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# THE BOARD

November 2006

## EUB approves Suncor's \$7 billion oil sands development

*The Board places conditions on project and recommends investment in infrastructure*

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### About the EUB

Our mission is to ensure that the discovery, development, and delivery of Alberta's energy resources and utilities services take place in a manner that is fair, responsible, and in the public interest. We regulate oil, natural gas, oil sands, coal, and electric energy, pipelines, and transmission line development.

On the utilities side, we regulate investor-owned and certain municipally owned natural gas, electric, and water utilities to ensure that customers receive safe and reliable service at just and reasonable rates. Regulation is done through two core functions: adjudication and regulation, information and knowledge.

The EUB has granted conditional approval for Suncor Energy Inc. to proceed with the construction, operation, and reclamation of the North Steepbank Mine extension and the Voyageur Upgrader adjacent to its existing development in the Fort McMurray region.

In *Decision 2006-112*, issued earlier this month, the EUB addresses matters relating to the Suncor project, including project needs, social and economic effects, public consultation, resource recovery, tailings management, air, groundwater, surface water, health effects, traditional land use, regional environmental initiatives, technology, and liability management.

The decision also states that Alberta Environment is the appropriate regulatory authority for managing greenhouse gas emissions from the Voyageur Project.

The EUB has placed seven conditions on Suncor that relate to environmental and technical aspects of the project. These include increasing tailings efficiency by 2009, providing the EUB with detailed information related to reclamation of tailings ponds, and submitting plans to incorporate additional tailings techniques beginning in 2007.

The Board also notes that the Suncor project will not require additional water beyond its existing allocation.

Responding to concerns raised by municipal and health officials during the July hearing, the EUB states that it appreciates that continued oil sands development has the potential to further strain public infrastructure and

public service delivery in the Wood Buffalo region.

The Board says it believes that the responsible government agencies are aware of and are responding to a number of the socioeconomic impacts. The EUB says that additional infrastructure investment in the Wood Buffalo region is needed and that there is a short window of opportunity to make these investments in parallel with continued oil sands development.

*Decision 2006-112* states that the Board is "concerned that a sustained high rate of development, coupled with capacity constraints for some infrastructure and services, has limited the ability of the [Regional Municipality of Wood Buffalo and Northern Lights Health Region] to adaptively respond to the cumulative impact of oil sands development.

"The Board acknowledges the challenges that exist and believes that public infrastructure and service providers in the region must have the necessary planning in place and the financial strength to

implement capital projects necessary to meet the existing and expected service requirements."

The decision makes two recommendations to the Government of Alberta. First, the Board recommends that coordinated action be taken at all levels of government to ensure that the regional municipality has the ability to service the anticipated level of sustained growth in the region. Second, it recommends that the government continue to work with the health region to address the lack of land, infrastructure, and resources.

**The EUB sees a "short window of opportunity" to make additional infrastructure investments in the Wood Buffalo region.**

## Recent EUB publications

### News Releases

**November 21:** News Release (NR 2006-48): EUB Approves Rate Increase for CU Water Limited

**November 14:** News Release (NR 2006-47): EUB Approves Suncor Oil Sands Project with Conditions

**October 31:** News Release (NR 2006-46): EUB Approves EnCana Coalbed Methane Project with Conditions

**October 27:** News Release (NR 2006-45): EUB Report: Solution Gas Flaring Down 72% Since 1996, Venting Down 59% Since 2000

### Bulletins

**November 16:** Bulletin 2006-41: Revised Directive 060: Upstream Petroleum Industry Flaring, Incinerating, and Venting (formerly Guide 60)

**November 9:** Bulletin 2006-40: Pipeline Construction and Test Notification Requirements

**November 3:** Bulletin 2006-39: Information Sessions on Commingling of Production from Two or More Pools in the Wellbore Using the Self-Declared Commingling Process

**November 1:** Bulletin 2006-37: Directive 043: Well Logging Requirements—Surface Casing Interval Issued

**October 31:** Bulletin 2006-38: Implementation of Development Entities for Management of Commingled Production from Two or More Pools in the Wellbore

**October 27:** Bulletin 2006-36: EUB Bonnyville Field Centre

### Publications

**November 1:** Directive 043: Well Logging Requirements—Surface Casing Interval

**October 31:** Directive 044: Requirements for the Surveillance, Sampling, and Analysis of Water Production in Oil and Gas Wells Completed Above the Base of Groundwater Protection (BGWP)

### Decisions

**November 23:** Decision 2006-117 + Errata: AltaGas Utilities Inc. 2005/2006 General Rate Application Phase I Second Compliance Filing

**November 21:** Decision 2006-118: Gas Alberta Inc. Application for Review and Variance of ATCO Pipelines 2004 GRA Phase II and Compliance Filing Decision 2004-079 and Decision 2004-096

**November 21:** Decision 2006-116: West Energy Ltd. - Prehearing Meeting - Applications for Two Well Licences - Pembina Field

**November 21:** Decision 2006-113: CU Water Limited General Rate Application

**November 14:** Decision 2006-112: Suncor Energy Inc., Application for Expansion of an Oil Sands Mine (North Steepbank Mine Extension) and a Bitumen Upgrading Facility (Voyageur Upgrader) in the Fort McMurray Area

**November 7:** Decision 2006-111: Suncor Energy Inc., Application for a Well Licence, La Glace Field

**November 7:** Decision 2006-110 Burlington Resources Canada Ltd., Applications for Three Well Licences, Pembina Field (Released: November 7, 2006)

**November 7:** Decision 2006-109: Direct Energy Regulated Services 2005 Default Rate Tariff and Regulated Rate Tariff Non-Energy Deferral Accounts Application No. 1458883

**November 1:** Decision 2006-108: ENMAX Energy Corporation January - June 2006 Reasonable Return Margin Application No. 1457764

**November 1:** Decision 2006-107: Direct Energy Regulated Services Reasonable Return Margin Effective July 2006 Application No. 1495025

## EUB adds new EnerFAQs to series

The EUB has rolled out two new EnerFAQs, bringing the total number in the series to 15.

The EUB has published *EnerFAQs No. 14: Public Health and Safety – Roles and Responsibilities of Agencies that Regulate Upstream Oil and Gas*, and *EnerFAQs No. 15: All About Appropriate Dispute Resolution (ADR)*.

EnerFAQs is a series of documents written in a frequently-asked-questions format that highlights a wide range of EUB services, programs, and issues.

*EnerFAQs No. 14* briefly describes the roles and responsibilities of the various agencies that have a regulatory role in upstream energy facilities and operations in the province. It also provides information on which agency to contact with questions or complaints or in the event of an upstream oil or gas emergency.

*EnerFAQs No. 15* explains the options available within the EUB's ADR program, with a focus on facilitation and mediation.

It illustrates how ADR options work and how they can help both landowners and energy companies resolve disputes. It is meant for those who find themselves in a conflict over energy industry projects and the impacts the projects may have.

The complete EnerFAQs series includes

No. 1 What Is the Alberta Energy and Utilities Board?

No. 2 Having Your Say at an EUB Hearing

No. 3 Inspections and Enforcement of Energy Developments in Alberta

No. 4 All About Critical Sour Wells

No. 5 Explaining EUB Setbacks

No. 6 Flaring and Incineration

No. 7 Electricity and the EUB

No. 8 Proposed Oil and Gas Development: A Landowner's Guide

No. 9 Animal Health

No. 10 Coalbed Methane

No. 11 Natural Gas Utilities

No. 12 Utility Concerns: How to Make a Complaint to the EUB

No. 13 The EUB and You: Agreements, Commitments, and Conditions

No. 14 Public Health and Safety: Roles and Responsibilities of Agencies that Regulate Upstream Oil and Gas

No. 15 All About Appropriate Dispute Resolution (ADR)

EnerFAQs can be found on the EUB Web site at [www.eub.ca](http://www.eub.ca). To obtain paper copies of EnerFAQs, contact EUB Information Services at (403) 297-8311, extension 2.

# EUB has role to play in CO<sub>2</sub> enhanced oil recovery in Alberta

The EUB has an established regulatory structure that can help Alberta become a world leader in using carbon dioxide (CO<sub>2</sub>) in enhanced oil recovery (EOR) schemes to boost production of conventional oil and reduce the province's greenhouse gas emissions.

Speaking at a recent Petroleum Technology Association of Canada (PTAC) conference, EUB Chairman Neil McCrank said that government and regulatory bodies all have a role to play to ensure that CO<sub>2</sub>-EOR projects can move forward.

"The role of governments and regulatory agencies is to provide industry with a clear, consistent, and stable framework, and the EUB is at the forefront," McCrank said.

"The EUB has a complete and well-honed regulatory framework in place to address CO<sub>2</sub> in EOR," he said, adding that CO<sub>2</sub>-EOR falls under the EUB's resource conservation mandate. McCrank noted that the regulatory agency was created more than 70 years ago to conserve the massive amounts of natural gas being flared off as companies produced oil from the Turner Valley field.

In 2000, Alberta became the largest emitter of CO<sub>2</sub> in the country at 223 megatonnes per year, compared to 207 megatonnes in Ontario, Canada's most industrialized province.

Alberta's emissions have risen since then as a result of population increases and strong economic growth, especially oil sands development.

CO<sub>2</sub>-EOR schemes see the gas injected into oil-bearing reservoirs that are no longer able to produce using conventional extraction methods. The CO<sub>2</sub> floods the reservoir and drives the trapped oil to the wellbore, where it is pumped to surface. Any CO<sub>2</sub> carried to the surface during production is captured at the wellhead and recirculated in the system, which prevents it from escaping into the atmosphere.

"And so it begs the question, can the reality of CO<sub>2</sub> emissions and the reality of oil conservation join together to create a unique solution to two problems? Given our conservation mandate, we are very interested in this," McCrank said.

While CO<sub>2</sub> is widely used in EOR operations in west Texas—a result of cheap CO<sub>2</sub> from natural occurring reservoirs—Alberta has been slower to adopt the CO<sub>2</sub>-EOR method,

largely because the high cost of capturing CO<sub>2</sub> from industrial sources remains a barrier.

Currently there is just one such commercial operation in Alberta, located near Joffre, which uses CO<sub>2</sub> piped in from a nearby petrochemical plant. Joffre was an abandoned pool before Penn West Energy developed a CO<sub>2</sub> injection scheme. Meanwhile, CO<sub>2</sub>-EOR pilot projects are under way at the Swan Hills, Pembina, Chigwell, and Enchant fields.

CO<sub>2</sub> captured from large industrial sources can also be stored in geological formations in an effort to lower overall greenhouse gas emissions.

The Alberta Geological Survey—a group within the Resources Branch of the EUB—believes Alberta is well positioned to be a leader in CO<sub>2</sub> capture and storage, since most of Alberta's CO<sub>2</sub> emissions come from large industrial emitters and thereby allow for the CO<sub>2</sub> to be captured. As well, the province's geology is very favourable for both CO<sub>2</sub> storage and its use in EOR schemes.

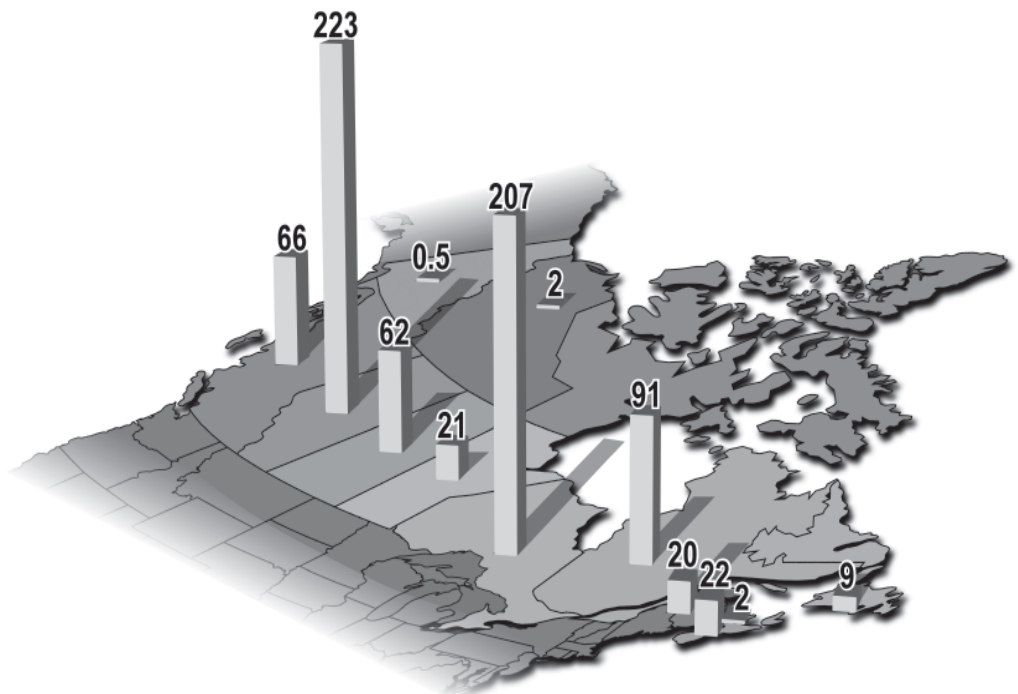
The EUB has jurisdiction and responsibility for CO<sub>2</sub> capture, transportation, and deep injection, as well as for effectively processing applications, monitoring compliance, and safeguarding public safety.

The storage of CO<sub>2</sub> also falls within the EUB framework. The agency already regulates acid gas disposal at more than 30 sites in Alberta. Acid gas—a combination of CO<sub>2</sub> and hydrogen sulphide (H<sub>2</sub>S)—is injected into deep saline aquifers and depleted hydrocarbon reservoirs, driven by the need to dispose of H<sub>2</sub>S produced with sour gas in accordance with EUB regulatory requirements.

If CO<sub>2</sub> is emitted into the air, it falls under the jurisdiction of Alberta Environment. However, if it goes underground, then it comes under the authority of the EUB.

With respect to CO<sub>2</sub> in EOR operations, McCrank posed the question to conference delegates of who should take the lead. Should it be the government, by offering royalty relief and other incentives for CO<sub>2</sub>-EOR schemes; the regulator, by ordering CO<sub>2</sub>-EOR schemes be implemented as a solution to a conservation problem; or industry, by constructing the necessary pipeline network, conducting the research (perhaps with government participation), and undertaking pilot projects?

"In the end, of course, all of us need to work together," said McCrank.



Carbon dioxide emissions (megatonnes per year)

## ■ ■ ■ Upcoming Public Hearings

Application No.	Applicant	Hearing Purpose
1440206	Richmount Petroleum Ltd.	Application to construct and operate two pipelines just east of Calgary - Okotoks Field
Start date: November 23, Telus Convention Centre, 120- 9 Avenue SE, Calgary Alberta		
1468565	Board Initiated Proceeding	Uniform System of Accounts / Minimum Filing Requirements for Alberta Electric Utilities
Start date: December 5, EUB Govier Hall, 640 - 5 Avenue SW, Calgary, Alberta		
1452905 1471170 1472099	Canadian Natural Resources Limited (CNRL)	Application for licences to drill two directional wells and to construct and operate a natural gas pipeline
Start date: December 5, The Athabasca Community Centre, 4901 – 48 Street, Athabasca, Alberta		
1456689 1459652 1459666	Burlington Resources Canada Ltd.	Application for licences to drill three Level 3 critical wells - Pembina Field
Start date: December 7: Super 8 Drayton Valley, 3727 - 50th Street, Drayton Valley, Alberta		
1475249	ATCO Gas	Application for 2003/2004 GRA Phase II Topic 4 - COSS Methodology and Rate Design
Start date: December 11: 12th Floor, 10055-106 Street, Edmonton, Alberta		
1460731	EUB Proceeding	Notice of Intention to issue a declaration naming David N. Matheson and Ronald P. Bourgeois under section 106 of the OGCA
Start date: December 12, Sandman Hotel, 888 - 7th Avenue SW, Calgary, Alberta		
1457276 (formerly 1439090) 1467817	Gladius Energy Inc.	Application for a well licence - Strachan Field
Start date: November 28, Lou Soppit Community Centre, 4733 – 54 Avenue, Rocky Mountain House, Alberta		

## ■ ■ ■ Pending Decisions

Application No.	Applicant	Hearing Purpose
1398411	Albian Sands Energy Inc.	Application for an expansion of current oil sands mining and bitumen processing facilities at the Muskeg River Mine
1459453 1451106	West Energy Ltd.	Application for licences to drill two crude oil wells targeting Nisku Formation
<b>Prehearing</b>		
1439224 1443360 1431899 1445441 1441569 1439596	Cheryl Kalev Benlato and District Community Lochend to Langdon Power Grp Cottonwood-Spruce View Power Grp Lavesta Area Grp Warburg Powerpoint	Review and Variance Request on Decision 2005-031 500-kV Transmission System Reinforcement Project Edmonton-Calgary Area
1357130	ATCO Gas South	2005/2006 Carbon Storage Plan - Revised Part 1 Module Schedule Decision will not be issued until after the decision has been issued in respect of the Retailer Service and GUA Compliance, Phase 2 Part B Application No.1411635, the 90 days for the decision is October 10, 2006.
1478363	ATCO Gas	Application for 2005-2007 GRA Phase I Second Compliance Filing
1463440	ATCO Pipelines	Muskeg River Affiliate Code of Conduct Exemption

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### For Alberta Geological Survey (AGS) documents on geological research, contact

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### Questions, complaints, problems?

**Utilities:** For information or to file a consumer utility complaint, contact us at

EUB Utilities Branch, 10th floor, 10055-106 Street,  
Edmonton, Alberta T5J 2Y2  
Fax: (780) 427-6970  
Complaints: (780) 427-4903\*  
E-mail: <utilities.concerns@eub.gov.ab.ca>

**Oil and gas:** For information or complaints about new or existing oil and gas developments and facilities, we recommend contacting the operating company first. If the company does not respond appropriately, you may contact the nearest EUB Field Centre.

EUB Field Centres	(24-hour service)
Bonnyville	(780) 826-5352*
Drayton Valley	(780) 542-5182*
Grande Prairie	(780) 538-5138*
Fort McMurray	(780) 743-7214*
High Level	(780) 926-5399*
Medicine Hat	(403) 527-3385*
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