



Regulating Oil Sands Development Fact Sheet

October 2009

The oil sands industry operates within some of the most stringent and comprehensive regulations for resource development anywhere in the world. Detailed regulations are in place with respect to resource access, and to the protection of all aspects of the environment, including a focus on water, land and air. A regulatory process is in place in Alberta involving both provincial and federal regulators. Before any oil sands project is approved, there are extensive public reviews undertaken generally leading to a public hearing. Comprehensive project approvals are reviewed, and project operating approvals must be renewed every 10 years.

Fact: There are several national and provincial regulators responsible for overseeing and approving projects in the oil sands industry.

- Provincially, Alberta Environment, the Energy Resources Conservation Board (ERCB) and Alberta Sustainable Resource Development are the primary regulators of the industry; however, many other areas of government also have regulating jurisdiction.
- On a federal level, Environment Canada, the Department of Oceans and Fisheries and Transport Canada are the primary regulators.

Fact: Before any project even begins, operators must participate in a very thorough application and review process which takes several years to complete.

- These are the basic steps that oil sands companies engage in from a project's proposal to completion
 1. A private company purchases oil sands rights for a specific area.
 2. An initial public disclosure is developed outlining the general nature of the proposed project.
 3. The company consults with First Nations and stakeholder groups in the area.
 4. The company makes an application for development to the ERCB, which regulates safe and responsible development of Alberta's energy resources. They also consult Alberta Environment, which issues

operating approvals for all aspects of the development, and other Provincial and Federal agencies as required.

5. An environmental impact assessment, water use request and socio-economic impact study are submitted by the developer. These applications are reviewed by government staff and any required additional information is supplied until staff are satisfied the application provides all information required to form a decision. Stakeholder consultation continues throughout the entire process.
 6. Public hearings may be held if outstanding issues remain.
 7. A decision on the project application is made in the public's interest by the ERCB.
 8. If approved, development proceeds based on terms set out in the project approval.
 9. Annual reporting and monitoring and 10-year renewal is required during operations as is participation in regional multi-stakeholder forms.
- The process for reviewing and approving these applications is transparent, open to the public and often occurs over several years.

Fact: Land use is controlled and is extensively monitored.

- All aspects of land use are subject to review and approval including surface access, timber harvesting, surface disturbance and reclamation.
- Industry is required by law to file a *Conservation and Reclamation Plan* as part of its initial application to develop an oil sands project. It must keep the plan up-to-date as its development proceeds.
- The *Conservation and Reclamation Plan* must be formally re-approved every 10 years.
- The *Conservation and Reclamation Plan* must detail the scope and timing of all surface disturbances and resulting reclamation activities throughout the life of the project through to the completion of the final reclaimed landscape.
- *Conservation and Reclamation Plans* must define how and when tailings ponds will ultimately be reclaimed.

Fact: Alberta Ambient Air Quality Objectives are some of the strictest in the world.

- The Wood Buffalo Environmental Association (WBEA) operates 15 active, continuous air monitoring stations in the oil sands region and 27 passive, interval air monitoring stations.
- There are about 10 times more air monitoring stations in the Wood Buffalo region as there are for the United States on a per capita basis.
- WBEA monitors about 70,000 square kilometres in the region and northwestern Saskatchewan.
- WBEA conducts a *Terrestrial Environmental Effects Monitoring Program* to monitor the impact of oil sands emissions in northeastern Alberta and northwestern Saskatchewan.
- Air quality data for the oil sands region is available in real time from the WBEA web site <http://www.wbea.org/content/view/56/111/> along with historic air quality information and the results of the *Terrestrial Environmental Effects Monitoring Program*.
- The Alberta Clean Air Strategic Alliance conducts studies to monitor improvements and lapses in air quality, and its studies indicate air quality has consistently improved and continues to improve in the Fort McMurray Wood Buffalo region.

Fact: Reclamation fees are paid before the land is ever disturbed, but the actual reclaiming of land takes many years.

- Industry is required to post financial security equivalent to the cost of reclamation to ensure all land is reclaimed irrespective of the project's economic performance.
- A reclamation certificate can only be issued once vegetation is mature enough to demonstrate long-term productivity.
- Once land is certified, it becomes open to public access, so operators may wait to apply for certification if the reclaimed land is adjacent to on-going industrial activity for reasons of safety and security.
- In March 2008, Alberta issued its first-ever oil sands land reclamation certificate.

Fact: In 2007, Alberta was the first jurisdiction in North America to legislate GHG reductions on large industrial facilities.

- In the first year of legislated GHG reduction, companies made 2.6 million tonnes of reductions, which is equivalent to taking 550,000 cars off the road.

Fact: Tailings result from mining activity, and there are strict environmental controls regulating how tailings ponds are contained and reclaimed.

- Tailings ponds and other structures on oil sands operations must comply with *Canadian Dam Safety Regulations* to ensure the integrity of the containment structures.
- No tailings water can be released to the Athabasca River or any other watercourse.
- The ERCB, Alberta Environment, and Alberta Sustainable Resource Development worked together to develop a new directive for managing tailings. The *Tailings Performance Criteria and Requirements for Oil Sands Mining Schemes* directive defines the objectives associated with tailings management and establishes performance-based criteria.

Fact: Alberta Environment regulates the oil sands industry's water use under the *Water Act*.

- All agricultural, industrial, municipal and commercial operations must apply to Alberta Environment for a licence to divert and use water.
- Alternatives to fresh water must be investigated for all water use before licences are issued.
- The available supply of water, environmental requirements, apportionment agreements and existing licences are all taken into consideration by Alberta Environment before a licence is issued.

Fact: The Athabasca River is closely monitored to responsibly allocate the average annual flow of the river, and it has the lowest water allocation of any river in Alberta.

- The oil and gas industry throughout the province as a whole has been licensed to use just over 7 per cent of the water allocated in the province, while agriculture has been licensed to use about 45 per cent. About 30 per cent is for commercial uses, and about 11 per cent is licensed to municipalities.
- The oil sands industry has typically used less than half of its total allocation for all existing, approved and announced projects. That is less than 1 per cent of the average annual flow of the Athabasca River.

- The total annual allocation of water from the Athabasca River for all uses, including agricultural and municipal uses, is less than 3.2 per cent of flow, compared to:
 - 37 per cent North Saskatchewan River (Edmonton)
 - 60 per cent Oldman River (Southern Alberta)
 - 65 per cent Bow River (Calgary)
- Industry's withdrawal of water from the Athabasca River is capped during periods of low river flow.
- The amount that is allocated changes each year and is often dependent on weather and other factors.

Fact: Water quality in the region is monitored to ensure bodies are safe and healthy.

- The Regional Aquatic Monitoring Program (RAMP) has been studying the health of fish populations and their habitat as well as water quality of rivers and lakes in the region for more than 10 years.
- RAMP has concluded that there has been no significant impact from oil sands development on the Athabasca River.
- RAMP's information and technical reports may be reviewed on their web site www.ramp-alberta.org/RAMP.aspx

Fact: Operators in the oil sands work with many groups involved in monitoring and regulating the environmental performance and commitment of companies.

- Alberta Environment regulates operations that impact air, land and water.
- Alberta Sustainable Resource Development oversees access to land, timber harvest and wildlife management.
- The ERCB undertakes public interest tests with respect to access to the hydrocarbon resource.
- Best Available Technology Economically Achievable (BATEA) is required in new facilities.
- Alberta Environment and the Department of Fisheries and Oceans have developed a water management plan for the lower Athabasca River.
- The Wood Buffalo Environmental Association (WBEA) has been monitoring air quality in the region since 1997.

- The Regional Aquatics Monitoring Program (RAMP) is the multiparty environmental monitoring program that assesses the health of rivers and lakes in the region.
- The Cumulative Environmental Management Association (CEMA) studies the cumulative environmental effects of industrial development in the region. The group has produced hundreds of reports and guidelines and has developed eight management frameworks.

Sources for all facts available upon request