

Made at Slave lake, in the Province of Alberta, on

July 13, 2018

ALBERTA ENERGY REGULATOR

Under Section 113 of the Environmental Protection and Enhancement Act

Under Section 29 of the Pipeline Act

Predator Oil Ltd.

#900, 222 3rd Avenue SW Calgary, AB T2P 0B4

Predator Oil Ltd ("Predator")

WHEREAS Predator is the licensee of a pipeline under licence number P45148 Line 8 ("the Pipeline") issued by the Alberta Energy Regulator (AER) under the *Pipeline Act*.

WHEREAS the Pipeline is located at 02-22-094-04W5M to 03-07-094-03W5M, approximately 70 km NE of the hamlet of Red Earth Creek;

WHEREAS on or about 4:31 pm on July 7, 2018 Predator notified the AER that the Pipeline had failed at 14-14-094-04W5 (the "Site"), resulting in the release of approximately 30 m³ of emulsion (the "Release");

WHEREAS highway vehicle access to the Site, and the cause of the failure of the Pipeline, have not officially been confirmed by Predator;

WHEREAS the basic composition of the product transported by the Pipeline is approximately 25-30% oil and 70-75% water (the "Substances");

WHEREAS the Substances are commonly known to cause an adverse effect on the environment;

WHEREAS the Release initiated on the Site, but migrated off the Site into wetland;

WHEREAS Predator has advised the AER that no streams or creeks have been impacted, and that the Release migrated to a treed wetland area;

WHEREAS on July 7, 2018 the AER inspectors observed dead vegetation at the Site from aerial photos provided by Predator, which was confirmed by the AER inspectors during the July 11, 2018 site inspection;

WHEREAS on July 12, 2018 Predator provided an update to the AER estimating the volume of the release to be approximately 100-200 m³ of emulsion;

WHEREAS Predator has advised that the Pipeline has been isolated and de-pressured;

WHEREAS Predator has deployed personnel for access, delineation and sampling activities and is working with the AER to determine appropriate containment methods;

WHEREAS Predator was requested to compile waste management, environmental assessment, remediation, containment and wildlife plans by the AER on July 11, 2018;

WHEREAS to date Predator has not provided the plans requested by the AER on July 11, 2018;

WHEREAS Christina Winarski, Manager, Enforcement and Surveillance, has been appointed a Director for the purposes of issuing environmental protection orders under the *Environmental Protection and Enhancement Act*, and has the authority to order the operation of a pipeline be suspended under the *Pipeline Act* (the "Director");

WHEREAS the Director is of the opinion that a release of a substance or substances has occurred, and that Substances have caused, are causing, or may cause an adverse effect;

WHEREAS Predator is a "person responsible" for the Substances as defined in section 1(tt) of the *Environmental Protection and Enhancement Act*;

WHEREAS the Director is of the opinion that the current state of the Pipeline is improper, hazardous, inadequate or defective in accordance with the *Pipeline Act*;

Therefore I, Christina Winarski, Manager, Surveillance and Enforcement, pursuant to sections 113 and 241 of the *Environmental Protection and Enhancement Act*, and section 29 of the *Pipeline Act* DO HEREBY ORDER Predator to do the following:

Suspend Operations

Immediately ensure the Pipeline has been safely shut down and cleaned out. The Pipeline must not be
restarted until the AER has provided written approval as required under section 29 of the *Pipeline*Act.

Immediate Containment and Assessment of Public Safety

- 2. Immediately contain the Release and prevent the further spread of the Substances to any unaffected areas, or other waterbodies (e.g., wetlands, marshes, bogs).
- 3. Immediately report confirmation of successful containment to the Director.
- 4. Immediately identify and report to the Director on potentially affected parties that could be adversely affected by the Release and develop a communications plan for notification to such potentially

AER Order Page 2 of 7

affected parties. This plan should include but not be limited to domestic, agricultural and recreational users of lands and waterbodies affected.

- 5. Immediately control and restrict public access to the affected areas.
- 6. Report to the Director by noon of each day following the issuance of this order, a list of parties as identified in clause 3 and times they were notified, until otherwise directed in writing by the Director.

Environmental Assessment Report

- 7. Submit to the satisfaction of the Director an Environmental Assessment Report on or before 10 pm on July 16, 2018.
- 8. The Environmental Assessment Report shall include:
 - a. Confirmation of total affected area (m2)
 - b. Confirmation of an estimated volume of impacted material (m3)
 - c. Identification of parameters of environmental concern based on source characterization
 - d. Identification of background characteristics for the site in surface / pore water and soils
 - e. Identification of site specific remediation guidelines
 - f. Identification of potential receptors
 - g. Characterization of ecosystems affected by the release (Background and source characterization) & Field screening reporting (should be included with the daily updates if applicable)
 - h. Any other information requested by the Director

Sampling and Monitoring Plan

- 9. Immediately submit to the satisfaction of the Director a Sampling and Monitoring Plan to commence sampling, at a minimum, once per 24 hour period, for hydrocarbons and chlorides in the affected waterbodies, wetland, and airshed, until otherwise directed in writing by the Director.
- 10. Implement the Sampling and Monitoring Plan in accordance with the approval of the Director.

Wildlife Mitigation Plan

- 11. Submit to the satisfaction of the Director a Wildlife Mitigation Plan on or before 10 pm on July 16, 2018.
- 12. The Wildlife Mitigation Plan shall include, at a minimum:

AER Order Page 3 of 7

- a. an assessment of impacted wildlife which shall include, at a minimum, fish, waterfowl, amphibians and mammals,
- b. the steps taken to prevent impacts to wildlife,
- c. a plan for the rehabilitation of impacted wildlife, and
- d. a plan for the humane euthanasia of impacted wildlife.
- 13. Implement the Wildlife Mitigation Plan in accordance with the approval of the Director.

Detailed Delineation and Remediation Action Plan

- 14. Submit to the satisfaction of the Director a Detailed Delineation and Remediation Action Plan on or before 10 pm on July 16, 2018.
- 15. The Detailed Delineation and Remediation Action Plan shall include:
 - a. A detailed plan to delineate the full extent (vertical and lateral) of the Substances, if any, in the soils, subsoils and groundwater, of any areas affected by the Release, including methods and techniques for delineating the Substances;
 - All of the steps that will be taken to remediate the Substances identified during the
 delineation at all locations where they are present, including the methods and
 remedial techniques that will be employed;
 - c. The steps that will be taken for the transportation and disposal of the Substances that are recovered from any affected soils, subsoils and/or groundwater; and
 - d. A schedule of implementation for the Detailed Delineation and Remediation Plan for approval by the Director.
- 16. The remedial work described in the Detailed Delineation and Remediation Plan shall at a minimum, comply with the *Alberta Tier 1 Soil and Groundwater Remediation Guidelines*, as amended in respect of remediation of soil, subsoil, surface water, and groundwater.
- 17. Implement the Detailed Delineation and Remediation Plan in accordance with the approval of the Director.

Waste Management Plan

- 18. Submit to the satisfaction of the Director a Waste Management Plan on or before 10 pm on July 16, 2018.
- 19. Implement the Waste Management Plan in accordance with the approval of the Director. All waste must be managed, stored, classified and transported in a manner that meets all applicable acts, rules and directives. All applicable provincial permits and licencing are to be obtained and provided to the Director.

Pipeline Failure and Release Prevention Plan

AER Order Page 4 of 7

- 20. Conduct an internal investigative analysis on the cause of the pipeline failure.
- 21. Submit a Pipeline Failure and Release Prevention Plan to identify and prevent future releases for all high risk lines for approval by the Director on or before September 30, 2018.
- 22. The Pipeline Failure and Release Prevention Plan shall include, at a minimum:
 - a. A review of leak detection methods to determine where gaps exist and proposed recommendations for improvement
 - b. A review of current corrosion monitoring and mitigation programs to determine where gaps exist and proposed recommendations for improvement
 - c. Identification for all high risk lines
 - d. A plan to prevent future releases
- 23. Implement the Pipeline Failure and Release Prevention Plan in accordance with the approval of the Director by October 30, 2018.

Reporting to the Director and the Public

- 24. Provide to the Director, by 8 am each day, a daily written report (the "Director's Report"), until otherwise directed by the Director in writing.
- 25. The Director's Report shall contain:
 - a. the steps taken in the last 24 hours to delineate and remove the Substances and remediate the Release Site; and
 - b. the steps to be taken in the next 24 hours;
 - c. The results of the sampling required by clause 9 of this Order;
 - d. An updated inventory of impacted wildlife, required by clause 12 of this order; and,
 - e. Any other information requested by the Director.
- 26. Provide to the public, by 2 pm each day, a daily written report (the "Daily Public Reports") which information shall be posted, at a minimum, on Predator's website, until otherwise directed by the Director in writing.
- 27. The Daily Public Report shall contain:
 - a. the steps taken in the last 24 hours to remediate the Substances; and
 - b. the steps to be taken in the next 24 hours
 - c. Details of monitoring of impacts within the impact zone

AER Order Page 5 of 7

d. Confirmation of containment

The Final Report

28. Submit to the Director a final report (Final Report) within 30 days of the completion of all the work required in compliance with this Order, summarizing such work and including verification that the work has met all standards and criteria as specified by the Director.

General

- 29. All Plans submitted by Predator under this order shall be prepared and implemented by a qualified environmental professional.
- 30. In carrying out the requirements of this Order, Predator shall obtain and comply with all required federal and provincial permits and governing legislation.
- 31. Predator, immediately upon receipt, shall provide to the Director copies of all federal and provincial permits obtained in the implementation of the requirements of this Order.
- 32. All Plans and Reports to be submitted to the Director under this order shall be submitted to SlaveLake.FieldCentre@aer.ca.
- 33. Where a deadline or reporting frequency has been specified in this Order, the Director may authorize in writing a different deadline or reporting frequency as applicable.

Dated at the Town of Slave Lake in the Province of Alberta, the 13 day of July, 2018

<original signed by>

Christina Winarski Manager, Surveillance & Enforcement

Alberta Energy Regulator

In complying with this order, the party or parties named must obtain all approvals necessary, notwithstanding the above requirements.

This order in no way precludes any enforcement actions being taken regarding this matter under the *Pipeline Act* and *Environmental Protection and Enhancement Act* or any other provincial or federal legislation, or by any other regulator with jurisdiction.

AER Order Page 6 of 7

All enforcement actions issued by the AER may be subject to a follow-up review to confirm previous commitments have been completed and measures have been implemented, to ensure similar noncompliances are prevented in the future. The AER may request any information that demonstrates steps have been taken to prevent repeat noncompliances from occurring.

Under the *Responsible Energy Development Act*, an eligible person may appeal decisions that meet certain criteria. Eligible persons and appealable decisions are defined in section 36 of the *Responsible Energy Development Act* and section 3.1 of the *Responsible Energy Development Act General Regulation*. If you wish to file a request for regulatory appeal, you must submit your request according to the AER's requirements. You can find filing requirements and forms on the AER website, www.aer.ca, under Applications & Notices: Appeals.

AER Order Page 7 of 7