



Teck Resources Limited

**Application for Oil Sands Evaluation Well Licences
Undefined Field**

October 21, 2013

ALBERTA ENERGY REGULATOR

Decision 2013 ABAER 017: Teck Resources Limited, Application for Oil Sands Evaluation Well Licences, Undefined Field

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Calgary Alberta

**TECK RESOURCES LIMITED
APPLICATION FOR OIL SANDS
EVALUATION WELL LICENCES
UNDEFINED FIELD**

**2013 ABAER 017
Applications No. 1749543, 1749567, 1749568,
1749569, 1749570, 1749572, 1749605,
1749607, 1749620, 1751999, 1752756,
1763318, 1763325, 1763326, 1763327**

DECISION

[1] Having carefully considered all of the evidence, the Alberta Energy Regulator (AER) approves Applications No. 1749543, 1749567, 1749568, 1749569, 1749570, 1749572, 1749605, 1749607, 1749620, 1751999, 1752756, 1763318, 1763325, 1763326, and 1763327.

[2] In reaching its decision, the AER considered all materials constituting the record of this proceeding, including the evidence and argument provided by each party. Accordingly, references in this decision to specific parts of the record are intended to help the reader understand the AER's reasoning on a particular matter and does not mean that the AER did not consider all relevant parts of the record with respect to that matter.

[3] During the proceeding, the *Responsible Energy Development Act (REDA)* came into force in Alberta. The *Energy Resources Conservation Act (ERCA)*, which established the Energy Resources Conservation Board (ERCB/Board), was repealed and the AER was created. In accordance with *REDA*, the AER assumed all of the ERCB's powers, duties, and functions under Alberta's energy resource enactments, including those under the *Oil and Gas Conservation Act (OGCA)*. Throughout the transition from the ERCB to the AER, the authority of the panel assigned to hear this matter continued in accordance with the *Responsible Energy Development Act Transition Regulation*. Where appropriate, this decision refers to the AER anywhere the ERCB was mentioned in the hearing record.

[4] Findings concerning the public interest have been included in this decision because section 3 of the *Oil Sands Conservation Act (OSCA)* and section 4 of the *OGCA* both state that one of the purposes of the statute is to provide for the economic, orderly and efficient development in the public interest of the oil sands and oil and gas resources of Alberta. The panel is aware of its responsibilities under section 15 of *REDA* and section 3 of the *Responsible Energy Development Act General Regulation*, which requires the AER to consider the economic, social, and environmental effects of energy resource activities when considering an application. The panel is satisfied that throughout the proceeding and in its decision it has considered the purposes and factors identified in those sections.

[21] Teck stated that its application was consistent with the Lower Athabasca Regional Plan (LARP), which was prepared under the *Alberta Land Stewardship Act* and approved by the Government of Alberta in 2012. Teck submitted that LARP indicates the economic potential of oil sands resources is to be optimized as part of the province's strategic plan for the Lower Athabasca region. Teck said that section 20 of *REDA* requires the AER to act in accordance with LARP when the AER considers applications. Teck interprets LARP as confirming that the province wants further energy development in the area where the Frontier Project is proposed because the area has been selected by the government for oil sands exploration and development, subject to certain objective environmental thresholds. Teck submitted that failure to acquire timely drilling information would impede its development of the Frontier Project.

[22] ACFN submitted that it had initiated a legal challenge of LARP and cautioned the panel against relying on LARP.

[23] ACFN challenged Teck's position on the need for more data to advance engineering for the Frontier Project. ACFN submitted that Teck's reliance on the Frontier Project to support the need for the wells was inconsistent with Teck's position that the Frontier Project was not within the scope of this hearing. ACFN also found that Teck's submission that it needs timely drilling information on these applications in order to meet the requirements of *Directive 082* is inconsistent with Teck's position that the disclosure of the number of oil sand evaluation wells needed to meet *Directive 082* density requirements is irrelevant. In addition to challenging the overall need for the wells, ACFN also challenged the need for the wells right now. It argued that Teck would not suffer any irreparable harm if the applications were delayed to permit further information on impacts to be collected.

[24] It was Teck's position that disclosure of the number of evaluation wells needed to meet *Directive 082* density requirements was irrelevant as Teck was drilling the wells not only to satisfy *Directive 082* but also to help in its business decisions. Teck disagreed with ACFN's position that the applications could be delayed. Teck said that failure to get approval for these applications before the 2012/2013 winter season had already resulted in a one-year schedule delay for the Frontier Project and in Teck incurring about \$12 million in contractor penalties. Teck submitted that it continues to pay rent on the oil sands leases and that failure to acquire the licences for these applications in time to begin the Corehole Program during the upcoming 2013/2014 winter season will result in further schedule delays, additional development costs, and lost opportunity costs.

[25] The panel acknowledges that evaluation wells allow for more than just the effective management of resources. They also help oil sands lessees make business decisions since the acquired information supports conceptual and detailed mine planning that is needed to apply for other approvals.

[26] The panel does not accept ACFN's argument that it is somehow inappropriate for Teck to connect the need for the wells to its ongoing efforts to advance the Frontier Project. *Directive 023: Guidelines Respecting an Application for a Commercial Crude Bitumen Recovery and Upgrading Project (Directive 023)* states that a proponent must acquire enough drilling information to delineate the resource and determine the economic viability of the project. *Directive 023* sets out the information required in an application for approval of a scheme to recover oil sands or crude bitumen or for approval of an oil sands processing plant. These

[48] Teck submitted that there are no significant contamination sources associated with its Corehole Program that would impair on-site or off-site water quality. Teck said that mitigation for its camp water use would be a commercial wastewater/sewage treatment system, and for its drilling materials would be compliance with *AER Directive 050: Drilling Waste Management*.

[49] The panel acknowledges that AESRD is responsible for assessing and approving Teck's proposed water diversion program, and that it has issued the necessary authorizations for the proposed water withdrawals.

[50] The panel agrees that the volume of the water withdrawals is small and not likely to adversely or irreversibly affect any water bodies. The panel also notes that as a result of the planned uses of water by Teck, most of the water used for the program would be returned to the hydrologic cycle during spring breakup.

[51] The panel finds that insufficient information was provided to support concerns about water quality and the potential contamination of water as a result of the Corehole Program. The panel finds that the risk of water contamination from the Corehole Program is minimal due to the localized nature of activities and Teck's proposed mitigation.

PROJECT FOOTPRINT AND CUMULATIVE DISTURBANCE

Cumulative Effects

[52] All three interveners expressed concern about the cumulative effects of oil sands development, including multiple winter exploration programs and the large number of geotechnical and corehole wells required for the Frontier Project.

[53] ACFN expressed concern about the cumulative effects of Teck's proposed Corehole Program in combination with other past and current resource delineation and geotechnical programs. ACFN also expressed the concerns that Teck has not completed an assessment of the cumulative effects of its resource delineation activities to date and that Teck's reasoning for not doing so is that other companies have not been required to complete such assessments.

[54] Teck confirmed that it has not completed a formal environmental impact assessment (EIA), or an assessment of the cumulative effects of the winter drilling programs that it had completed to date, or the Corehole Program, and that there are no regulatory requirements for such assessments for oil sands exploration programs. Teck said that its proposed mitigation measures were designed to minimize site-specific effects and that this would also help limit environmental and cumulative effects of the program. Teck also said that LARP was the appropriate mechanism for managing cumulative effects.

[55] The panel acknowledges that there is no requirement under the *Environmental Protection and Enhancement Act* (EPEA) or the AER's rules to conduct an EIA or cumulative effects assessment for exploration programs such as those proposed in the Corehole Program applications. The panel also believes that a formal EIA or cumulative effects assessment for each exploration program would not be practical and that LARP is a more appropriate mechanism for establishing disturbance limits and managing regional cumulative effects. While the panel recognizes that some of the tools and frameworks contemplated under LARP for managing

cumulative effects, such as disturbance limits and the biodiversity management framework, have not yet been developed or implemented, the panel does not believe that it is necessary or would be appropriate to wait until these tools have been developed and implemented before issuing the authorizations for the Corehole Program wells. Section 7(3) of the Regulatory Details Plan in LARP states that

a decision-maker or local government body must not adjourn, defer, deny, refuse, or reject any application, proceeding or decision-making process before it by reason only of

- a) the Crown's non-compliance with a provision of either the LARP Strategic Plan or LARP Implementation Plan, or
- b) the incompleteness by the Crown or any body of any direction or commitment made in a provision of either the LARP Strategic Plan or LARP Implementation Plan.

Land Disturbance

[56] Teck submitted that it designed the Corehole Program to limit the amount of new disturbance by using geotechnical well pads and existing access as much as possible. Teck has acquired the necessary surface access authorizations from AESRD. Teck estimated that the total disturbed area of existing dispositions was about 140 hectares but indicated that individual disturbance areas cannot be simply summed up because the amounts include disturbance related to the geotechnical program, and some of the Corehole Program will take place on those already disturbed sites. Teck estimated that approval of the Corehole Program would result in about 23 hectares (ha) of new disturbance.

[57] Teck submitted that AESRD was responsible for assessing the environmental effects of the proposed geotechnical and corehole programs on Crown lands and for issuing the required surface authorizations. Teck said that AESRD had assessed the potential impacts of both programs, including the issues raised by the intervening parties, had authorized the clearing and construction of access routes and well sites for the Corehole Program, and had issued the water diversion licences and authorizations necessary for pad and access preparation. Teck submitted that the AER should take in to consideration AESRD's authorizations.

[58] Teck provided a series of technical memoranda outlining its wildlife and watercourse mitigation measures. These memoranda identify key mitigations proposed by Teck for the Corehole Program, including

- sharing common access corridors with other operators;
- using existing linear corridors for access where possible;
- using existing clearings;
- locating facilities, roads, remote sumps, and well sites outside of the Key Wildlife Biodiversity Zone where possible;
- placing breaks in snow berms to allow wildlife movement and access to trapping trails;
- avoiding water bodies and creek crossings where possible;
- removing log spans, rig mats, and snow fills before spring break-up; and
- closing access after drilling and use of active and passive access control.

[59] Teck said that access will be controlled through use of signage, rollback of snow and woody debris, and vehicular traffic speed limits. Teck also said that the proposed Corehole Program will adhere to AESRD's Code of Practice for Exploration Operations.

[60] Teck said that it is committed to an "early-in/early-out" policy whereby work would begin immediately after freeze-up in order to complete the Corehole Program as soon as possible. Teck submitted that the Corehole Program would take about 90 days to complete.

[61] Teck also submitted a technical memo to address reclamation and stated that vegetation cover would recover relatively quickly because of the minimal-impact disturbance techniques being used for the Corehole Program. Teck said that it would employ low-impact winter construction methods that have limited impact on soils and ground disturbance and that would include freezing over access and drilling pads. Teck submitted that these methods promote rapid reclamation through the use of rollback on leases and access roads and the use of stripping techniques that leave the rooting zone intact. Teck said that recent site assessments of previous corehole programs in the Frontier Project area noted healthy regrowth of vegetation on all sites.

[62] The panel recognizes that AESRD has jurisdiction to establish regulatory requirements to manage environmental impacts for surface access to Crown lands and to assess effects on wildlife resources. The panel also notes that AESRD has issued the requisite authorizations for surface disturbance as requested by Teck and, in so doing, has exercised its authority to impose regulatory conditions, including mitigation requirements for the surface access associated with the Corehole Program.

[63] The AER accepts that LARP reflects government policy on land development as set out in the plan and that bitumen resource development is a priority use for the Lower Athabasca region, which includes the area of the applications. The panel notes that the applications are not for projects that would be located in an area identified for protection under LARP, and it therefore believes that completion of the proposed Corehole Program is consistent with the requirements of LARP.

[64] The panel believes that Teck has made considerable effort to minimize the amount of new surface disturbance associated with the Corehole Program and to limit the duration of the effects of any disturbance that does occur. During its flyover of the project area, the panel observed that while there has been some disturbance of the project area as a result of previous exploration activities, the amount of disturbance visible from the air was significantly less than what the panel had expected given that Teck has drilled about 680 coreholes and 600 geotechnical holes in the project area over the past six years. While the panel acknowledges that its observations occurred at a single point in time and under specific conditions, and are therefore subject to some limitations, it believes its observations support Teck's evidence that the use of low-impact techniques to date has helped to minimize the nature and extent of disturbance associated with these activities.

[65] The panel finds that the amount of new surface disturbance associated with the Corehole Program is small and that the mitigation measures proposed by Teck are appropriate to ensure that the disturbance related to them will be of relatively short duration and that vegetation will recover relatively quickly. The panel therefore concludes that the preparation of well sites and access roads for the Corehole Program will not result in any significant or long-term adverse environmental or cumulative effects.