

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 9855-BXGQD7

Issue Date: January 25, 2021

Stelco Inc.
2330 Haldimand Road 3
Haldimand County, Ontario
N0A 1L0

Site Location: Lake Erie Works
2330 Haldimand Road 3
Haldimand County
N0A 1L0

The approval is being issued under section 20.13 of Part II.1 of the Environmental Protection Act , R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

- Two (2) automated larry cars to charge 86, 6m ovens on Nos 1 and 2 Coke Oven Batteries using sequential charging and oven aspiration for emission control. The maximum coal charging rate is 4182 tonnes/day, approved in Environmental Compliance Approval No. 8-2118-76-807 issued on November 25, 1980;
- The coke pushing operation for 86, 6 m coke ovens on Nos. 1 and 2 Batteries, 120 pushes/day. The amount of coke pushed is 2969 tonnes/day maximum, approved in Environmental Compliance Approval No. 8-2179-79-806 issued on March 6, 1980;
- One (1) Coke Oven Glare Stack to flare surplus coke oven gas at a maximum rate of 17.25 Std m³/s. The stack height is 70 metres above grade and is 0.8 metre in diameter, approved in Environmental Compliance Approval No. 8-2186-79-806 issued on April 24, 1980;
- One (1) modified Minister-Stein travelling hood system on Nos. 1 and 2 Batteries, duct work and American Air Filter Venturi scrubber, capacity 58.43 Std m³/s with a pressure drop of 1143 mm W.G., exhausting to a 2.0 m diameter stack, 40 m above grade. The coke production capacity is 2969 tonnes/day maximum from 86 ovens; and
- Alterations to a Minister-Stein fume hood, including tighter seals between the hood and the door machine, new hood car wings, and operation of the hood as a stationary hood coupled to the door machine or operation of the hood as a travelling hood coupled to quench car;

approved in Environmental Compliance Approval No. 8-2180-79-806 issued on

March 6, 1980 and amended on March 18, 1992;

- One (1) coke quenching tower, 32 m above grade to quench a maximum of 2969 tonnes of incandescent coke per day from 86, 6 m coke ovens; and
- The use of a wetting agent at a concentration of 200 milligrams per litre in the water used in the coke quench tower;

both approved in Environmental Compliance Approval No. 8-2181-79-806 issued on March 6, 1980 and amended on February 7, 1996;

- A coal handling system including underground coal hoppers, screening station, covered conveyors, water sprays, coal crusher with a Wheelabrator model 120-6P pulse jet baghouse, using Dacron Felt bags, blending silos and a Larry Bin on the coke ovens battery. This system serves 86 ovens for a maximum coke production rate of 2969 tonnes/day, approved in Environmental Compliance Approval No. 8-2182-79-806 issued on March 6, 1980;
- One coke handling system including a coke wharf, conveyors, SOLMER type plow feeder, 91 tonne capacity excess coke loadout bin, & two transfer houses to transport coke to the Blast Furnace stockhouse at a maximum rate of 2969 tonnes of coke/day, approved in Environmental Compliance Approval No. 8-2183-79-806 issued on March 6, 1980;
- A coke oven door leak control system, installed on Nos. 1 and 2 Coke Oven Batteries for 86, 6 m coke ovens, consisting of two (2) door machines with door jam cleaning knives and doors with spring loaded knife - edge door seals. Maximum coke production rate is 2969 tonnes/day, approved in Environmental Compliance Approval No. 8-2184-79-807 issued on November 25, 1980;
- Eight raw coke oven gas bleeders to flare raw coke oven gas under emergency conditions at a total maximum rate of 17.25 Std m³/s. The stack heights are 27.8 m above grade and diameters are 0.61 metre, approved in Environmental Compliance Approval No. 8-2188-79-806 issued on April 28, 1980;
- The installation of a coal and coal/tar sludge mixture handling system including underground hoppers, screening station, covered conveyors, water sprays, coal crusher, blending silos, Larry bin on the coke ovens battery, and baghouse having a pulse jet cleaning mechanism and Dacron felt bags. The system handles up to 3,500 tonnes of tar sludge per year from the Lake Erie and Hilton Works and serves a coke oven production facility having a maximum coke production rate of 2,969 tonnes per day. The coal/tar sludge mixture will enter the coke ovens in a ratio not less than 20:1. All as per application dated October 13, 1989 and submitted by Stelco Inc., approved in Environmental Compliance Approval No. 8-2182-79-898 issued on November 29, 1989;

- The installation of a 1.0 cubic metre capacity pug mill to crush and mix coal and tar sludge up to 3,500 tonnes of tar sludge per year. The miller will mix the coal and tar sludge in a coal to tar sludge ratio of 4 to 1. All as per application dated October 13, 1989 and submitted by Stelco Inc., approved in Environmental Compliance Approval No. 8-2047-87-897 issued on November 29, 1989 and amended on October 5, 1999;
- Two (2) coke oven underfiring flue stacks on Nos. 1 and 2 Batteries, with a diameter of 3.0 metres each and a height of 85.0 metres, having underfiring rate of 492.7 million kilojoules per hour using coke gas for an eighty-six oven battery, with a maximum coke production rate of 2,969 tonnes per day; and
- One (1) burner with a maximum heat input of 9.5 million kilojoules per hour, using coke oven gas as fuel with a maximum rate of 500 normal cubic metres per hour, to be installed in the base of the Coke Ovens Underfiring stack to increase the stack draft;

both approved in Environmental Compliance Approval No. 0639-5SYKT7 issued on November 9, 2003.

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

1. *"Approval"* means this Environmental Compliance Approval including Schedules A and B, and including the information and documentation submitted in support of the applications for Environmental Compliance Approval listed above;
2. *"Battery Repair"* means a repair to a *By-product coke oven battery* that affects the entire battery, such as a repair to an end flue or a burner. For clarity, the repair of one or more *Coke Ovens* does not constitute a battery repair;
3. *"By-product coke oven battery"* means a structure that,
 - a. comprises *Coke Ovens* that operate under positive pressure and are connected by common walls, and
 - b. is constructed in a manner that allows by-products to be recovered from *Coke Oven* gas;
4. *"Business Day"* means a day that is not a Saturday or a holiday within the meaning of section 87 of the Legislation Act, 2006;
5. *"Charging"* means the *Coke Oven* operation in which coal is loaded into a *Coke Oven*; and "charge" has a corresponding meaning;

6. "*Coke Oven*" means an oven in which the *Coking Process* occurs;
7. "*Coke Oven Door*" means the entire area on the vertical face of a *Coke Oven* between the bench and the top of the battery between two adjacent buckstays and includes the *Coke Oven Door*, chuck door, and buck stay or jamb;
8. "*Coke Side*" means the side of a *By-product coke oven battery* from which the coke is discharged from *Coke Ovens* at the end of the *Coking Process*.
9. "*Coking Process*" means a process in which coal undergoes destructive distillation to produce coke and *Coke Oven* gas;
10. "*Collecting Main*" means any apparatus that is connected to one or more *Offtake Systems* and that provides a passage for conveying gases under positive pressure from the *By-product coke oven battery* to the by-product recovery system;
11. "*Company*" means Stelco Inc., that is responsible for the construction or operation of the *Facility* and includes any successors and assigns;
12. "*Director*" means any person appointed in writing by the Ministry of Environment, Conservation and Parks pursuant to section 5 of the *EPA*;
13. "*District Manager*" means the District Manager of the appropriate local district office of the *Ministry*, where the *Facility* is geographically located;
14. "*EPA*" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;
15. "*Equipment*" means the equipment or processes described in this *Approval*, to the extent approved by this *Approval*;
16. "*Facility*" means the entire operation located on the property where the *Equipment* is located;
17. "*Fugitive Emission*" means an emission from a *By-product coke oven battery* that is not collected by a capture system and that is discharged to the air. A fugitive emission includes,
 - a. an emission that escapes capture by process equipment exhaust hoods,
 - b. an emission that is emitted during material transfer,
 - c. an emission that is emitted from buildings housing material processing equipment or handling equipment, and
 - d. an emission that is emitted directly from process equipment;
18. "*Method 9*" means the document entitled "Method 9 - Visual Determination of the Opacity of Emissions from Stationary Sources" made available on the Internet by the *USEPA*, as amended from time to time, or a copy of that document that is available from the *Ministry*;

19. "*Method 303*" means the document entitled "Method 303-Determination of Visible Emissions From By-Product Coke Oven Batteries" made available on the Internet by the *USEPA*, as amended from time to time, or a copy of that document that is available from the *Ministry*;
20. "*Manual*" means a document or a set of documents that provide written instructions to staff of the *Company*;
21. "*Ministry*" means the ministry of the government of Ontario responsible for the *EPA* and includes all officials, employees or other persons acting on its behalf;
22. "*Offtake System*" means any individual *Coke Oven* apparatus that is stationary and provides a passage for gases from a *Coke Oven* to a *By-product coke oven battery Collecting Main* or to another *Coke Oven*. Offtake system components include the standpipe and standpipe caps, goosenecks, flange between the gooseneck and collection main, stationary jumper pipes, mini-standpipes, and standpipe and gooseneck connections;
23. "*Publication NPC-300*" means the *Ministry* Publication NPC-300, "Environmental Noise Guideline, Stationary and Transportation Sources – Approval and Planning, Publication NPC-300", August 2013, as amended.
24. "*Pushing*" means the coke oven operation in which coke is removed from a *Coke Oven* and "push" has a corresponding meaning;
25. "*Quenching*" means the process of cooling hot coke by direct contact with water; and "quench" has a corresponding meaning;
26. "*Shut-down*" means an operating condition during which the operation of a *By-product coke oven battery* is decreased from normal operating conditions to an inoperative state;
27. "*Start-up*" means an operating condition during which the operation of a *By-product coke oven battery* is increased from an inoperative state to normal operating conditions;
28. "*Topside Port Lid*" means a cover, removed during *Charging*, that is placed over the opening through which coal can be charged into a *Coke Oven*;
29. "*USEPA*" means the United States Environmental Protection Agency; and
30. "*Visible Emissions*" means any emission seen by the unaided (except for corrective lenses) eye, excluding steam or condensing water.

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

TERMS AND CONDITIONS

1. OPERATION AND MAINTENANCE

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

2. RECORD RETENTION

1. The *Company* shall retain, for a minimum of two (2) years from the date of their creation, all records and information related to or resulting from the recording activities required by this *Approval*, and make these records available for review by staff of the *Ministry* upon request. The *Company* shall retain:
 - a. all records on the maintenance, repair and inspection of the *Equipment*; and
 - b. all records of any environmental complaints, including:
 - i. a description, time and date of each incident to which the complaint relates;
 - ii. wind direction at the time of the incident to which the complaint relates; and
 - iii. a description of the measures taken to address the cause of the incident to which the complaint relates and to prevent a similar occurrence in the future.

3. NOTIFICATION OF COMPLAINTS

1. The *Company* shall notify the *District Manager*, in writing, of each environmental complaint within two (2) business days of the complaint. The notification shall include:
 - a. a description of the nature of the complaint; and

b. the time and date of the incident to which the complaint relates.

4. NOISE

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

5. PERFORMANCE LIMITS

1. The *Company* shall comply with the Coke Oven Battery Observation Requirements outlined in Schedule A of this *Approval*.

6. REQUIREMENTS FOR PUBLIC REPORTING

1. The *Company* shall comply with the Requirements for Public Reporting outlined in Schedule B of this *Approval*.

SCHEDULE A - Coke Oven Battery Observation Requirements

Part 1: Application

1. For the purpose of this Schedule, a *Charge* of a *Coke Oven* commences when coal begins to flow into the *Coke Oven* through a topside port and ends when the last topside port is re-capped.
2. For the purpose of this Schedule, a *Push* commences with the first detectable movement of the coke mass being removed from the *Coke Oven* and ends when the quench car carrying the coke enters the quench tower.
3. For the purpose of this Schedule, a *Quench* begins when the quench car enters the quench tower and ends when the quench car exits the quench tower.

Part 2: Work Ordered

Visible Emission Limits - Doors, Lids, Offtakes and Charging

Item 2.1

1. Subject to Item 2.15, the *Company* shall comply with the rules set out in paragraph 2.

2. Each *By-product coke oven battery* at the *Facility* shall be operated in a manner that complies with the rules set out in Columns 1, 2 and 3 of Table 1.

Table 1 – Daily 30-day Rolling Average Per Cent Leaking Doors, Lids and Offtakes

Column 1	Column 2	Column 3
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Daily 30-day Rolling Average Per Cent Leaking Doors (PLD (30-day))	Daily 30-day Rolling Average Per Cent Leaking Topside Port Lids (PLL (30-day))	Daily 30-day Rolling Average Per Cent Leaking Offtake Systems (PLO (30-day))
The daily 30-day rolling average per cent leaking doors as calculated in accordance with Item 2.4 shall not exceed 4.0% .	The daily 30-day rolling average per cent leaking Topside Port Lids as calculated in accordance with Item 2.4 shall not exceed 0.4% .	The daily 30-day rolling average per cent leaking Offtake Systems as calculated in accordance with Item 2.4 shall not exceed 2.5% .

Item 2.2

Subject to Item 2.15, the *Company* shall comply with the following rule:

1. Each *By-product coke oven battery* at the *Facility* shall be operated in a manner that results in the daily 30-day rolling log average of seconds of *Visible Emissions* for the *By-product coke oven battery* during *Charging*, calculated in accordance with Item 2.4, not exceeding 12 seconds.

Item 2.3

The *Company* shall ensure that, the *District Manager* is notified in writing of any failure to comply with Item 2.1 or 2.2 as soon as practicable following the date of the failure to comply. The notice shall include the following information:

1. The first and last date of the 30-day period on which the calculation mentioned in Item 2.1 or 2.2, as applicable, was based.
2. The value of the result of the calculation that indicated the failure to comply.
3. Identification of the *By-product coke oven battery* for which the calculation that indicated failure to comply was performed.
4. Identification of each *Coke Oven* for which an observation was used in the calculation that indicated the failure to comply
5. Any relevant information regarding the cause of the failure to comply, if known.
6. If the cause of the failure to comply is not known, an assessment of the most likely cause based on the best information available and an explanation of steps that have been taken or will be taken to determine the cause.

Visible Emissions - Observation and Calculation

Item 2.4

1. Subject to paragraph 2 and Item 2.15, for each *By-product coke oven battery* at the *Facility*, the *Company* shall ensure that each day:
 - i. *Visible Emissions* from the following sources of contaminant are observed, determined and recorded in accordance with *Method 303*:
 - A. Charging systems during *Charging*;
 - B. Doors, *Topside Port Lids* and *Offtake Systems* on *Coke Ovens*; and
 - C. *Collecting Mains*; and
 - ii. the following calculations are made in accordance with *Method 303*:
 - A. The per cent leaking doors for a day (PLD).
 - B. The daily 30-day rolling average per cent leaking doors (PLD(30-day)).
 - C. The per cent leaking *Topside Port Lids* for a day (PLL).
 - D. The daily 30-day rolling average of per cent leaking *Topside Port Lids* (PLL(30-day)).
 - E. The per cent leaking *Offtake Systems* for a day (PLO).
 - F. The daily 30-day rolling average of per cent leaking *Offtake Systems* (PLO(30-day)).
 - G. The daily 30-day rolling log average of seconds of *Visible Emissions* during *Charging*.
2. Subject to paragraph 3, reference to a day in paragraph 1 includes, at minimum, each of the following days:
 - i. Each *Business Day* in a calendar year.
 - ii. At least ten Saturdays in a calendar year.
 - iii. At least ten Sundays in a calendar year.
3. The *District Manager* may specify a different set of days than the days set out in paragraph 2 for a *By-product coke oven battery* if the *Director* is of the opinion that no failure to comply with Item 2.1 or 2.2 has occurred in the past 12 months with respect to the battery and the battery specified is operating properly.
4. For the purpose of this Schedule, a reference to “63.309 (c)(1) of this part” in paragraphs 11.1.1 and 11.2.1 of *Method 303* is a reference to 40 CFR 63.309 (c) (1).
5. For the purpose of this Schedule, a person will be considered to be a certified observer under *Method 303* if,
 - i. the person is a certified observer under *Method 303*, or
 - ii. the person,

- A. has met all of the certification requirements, including recertification requirements where applicable, set out in section 10 of *Method 303* except for the requirement set out in section 10.1.3 of *Method 303* to have the composition of the panel approved by the *USEPA*,
 - B. the *Director* waived the requirement mentioned in sub-subparagraph A in writing, and
 - C. the composition of the panel mentioned in sub-subparagraph A was approved by the *Director*.
6. For the purpose of this Schedule, the requirement for a certified observer (*Method 303*) to be employed by the administrator, as set out in 40 CFR 63.301, does not apply.
 7. The *Ministry* is not an enforcement agency for the purpose of Section 10.3 of *Method 303*.
 8. For each certified observer who makes an observation for the purpose of paragraph 1, the *Company* shall ensure that a record reflecting the successful completion of the proficiency test referred to in *Method 303* is retained at the *Facility* for a period of two (2) years.
 9. For a certified observer described under subparagraph 5 ii, the checklist mentioned in sections 10.1.3 and 10.3 of *Method 303* may be a checklist provided by the *District Manager*.
 10. For the purpose of this Schedule, an observer may wait to observe *Visible Emissions* from the *Offtake System* of a *Coke Oven* being charged until approximately five minutes after the completion of the charge.
 11. For the purpose of this Schedule, an observer may count a door of a *Coke Oven* that has been charged in the 30-minute period preceding the observation as uncounted.
 12. For the purpose of this Schedule, the following requirements do not apply with respect to the *Coke Side* of the by-product *Coke Ovens*:
 - i. The requirements with respect to the traverse set out in, *Method 303*, paragraph 11.2.2, if the requirements set out in 11.2.2.3 are met with respect to the traverse.
 - ii. The calculation set out in, *Method 303*, 12.5.2 if the calculation set out in 12.5.3 is used.

Observation of the Opacity of Fugitive Pushing Emissions

Item 2.5

For greater certainty, the requirements set out in Item 2.5 pertain only to the opacity of fugitive *Pushing* emissions and not to the opacity of any other emissions.

1. Subject to Item 2.15 and paragraph 9, the *Company* shall ensure that the opacity of fugitive *Pushing* emissions for each *By-product coke oven battery* at the *Facility* is determined and recorded each day in accordance with paragraphs (a) (1) to (6) of 40CFR63, subpart CCCCC, section 63.7334 (United States).
2. Subject to paragraph 3, reference to a day in paragraph 1 includes, at minimum, each of the following days:
 - i. Each *Business Day* in a calendar year.
 - ii. At least ten Saturdays in a calendar year.
 - iii. At least ten Sundays in a calendar year.
3. The *Director* may specify a different set of days than the days set out in paragraph 2 for a *By-product coke oven battery* if the *District Manager* is of the opinion that no failure to comply with Item 2.14 has occurred in the past 12 months with respect to the battery and the battery being specified is operating properly.
4. Figures 9.1 and 9.2 of *Method 9* do not apply for the purpose of this Schedule. For the purpose of this Schedule the *Company* shall use current existing field data sheets and record sheets.
5. For the purpose of this Schedule, the requirement for a *Method 9* certified observer to be employed by the administrator, as set out in 40 CFR 63.301, does not apply.
6. For the purpose of this Schedule, the alternative procedure mentioned in paragraph (a) (3) of 40CFR63, subpart CCCCC, section 63.7334 (United States) is not available.
7. For further certainty, the following determinations shall be made with respect to the *Pushing* opacity observations required to be made under paragraph (a)(4) of 40CFR63, subpart CCCCC, section 63.7334 (United States):
 - i. Determine the average opacity of the first six observations.
 - ii. Using the next opacity observation and the previous five observations, determine the average opacity.
 - iii. Repeat the determination described in subparagraph ii for all observations.
 - iv. Identify the highest average opacity determined in subparagraphs i to iii.
 - v. The average determined in subparagraph iv is deemed to be the average opacity of fugitive *Pushing* emissions for the push.
8. If two or more determinations required by paragraph 1 are not made in any seven-day period, the *Company* shall ensure that the *Director* and *District Manager* are

notified in writing as soon as practicable.

9. The opacity of fugitive *Pushing* emissions associated with a *Coke Oven* push may be determined and recorded by a method other than the method set out in paragraph 1 if in the opinion of the *Director* the information submitted under paragraph 10 demonstrates that,
 - a. the method set out in paragraph 1 does not allow adequate observation of the opacity of the fugitive *Pushing* emissions because,
 - i. the *Coke Oven* push occurred at night, or
 - ii. an obstruction is preventing the observation of the *Coke Oven* push; and
 - b. the method is reasonably equivalent to paragraphs (a) (1) to (6) of 40CFR63, subpart CCCCC, section 63.7334 (United States).
10. The information mentioned in paragraph 9 includes the following:
 - i. An identification of each *Coke Oven* for which the other method may be used.
 - ii. An identification of the *By-product coke oven battery* in which each of the *Coke Ovens* set out in subparagraph i is located.
 - iii. An explanation of why it is not possible to use method set out in paragraph 1 for each of the *Coke Ovens* set out in subparagraph i.
 - iv. A detailed explanation of the proposed other method.
 - v. The number of days the other method may be used.

Operational Adjustments to Reduce Visible Emissions - Doors, Lids and Offtakes

Item 2.6

The *Company* shall ensure that, for each *By-product coke oven battery* at the *Facility*, a document entitled “Operational Adjustments – Visible Emissions” is prepared. The document shall set out actions to be taken if an exceedance described in Item 2.9 occurs and, for each action, shall include a written procedure to implement the action. One of the actions set out in the document shall be to cease operating a *Coke Oven*.

Item 2.7

The *Company* shall ensure that a graphic representation of the actions required to be set out by Item 2.6 is given to the *District Manager*.

Item 2.8

No later than March 31 of each year, the *Company* shall ensure that if, during the previous calendar year, any change is made to an action required to be set out by Item

2.6, the graphic required to be given by Item 2.7 is updated to reflect the change and the updated graphic and the reason for each update is given to the *District Manager*.

Item 2.9

1. The requirements of this Item are subject to Item 2.15.
2. If, as calculated in accordance with Item 2.4, the per cent leaking doors on a *By-product coke oven battery* at the *Facility* exceeds **five (5) per cent**, the *Company* shall ensure that one or more operational adjustments are made to minimize the discharge of *Visible Emissions* from leaking *Coke Oven Doors*.
3. If, as calculated in accordance with Item 2.4, the per cent leaking *Topside Port Lids* on a *By-product coke oven battery* at the *Facility* exceeds **one (1) per cent**, the *Company* shall ensure that one or more operational adjustments are made to minimize the discharge of *Visible Emissions* from leaking *Topside Port Lids*.
4. If, as calculated in accordance with Item 2.4, the per cent leaking *Offtake Systems* on a *By-product coke oven battery* at the *Facility* exceeds **four (4) per cent**, the *Company* shall ensure that one or more operational adjustments are made to minimize the discharge of *Visible Emissions* from leaking *Offtake Systems*.
5. If an operational adjustment is required to be made under paragraphs 2, 3, or 4 the *Company* shall ensure that a record describing the operational adjustment is prepared.
6. The record required by paragraph 5 shall contain the following information:
 - i. An indication of whether emissions from *Coke Oven Doors*, *Topside Port Lids* or *Offtake Systems* gave rise to the requirement to make an operational adjustment.
 - ii. The result of the calculation performed in accordance with Item 2.4.
 - iii. Identification of the *By-product coke oven battery* from which the emissions mentioned in subparagraph i were emitted.
 - iv. Identification of the *Coke Ovens* or port numbers from

which the emissions mentioned in subparagraph i were emitted.

- v. The date on which the result mentioned in subparagraph ii was calculated.
- vi. The production rate of the *By-product coke oven battery* on the date mentioned in subparagraph v.
- vii. The name of the certified observer who determined the result mentioned in subparagraph ii.
- viii. The name of the persons operating and supervising the *By-product coke oven battery* mentioned in subparagraph iii on the date mentioned in subparagraph v.
- ix. A description of the operational adjustment made in accordance with paragraph 2, 3 or 4 as applicable.
- x. The date on which the operational adjustment mentioned in subparagraph ix commenced and the date on which the operational adjustment was completed.

Item 2.10

1. The *Company* shall ensure that the *District Manager* is notified in writing if two or more operational adjustments are required to be made under Item 2.9 in any seven-day period. The notice shall include the record required by paragraph 5 of Item 2.9 for each of the operational adjustments.

2. The seven-day period mentioned in paragraph 1 shall end on the date that is six days after the date on which the first operational adjustment is required to be made under Item 2.9.

3. The *District Manager* shall be notified as soon as practicable following the last day of the seven-day period mentioned in paragraph 2. The notice shall address all operational adjustments required to be made in the period.

4. An operational adjustment in respect of which a notice has been given by the *Company* under paragraph 1 shall not be included in determining whether two or more operational adjustments have been required within a subsequent seven-day period.

Operational Adjustments to Reduce Fugitive Pushing Emissions

Item 2.11

For greater certainty, the requirements set out in Item 2.11 of this Schedule pertain only to the opacity of fugitive *Pushing* emissions and not to the opacity of any other emissions.

The *Company* shall ensure that, for each *By-product coke oven battery* at the *Facility*, a document entitled “Operational Adjustments – Reducing Fugitive Emissions During Pushing” is prepared. The document shall set out actions that could be taken if an operational adjustment is required to be made under Item 2.14 and, for each action, shall include a written procedure to implement the action. One of the actions set out in the document shall be to increase the duration of the *Coking Process* for a *Coke Oven*.

Item 2.12

For greater certainty, the requirements set out in Item 2.12 of this Schedule pertains only to the opacity of fugitive *Pushing* emissions and not to the opacity of any other emissions.

The *Company* shall ensure that a graphic representation of the actions required to be set out by Item 2.11 is given to the *Director* and *District Manager*.

Item 2.13

For greater certainty, the requirements set out in Item 2.13 of this Schedule pertain only to the opacity of fugitive *Pushing* emissions and not to the opacity of any other emissions.

No later than March 31 of each year, the *Company* shall ensure that if, during the previous calendar year, any change is made to an action required to be set out by Item 2.11, the graphic required to be given by Item 2.12 is updated to reflect the change and the updated graphic and the reason for each update is given to the *District Manager*.

Item 2.14

For greater certainty, the requirements set out in Item 2.14 of this Schedule pertain only to the opacity of fugitive *Pushing* emissions and not to the opacity of any other emissions.

1. Subject to Item 2.15, the *Company* shall ensure that one or more of the operational adjustment actions set out in the document mentioned in Item 2.11 are made to minimize the discharge of emissions to the air during *Pushing* if during

any day the *Fugitive Emissions* associated with a *Coke Oven* push have an average opacity, determined in accordance with Item 2.5, of 30 per cent or more.

2. Subject to paragraph 3, no later than thirty days after the date on which a requirement to make an operational adjustment arose under paragraph 1, the *Company* shall, for a 30-day period, cease to operate each *Coke Oven* that gave rise to the requirement to make an operational adjustment under paragraph 1.
3. Paragraph 2 does not apply if,
 - a. during the thirty-day period mentioned in paragraph 2, the opacity of the fugitive *Pushing* emissions associated with each *Coke Oven* that was observed on the date on which the requirement to make an operational adjustment arose under paragraph 1 is observed again and no *Fugitive Emissions* associated with a *Coke Oven* push have an average opacity, determined in accordance with Item 2.5, of less than 30 per cent; or
 - b. Subject to paragraph 5, the *Director* and *District Manager* have been notified of and the *Director* has approved a plan to minimize the discharge of emissions to the air during the *Pushing* of each *Coke Oven* that gave rise to the requirement to make an operational adjustment under in paragraph 1.
4. If the information required by clause 3 a. is not ascertained before the date that is half way through the 30-day period mentioned in paragraph 2, the *Company* shall ensure that the *District Manager* is notified as soon as practicable after the date.
5. The *Director* shall not approve the plan mentioned in clause 3 b. for a period of more than 24 months.
6. If an operational adjustment is required to be made under paragraph 1, the *Company* shall ensure that a record describing the operational adjustment is prepared.
7. The record required by paragraph 6 shall contain the following information:
 - i. The opacity of the *Fugitive Emissions* that gave rise to the requirement to make the operational adjustment.
 - ii. Identification of each *Coke Oven*, the push of which gave rise to the requirement to make the operational adjustment.
 - iii. Identification of the *By-product coke oven battery* in which the *Coke Ovens* mentioned in subparagraph ii are located.
 - iv. The date on which the opacity mentioned in subparagraph i was determined.
 - v. The production rate of the *By-product coke oven battery* on the date mentioned in subparagraph iv.
 - vi. The name of the certified observer qualified under *Method 9* who determined the opacity mentioned in subparagraph i.

- vii. The name of the persons operating and supervising the *By-product coke oven battery* mentioned in subparagraph iii on the date mentioned in subparagraph iv.
- viii. A description of the operational adjustment made in accordance with paragraph 1.
- ix. The date on which the operational adjustment mentioned in subparagraph viii commenced and the date on which the operational adjustment was completed.

Start-up, Shut-down, Battery Repair and Batteries not in Operation

Item 2.15

1. The *Director* may approve a plan setting out operating practices during a period of *Start-up, Shut-down* or *Battery Repair* if he or she is of the opinion that the operating practices will minimize the discharge of contaminants during the period.
2. Approval of the plan mentioned in paragraph 1 shall expire at the end of the period mentioned in paragraph 1.
3. During a period of approval mentioned in paragraph 2, the *Company* shall comply with the operating practices set out in the plan approved under paragraph 1 instead of Items 2.1, 2.2, 2.4, 2.5, 2.9 and 2.14.
4. Items 2.1, 2.2, 2.4, 2.5, 2.9 and 2.14 do not apply during a period in which a *By-product coke oven battery* is not operating.

Requirements for Record-Keeping

Item 2.16

1. The *Company* shall ensure that the following information is recorded:
 - i. The daily production rate of each *By-product coke oven battery* at the *Facility*.
 - ii. The date, time and reason for each *Shut-down* of a *Coke Oven* and the date and time that the *Coke Oven* was re-started.
 - iii. The date, time and reason for each *Battery Repair* and the date and time that the *Battery Repair* was completed.
 - iv. The date, time and durations of each power outage that affected a *By-product coke oven battery* at the *Facility*.
 - v. For each *By-product coke oven battery* at the *Facility*,
 - a. The per cent leaking doors calculated in accordance with Item 2.4.

- b. The per cent leaking *Topside Port Lids* calculated in accordance with Item 2.4.
- c. The per cent leaking *Offtake Systems* calculated in accordance with Item 2.4.
- d. The *Visible Emissions* from charging systems during *Charging* calculated in accordance with Item 2.4.
- e. The opacity of fugitive *Pushing* emissions determined in accordance with Item 2.5.

SCHEDULE B – Requirements for Public Reporting

1. The *Company* shall maintain and participate in the existing Community Liaison Committee (CLC) for the *Facility*, and ensure that,
 - a. the CLC meets, at a minimum, quarterly or at a frequency agreed to in writing by the CLC members and serves as a forum for dissemination, consultation, review and exchange of information regarding the operation of the *Facility*, environmental issues such as the need for new approvals or amendments to existing approvals to reduce emissions of suspended particulate matter;
 - b. a report is presented at each meeting that includes, for each *By-product coke oven battery* at the *Facility*, a summary of the following information:
 - i. the information required by Schedule A Item 2.3 with respect to each notice required to be given during the period since the last meeting of the CLC,
 - ii. the information required by Schedule A Item 2.9 paragraph 6 with respect to each record required to be made during the period since the last meeting of the CLC,
 - iii. the information required by Schedule A Item 2.14 paragraph 7 with respect to each record required to be made during the period since the last meeting of the CLC,
 - iv. Complaints received by the *Facility* during the period since the last meeting of the CLC that relates to a matter addressed in this *Approval*, and
 - v. Any comments provided to the *Facility* by the *Ministry* regarding the status of subparagraphs i to iv.
 - c. for each meeting, the materials, such as agendas and presentations, are posted to the *Company* website no later than five *Business Days* after the date that the CLC meeting is held.

2. By July 1 of each year, the *Company* shall prepare a report titled “Environmental Management System and Community Engagement Report” that sets out the following information with respect to the preceding calendar year:
 - i. A summary of the information required by Schedule A Item 2.3 with respect to each notice required to be given.
 - ii. A summary of the information required by Schedule A Item 2.9 paragraph 6 with respect to each record required to be made.
 - iii. A summary of the information required by Schedule A Item 2.14 paragraph 7 with respect to each record required to be made.
 - iv. The minutes of the CLC meetings and any related follow-up actions.
3. The report required by paragraph 2 shall be made available for public inspection at the Facility during office hours and be posted to the *Company* website.

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

1. Condition No. 1 is included to emphasize that the *Equipment* must be maintained and operated according to a procedure that will result in compliance with the *EPA*, the Regulations and this *Approval*.
2. Condition No. 2 is included to require the *Company* to keep records and to provide information to staff of the *Ministry* so that compliance with the *EPA*, the Regulations and this *Approval* can be verified.
3. Condition No. 3 is included to require the *Company* to notify staff of the *Ministry* so as to assist the *Ministry* with the review of the site's compliance.
4. Condition No. 4 is included to provide the minimum performance requirements considered necessary to prevent an adverse effect resulting from the operation of the *Facility*.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 8-2118-76-807, 8-2179-79-806, 8-2180-79-806, 8-2181-79-806, 8-2182-79-806, 8-2183-79-806, 8-2184-79-807, 8-2188-79-806, 8-2182-79-898, 8-2047-87-897, 8-2186-79-806 and 0639-5SYKT7 issued on November 25, 1980, March 6, 1980, March 6, 1980, March 6, 1980, March 6, 1980, November 25, 1980, April 28, 1980, November 29, 1989, November 29, 1989, April 24, 1980 and November 9, 2003.

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me, the Environmental Review Tribunal and in accordance with Section 47 of the Environmental Bill of Rights, 1993, the Minister of the Environment, Conservation and Parks, within 15 days after receipt of this Notice, require a hearing by

the Tribunal. The Minister of the Environment, Conservation and Parks will place notice of your appeal on the Environmental Registry. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

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

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

The Notice should also include:

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

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

This Notice must be served upon:

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

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

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

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.gov.on.ca**

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

The above noted activity is approved under s.20.13 of Part II.1 of the Environmental Protection Act.

DATED AT TORONTO this 25th day of January,
2021

Rudolf Wan, P.Eng.
Director
appointed for the purposes of Part
II.1 of the *Environmental
Protection Act*

MS/
c: District Manager, MECP Hamilton District Office
Petar Kolundzija, Stelco Inc.