

# Decision 2011-05

<https://had.aer.ca/link/decision4445>

## TITLE

Decision 2011-005 : Total E&P Joslyn Ltd. application for an oil sands mine and bitumen processing facility Joslyn North mine project Fort McMurray area

## DATE

2011

## APPLICANT

Total E&P Limited

## APPLICATION NUMBER

1445535

## HEARING PANEL

Dilay JD

Ross B  
McFadyen D

## HEARING TYPE

Board

## CATEGORY

Oil sands

## DESCRIPTORS

Oil sands oil recovery

Bitumen  
Oil sands  
Directive 074  
Environmental impact assessment  
Conservation  
Environmental impact  
Wildlife  
Vegetation  
Wetland  
Water  
Fish  
History  
Paleontology  
Land use  
Socio-economic effect  
Economic development  
Noise (sound)  
Reclamation  
Liability (law)  
Tailings - storage  
Settling pond  
Residential building  
Public consultation  
Cumulative impact assessment

## LEGAL REFERENCES

2011 ABERCB 005

Oil Sands Conservation Act S3  
Oil Sands Conservation Act S24  
Oil Sands Conservation Act S26  
Oil Sands Conservation Regulation  
Environmental Protection and Enhancement Act  
Water Act  
Energy Resources Conservation Act  
Canadian Environmental Assessment Act

NOTES

Report of the joint review panel established by the Federal Minister of the Environment and the Energy Resources Conservation Board

Change to legal citation effective January 2011

INTERVENERS

BP Canada Energy Company

Shell Canada Limited  
Syncrude Canada Limited  
Belanger F member of the Dene Sioux First Nation  
Regional Municipality of Wood Buffalo (RMWB)  
Oil Sands Environmental Coalition (OSEC)  
Mikisew Cree First Nation (MCFN)  
Fort McKay First Nation and Metis Nation Local #63 (Fort McKay)  
Athabasca Chipewyan First Nation (ACFN)  
Non-Status Fort McMurray Band Descendents, and Off-Reserve Fort McMurray Band Descendants  
Sierra Club Prairie  
Guertin M  
Clearwater River Band No. 175  
Government of Canada  
Government of Alberta  
Joint Review Panel (Panel) staff

APPROVAL

Approved with conditions

## CONDITIONS

Condition 1 – TOTAL will submit a detailed tailings management plan two years before commencement of operations, and TOTAL will clearly demonstrate its ability to meet all requirements of Directive 074. (Section 5.1.3) Condition 2 – TOTAL will devise methods for measuring fines at the project in accordance with Energy Resources Conservation Board requirements. (Section 5.1.3) Condition 3 – TOTAL will notify the Energy Resources Conservation Board in writing of any proposed pilot plants and/or demonstration plants for all technology development at least six months before construction of those facilities begins. (Section 5.1.3) Condition 4 – TOTAL will provide written updates of any previously submitted test reports by no later than February 28 each year, or as otherwise specified by the Energy Resources Conservation Board. (Section 5.1.3) Condition 5 – TOTAL will not exceed three million cubic metres of fluid in the sand beach area sumps. (Section 5.1.3) Condition 6 – One year prior to plant start-up, TOTAL will provide measurement plans to the Energy Resources Conservation Board for review and approval, including process and instrumentation diagrams, metering, sampling methods, analytical methods and, material balance procedures that satisfy Energy Resources Conservation Board measurement requirements. (Section 5.2.2) Condition 7 – TOTAL will not discharge any untreated froth treatment tailings to the tailings disposal area. (Section 5.3.2) Condition 8 – On an annual average basis, TOTAL will limit site-wide solvent losses to not more than four volumes per thousand volumes of bitumen production under any operating conditions. (Section 5.3.2) Condition 9 – On an annual average basis, TOTAL will limit the amount of asphaltene rejection to 10 mass per cent based on bitumen production. (Section 5.4.2) Condition 10 – TOTAL will submit detailed geotechnical designs for all external overburden disposal areas and reclamation stockpiles to the Energy Resources Conservation Board at least six months prior to conducting any field preparation in these areas. (Section 5.5.3) Condition 11 – TOTAL will submit to the Energy Resources Conservation Board, for its review and approval, detailed geotechnical designs and setback distances for critical infrastructure two years prior to site preparation activities for the ore preparation plant pit, the west and southern final pitwall, and for the final pitwall design and assessed setback from the Ells River. (Section 5.5.3) Condition 12 – TOTAL will provide Alberta Environment with a wildlife mitigation plan for approval prior to clearing any vegetation. The plan must achieve no net significant adverse effect on species at risk and deal with mitigating impacts to not only species at risk, but also valued wildlife. (Section 6.1.3) Condition 13 – TOTAL will monitor noise levels at James Grandejambe's cabin. Should noise levels exceed those outlined in Directive 038, TOTAL will ensure that mitigation measures are implemented and that Directive 038 compliance is met. (Section 9.6.3) Condition 14 – TOTAL will maintain unimpeded access required for stakeholders to areas west of the project until the Moose Lake access management plan, or an equivalent, is implemented. (Section 9.7.3) Condition 15 – TOTAL will actively support and participate in the Cumulative Environmental Management Association and other regional committees to develop and use its strategies to mitigate both development and regional cumulative environmental effects. (Section 10.1.3) Condition 16 – TOTAL will limit the area of disturbance to 5000 hectares or less. (Section 10.1.3) Condition 17 – TOTAL will remove all benching on mine discard structures prior to reclaiming them. (Section 10.1.3) Condition 18 – TOTAL will provide sustainable watershed designs with vegetated watercourses for geotechnical design applications for mine discard structures. Landform watershed designs should be consistent with regionally recognized guidelines for the purpose of erosion management. (Section 10.1.3) Condition 19 – TOTAL will provide an amended mine plan to demonstrate an integrated landform and landscape design for the Canadian Natural Resources Limited – TOTAL common mine boundary to the Energy Resources Conservation Board for approval five years prior to development. The amended plan must include a discussion of the feasibility of filling the trench area between the Joslyn North and Horizon projects with mine discard. The plan must also include a discussion of the alternatives considered by TOTAL. (Section 10.2.3) Condition 20 – TOTAL will submit an annual report to the Energy Resources Conservation Board, starting two years prior to commencing mining operations, that describes its end pit lake research and development efforts for the previous year, and the current plans and timelines for determining the efficacy of its end pit lake within seven years of mine closure. This report will include all of TOTAL's efforts and contributions with respect to collaboration on the demonstration of a full scale end pit lake. (Section 12.3)

