

Director's Order Number: 1-131449375

Director's Order Issued To

NATIONAL STEEL CAR LIMITED/ WAGON D'ACIER NATIONAL LIMITEE
600 Kenilworth Ave N,
Hamilton, ON, L8N 3J4
Canada

Site

National Steel Car Limited
600 KENILWORTH AVE N, HAMILTON, ON, L8N 3J4

Refer to the Definitions section in Part B of this Director's Order, for the meaning of all the capitalized terms that are used in this Director's Order.

PART A - WORK ORDERED

This work is ordered pursuant to my authority under **EPA | 18 | (1)**. I order you to do the following:

Item No. 1 **Compliance Due Date:** 06/30/2023

By June 30, 2023, the Company shall provide to the undersigned Director by email at Stephen.Burt@ontario.ca and at Environment.Hamilton@ontario.ca, a plan to reduce the amount of Manganese, Ferric Oxide and Hexavalent Chromium that are discharged from the Site into the natural environment.

The plan shall include, at a minimum, the following:

- a) Details of the Company's plan to request a site-specific standard from the Director, Local Air Quality Regulation, s.35, pursuant to s.32 of O.Reg. 419/05 for Manganese, Ferric Oxide and Hexavalent Chromium. All the requirements set out in s.33 of O.Reg. 419/05 and the *Guide to Requesting a Site-specific Standard* must be considered.
- b) A description of the public consultation that will be undertaken in respect of the proposed request to set a site-specific standard for Manganese, Ferric Oxide and Hexavalent Chromium, which shall comply with the requirements set out in subsections 34(2) to 34(4) of O.Reg. 419/05 in respect of the public meeting.

- c) The date, no later than June 30, 2024, by which the Company will submit a request for site-specific standards and all supporting documentation as set out in s. 33 of O.Reg 419/05, to the Ministry's Director, Local Air Quality Regulation, for the purposes of s.35 of O.Reg 419/05.

Item No. 2 Compliance Due Date: 06/30/2024

By June 30, 2024, the Company shall submit, to the Director, Environmental Approvals and Permissions Branch, an electronic copy of a completed application for an Environmental Compliance Approval (air and noise). This submission shall include all necessary supporting documentation and applicable fees for all operations at the Site including in respect of any changes to operations and equipment in support of the request for the site-specific standards.

Item No. 3 Compliance Due Date: 06/30/2024

By June 30, 2024, the Company shall request a new site-specific standard for Hexavalent Chromium, Ferric Oxide, and Manganese for the Site from the Director, Local Air Quality Regulation, for the purposes of s.35 of O.Reg 419/05. The Company shall include in the request, the information set out in section 33 of O.Reg 419/05 and the *Guide to Requesting a Site-specific Standard*.

Item No. 4 Compliance Due Date: 06/30/2024

By June 30, 2024, the Company shall provide a copy of the completed ECA application referred to in Item No. 2, and the completed request for a new site-specific standard referred to in Item No.4 to the undersigned Director.

PART B - BACKGROUND AND REASONS

This Director's Order is being issued for the reasons set out below.

Definitions

For the purposes of this Director's Order, the following capitalized terms shall have the meanings set out below:

“**Company**” means National Steel Car Limited/ Wagon D’acier National Limitee with a registered office located at 600 Kenilworth Avenue North, Hamilton, Ontario L8N 3J4

“**ECA**” means Environmental Compliance Approval

“**ESDM report**” means Emission Summary and Dispersion Modelling report prepared in

accordance with s.26 of O.Reg. 419/05

“**Site**” means 600 Kenilworth Avenue North, Hamilton, Ontario, L8N 3J4

“**Ferric Oxide**” means ferric oxide as defined in Schedule 3 of Ontario Regulation 419/05 (Air Pollution – Local Air quality. Interchangeable with “Iron oxide”

“**Guide to Requesting a Site-specific Standard**” means Version 2.0 of the ministry’s publication with PIBS # 6322e02 titled “Guide to Requesting a Site-Specific Standard: Guidance for Request for Site-Specific Standard Approvals under Section 32 Under Ontario Regulation 419/05 Air Pollution – Local Air Quality made under the Environmental Protection Act”

“**Hexavalent Chromium**” means chromium compounds (hexavalent) as defined in Schedule 3 of Ontario Regulation 419/05 (Air Pollution – Local Air quality)

“**Manganese**” means manganese compound as defined in Schedule 3 of Ontario Regulation 419/05 (Air Pollution – Local Air quality)

“**Ministry**” means the Ministry of the Environment, Conservation, and Parks

“**O.Reg. 419/05**” means Ontario Regulation 419/05 (Air Pollution – Local Air Quality) made under the EPA

Description of Person(s) Subject to the Director's Order

The Company was established and began operations at its Hamilton, Ontario Site in 1912 and has been manufacturing railcars at this location for over 100 years. National Steel Car Limited/ Wagon D’acier National Limitee, the Company, is a Canadian corporation with a Corporation Number 452923-5 and is registered in the province of Ontario with an Ontario Corporation Number 1556552.

The registered owner of the Site is the Company.

Description of the Site

The Site is located at 600 Kenilworth Ave. N. in Hamilton, Ontario. The Site is roughly 900 metres by 260 metres and located in a heavy industrial area. The Company manufactures freight railcars for railroads, railcar leasing companies, and industrial shippers. The Site operates under NAICS code 336510 - Railroad Rolling Stock Manufacturing. The primary raw material is steel. Other materials used are blasting abrasives, paint, welding wire, shielding gas, and purchased parts. The main processes are cutting and welding of metal components, blasting, heat treating, painting, and curing.

Events Leading up to Director's Order

The Company was issued ECA #9929-5WWS8Q, by the Ministry in June 2004 in respect of air and noise emissions from the Site. The ECA does not include all sources of

emissions from operations and an amendment to the ECA is required.

Since 2017, two separate ECA applications were submitted to the Ministry for a comprehensive site-wide approval with limited operational flexibility. Both applications have since been cancelled or withdrawn because compliance with O.Reg. 419/05 was not demonstrated. Non-compliance is related to O. Reg. 419/05 Schedule 3 standards for Manganese, Ferric Oxide and Hexavalent Chromium.

The locations of the modelled point of impingement concentrations in exceedance of O.Reg. 419/05 Schedule 3 Standards are at industrial or vacant properties adjacent to the Site. There are no modelled exceedances at residential or other sensitive receptor locations referred to in subsection 30(8) of O.Reg. 419/05.

The Company developed an abatement plan in 2017 and began taking measures to reduce its emissions. Most notably, the Company worked with its welding rod supplier to transition to rods with a lower composition of manganese. Emission reductions have been achieved, however the Company has been unable to demonstrate compliance with the Ministry's O.Reg 419 Schedule 3 Standards.

On May 18, 2022, the Company submitted an ESDM report to the Ministry. The ESDM report is based on actual production at the Site through the 2021 calendar year and showed a significant increase in Hexavalent Chromium emissions. The report indicates that there are modelled exceedances of the Ministry's O.Reg. 419/05 Schedule 3 Standards for Hexavalent Chromium (annual standard) and Ferric Oxide (24-hour standard). It is the Ministry's understanding that due to the types of rail cars produced in 2021 the Site performed more welding on an annual basis than had been described in the Company's previous annual ESDM reports. The additional welding and the types of welding rods used resulted in the increase in Hexavalent Chromium emissions.

The May 2022 ESDM report indicates that Manganese meets the applicable O.Reg. 419/05 Schedule 3 Standard (reported to be 92% of limit). However, these emissions are not based on the Site's worst-case emission scenario as described in O.Reg 419/05 s. 11(1). Furthermore, based on assessments completed by the Air Review Engineer from the Environmental Permissions Branch, it has been concluded that the emission calculations used are likely underestimating the emission rates by as much as 20%. It is the opinion of the Ministry's Air Review and Air Compliance Engineers that making the necessary adjustments to the emission rates in the ESDM report would also result in a modelled exceedance of the Ministry's Schedule 3 Standard for Manganese (24-hour Standard).

Ferric Oxide and Hexavalent Chromium are modelled in excess of their respective air standards and it is believed that Manganese could also exceed the air standard. The hexavalent chromium

air standard is based on carcinogenicity. The manganese air standard is based on neurotoxicity. The Ferric Oxide standard is based on protection against causing rust and discolouration of property.

On May 27, 2022, the Company submitted to the Ministry a s.28 Notification in relation to the modelled exceedances, and on June 28, 2022, an updated abatement plan was also submitted. The abatement plan was reviewed by an Air Compliance Engineer (Richard Lalonde) with the Ministry's West Central Region, Technical Support Section. The review memo, dated September 16, 2022, concluded the following:

- There are ongoing deficiencies in the demonstration of compliance with sections 10 and 11 of O.Reg. 419/05 and specifically the methodology for assessing emissions from the welding activities, the level of data quality that was assigned to these estimates and the development of appropriate maximum emission scenarios.
- The locations of the modelled (off-property) point of impingement concentrations in exceedance of O.Reg. 419/05 Schedule 3 Standards are industrial or vacant properties. There are no modelled exceedances at residential or other sensitive receptor locations referred to in subsection 30(8) of O.Reg. 419/05.
- The June 2022 abatement plan does not provide a clear path or timelines to achieve compliance with the Ministry's Standards outlined in Schedule 3 of O. Reg. 419/05, and no specific emission control technologies or modifications were proposed.

A copy of the memo was provided to the Company on September 19, 2022, via email. On October 3, 2022, Ministry staff met with the Company to discuss the Air Compliance Engineer's review of the s. 28 Notification and the updated abatement plan. During the meeting Ministry staff recommended that the Company make a request for site-specific standards under s.32 of O.Reg. 419/05 for Manganese, Ferric Oxide and Hexavalent Chromium.

Although the Company's May 2022 ESDM report indicates that there are no modelled exceedances at nearby sensitive receptors (i.e. residential homes, schools, day care facilities or hospitals) the Ministry's engineers are not confident that the reported emission rates and modelled off-site point of impingement concentrations accurately represent the emissions from the Site. Furthermore, the May 2022 ESDM report does not assess the worst-case emission scenario for the Site, which suggests that the off-site concentration of Manganese, Ferric Oxide and Hexavalent Chromium could be higher than reported. These issues will be addressed as part of the request for site-specific standards and the ECA submission process.

Authority to Issue the Director's Order

I am issuing this Director's Order pursuant to my authority as a Director under section 18 of the Environmental Protection Act, R.S.O. 1990, c. E.19.

I have reasonable and probable grounds to believe that the requirements specified in this Order are necessary or advisable so as to prevent or reduce the risk of a discharge of a contaminant, namely Manganese, Ferric Oxide and Hexavalent Chromium into the natural environment from the Site;

Issuing Director

Name: Stephen Burt

Job Title: District Manager, Hamilton District Office

Badge Number: 1504

Address: 119 King St W. - 9th floor, Hamilton, ON L8P 4Y7

Director Email: Stephen.Burt@ontario.ca

Date: 2023/04/11

Issued at Hamilton this 11th day of April, 2023.

Stephen Burt

Director s. 18 Environmental Protection Act, R.S.O. 1990, c. E.19.

Ministry of the Environment, Conservation and Parks

Hamilton District Office

APPEAL TO THE ONTARIO LAND TRIBUNAL INFORMATION

REQUEST FOR HEARING

You may require a hearing before the Ontario Land Tribunal if, within 15 days of service of this Director's Order, you serve written notice of your appeal on the Ontario Land Tribunal and the Director as indicated in the Contact Information below. Your notice of appeal must state the portions of this Director's Order for which a hearing is required and the grounds on which you intend to rely at the hearing. Unless you receive leave (permission) from the Ontario Land Tribunal, you are not entitled to appeal a portion of this Director's Order or to rely on grounds of appeal that are not stated in the notice of appeal.

CONTACT INFORMATION

The contact information for the Director and the Ontario Land Tribunal is the following:

Registrar Ontario Land Tribunal
655 BAY STREET, SUITE 1500
TORONTO, ON
M5G 1E5
Email: OLT.Registrar@ontario.ca

and

Director
Ministry of the Environment, Conservation and
Parks
Hamilton District Office
119 KING ST WEST, 9TH FLOOR
HAMILTON, ON L8P 4Y7
Email: Environment.Hamilton@ontario.ca

The contact information of the Ontario and Tribunal and further information regarding its appeal requirements can be obtained directly from the Tribunal at:

Tel: (416) 212-6349

Toll Free: 1 (866) 448-2248

Webpage: www.olt.gov.on.ca

SERVICE INFORMATION

Service of the documentation referred to above can be made personally, by mail, by fax (in the case of the Director only), by commercial courier or by email in accordance with the legislation under which this Director's Order is made and any corresponding Service Regulation.

Please note that where service is made by mail, it is deemed to be made on the fifth day after the date of mailing and choosing service by mail does not extend any of the above-mentioned timelines.

ADDITIONAL INFORMATION

Unless stayed by the Director or the Ontario Land Tribunal, this Director's Order is effective from the date of service.

Failure to comply with a requirement of this Director's Order constitutes an offence.

The requirements of this Director's Order are minimum requirements only and do not mean that you are

not required to comply with any other applicable legal requirements, including any:

- statute, regulation, or by-law;
- federal, provincial, or municipal law; or
- applicable requirements that are not addressed in this Director's Order.

The requirements of this Director's Order are severable. If any requirement of this Director's Order, or the application of any requirement to any circumstance, is held invalid, such finding does not invalidate or render unenforceable the requirement in other circumstances. It also does not invalidate or render unenforceable the other requirements of this Director's Order.

Further orders may be issued in accordance with the legislation as circumstances require.

This Director's Order is binding upon any successors or assignees of the persons to whom this Director's Order is issued.

The procedures to request a hearing and an appeal of this Director's Order and other information provided above are intended as a guide. The legislation should be consulted for additional details and accurate reference. Further information can be obtained from e-Laws at www.ontario.ca/laws.