

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 9793-C2R8AV
Issue Date: October 3, 2021

Imperial Oil Limited
505 Quarry Park Blvd SE
Post Office Box, No. 2480
Calgary, Alberta
T2C 5N1

Site Location: 4022 Highway 101 West
City of Timmins, District of Cochrane

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) soil vapour extraction and treatment system equipped with one (1) granular activated carbon unit, discharging to the air through a stack having a maximum volumetric flow rate of 0.076 cubic metre per second, an exit diameter of 0.051 metre, extending 0.21 metre above the roof and 2.8 metres above grade; and
- one (1) diesel-fired generator set having a maximum rating 50 kilowatts;

all in accordance with the Environmental Compliance Approval Application submitted by Imperial Oil Limited, dated August 29, 2019 and signed by Ayan Chakraborty; the supporting information including the Emission Summary and Dispersion Modelling reports prepared by Golder Associates Ltd., dated November 26, 2020 and signed by Emily Lau; and the Acoustic Assessment Report prepared by Golder Associates Ltd., dated November 26, 2020 and signed by Jeremy Schmitt.

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 Imperial Oil Limited 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. "Emission Summary Table" means a table described in paragraph 14 of subsection 26 (1) of O. Reg. 419/05;
6. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;
7. "Equipment" means the soil vapour extraction and treatment systems described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval;
8. "ESDM Report" means the Emission Summary and Dispersion Modelling Report prepared in accordance with section 26 of O. Reg. 419/05 and the Procedure Document by Golder Associates Ltd., dated November 26, 2020 and signed by Emily Lau, submitted in support of the application including any addendum submissions made during the Ministry's review of the Company's application;
9. "Exhausted" means the capacity of the GAC to adsorb contaminant emissions is reached and the granular activated carbon filter unit is no longer able to effectively reduce emissions;
10. "Facility" means the entire operation located on the property where the Equipment is located;
11. "GAC" means granular activated carbon;
12. "Manager" means the Manager, Technology Standards Section, Technical Assessment and Standards Development Branch, or any other person who represents and carries out the duties of the Manager, as those duties relate to the conditions of this Approval;
13. "Manual" means a document or a set of documents that provide written instructions to staff of the Company;
14. "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;
15. "Monitoring Plan" means a written monitoring plan developed for the site as described in Condition 4;
16. "O. Reg. 419/05" means Ontario Regulation 419/05, Air Pollution – Local Air Quality, as amended;
17. "Pre-Test Plan" means a plan for the Source Testing including the information required in Section 5 of the Source Testing Code;

18. "Procedure Document" means Ministry guidance document titled "Procedure for Preparing an Emission Summary and Dispersion Modelling Report" dated March 2018, as amended;
19. "Process" means the soil vapour extraction and 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;
20. "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;
21. "Remedial Work Plan" means a plan, developed for the Process at the site and prepared as a single document as described in Condition 2;
22. "Schedule" means the schedules attached to, and forming part of, this Approval, namely:
 - Schedule "A" - Emission Limits;
23. "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;
24. "Source Testing" means sampling and testing to measure emissions resulting from operating the Targeted Sources under conditions which yield the worst case emissions within the approved operating range of the Targeted Sources which satisfies paragraph 1 of subsection 11(1) of O. Reg. 419/05;
25. "Source Testing Code" means the Ontario Source Testing Code, dated June 2010, prepared by the Ministry, as amended;
26. "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;
27. "Target Compounds" means the volatile organic compounds and petroleum hydrocarbons 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.
28. "Targeted Source" means the diesel-fired generator set having a rating of 50 kilowatts, that generates electricity under non-emergency situations for use at the Facility, described in the Company's application, this Approval and in the supporting documentation submitted with the application, to the extent approved by this Approval; and
29. "Test Contaminant" means the following contaminants: Nitrogen Oxides (expressed as nitrogen

dioxide equivalent), Suspended Particulate Matter, Non-Methane Hydrocarbons (total hydrocarbons excluding methane), and Carbon Monoxide.

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 and Equipment at the site comply with the limits set out in Ministry Publication NPC-300.
3. The Company shall ensure that the GAC maintains a removal efficiency greater than or equal to 90% for the Target Compounds.
4. The Company shall, at all times, ensure that the emissions from the Targeted Source operated at the Facility to generate electricity under non-emergency situations will not exceed the emission limits specified in Schedule "A".

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. a description of the site;
 - c. an overview of the work to be undertaken at 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. 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, before the commencement of operation of the Equipment at the site:
 - a. prepare 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. procedures to inspect, test and replace the GAC before it is Exhausted;
 - iii. procedures to measure and maintain the removal efficiency of the Target Compounds by the GAC;
 - iv. procedures to prevent upset conditions and contingency measures;
 - v. emergency procedures, including spill clean-up procedures;
 - vi. procedures for any record keeping activities relating to the operation and maintenance of the Equipment; and
 - vii. all appropriate measures to minimize noise and odorous emissions from all potential sources;
 - b. implement the recommendations of the Manual.
2. The Company shall ensure that the GAC is replaced before it is Exhausted.

4. MONITORING

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 in Condition 1 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. identification of potential migration pathways on-Site and off-Site;
- d. procedures for monitoring any potential off-Site migration;
- e. approximate monitoring locations and frequency of the monitoring, prior to, during and after the Process; and
- f. 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.

7. SOURCE TESTING

1. The Company shall ensure that the emissions of the Test Contaminant in the gases emitted from the stack of the Targeted Source shall not be greater than the emission limits specified in

Schedule "A".

2. The Company shall perform Source Testing once every two (2) years to determine the rate of emission of the Test Contaminant from the Targeted Source.
3. The Company shall submit, not later than three (3) months prior to the operation of the Targeted Source, to the Manager a Pre-Test Plan for the Source Testing of the Targeted Source. The Company shall finalize the Pre-Test Plan in consultation with the Manager.
4. The Company shall not commence the Source Testing required under this Approval until the Manager has approved the Pre-Test Plan.
5. The Company shall complete the Source Testing not later than three (3) months after the Manager has approved the Pre-Test Plan.
6. The Company shall notify the Manager, the District Manager and the Director in writing of the location, date and time of any impending Source Testing required by this Approval, at least fifteen (15) days prior to the Source Testing.
7. The Company shall submit a report (hardcopy and electronic format) on the Source Testing to the Manager, the District Manager and the Director not later than three (3) months after completing the Source Testing. The report shall be in the format described in the Source Testing Code, and shall also include, but not be limited to:
 - a. an executive summary;
 - b. an identification of the applicable North American Industry Classification System code (NAICS) for the Facility;
 - c. records of operating conditions at the time of Source Testing, including but not limited to the following:
 - i. production data;
 - ii. Facility/process information related to the operation of the Targeted Source;
 - iii. description of the emission sources controlled by the Targeted Source at the time of testing; and
 - iv. operational description of the general building ventilation at the time of testing;
 - d. results of Source Testing, including the emission rate, emission concentration, and relevant emission factor of the Test Contaminant from the Targeted Source; and
 - e. a tabular comparison of Source Testing results for the Targeted Source and Test Contaminant

- to original emission estimates described in the Company's application and the ESDM Report.
8. The Director may not accept the results of the Source Testing if:
 - a. the Source Testing Code or the requirements of the Manager were not followed;
 - b. the Company did not notify the Manager, the District Manager and Director of the Source Testing; or
 - c. the Company failed to provide a complete report on the Source Testing.
 9. If the Director does not accept the results of the Source Testing, the Director may require re-testing. If re-testing is required, the Pre-Test Plan strategies need to be revised and submitted to the Manager for approval. The actions taken to minimize the possibility of the Source Testing results not being accepted by the Director must be noted in the revised Pre-Test Plan submission to the Manager.
 10. If the Source Testing results indicate the emission estimates are higher than the original emission estimates described in the Company's application and the ESDM Report, the Company shall update their ESDM Report in accordance with Section 26 of O. Reg. 419/05 with the emission estimates from the Source Testing report and make these records available for review by staff of the Ministry upon request. The updated Emission Summary Table from the updated ESDM Report shall be submitted with the report on the Source Testing.
 11. The District Manager may not require subsequent Source Testing or relax the frequency of subsequent Source Testing if the results of the Source Testing indicate that the environmental impact from the Test Contaminant are insignificant.

SCHEDULE "A"

Emission Limits

| Contaminant | Maximum Limit |
|------------------------------|----------------------|
| Nitrogen Oxides | 0.4 kg/MWh |
| Suspended Particulate Matter | 0.02 kg/MWh |
| Non-Methane hydrocarbons | 0.19 kg/MWh |
| Carbon Monoxide | 3.5 kg/MWh |

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

1. Condition No. 1 is included to provide the minimum performance requirements considered necessary to prevent adverse effects.
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 so that compliance with the EPA and this Approval can be verified.
3. Condition No. 3 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.
4. Condition No. 4 is included to require the Company to gather accurate information so that compliance with the EPA, the regulations and this Approval can be verified.
5. Condition No. 5 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.
6. Condition No. 6 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.
7. Condition No. 7 is included to require the Company to gather and retain accurate information so that 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 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.

The Notice should also include:

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

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

This Notice must be served upon:

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

AND

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

AND

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

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

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

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

DATED AT TORONTO this 3rd day of October, 2021



Neryed Ragbar, P.Eng.

Director

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

BR/

c: District Manager, MECP Timmins
Emily Lau, Golder Associates Ltd.