

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 3148-BQFMQL

Issue Date: September 28, 2020

Nipigon LNG Corporation
150 Connie Crescent, No. 4
City of Vaughan, Ontario
L4K 1L9

Site Location: Nipigon Natural Gas Liquefaction (LNG) Plant
Lot 12, Concession 4
Ledger Unorganized Township,
District of Thunder Bay.

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:

the establishment of stormwater management Works to service the Natural Gas Liquefaction Plant Site for collection, transmission, treatment and disposal of stormwater run-off from a catchment area of 3.99 hectares, to provide enhanced level of water quality protection and to attenuate post-development peak flows to pre-development levels, discharging to Cash Creek, a tributary creek of Helen Lake, the Nipigon River and Lake Superior, for all storm events up to and including the 100-year return storm, consisting of the following:

Stormwater Management System

Perimeter Ditches: 300 m long 250 mm to 600 mm wide by 200 mm to 300 mm deep trapezoidal drainage ditches located along the north and south of the property boundary to intercept site storm run-off to discharge into a stormwater pond as described later;

Sump Pumping 1: a 48 cu.m. capacity concrete sump, complete with a submersible pump to collect discharges from the truck loading area to pump into the stormwater management pond;

Sump Pumping 2: a 43.5 cu.m. capacity concrete sump, complete with a submersible pump to collect discharges from the LNG tank area to pump into the stormwater management pond;

Stormwater Management Pond: one (1), clay lined wetpond with a 750 mm diameter culvert / pipe inlet into a forebay to provide a total storage volume of 5,512 cubic metres including a permanent pool volume of approximately 1593 cubic metres at a depth of 1.4 metres, and an extended detention volume

of 3919 cu.m., an ice storage and a strategic safety storage volume of 6339 cu.m. at 1.4 m depth; to discharge pond water via a reversed sloped 300 mm diameter low flow outlet pipe at the pond bottom encased in filter cloth and washed stone surround and a 600 mm diameter high flow outlet pipe into an Outlet Control Manhole located on the pond bank as described below:

Outlet Control Manhole: a 1500 mm diameter concrete structure complete with a 100 mm diameter vertical orifice on the inlet wall at the 300 mm diameter pipe and a high flow inlet of pipe of 600 mm diameter for pond water to discharge via a 600 mm diameter outfall pipe on to a riprap slope protected outfall ditch;

Emergency Pond Outlet: designed to convey flows up to the 100 year return storm, located at the north-west end of the Pond embankment, complete with a cut-off wall including a rectangular weir opening approximately 600 mm wide and an upper broad crested rectangular overflow weir bound by armour stone, approximately 4 metres wide, with its invert approximately 1 metre above the normal water surface;

all to discharge via a riprap protected passive outlet channel to the Creek;

including erosion/sedimentation control works during construction and operation to minimize the amount of silt discharged via the effluent from the Stormwater Pond into the Cash Creek;

all in accordance with the application for approval and supporting information and documentation as listed in **Schedule A**.

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

1. "Approval" means this entire document and any schedules attached to it, and the application;
2. "District Manager" means the District Manager of the Thunder Bay - District Office of the Ministry;
3. "Director" means a person appointed by the Minister pursuant to section 5 of the EPA for the purposes of Part II.1 of the EPA;
4. "EPA" means the *Environmental Protection Act*, R.S.O. 1990, c.E.19, as amended;
5. "Ministry" means the ministry of the government of Ontario responsible for the EPA and OWRA and includes all officials, employees or other persons acting on its behalf;
6. "OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40, as amended;
7. "Owner" means Nipigon LNG Corporation and its successors and assignees;
8. "Works" means the sewage works described in the Owner's application, and this Approval.

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. GENERAL PROVISIONS

(1) The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.

(2) Except as otherwise provided by these conditions, the Owner shall design, build, install, operate and maintain the Works in accordance with the description given in this Approval, and the application for approval of the Works.

(3) Where there is a conflict between a provision of any document in the schedule referred to in this Approval and the conditions of this Approval, the Conditions in this Approval shall take precedence, and where there is a conflict between the documents in the schedule, the document bearing the most recent date shall prevail.

(4) Where there is a conflict between the documents listed in the Schedule submitted documents, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.

(5) The Conditions of this Approval are severable. If any Condition of this Approval, or the application of any requirement of this Approval to any circumstance, is held invalid or unenforceable, the application of such condition to other circumstances and the remainder of this Approval shall not be affected thereby.

2. EXPIRY OF APPROVAL

The approval issued by this Approval will cease to apply to those parts of the Works which have not been constructed within five (5) years of the date of this Approval.

3. CHANGE OF OWNER

The Owner shall notify the District Manager and the Director, in writing, of any of the following changes within thirty (30) days of the change occurring:

(a) change of Owner;

(b) change of address of the Owner;

(c) change of partners where the Owner is or at any time becomes a partnership, and a copy of the most recent declaration filed under the Business Names Act , R.S.O. 1990, c.B17 shall be included

in the notification to the District Manager; and

(d) change of name of the corporation where the Owner is or at any time becomes a corporation, and a copy of the most current information filed under the *Corporations Information Act*, R.S.O. 1990, c. C39 shall be included in the notification to the District Manager.

4. OPERATION AND MAINTENANCE.

(1) The Owner shall ensure that the design minimum liquid retention volume(s) is maintained in the wet pond at all times.

(2) The Owner shall inspect the Works at least once a year and clean and maintain the Works to prevent the excessive build-up of sediments and/or vegetation.

(3) The Owner shall maintain a logbook to record the results of these inspections and any cleaning and maintenance operations undertaken, and shall keep the logbook at *the Corporate Office* for inspection by the Ministry. The logbook shall include the following:

(a) the name of the Works;

(b) the date and results of each inspection, maintenance and cleaning, including an estimate of the quantity of any materials removed; and

(c) the date of each spill within the catchment area, including follow-up actions / remedial measures undertaken.

5. TEMPORARY EROSION AND SEDIMENT CONTROL

(1) The Owner shall install and maintain temporary sediment and erosion control measures during construction and conduct inspections once every **two (2) weeks** and after each significant storm event (a significant storm event is defined as a minimum of 25 mm of rain in any 24 hours period). The inspections and maintenance of the temporary sediment and erosion control measures shall continue until they are no longer required and at which time they shall be removed and all disturbed areas reinstated properly.

(2) The Owner shall maintain records of inspections and maintenance which shall be made available for inspection by the Ministry, upon request. The record shall include the name of the inspector, date of inspection, and the remedial measures, if any, undertaken to maintain the temporary sediment and erosion control measures.

6. EFFLUENT OBJECTIVES

(1) The Owner shall design and undertake everything practicable to operate the Works with the objective that the concentrations of the materials named in **Table 1 of Schedule B** as effluent parameters are not

exceeded in the effluent from the Works.

(2) In the event of an exceedence of the objective set out in subsection (1), the Owner shall:

- (a) notify the District Manager as soon as possible during normal working hours,
- (b) take immediate action to identify the source of contamination, and
- (c) take immediate action to prevent further exceedence.

(3) As a further effluent objective, the Owner shall use best efforts to maintain the pH of the effluent from the Works within the range of (6.5 to 8.5), inclusive, at all times.

(4) The Owner shall include in all reports submitted in accordance with Conditions 7 and 9 a summary of the efforts made and results achieved under this Condition.

7. EFFLUENT MONITORING AND RECORDING

The Owner shall, upon commencement of operation of the sewage works, carry out the following monitoring program; all as per **Table 2 of Schedule B:**

(1) All samples and measurements taken for the purposes of this Approval are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.

(2) Samples shall be collected and analyzed at the sampling point(s), frequencies and using the sample type specified for each parameter as listed.

(3) The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following documents and all analysis shall be conducted by a laboratory accredited to the ISO/IEC:17025 standard or as directed by the District Manager:

(a) the Ministry's publication "Protocol for the Sampling and Analysis of " Industrial/Municipal Wastewater"Version 2.0" (January 2016, PIBS 2724e02), as amended from time to time by more recently published editions;

(b) the publication "Standard Methods for the Examination of Water and Wastewater" (21st edition) as amended from time to time by more recently published editions; and

(d) in respect of any parameters not mentioned in (a) - (b), the written approval of the District Manager, which approval shall be obtained prior to sampling.

(5) The measurement frequencies specified in subsection (2) in respect of any parameter are minimum requirements which may, after 24 months of monitoring in accordance with this Condition, be modified

by the District Manager in writing from time to time.

(6) The Owner shall retain for a minimum of five (5) years from the date of their creation, all records and information related to or resulting from the monitoring activities required by this Approval.

8. EFFLUENT - VISUAL OBSERVATIONS

Notwithstanding any other condition in this Approval, the Owner shall ensure that the effluent from the Works is essentially free of floating and settleable solids and does not contain oil or any other substance in amounts sufficient to create a visible film, sheen or foam on the receiving waters.

9. REPORTING

(1) One week prior to the start up of the operation of the Works, the Owner shall notify the District Manager (in writing) of the pending start up date.

(2) The Owner shall report to the District Manager or designate, any exceedance of any parameter specified in Condition 5 orally, as soon as reasonably possible, and in writing within seven (7) days of the exceedance.

(3) In addition to the obligations under Part X of the *Environmental Protection Act*, the Owner shall, within ten (10) working days of the occurrence of any reportable spill as defined in Ontario Regulation 675/98, bypass or loss of any product, by-product, intermediate product, oil, solvent, waste material or any other polluting substance into the environment, submit a full written report of the occurrence to the District Manager describing the cause and discovery of the spill or loss, clean-up and recovery measures taken, preventative measures to be taken and schedule of implementation.

(4) The Owner shall prepare and submit a performance report to the District Manager on an annual basis within sixty (60) days following the end of the period being reported upon. The first such report shall cover the first annual period following the commencement of operation of the Works and subsequent reports shall be submitted to cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:

(a) a summary and interpretation of all monitoring data and a comparison to the Effluent Objectives of Condition 5, a description of efforts made and results achieved in meeting the effluent objectives, including an overview of the success and adequacy of the sewage Works;

(b) a description of any operating problems encountered and corrective actions taken;

(c) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the sewage works;

(d) a summary of any effluent quality assurance or control measures undertaken in the reporting period;

(e) a summary of the calibration and maintenance carried out on all effluent monitoring equipment;

(f) any other information the District Manager requires from time to time.

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

1. Condition 1 is imposed to ensure that the Works are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review.
2. Condition 2 is included to ensure that the Works are constructed in a timely manner so that standards applicable at the time of Approval of the Works are still applicable at the time of construction, to ensure the ongoing protection of the environment
3. Condition 3 is included to ensure that the Ministry records are kept accurate and current with respect to approved works and to ensure that subsequent owners of the works are made aware of the Approval and continue to operate the works in compliance with it.
4. Condition 4 is included to require that the Works be properly operated and maintained such that the environment is protected .
5. Condition 5 is included as installation, regular inspection and maintenance of the temporary sediment and erosion control measures is required to mitigate the impact on the downstream receiving watercourse during construction until they are no longer required.
6. Condition 6 is imposed to establish non-enforceable effluent quality objectives which the Owner is obligated to use best efforts to strive towards on an ongoing basis. These objectives are to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs.
7. Condition 7 is included to require the Owner to demonstrate on a continual basis that the quality and quantity of the effluent from the approved works is consistent with the design objectives of the Approval and that the approved works does not cause any impairment to the receiving watercourse.
8. Condition 8 is imposed to ensure that the effluent discharged from the Works to the creek free of any floating material and meets the Ministry's effluent quality requirements thus minimizing environmental impact on the receiver.
9. Condition 9 is included to provide a performance record for future references and to ensure that the Ministry is made aware of problems as they arise, so that the Ministry can work with the Owner in resolving the problems in a timely manner.

Schedule A.

1. Application for Approval of Industrial Sewage Works submitted by Sheldon Smith, of Stantec Consulting Ltd dated February 18, 2020;
2. Stantec Consulting Ltd. Memo dated February 18, 2020 for Nipigon LNG to the Ministry including attachments and Stormwater management report/design brief/drainage report and enclosed plans/design drawings etc..

Schedule B

Table 1 - Effluent Objectives	
Effluent Parameter	Concentration Objective
Oil & Grease	15 mg/L
TSS	30 mg/L

Table 2 - Effluent Monitoring - (Sample Point - SWM Pond Outlet Structure)		
Effluent Parameter	Frequency	Sample Type
Oil & Grease	Monthly	Grab
TSS	Monthly	Grab
pH	Daily	Grab /Probe
Temperature	Daily	Grab /Probe
TAN	Monthly	Grab

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

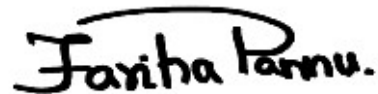
The Director appointed for the purposes of
Part II.1 of the Environmental Protection Act
Ministry of the Environment,
Conservation and Parks
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

*** 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 28th day of September, 2020



Fariha Pannu, P.Eng.
Director
appointed for the purposes of Part II.1 of the
Environmental Protection Act

MN/

c: District Manager, MECP Thunder Bay - District
Sheldon Smith, P.Geo., Stantec Consulting Ltd