

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 1433-CKHLL6
Issue Date: November 2, 2022

Canadian National Railway Company
935 de la Gauchetière Street West
Post Office Box, No. 8100
Montreal, Quebec
H3B 2M9

Site Location: CN Sioux Lookout Yard
Part Parcel 17670, Plan M-305
Municipality of Sioux Lookout, District of Kenora

You have applied under section 20.2 of Part II.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

- one (1) biosparge in-situ remediation process to treat soil/groundwater by the injection of oxygen into the subsurface;

all in accordance with the Environmental Compliance Approval application submitted by Canadian National Railway Company, dated December 31, 2021 and signed by Stella Karnis; and the supporting information, including the Project Report prepared by KGS Group, dated February 4, 2022, and signed by Alexandria Beveridge and Jason Mann.

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

1. "Approval" means this Environmental Compliance Approval, including the application and supporting documentation listed above;
2. "Company" means Canadian National Railway Company that is responsible for the construction or operation of the Facility and includes any successors and assigns;
3. "Director" means a person appointed for the purpose of section 20.3 of the EPA by the Minister pursuant to section 5 of the EPA;

4. "District Manager" means the District Manager of the appropriate local district office of the Ministry where the Facility is geographically located;
5. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;
6. "Equipment" means the biosparge system including sparge wells and monitoring wells as described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;
7. "Facility" means the entire operation located on the property where the Equipment is located;
8. "Manual" means a document or a set of documents that provide written instructions to staff of the Company;
9. "Ministry" means the ministry of the government of Ontario responsible for the EPA and includes all officials, employees or other persons acting on its behalf;
10. "Monitoring Plan" means a written monitoring plan developed for the site as described in Condition 4;
11. "Process" means the biosparge treatment process as described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;
12. "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;
13. "Remedial Work Plan" means a plan, developed for the Process at the site and prepared as a single document as described in Condition 2;
14. "Soil, Groundwater and Sediment Standards" means the Ministry publication "Soil, Groundwater and Sediment Standards for Use under Part XV.1 of the Environmental Protection Act" dated April 15, 2011, as may be amended;
15. "Supporting Documents" means the Ministry publications that accompany the Soil, Groundwater and Sediment Standards including "Guide for Completing Phase II Environmental Site Assessment under Ontario Regulation 153/04" dated June 2011, as amended;
16. "Target Compounds" means Iron, Petroleum Hydrocarbons and Light Non-aqueous Phase Liquids as described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval, that the Equipment is designed to treat.

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. PERFORMANCE REQUIREMENTS

1. The Company shall, at all times, design and operate the Process with the intent to reduce the soil/groundwater concentrations of the Target Compounds to comply with the appropriate criteria provided in the Soil, Groundwater and Sediment Standards, appropriate worker health and safety criteria or Site specific criteria developed in accordance with the Supporting Documents.
2. The Company shall, ensure that the noise emissions from the Process at the Site comply with the limits set out in Ministry Publication NPC-300.
3. The Company shall keep the doors to the Control Building closed during the normal operation of the Equipment.
4. The Company shall, at all times, unless otherwise agreed by the District Manager, design and operate the Process so that no Target Compounds, or their decomposition compounds, are permitted to migrate off-Site in groundwater or soil vapour, as a result of the Process, at concentrations greater than the applicable criteria provided in the Soil, Groundwater and Sediment Standards, appropriate worker health and safety criteria or Site specific criteria.

2. REMEDIAL WORK PLAN

1. The Company shall, before commencement of operation of the Process at the site, prepare a Remedial Work Plan designed with specific application for the Process at the site that specifies, as a minimum:
 - a. the remedial objectives established for the Site;
 - b. an overview of the work to be undertaken by the Company;
 - c. a description of the Site;
 - d. locations of on-Site and off-Site receptors and potential migration pathways;
 - e. a Site plan overview of the extent of contamination at the Site;
 - f. locations of the proposed Equipment and points of application of the Process;
 - g. land uses at the Site and in the immediate surrounding vicinity;

- h. overview of the Site geology and hydrogeology, and expected chemical reactions resulting from the operation of the Process; and
- i. alternative remedial measures to be undertaken in the event that the Process is not successful to meet the Remedial Work Plan objectives.

3. OPERATION AND MAINTENANCE

- 1. The Company shall ensure that the Equipment is properly operated and maintained at all times. The Company shall:
 - a. prepare, before commencement of operation of the Process and Equipment, 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. frequency of inspections and scheduled maintenance for the Equipment;
 - iii. procedures to prevent upset conditions and contingency measures to address any off-Site migration;
 - iv. emergency procedures, including spill clean-up procedures;
 - v. all appropriate measures to minimize noise and odorous emissions from all potential sources;
 - vi. procedures for any record keeping activities relating to the operation and maintenance of the Equipment;
 - vii. procedures to record and respond to environmental complaints; and
 - viii. steps to be carried out for the discontinuation of the Process.
 - b. implement the recommendations of the Manual.

4. MONITORING PLAN

- 1. The Company shall, before commencement of operation of the Process at the Site, design and implement a Monitoring Plan, in accordance with the Supporting Documents, for the soil/groundwater at the Site to document that the Performance Requirements outlined above are not exceeded and that the Remedial Work Plan objectives are achieved. The Monitoring Plan shall specify, as a minimum:

- a. the Monitoring Plan objectives;
- b. a list of analytical and/or indicator parameters;
- c. monitoring locations and frequency;
- d. identification of potential migration pathways on-Site and off-Site;
- e. procedures for monitoring any potential off-Site migration;
- f. approximate monitoring locations and frequency of the monitoring, prior to, during and after the Process; and
- g. sampling methodology and QA/QC procedures, when applicable.

5. 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.

6. 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;
 - b. the time and date of the incident to which the complaint relates; and
 - c. the actions taken to resolve the complaint and any recommendations for remedial measures.

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

1. Condition No. 1 is included to outline the minimum performance requirements considered necessary to prevent an adverse effect resulting from the operation of the Process.
2. Condition No. 2 is included to require the Company to gather accurate information and prepare a work plan prior to carrying out the Process at the Site and so that compliance with the EPA and this Approval can be verified.
3. Condition No. 3 is included to emphasize that the Equipment and Process must be operated according to a procedure that will result in compliance with the EPA, the regulations, and this Approval.
4. Condition No. 4 is included to require the Company to gather accurate information so that the environmental impact and subsequent compliance with the EPA, the regulations, and this Approval can be verified.
5. Condition No. 5 is included to require the Company to notify the Ministry so that the environmental impact and subsequent compliance with the EPA, the regulations, and this Approval can be verified.
6. Condition No. 6 is included to require the Company to retain records and provide information to the Ministry so that the environmental impact and subsequent compliance with the EPA, the regulations, and this Approval can be verified.

In accordance with Section 139 of the *Environmental Protection Act*, you may by written notice served upon me, the Ontario Land 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 ("the Notice") 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.

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 Director appointed for the purposes of

Registrar*
Ontario Land Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5
OLT.Registrar@ontario.ca

and

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

and


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 Ontario Land Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349 or 1 (866) 448-2248, or www.olt.gov.on.ca**

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

The above noted activity is approved under s.20.3 of Part II.1 of the *Environmental Protection Act*.

DATED AT TORONTO this 2nd day of November, 2022



Nancy E Orpana, P.Eng.

Director

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

BR/

c: Area Manager, MECP Kenora

c: District Manager, MECP Thunder Bay - District

Alexandria Beveridge, Kintzamanis Graumann Smith MacMillan Inc.