



Environment, Climate and Parks
Environmental Approvals Branch
1007 Century Street, Winnipeg MB R3H 0W4
T 204-945-8321 F 204-945-5229
www.manitoba.ca

File No.: 6135.00

June 6, 2022

Andrew Brigden
Tundra Oil & Gas Limited
295 3rd Avenue, Virden MB R0M 2C0
andrew.brigden@tundraoilandgas.com

Dear Andrew Brigden:

Re: Environment Act Licence No. 3379

Thank you for your proposal. The Environment Act licensing process is intended to promote a healthy environment, society, and economy for now and tomorrow.

Enclosed Environment Act Licence No. 3379 is issued to Tundra Oil & Gas Limited. The licence is for the construction and operation of six new interconnected flowline segments, totalling 46 km in length, in the Rural Municipalities of Wallace-Woodworth and Pipestone. The flowlines will collect and transport unrefined solution natural gas from five existing battery facilities to a compressor terminal located in Sinclair, Manitoba.

Tundra Oil & Gas Limited must operate the development according to all licence requirements as well as all applicable federal, provincial, and municipal regulations and by-laws.

The licence holder must submit a notice of alteration to the director for approval prior to altering the development as licensed.

Anyone affected by the issuance of this licence may appeal this decision to the Minister of Environment, Climate and Parks. If you wish to appeal, please send your reasons, in writing, to the Minister's attention by July 6, 2022.

If you have any questions about this approval, please contact Kristy Forrestall, Acting Regional Supervisor, Environmental Compliance and Enforcement Branch at Kristy.Forrestall@gov.mb.ca or 204-573-0518.

Sincerely,

Original Signed by

James Capotosto
Director

- c. Daniel Chranowski - Matrix Solutions Inc.
Kristal Harman, Yvonne Hawryliuk, Kristy Forrestall - Environmental Compliance and Enforcement
Asit Dey, Elise Dagdick - Environmental Approvals
Public Registry

LICENCE

File No.: 6135.00

Licence No. / Licence n°: 3379

Issue Date / Date de délivrance : June 6, 2022

In accordance with The Environment Act (C.C.S.M. c. E125)/
Conformément à la Loi sur l'environnement (C.P.L.M. c. E125)

Pursuant to Sections 11(1) / Conformément au Paragraphe 11(1)

THIS LICENCE IS ISSUED TO: / CETTE LICENCE EST DONNÉE À:

TUNDRA OIL & GAS LIMITED; "the licensee"

for the construction and operation of the Development being six new interconnected flowline segments, totaling 46 km in length, located within portions of 7, 8, 9, and 10-29 WPM, and 8 and 9-28 WPM in the Rural Municipalities of Wallace-Woodworth and Pipestone in the area between Kola, Cromer, and Sinclair, Manitoba, as identified in Schedules A and B of this Licence, to collect and transport unrefined solution natural gas from five existing battery facilities to a compressor terminal located northwest of Sinclair, Manitoba, in accordance with the proposal filed under The Environment Act on December 2, 2021, and subject to the following specifications, limits, terms, and conditions:

DEFINITIONS

In this Licence,

"accredited laboratory" means an analytical facility accredited by the Standards Council of Canada (SCC), or accredited by another accrediting agency recognized by Manitoba Environment, Climate and Parks to be equivalent to the SCC, or be able to demonstrate, upon request, that it has the quality assurance/quality control (QA/QC) procedures in place equivalent to accreditation based on the international standard ISO/IEC 17025, or otherwise approved by the director;

"affected area" means a geographical area, excluding the property of the Development;

"approved" means approved by the director or assigned environment officer in writing;

"contractor" means any party entered into a contract with the licensee;

"director" means an employee so designated pursuant to The Environment Act;

"environment officer" means an employee so designated pursuant to The Environment Act;

"noise nuisance" means an unwanted sound, in an affected area, which is annoying, troublesome, or disagreeable to a person:

- (a) residing in an affected area;
- (b) working in an affected area; or
- (c) present at a location in an affected area which is normally open to members of the public; if the unwanted sound
- (d) is the subject of at least five written complaints, received by the director in a form satisfactory to the director and within a 90-day period, from five different persons falling within clauses (a), (b) or (c), who do not live in the same household; or
- (e) is the subject of at least one written complaint, received by the director in a form satisfactory to the director, from a person falling within clauses (a), (b) or (c) and the director is of the opinion that if the unwanted sound had occurred in a more densely populated area there would have been at least five written complaints received within a 90-day period, from five different persons who do not live in the same household;

"odour nuisance" means a continuous or repeated odour, smell or aroma, in an affected area, which is offensive, obnoxious, troublesome, annoying, unpleasant or disagreeable to a person:

- (a) residing in an affected area;
- (b) working in an affected area; or
- (c) present at a location in an affected area which is normally open to members of the public; if the odour, smell or aroma
- (d) is the subject of at least 5 written complaints, received by the director in a form satisfactory to the director and within a 90-day period, from 5 different persons falling within clauses (a), (b) or (c), who do not live in the same household; or
- (e) is the subject of at least one written complaint, received by the director in a form satisfactory to the director, from a person falling within clauses (a), (b) or (c) and the director is of the opinion that if the odour, smell or aroma had occurred in a more densely populated area there would have been at least 5 written complaints received within a 90-day period, from 5 different persons who do not live in the same household.

"solid waste" means "solid waste" means any waste in solid form, including dead animals (source: the Waste Management Facilities Regulation);

"waste disposal ground" means an area of land designated by a person, municipality, provincial government agency, or crown corporation for the disposal of waste and approved for use in accordance with the Waste Management Facilities Regulation, or any future amendments thereto, or a Licence pursuant to The Environment Act;

"riparian area" means an area of land on the banks or in the vicinity of a water body, which due to the presence of water supports, or in the absence of human intervention would naturally support, an ecosystem that is distinctly different from that of adjacent upland areas (Source: The Water Protection Act 2005);

"water body" means any body of flowing or standing water, whether naturally or artificially created, and whether the flow or presence of water is continuous, intermittent or occurs only during a flood, including but not limited to a lake, river, creek, stream, slough, marsh, swamp and wetland, including ice on any of them (Source: The Water Protection Act 2005); and

"wetland" means land that is saturated with water long enough to promote wetland or aquatic processes as indicated by poorly drained soils, hydrophytic vegetation, and various kinds of biological activity which are adapted to a wet environment. They are generally less than approximately 2 metres in depth (National Wetland Working Group 1997).

GENERAL TERMS AND CONDITIONS

This section of the Licence contains requirements intended to provide guidance to the licensee in implementing practices to ensure that the environment is maintained in such a manner as to sustain a high quality of life, including social and economic development, recreation and leisure for present and future Manitobans.

Retain Copy of Licence

1. The licensee shall at all times maintain a copy of this licence at the Development or at the premises from which the Development's operations are managed.

Future Sampling

2. In addition to any of the limits, terms and conditions specified in this Licence, the licensee shall, upon the request of the director:
 - a) sample, monitor, analyze and/or investigate specific areas of concern regarding any segment, component or aspect of pollutant storage, containment, treatment, handling, disposal or emission systems, for such pollutants or ambient quality, aquatic toxicity, leachate characteristics and discharge or emission rates, for such duration and at such frequencies as may be specified;
 - b) determine the environmental impact associated with the release of any pollutant(s) from the Development;
 - c) conduct specific investigations in response to the data gathered during environmental monitoring programs; or
 - d) provide the director, within such time as may be specified, with such reports, drawings, specifications, analytical data, descriptions of sampling and analytical procedures being used, bioassay data, flow rate measurements and such other information as may from time to time be requested.

Sampling Methods

3. The licensee shall, unless otherwise specified in this Licence:
 - a) carry out all preservations and analyses on liquid samples in accordance with the methods prescribed in the most current edition of Standard Methods for the Examination of Water and Wastewater or in accordance with equivalent preservation and analytical methodologies approved by the director;
 - b) carry out all sampling of, and preservation and analyses on, soil, compost, and air samples in accordance with methodologies approved by the director;
 - c) have all analytical determinations undertaken by an accredited laboratory; and
 - d) report the results to the director, in writing and in an electronic format acceptable to the director, within 60 days of the samples being taken or within another time frame as specified by the director.

Reporting Format

4. The licensee shall submit all information required to be provided to the director or environment officer under this Licence, in written and electronic format, in such form (including number of copies) and of such content as may be required by the director or environment officer, and each submission shall be clearly labeled with the Licence Number and File Number associated with this Licence.

Noise Nuisance

5. The licensee shall not cause or permit a noise nuisance to be created as a result of the construction, operation, or alteration of the development, and shall take such steps as the director may require to eliminate or mitigate a noise nuisance.

Odour Nuisance

6. The licensee shall not cause or permit an odour nuisance to be created as a result of the construction, operation or alteration of the development, and shall take such steps as the director may require to eliminate or mitigate an odour nuisance.

Environmental Accident

7. The licensee shall, in the case of physical or mechanical equipment breakdown or process upset where such breakdown or process upset results or may result in the release of a pollutant in an amount or concentration, or at a level or rate of release, that causes or may cause a significant adverse effect, immediately report the event by calling the 24-hour environmental accident reporting line at 204-944-4888 (toll-free 1-855-944-4888). The report shall indicate the nature of the event, the time and estimated duration of the event and the reason for the event.
8. The licensee shall, following the reporting of an event pursuant to clause 7,
 - a) identify the repairs required to the mechanical equipment;
 - b) undertake all repairs to minimize unauthorized discharges of a pollutant;
 - c) complete the repairs in accordance with any written instructions of the director; and
 - d) submit a report to the director about the causes of breakdown and measures taken, within one week of the repairs being done.

Compliance

9. The licensee shall adhere to the commitments made in the proposal during construction and operation of the development, except as otherwise required by this Licence.

SPECIFICATIONS, LIMITS, TERMS AND CONDITIONS

Environmental Contingency Plans

10. The licensee shall, prior to construction, submit contingency plans for accidental spills and releases, and waste management during construction of the development to the assigned environment officer. Contingency plans for accidental spills and releases shall include notification to land owners that could potentially be impacted and an inventory of groundwater wells in the area.

Notification

11. The licensee shall notify the assigned environment officer not less than two weeks prior to beginning construction of the development. The notification shall include the intended starting date of construction and the name of the contractor responsible for the construction.
12. The licensee shall, prior to construction, provide a copy of this Licence to the contractor and subcontractor(s) involved in the development.
13. The licensee shall, no less than one week prior to the completion of construction of the development, notify the assigned environment officer to allow for a final inspection.

Environmental Inspection

14. The licensee shall, during construction of the development, employ qualified environmental inspectors to ensure that all the environmental practices outlined in the proposal are carried out.

Heritage Resources

15. The licensee shall comply with the requirements of The Heritage Resources Act, and suspend construction and immediately notify the Historic Resources Branch if heritage resources are encountered during the construction of the development.

Water Crossings

16. The licensee shall, before, during, and after construction of the two crossings of the flowlines at Pipestone Creek, collect samples of the creek for turbidity analysis upstream (background level) and downstream of construction activities. Analysis shall follow the “Canadian Council of Ministers of the Environment Water Quality Guidelines for the Protection of Aquatic Life” narrative guidelines for induced change from background levels. Should turbidity levels exceed the background sample turbidity level, construction shall stop immediately so the cause of the exceedance can be assessed and mitigated. The licensee may resume construction upon approval of the assigned environment officer.
17. The licensee shall, where open cut stream crossing techniques are used on intermittent waterways and artificial drainage channels, not construct open cut crossings associated with the development between March 15 and June 15 of any year.

18. The licensee shall, where conditions allow, excavate endpoints for directional drilling operations a minimum of 30 m from the high water mark of third and higher order waterways, and a minimum of 15 m from the high water mark of first and second order waterways.
19. The licensee shall, during construction and maintenance of the development associated with any water body crossings:
 - a) minimize disturbance to riparian areas;
 - b) implement erosion control measures within dry waterbodies to prevent sediment to enter downstream water bodies in the event of rain;
 - c) re-contour the bed and banks of the water body to their original elevations and shapes;
 - d) stabilize the disturbed soils once the bed and banks are re-contoured; and
 - e) re-vegetate disturbed areas using a seed mix native to the area, or other effective methods, to prevent the establishment of invasive plant species.

Future Studies

20. The licensee shall actively participate in any future watershed-based management study, plan, and/or nutrient reduction program related to any accidental discharges associated with the development, approved by the director.

Wetlands

21. The licensee shall:
 - a) only trench Class I, II, and III wetlands if dry or under frozen ground conditions;
 - b) bore under Class I, II, and III wetlands if holding water using horizontal directional drilling; and
 - c) bore under all Class IV wetlands using horizontally directional drilling.

Invasive Species

22. The licensee shall, during construction and maintenance of the development, prevent the introduction and spread of foreign aquatic and terrestrial biota by cleaning equipment prior to its delivery to the site of the development and complying with the requirements of Manitoba Aquatic Invasive Species Regulation, or any future amendment thereof.

Fuel Storage and Spill Containment

23. The licensee shall locate all fuel storage and equipment servicing areas established for the construction and operation of the development a minimum distance of 100 metres from any water body, and shall comply with the requirements of Manitoba Storage and Handling of Petroleum Products and Allied Products Regulation, or any future amendment thereof.

Respecting Solid Wastes

24. The licensee shall dispose of non-reusable construction debris from the development at a waste disposal ground operating under the authority of a permit issued pursuant to the Waste Management Facilities Regulation, or any future amendment thereof, or a Licence issued pursuant to The Environment Act.

Monitoring and Adaptive Management

25. The licensee shall, prior to construction, submit a monitoring and adaptive management plan for the development for approval of the director of the Environmental Approvals Branch. The plan shall include:
- a) post-construction monitoring of grouse lekking activity within SE 35-09-29 WPM, located 86 metres from the right-of-way, for at least two years post-construction to confirm if there is continued use of the site for lekking;
 - b) post-construction monitoring for the introduction and establishment of weeds, non-native, and invasive plant species along the flowline right-of-way;
 - c) post-construction monitoring of the success of natural regeneration in wetlands impacted by the development;
 - d) post-construction monitoring of the success of vegetation establishment along the flowline right-of-way; and
 - e) proposed adaptive management measures such as weed control and re-vegetation if the monitoring results indicate that it is required.
26. The licensee shall submit an annual report to the director of the Environmental Approvals Branch on the results of monitoring and adaptive management programs approved pursuant to clause 25 of this Licence.

Alterations

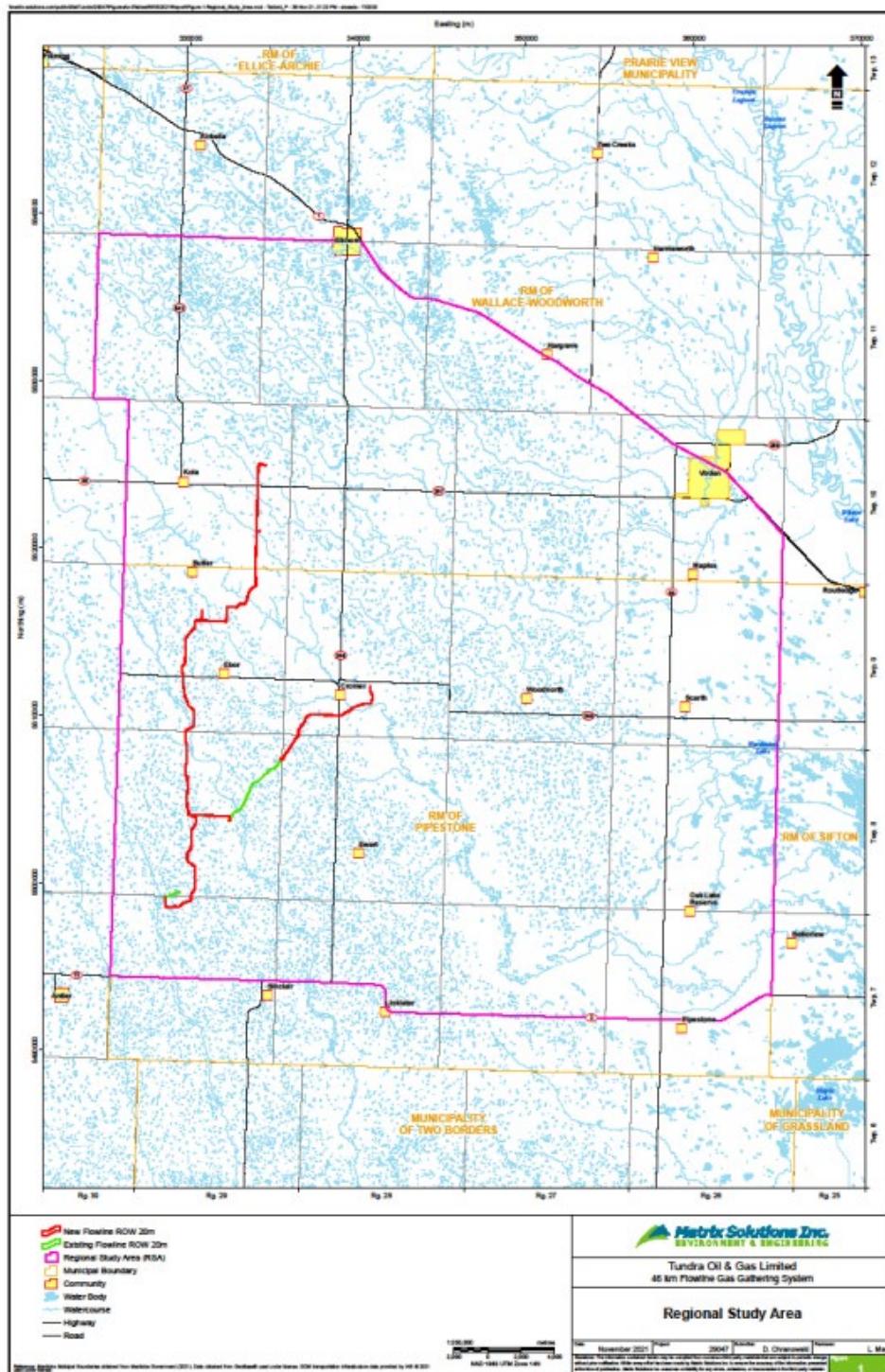
26. The licensee shall, prior to proceeding with any alterations to the development as licensed, notify the director and receive approval.

REVIEW AND REVOCATION

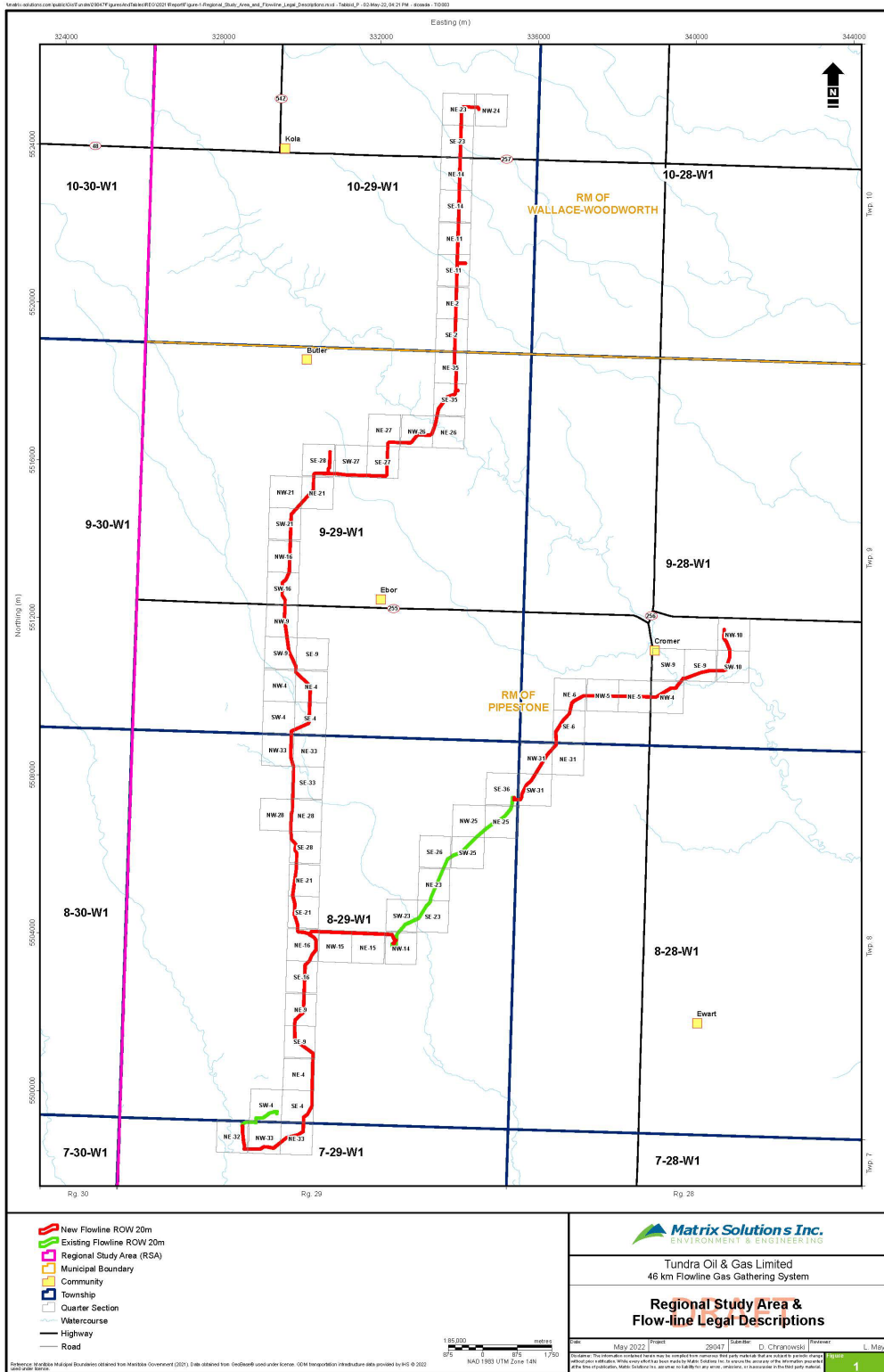
- A. If, in the opinion of the director, the licensee has exceeded or is exceeding or has or is failing to meet the specifications, limits, terms, or conditions set out in this Licence, the director may, temporarily or permanently, revoke this Licence.
- B. If the licensee has not commenced construction of the development within three years of the date of this Licence, the Licence is revoked.
- C. If, in the opinion of the director, new evidence warrants a change in the specifications, limits, terms or conditions of this Licence, the director may require the filing of a new proposal pursuant to Section 11 of The Environment Act.

Original Signed by
James Capotosto
Director

Schedule A of Environment Act Licence No. 3379



Schedule B of Environment Act Licence No. 3379



Source: Available Municipal Boundaries obtained from Manitoba Government (2021). Data obtained from: GeoBench point cloud source. SGM transportation infrastructure data provided by H&B 2022.