulate matter or registered contaminant or, if a continuous monitor is used at the location, the calculated daily average concentration,
 - B. each annual average and baseline required to be recorded under section 67 and an indication of whether each annual average is greater than or less than the baseline.

- C. the average of the particulate matter concentration measurements during the year and the average concentration for the preceding ten years, and
- D. for each registered contaminant measured in accordance with section 63, the average of the concentration measurements during the year and the average concentration for the preceding ten years, and
- iii. a summary of the records required by section 68.
- 11. A record titled "Annual Summary of Changes to Source Information" that,
 - i. sets out the table required by subsection 69 (1) with an additional column that, for each piece of equipment in column 1, indicates whether the information in columns 1, 2 or 3 changed from the information set out in the previous calendar year, and
 - ii. describes any changes to the use of a management method required to be listed in the Best Practices Table.
- 12. A table titled "Complaint Summary Table" that sets out the total number of complaints received under section 76 in respect of the mini mill in the year and in the preceding year.
- (4) The information contained in the records required under subsection (3) shall be certified as having been completed in accordance with the requirements of this industry standard and that the information contained in them is complete and accurate by the highest ranking individual.

Public Reporting

- **78.** (1) A registered person shall ensure that the following information is made available for examination by any person without charge on a website for the mini mill and available for review during the regular business hours at the mini mill:
 - 1. The Community Monitoring Report required by paragraph 10 of subsection 77 (3).
 - 2. An excerpted copy of the map required by subparagraph 10 i of subsection 77 (3).
 - 3. An excerpted copy of the information required by sub-subparagraphs 10 ii C and D of subsection 77 (3).

- 4. The Implementation Summary Table and Performance Summary Table required by paragraphs 1 and 2 of subsection 77 (3).
- (2) A registered person shall ensure that, if a person requests a written copy of the information required under subsection (1), that it is given, without charge, to the person within 15 days of the request.
- (3) A registered person shall ensure that the information required to be made public under this section is updated at least one in every 12-month period and not later than March 31 in each year.

Record keeping – general

- 79. (1) Where a record is required to be made under this industry standard and a time period within which the record is required to be made is not otherwise provided for, the record shall be made within 15 days.
- (2) Where a record is required to be made under this standard in respect of the taking of a sample or measurement, or the making of an observation, the record shall be made at the same time as the event.
- (3) Where an average is required to be calculated or recorded under this standard and a time period within which the average is required to be calculated or recorded is not otherwise provided for, the average shall be calculated and any related records shall be made within 45 days of the information necessary to make the calculations being available.

Record retention

- 80. (1) In addition to the requirements of section 165.1 of the Act, a registered person shall ensure that the following records and previous versions of the records are made available at the mini mill to a provincial officer and a Director upon request:
 - 1. A record required to be made under this industry standard, including procedures, measurements, notifications, tables and reports.
 - 2. A notice or order given to the registered person in respect of this industry standard.
 - 3. A source set out in subsection 18 (1) used to determine an operating parameter, measurement frequency, measurement location or normal operating range for an Equipment Operating Parameter Summary Table, a Direct Evacuation Control System Operating Parameter Summary Table or a Ventilation Operating Parameter Summary Table.

- (2) A record, notice or order described in paragraphs 1 and 2 of subsection (1) shall be retained for a minimum of five years from the date the record was created.
- (3) Despite subsection (2), the following records shall be retained for a minimum of fifty years from the date the record was created:
 - 1. A study referred to in subsection 14 (1).
 - 2. A Capture Efficiency Assessment Report
- (4) A document described in paragraph 3 of subsection (1) shall be retained for a minimum of five years from the date the equipment to which the record relates was last used at the mini mill.
- (5) If a record is retained in electronic form, the Director or provincial officer may require that a copy of it be provided to him or her on paper or electronically or both.

Appendices

Appendix 10-A: All Contaminants

Number	CAS No.	Contaminant Name
1	7440-47-3	Chromium and Chromium Compounds (Metallic, Divalent And Trivalent)
2	18540-29-9	Chromium Compounds (Hexavalent)
3	7439-96-5	Manganese and Manganese Compounds
4	7440-02-0	Nickel and Nickel Compounds
5	Not Applicable	Suspended Particulate Matter (< 44 µm Diameter)
6	See Schedule 8 in O.Reg. 419/05	Dioxins, Furans and Dioxin-Like PCBs

Appendix 10-B: Suspended Particulate Matter

Number	CAS No.	Contaminant Name
1	7440-47-3	Chromium and Chromium Compounds (Metallic, Divalent and Trivalent)
2	18540-29-9	Chromium Compounds (Hexavalent)
3	7439-96-5	Manganese and Manganese Compounds
4	7440-02-0	Nickel and Nickel Compounds
5	Not Applicable	Suspended Particulate Matter (< 44 µm Diameter)

Appendix 10-C: Metals

Number	CAS No.	Contaminant Name
1	7440-47-3	Chromium and Chromium Compounds (Metallic, Divalent and Trivalent)
2	18540-29-9	Chromium Compounds (Hexavalent)
3	7439-96-5	Manganese and Manganese Compounds
4	7440-02-0	Nickel and Nickel Compounds

Appendix 10-D: Dioxins and Furans

Number	CAS No.	Contaminant Name
1	See Schedule 8 in O.Reg. 419/05	Dioxins, Furans and Dioxin-Like PCBs