

MADE at the City of Fort McMurray, in the  
Province of Alberta, on

August 11, 2015

ALBERTA ENERGY REGULATOR

**Under Sections 113 and 156 of the Environmental Protection and Enhancement Act**

Syncrude Canada Ltd.  
525 3<sup>rd</sup> Ave SW  
Calgary, AB  
T2P 0G4

("Syncrude")

WHEREAS Syncrude holds *Environment Protection Enhancement Act* (EPEA) Approval No. 26-02-00, to operate the Mildred Lake Oilsands Processing Plant and Mine, Aurora North Oil Sands Processing Plant and Mine and Aurora South Oil Sands Processing Plant and Mine, located approximately between 14-21-092-11W4M and 03-28-092-11W4M near Fort McMurray in the Regional Municipality of Wood Buffalo, Alberta (the "Facility"), and such approval being under the jurisdiction of the Alberta Energy Regulator (AER);

WHEREAS on August 5, 2015, Syncrude reported to Alberta Environment and Parks (AEP) that a Great Blue Heron was found covered in oil at the Facility and requested authority to euthanize the Great Blue Heron;

WHEREAS on August 7, 2015 Syncrude reported to AEP an additional 30 Great Blue Herons in various stages of decomposition at or near the Facility, in the vicinity of Southwest Sand Storage Facility External Sump, identified as 691 East and 691 West (the "Sumps");

WHEREAS on August 7, 2015 Syncrude as directed by AEP, reported the death of the additional 30 Great Blue Herons to the Coordination and Information Centre (CIC), and the CIC forwarded the information to the AER's Fort McMurray Field Office, which was received the same day;

WHEREAS on August 7, 2015 an AER inspector arrived at the Facility, and observed in the SE corner of the Sumps an area where there was pooling water and in the NW corner of the Sump a pool of what appeared to be pooling bitumen (the "Release");

WHEREAS the AER has confirmed the presence of deceased migratory birds covered in a substance resembling bitumen and located in the bitumen (the "Incident");

WHEREAS the observed bitumen (the "Substance") in the Sumps, is a substance known to be hazardous to the environment;

WHEREAS the Substance is currently contained within the Sumps and is not accessible by the public;

WHEREAS the Director is of the opinion that wildlife has been or may be contaminated by the Substance which is hazardous and measures with regard to the hazardous substance must be taken in order to protect the wildlife and the environment;

WHEREAS for the purposes of section 113 of EPEA, Syncrude is a "person responsible" for the Substance as defined in section 1(tt) of EPEA;

WHEREAS Charles MacDonald, Manager, Enforcement and Surveillance, has been appointed a Director for the purposes of issuing environmental protection orders under EPEA ("the Director");

THEREFORE, I, Charles MacDonald, Manager, Enforcement and Surveillance, pursuant to sections 113, 156, and 241 of EPEA, DO HEREBY ORDER that Syncrude shall do the following:

**Immediate Requirements relating to the Incident**

1. **Immediately** commence collecting water samples from the Sumps and a water sample from the seepage collection ditch located along the perimeter of the Sumps and conduct testing and provide analysis for the following parameters:
  - a. BTEX, F1-F4, major ions, trace metals, PAWs, alkylated naphthalenes (methyl naphthalene), naphthenic acids.
  - b. Provide a map indicating the sample locations.
2. **Immediately** commence collecting two soil samples from the Sumps (one from central sand area and one from along the shoreline) and conduct testing and provide analysis for the following parameters:
  - a. BTEX, F1-F4, major ions, trace metals, PAWs, alkylated naphthalenes (methyl naphthalene), naphthenic acids.
  - b. Provide a map indicating the sample locations.
3. **Immediately** provide an Aerial Photo and Map of the Incident area, including any monitoring wells such as groundwater wells or piezometers.
4. **Immediately** identify the current capacity of the Sumps including a description of the product stored and the maximum holding capacity of the Sumps.
5. Syncrude shall submit to the Director the information required in clauses 1 and 2 on or before **August 19, 2015**, or as otherwise directed in writing by the Director.

**Reporting to the Director and the Public**

6. Provide to the Director, by 3:00 p.m. each day, a daily written report (the "Director's Report"), until otherwise directed by the Director in writing.
7. The Director's Report shall contain:
  - a. the steps taken in the last 24 hours to remediate the Substances;
  - b. the steps to be taken in the next 24 hours;
  - c. an updated inventory of impacted wildlife; and,
  - d. progress and findings of Syncrude's actions relating to the Incident.

8. Provide to the Director by August 19, 2015, historical information on the Sumps with regards to wells, monitoring, and approvals. This information will include construction dates and the date that Syncrude terminated use of the Sumps.
9. Provide to the public, by 3:00 p.m. each day, a daily written report (the "Daily Public Reports") which information shall be posted, at a minimum, on Syncrude's website, until otherwise directed by the Director in writing.
10. The Daily Public Report shall contain:
  - a. the steps taken in the last 24 hours to remediate impact to the wildlife; and
  - b. the steps to be taken in the next 24 hours to remediate impacts to wildlife.

#### **Wildlife Mitigation Plan**

11. The Wildlife Mitigation Plan shall be submitted to the Director for approval on or before August 14, 2015, or as otherwise directed in writing by the Director.
12. The Wildlife Mitigation Plan shall include, at a minimum:
  - a. Wildlife fencing around the Sumps;
  - b. Amphibian fencing / silt fencing to the wildlife fencing currently being constructed;
  - c. Visual deterrents such as repellent ribbon and/ or flagging and deterrent fishing line; and,
  - d. Increase the frequency with which cannon locations are rotated to increase efficiency.
13. In carrying out the requirements of this Order and the Wildlife Mitigation Plan, Syncrude shall obtain and comply with all required federal and provincial permits and governing legislation.
14. Syncrude, 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.

#### **The Detailed Delineation and Remediation Plan**

15. The Detailed Delineation and Remediation Plan shall be submitted to the Director for approval on or before August 19, 2015, or otherwise directed in writing by the Director.
16. The Detailed Delineation and Remediation 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;
  - b. 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.
17. Implement the work required by the Detailed Delineation and Remediation Plan in accordance with the schedule of implementation for this Plan that has been approved by the Director.

**The Final Report**

18. Syncrude shall submit to the Director a final report (the "Final Report") within 30 (thirty) 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.

DATED at the City of Fort McMurray in the Province of Alberta, the 11<sup>th</sup> day of August 2015.



Charles MacDonald  
Manager, Enforcement and Surveillance

Alberta Energy Regulator

**Notwithstanding the above requirements, the Parties shall obtain all necessary approvals in complying with this Order.**

**Take notice that this Order is a remedial tool only, and in no way precludes any enforcement proceedings being taken regarding this matter under the Environmental Protection and Enhancement Act or any other provincial or federal legislation, or by any other regulator having jurisdiction.**

**Under the Responsible Energy Development Act, an eligible person may file a request for a regulatory appeal on an appealable decision. Eligible persons and appealable decisions are defined in section 36 of the Responsible Energy Development Act and section 3.1 of the Responsible Development Act General Regulation. If you wish to file a request for regulatory appeal, you must submit your request in the form and manner and within the timeframe required by the AER. You can find filing requirements and forms on the AER website, [www.aer.ca](http://www.aer.ca), under Applications & Notices: Appeals.**

