ENVIRONMENTAL LAW CENTRE

Our File: 99-881

SUBMISSIONS TO THE OIL SANDS PANEL ON PHASE II PROPOSED OPTIONS FOR STRATEGIES AND ACTIONS FOR OIL SANDS DEVELOPMENT IN ALBERTA

Peace River, April 16, 2007

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I. Introduction

The Environmental Law Centre ("ELC") is a charitable organization, incorporated in 1982, to provide Albertans with an objective source of information on environmental law and natural resources law. The ELC provides services in legal education, assistance, research and law reform to achieve its mission to ensure that laws, policies and legal processes protect the environment.

The ELC has been involved in providing assistance to the public and submissions to government on energy related issues since 1982. We provided written and oral submissions to the Oil Sands Panel (the "Panel") on a vision and principles for oil sands development in September 2006.[1] Accordingly, we have prepared submissions to assist the Panel in choosing strategies and actions to guide the long-term development of the oil sands.

This submission will focus on reclamation issues (Vision 3, Strategies 8-11). The ELC will also be making submissions to the Panel in Edmonton, Bonnyville and Calgary on strategies and actions relating to sound environmental practices and greenhouse gas emissions, water issues, and the role of government and "directly affected" status.

For ease of reference, we have appended a chart that summarizes our positions on the strategies and actions outlined in this submission. As instructed by the Multi-Stakeholder Committee (the "MSC"), this chart summarizes which actions we agree with, which we do not agree with and any gaps, additions or alternatives we have proposed.

The ELC's position with respect to the specific strategies and actions that should be recommended by the MSC is based upon the ELC's overall vision for oil sands development in Alberta. This vision was expressed in our written submission to the Panel in September of 2006 and is as follows:

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Sound laws and policies that are protective of the environment are implemented and effectively applied to current and future oil sands development.

As noted in that submission, the ELC considers that the precautionary principle is a guiding principle of environmental law and must be included in the framework for oil sands development in Alberta. The ELC's position respecting the proposed actions and strategies identified in the Options for Actions and Strategies ("OSA") document is consistent with this principle.

II. Vision 3, Strategy 8: Review current reclamation process and identify how reclamation can better proceed throughout the region given current rates of disturbance

Recognition of the precautionary principle requires that comprehensive reclamation and mitigation plans be prepared and submitted to regulators at the onset of development (Action 8.2). The ELC notes that the *Environmental Protection and Enhancement Act* (*EPEA*) provides that operators must reclaim specified lands.[2] For this reason, the ELC considers that mitigation is not generally an acceptable alternative to reclamation. However, where mitigation is required, the ELC considers that mitigation plans must be submitted to regulators and considered prior to the issuance of a project approval. Further, mitigation must be based on proven technology and achievable goals. Given that the adequacy of mitigation plans is at issue in a recently filed application for judicial review of an oil sands approval, the ELC will not discuss the issue of mitigation in this submission and will instead focus on the provision of comprehensive reclamation plans.[3]

Reclamation plans must be provided at the onset of development. Early identification of when and through what steps lands will be reclaimed is critical to developing a meaningful understanding of a project's ultimate impacts. Reclamation plans must be clear and must reflect reclamation objectives that are tied to rationally derived land use objectives and comprehensive environmental quality standards.[4] Reclamation plans should describe all project facilities and activities as well as identify all areas to be reclaimed. Reclamation plans should describe all reclamation work to be completed and should include baseline environmental data and risk assessment.[5] Reclamation plans should acknowledge the many areas of uncertainty that exist with respect to reclamation effectiveness using current technology and must address ecological components at risk should the identified uncertainties not be resolved. As an example, tailings management continues to be an unresolved reclamation issue. Both fluid fine tailings and consolidated tailings present their own challenges.[6] Failure to adequately resolve those challenges may have ecological consequences. These consequences should be understood and acknowledged.

As noted generally in the ELC's submission made in Edmonton on April 4, 2007, the ELC supports the use of integrated landscape management as a planning strategy that is based upon setting and prioritizing landscape-scale objectives.[7] Achieving landscape-scale end-use objectives requires that reclamation plans be co-ordinated across lease boundaries and be on a landscape basis (Action 8.3). This requires that reclamation processes be stable, reasonable and consistently understood and applied (Action 8.4).

The ELC stresses, however, that any requirement for reclamation planning on a broader scale cannot be a means to relieve individual operators of responsibility for appropriate reclamation on specific sites; rather, it is a tool to help regulators ensure better consistency between projects and to ensure the eventual reclamation of disturbed lands in a manner that respects land-use planning on a landscape scale.

The ELC supports the requirement for progressive, timely and seamless reclamation to a self-sustaining boreal forest ecosystem (Action 8.5). The ELC considers reclamation to a self-sustaining boreal forest ecosystem to be a laudable goal; however, as an action, this creates a requirement that is difficult to enforce effectively. The boreal forest ecosystem within which the Athabasca oil sands are wholly situated is a complex ecosystem composed of interconnected forests and wetlands. There is no certainty that this complex ecosystem, with its abundant biodiversity, can be re-created to a level that is self-sustaining.[8]

However, in the absence of a certain ability to recreate the complex boreal forest ecosystem, it is not sufficient for operators to simply reclaim disturbed lands by creating fenced livestock pastures or dry forested hills dotted with end-pit lakes. It is the ELC's position that regulations should, using reclamation to a self-sustaining boreal forest ecosystem as an ultimate target, establish enforceable reclamation performance standards consistent with current technology but should also continue to put forward pressure on operators by requiring continuous improvement in reclamation technology. The ELC supports the enhancement of research into reclamation (Action 8.1). As technologies advance, opportunities for improved reclamation are created.

The development of alternative tailings technologies, such as dry tailings technology, is an example of progress that has been made in terms of identifying technology to improve reclamation, although the Pembina Institute has noted that dry tailings technology presents its own reclamation challenges,[9] The ELC takes the position that regulations must set specific reclamation performance standards and must require continuous improvement in the technology applied by operators of new and existing projects. The ELC does not consider it appropriate for regulations to mandate a specific technology for new or existing oil sands projects (Actions 8.6 and 8.7).

Reclamation plans should be based on a progressive reclamation approach and should include enforceable deadlines for the different phases of reclamation.[10] A requirement for progressive reclamation may be enforced by imposing limits on the total allowable amount of unreclaimed land that may exist at a project at a given time on the project lands.[11] The ELC has identified the setting of limits on the extent and characteristics of development footprints as a tool for integrated landscape management.[12]

Seamless reclamation within and across lease boundaries is a necessary element of reclamation planning on a landscape scale and results in continuity of drainage, landforms and vegetation. Failure to ensure seamless reclamation will result in increased fragmentation of the boreal forest, and may negatively impact wildlife habitat.[13]

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The ELC considers timely reclamation to be a component of sound environmental practices. The issue of timeliness of reclamation and the time within which reclamation certificates are issued is directly linked to the issue of operator liability after reclamation certificates are issued. In the case of an oil sands mine, where an *EPEA* approval is held in respect of that activity, when a reclamation certificate is issued for the specified lands, regulations prevent ongoing operator liability for conservation and reclamation of the lands after the date upon which the reclamation certificate is issued. This means, in that case, that no environmental protection order regarding conservation or reclamation may be issued to an operator of a mine after the day upon which the operator has been issued a reclamation certificate in respect to those activities.[14] The ELC considers it appropriate that regulations require reclamation of lands within mandated timelines and that financial or other consequences should be imposed by regulators upon operators that fail to meet the mandated timelines. However, until reclamation techniques can deliver on the promise of restoration of lands to the level of self-sustaining ecosystems, care must be taken to not require final reclamation to occur too soon.

The ELC considers that a formal, multi-step reclamation process with measurable and enforceable performance criteria at each step and firm timelines for each step, such as land contouring and drainage design, soils replacement and revegetation/reforestation, is appropriate.

The ELC considers that financial incentives may be appropriate to encourage operators to accelerate the reclamation and return of lands to the public, First Nations and Métis (Action 8.8); however, financial incentives of this nature are only appropriate where operators demonstrate that they have exceeded regulatory expectations in terms of timing of reclamation and the degree of reclamation achieved. Operators should not be subsidized by the government and Alberta taxpayers merely for meeting sound environmental practice requirements.

Regulations and approval conditions ought to impose mandatory reclamation planning schedules and timelines on operators. However, the ELC considers that commitments made by operators in applications or during hearings respecting reclamation planning schedules, to the extent that those commitments are not contrary to legislation, regulations or approvals, ought to be adhered to as well and that regulators have a responsibility to ensure adherence by creating meaningful consequences for failure to meet such commitments (Action 8.9). Commitments respecting reclamation schedules are frequently made to address concerns of stakeholders or regulators and such commitments form part of the cost/benefit analysis undertaken by all stakeholders determining whether to support or oppose a project and by regulators when considering applications in respect of a project.

III. Vision 3: Strategy 9: Develop formal and transparent processes and policy for financial management of reclamation liabilities

Vast amounts of land will be impacted by oil sands development. To date, oil sands mining development has resulted in the alteration of over 42,000 hectares of land.[15]

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While active reclamation has occurred on over 5,000 hectares of disturbed land, no reclamation certificates have been issued in respect of lands disturbed for oil sands development.[16]

Reclamation of these disturbed lands is and will be very costly. The ELC considers that the oil sands industry must be held responsible for these financial costs. This is generally consistent with the "polluter pays" principle, widely adopted as an international law principle[17] and appropriately recognized among the purposes of the *EPEA*, which emphasizes the responsibility of those who engage in environmentally harmful conduct for the costs associated with their activity. [18]

Financial guarantees held in 2005-2006 by Alberta Environment in respect of reclamation for oil sands mining projects exceeded 350 million dollars.[19] However, the Alberta Auditor General has, in the recent past, identified inconsistencies in the manner in which reclamation security is estimated for oil sands mining projects and has expressed concerns about potential under-funding for reclamation.[20]

The ELC agrees that sufficient funds must be set aside for meaningful reclamation of oil sands areas (Action 9.1). However, this Action is too broad and general to be helpful in providing true guidance. Sufficiency of funds must be ensured through formalized cost estimation processes that are consistently applied and must be based on the cost to fully reclaim the impacted lands. Further, these processes must provide for appropriate contingency amounts to recognize the very significant gap between the environmental impacts being created and the ability of current technology to reclaim the impacted lands.

Current regulations require the Director of Alberta Environment to determine the sufficiency of reclamation security submitted by approval holders. However, this determination is based upon reclamation cost estimates provided by the operator for each project.[21] The cost estimates are not prepared by the regulator or by independent third parties. Currently, there are no regulations that ensure consistency in cost estimation processes. Further, Alberta Environment does not have a formal guideline that dictates the manner in which the cost estimate is to be prepared. As a result, there is potential that costs included or excluded from the calculation may vary depending on the operator. The ELC considers that cost estimation processes must be formally regulated to ensure consistency and enforceability.

Reclamation security cost estimates are not open for public review.[22] Albertans cannot have confidence as to the effectiveness of the reclamation security estimation process to adequately protect the province from unfunded reclamation costs because there is no transparency in the estimation or review process. Similarly, the method used for returning security to operators is not transparent. The ELC recommends increasing transparency and public participation in the financial security estimate and review process as well as the process through which reclamation security is returned to operators. The absence of such an Action in the OSA document is a gap that should be addressed.

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The ELC considers that full cost coverage for reclamation liability should be provided by operators (Action 9.3). While cost estimation inconsistencies may exist, as discussed above, the reclamation security program in place under the *EPEA* for oil sands mining projects is currently based on the full cost to reclaim the impacted area.[23] Given this, a requirement for industry to provide risk-adjusted security for reclamation liabilities (Action 9.2) can only serve to reduce the amount of security taken in respect of those projects. This has the potential to increase the risk that reclamation costs will be absorbed by the Alberta taxpayers in the event that an operator fails to reclaim lands as required. Risk-adjustment is used currently in respect of in-situ projects, which fall under the Orphan program administered by the Energy and Utilities Board (EUB) and the Orphan Well Association. This process takes security from a licensee only if the licencee's deemed liabilities exceed its deemed assets. Many in-situ operators are not required to provide security with the EUB.[24]

The Alberta Government's 2006 Budget included a response to the Auditor General's public concerns about the adequacy of reclamation security taken in respect of coal mine and oil sands mine projects. In response to the recommendation that "the Ministry of Environment implement a system for obtaining sufficient financial security to ensure parties complete the conservation and reclamation activity that the Ministry regulates", Alberta Environment stated that it intended to "work with other ministries in developing a risk-focused asset to liability model to calculate the security needed in the mining and oil and gas sectors".[25]

The ELC cautions that a risk-focused asset to liability security estimate mechanism must be carefully constructed to ensure consistency between operators and between projects. Environmental risk and business risk in respect of a project and operator must be calculated by regulators through a formalized process using common criteria or, where operators make such calculations, risk calculations must be reviewed and approved by the regulator. In either case, risk determinations should be made in a manner that is transparent and that is open to meaningful public scrutiny and involvement.

In addition, financial backstopping by industry is critical to any form of risk-adjusted process as it helps to ensure that the province is not left with the financial liabilities associated with reclamation. Accordingly, if risk-adjustment is adopted for oil sands mining operations, the ELC considers it necessary that an industry-funded backstop be established to cover under-funded liabilities (Action 9.4).

IV. Vision 3, Strategy 10: Clearly identify standards, certification process and enforcement mechanisms for reclamation of all disturbances related to oil sands development

As outlined in our previous submission to the Panel on vision and principles for oil sands development in September 2006, the ELC's vision is that sound laws and policies that are protective of the environment are implemented and effectively applied to current and future oil sands development.[26] The identification of clear reclamation standards, the creation of an accessible reclamation certification process and the consistent enforcement of reclamation requirements are all critical to achieving this vision.

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It is necessary that a clear, multi-step reclamation process with enforceable regulatory achievement steps be defined by regulators and contain performance measures appropriate for each stage of reclamation (Action 10.2). In order to obtain regulatory sign-off on the reclamation of lands, operators should be required in all cases to have achieved the required reclamation objectives for each step and reclamation should be consistent with rationally derived landscape-scale land use planning objectives. The ELC, in its presentation made April 4, 2007 expressed its position that, with respect to developing and implementing limits and standards to protect human health, Alberta must benchmark itself against the standard of excellence.[27] Similarly, the ELC considers that the starting point for setting standards for reclamation must be the standard of excellence. The standards must be clear and they must be enforceable. They must also be developed and applied in a consistent and transparent manner.

The ELC supports the notion of requiring operators to return disturbed areas to a natural state. (Action 10.1) and takes the position that the reclamation achievement steps at each stage must be directed toward that action. However, the meaning of "natural state", in this context is not clear. The ELC considers that, to be meaningful, the terms "returning" and "natural state" must be considered in the context of the boreal forest lands that have been disturbed. The ELC does not consider an end-pit lake of unproven environmental impact to be in a natural state. Further, the ELC echoes here its concerns articulated above in respect of "self-sustaining boreal forest ecosystems". Some lands, such as wetlands, cannot currently with any certainty be restored to their natural state. Therefore, ongoing research into reclamation techniques must continue in order to overcome current inabilities to restore all components of the boreal forest, such as wetlands. Further, the ELC supports the requirement that new, proven techniques for reclamation are incorporated in project approvals within a reasonable timeframe (Action 10.3).

The ELC considers that effective enforcement of environmental laws is critical to environmental protection and supports actively requiring compliance with reclamation requirements (Action 10.4). As stated in the ELC's submission to the Panel in September 2006:

> The oil sands framework arising from this consultative process will embrace a number of policy goals in the public interest of Albertans. However, the mere adoption of these policy goals will not suffice to adequately protect the environment. Protection of the environment cannot be ensured through the establishment of voluntary targets or non-binding guidelines alone; an appropriate mix of regulatory tools and voluntary initiatives must be used. Policy goals must be appropriately implemented into legislation and regulation that is enforced.

Enforcement in the context of oil sands requires, among other things, the imposition of legally binding standards to provide a clear, consistent definition of compliance. This means that land use plans, quantitative thresholds and reclamation requirements must be given legal status so that they are binding on government regulators and operators and, thus, cannot be easily modified by the exercise of administrative discretion. The ELC

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considers that the forfeiture of reclamation security held in respect of mining operations is a possible tool that may be used to ensure compliance with reclamation standards and progressive reclamation schedules.

The ELC agrees with Action 10.5 and takes the position that reclamation processes and approvals should, over the long term, meet the pace of oil sands activity. This is consistent with a progressive reclamation requirement advocated above. The ELC takes the position that the development of a formal reclamation process that has mandatory timelines for each step and that is effectively enforced would result in the acceleration of reclamation. In any event, the ELC generally supports Action 10.8, the acceleration of reclamation to keep pace with oil sands activity. However, the ELC does not necessarily consider that the suspension of oil sands activity is required until industry has "caught up" with reclamation (Action 10.7). The creation of a formal reclamation process with enforceable timelines should render such a suspension unnecessary.

V. Vision 3, Strategy 11: Alberta and Industry have a joint responsibility to ensure that the reclamation predictions and policy statements made in EIAs and hearings or during consultation initiatives are delivered on.

The ELC agrees that both industry and Alberta, through the actions of its applicable regulators, have responsibilities to ensure reclamation predictions and policy statements are met. As stated in the OSA document, Strategy 11 is not really a strategy at all; rather, it is a statement of values. The statement acknowledges that there is value in ensuring that actions of industry align with their commitments and predictions and that policy statements issued by regulators are followed in a meaningful way. The context of this value expression is that of the EIA, hearing and consultation process that culminates in the issuance of development approvals from the EUB and Alberta Environment. Redrafting this as a strategy, the ELC asserts that Alberta and industry must recognize their respective responsibilities for ensuring that reclamation predictions and policy statements made throughout the regulatory process are met and each must be accountable for any failure to live up to that responsibility.

Industry applicants prepare EIAs, participate in consultations with stakeholders and appear before regulatory hearings with the expressed purpose of convincing regulators that a project is in the public interest. As noted by the Pembina Institute in the publication *Oil Sands Fever*, despite the many uncertainties that exist with respect to the ability to reclaim lands impacted by oil sands mining, operators take successful reclamation as a given.[28] Regulators assume that future research in reclamation techniques will address outstanding reclamation uncertainties and grant approvals based on that assumption.[29]

In this context, regulators have a mandate to ensure that particular energy development projects are in the public interest and that environmental consequences of a project are understood and mitigated. It is the responsibility of regulators to set and enforce standards. The ELC considers that Action 11.5 is consistent with this responsibility. Alberta must take leadership over the development of reclamation practices and standards.

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The ELC considers that the reclamation standards set by Alberta must ensure that that Actions 11.3 and 11.4. are achieved. Further, to ensure that reclamation is achieved on a landscape basis consistent with landscape-level planning as articulated in the ELC submission delivered April 4, 2007 in Edmonton, Alberta regulators should provide industry with a framework for integration of all reclamation approvals (Action 11.1) and should coordinate reclamation between adjacent mines and within common watersheds (Action 11.6).

The ELC does not support the adoption of Action 11.8 respecting the trading of reclamation objectives between mines. Once lands have been disturbed, there must be applied a consistent standard of reclamation to which all operators are held in order to obtain a reclamation certificate. While reclamation activities may differ to reflect the land capability necessary to achieve the integrated land management planning goals identified prior to development, the ELC considers that reclamation standards must be reflective of best practices and must utilize the most progressive technologies. Adoption of a reclamation objective trading mechanism assumes that some operators will reclaim beyond this level while others will fail to meet it. The very notion cuts against a requirement for continuous improvement by all operators.

VI. Conclusion

The ELC considers that the fulfillment of its vision for oil sands development as expressed in its submission to the Panel in Phase I of these consultations and fulfillment of the visions and principles of the MSC requires reclamation related strategies and actions that:

- lead to the submission by operators of comprehensive reclamation and mitigation plans for progressive reclamation with clear and enforceable multi-step reclamation stages, mandatory timelines and schedules for reclamation of lands to a self-sustaining boreal forest ecosystem that is consistent with integrated landscape planning principles and will result in long-term landscape-scale land use objectives being met,

- ensure that Alberta taxpayers are protected from financial liability for reclamation of oil sands impacted lands by imposing, through enforceable regulations, formal reclamation security cost estimate processes that will consistently result in full cost coverage of reclamation costs by operators,

- require that operators restore lands to a natural state through the establishment of reclamation standards and criteria that reflect a standard of excellence, the use of the most progressive technologies available and the continuing enhancement of research into the improvement of reclamation technologies, and

- create a formalized regulatory regime that ensures that meaningful public scrutiny and participation is possible in respect of all reclamation related regulatory decisions, such as: the development of long-term regional land-use objectives: the

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approval of reclamation plans: the estimation and approval of reclamation security amounts; the development and enforcement of multi-step reclamation processes and applicable performance criteria; the determination of applications for reclamation certificates and the return of reclamation financial security.

Thank you for the opportunity to provide these submissions to the Panel.

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[1] Jodie Hierlmeier & Dean Watt, *Submissions to the Oil Sands Panel On Developing A Framework For Oil Sands Development in Alberta* (Edmonton, Environmental Law Centre, 2006), online: Environmental Law Centre <http://www.elc.ab.ca/ims/client/upload/Submissions%20to%20Oil%20Sands%20Panel%20-%20Sept%2026.pdf>.
[2] R.S.A. 2000, c. E-12, s. 137.
[3] Application, *Pembina Institute for Appropriate Development et al* v. *Attorney General of Canada et al,* Federal Court of Canada, Docket No. T-535-07 (filed 29 March 2007).
[4] Michael M. Wenig, Kevin O'Reilly & contributing author David Chambers, *The Mining Reclamation Regime in the Northwest Territories: A Comparison with selected Canadian and U.S. Jurisdictions* (Calgary, Canadian Institute of Resource Law & Canadian Arctic Resources Committee, 2005) at 6 [Wenig et al.].
[5] *Ibid*.
[6] Dan Woynillowicz, Chris Severson-Baker & Marlo Raynolds, *Oil Sands Fever: The Environmental Implications of Canada's Oil Sands Rush* (Drayton Valley, The Pembina Institute, 2005) at 38 [Woynillowicz et al.].
[7] Jodie Hierlmeier, "Submissions to the Oil Sands Panel on Phase II Proposed Options for Strategies and Actions for Oil Sands Development in Alberta" (Oral submission and accompanying written submission presented to the Multi-Stakeholder Committee, 4 April 2007 in Edmonton) [unpublished]. The ELC will post all of its written submissions on the ELC's website once they have been presented to the Panel.
[8] Woynillowicz et al., *supra*, note 6 at 38.
[9] *Ibid*.
[10] Wenig et al., *supra* note 4 at 6.
[11] Wenig et al., *supra* note 4 at 104.
[12] Jodie Hierlmeier, *supra* note 7.
[13] Woynillowicz et al., *supra*, note 6 at 40.
[14] *Conservation and Reclamation Regulations,* Alta. Reg. 115/93, s. 15. Where no approval is held in respect of the mining activity, ongoing operator liability is limited to 5 years after the date upon which the reclamation certificate is issued.
[15] Canada, Parliament, Standing Committee on Natural Resources, "The Oil Sands: Toward Sustainable Development" in Official Reports of Debates (Hansard), No 128 (March 26, 2007) at 48.
[16] Alberta Environment, online: <www3.gov.ab.ca/env/soe/land_indicators/41_oilsands_reclamation.html>.
[17] *Rio Declaration on Environment and Development,* 14 June 1992, 31 I.L.M. 874, Principle 16.
[18] *Supra* note 2, s.2.
[19] Alberta, Ministry of Environment, *Environmental Protection Security Fund Annual Report,* April 1, 2005 – March 31, 2006 at Schedule 1.
[20] Auditor General of Alberta, *Annual Report of the Auditor General of Alberta 2004-2005*, at page 182.
[21] *Supra* note 14, s. 18.
[22] *Albian Sands Energy Inc. Application to Expand the Oil Sands Mining and Processing Plant Facilities at the Muskeg River Mine,* (17 December 2006), *Decision 2006-128,* Joint Panel Application 1398411, at 65.
[23] *Supra*, note 14, s. 18.
[24] Alberta Energy and Utilities Board, *Directive 006:Licensee Liability Rating (LLR) Program and Licence Transfer Process*, 20 September 2005 (Directive 006) at 2.
[25] Alberta, Legislature, *Budget 2006: Strengthening Today, Securing Tomorrow*, Alberta Hansard, 22 March 2006, at 155.
[26] Jodie Hierlmeier & Dean Watt, *supra* note 1.
[27] Jodie Hierlmeier, *supra* note 7.
[28] Woynillowicz et al., *supra* note 6 at 39.
[29] *Imperial Oil Resources Ventures Limited, Application for an Oil Sands Mine and Bitumen Processing Facility (Kearl Oil Sands Project) in the Fort McMurray Area* (27 February 2007), *Decision 2007-013*, Joint Panel Application 140877, at 43.

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Appendix I: Summary of Strategies and Actions Related to Reclamation

Vision 3: Ensures Healthy Environment….		
Strategy 8. Review current reclamation process and identify how reclamation can better proceed throughout the region given current rates of disturbance		
Actions ELC agrees with	**Actions ELC disagrees with**	**Gaps/alternatives/additions in actions**
8.1 Enhance research into reclamation. 8.2 Require comprehensive reclamation and mitigation plans from the onset of development. 8.3 Plan and co-ordinate reclamation across lease boundaries on a landscape basis. 8.4 Ensure that reclamation processes are stable, reasonable and consistently understood and applied. 8.5 Require progressive, timely and seamless reclamation to a self-sustaining boreal forest ecosystem. 8.8 Establish financial incentives/disincentives to accelerate the return of reclaimed land to the public.[1] 8.9 Ensure commitments on reclamation are met on a planned schedule and land is returned to public, First Nations and Métis.	8.6 Require all new oil sands mines to use alternative tailings technology such as dry tailings technology.[2] 8.7 Require existing oil sands operations to convert to alternative tailings technologies such as dry tailings technology in ten years.[3]	
Vision 3: Ensures Healthy Environment….		
Strategy 9. Develop formal and transparent process and policy for financial management of reclamation liabilities		
9.1 Ensure sufficient funds set aside for meaningful reclamation of oil sands areas.	9.2 Require industry to provide risk-adjusted security for reclamation liabilities.	Require Alberta Environment to establish formal regulations to be followed by all operators for

9.3 Require industry to provide full cost coverage for reclamation liability. 9.4 Establish a backstop fund to cover liabilities that are unfunded.[4]		the estimation of reclamation security costs. Reform reclamation security estimate process to allow for greater transparency and public involvement in the security estimate and review process as well as the process through which security is returned to operators.
Vision 3: Ensures Healthy Environment….		
Strategy 10. Clearly identify standards, certification process and enforcement mechanisms for reclamation of all disturbances related to oil sands development		
10.1 Restore disturbed areas to a natural state (e.g. spruce, willows, medicines, bogs, etc.). 10.2 Define a clear multi-step reclamation process with regulatory achievement steps at the landscape, soils, vegetation establishment and final certification stage. 10.3 Ensure that new proven techniques for reclamation are incorporated in project approvals within a reasonable timeframe. 10.4 Actively require compliance with reclamation requirements. 10.5 Ensure reclamation process commitments and approvals meet pace of oil sands activity. 10.6 Define a reasonable standard for reclamation attainment required to obtain a Closure Certificate; and certify reclaimed lands in a timely manner.[5]	10.7 Suspend oil sands activity until catch up with reclamation.[6]	

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10.8 Accelerate reclamation to keep pace with oil sands activity.		
Vision 3: Ensures Healthy Environment….		
Strategy 11. Alberta and Industry have a joint responsibility to ensure that the reclamation predictions and policy statements made in EIAs and hearings or during consultation initiatives are delivered on.		
11.1 Alberta regulators should provide industry with a framework for integration for all reclamation approvals. 11.2 Reclamation objectives critical to the treaty rights of First Nations need to be described and objectives and progress reported on annually. 11.3 Ensure reclamation meets soil requirements that will support a sustainable ecosystem. 11.4 Ensure that the land will not require long- term maintenance by future generations. 11.5 Alberta should lead the establishment of a group to cooperatively develop best management practices through science based adaptation to continue the improvement of reclamation practices. 11.6 Coordinate reclamation between adjacent mines and within common watersheds through a joint plan. 11.7 Ensure that the first priority for reclamation is First Nations and Métis traditional uses and forests for both commercial and	11.8 Pursue the trading of reclamation obligations between mines so that the regional objectives are met.	

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non commercial values including species specific replacement of wildlife habitat. 11.9 Require reclamation to ensure the evolution of productive natural ecosystems consistent with pre-disturbance conditions.		

[1] The ELC considers that timely reclamation is consistent with sound environmental practices and that financial incentives are only appropriate where operators' reclamation performance in terms of time and level of reclamation exceeds the requirements imposed by regulation.

[2] The ELC considers that regulations should identify specific enforceable reclamation performance criteria, however, it should be left to operators to determine how to best achieve those targets.

[3] The ELC considers that existing operators should be required to continually improve the reclamation techniques they use; however, the regulations should identify specific enforceable reclamation performance criteria, rather than impose particular processes.

[4] The ELC considers that the use of an industry-funded backstop is necessary only if a risk-adjusted security regime is put in place.

[5] The ELC supports the return of reclaimed lands in a timely manner but, noting that ongoing liability for operators is limited once a reclamation certificate is issued, cautions against the issuance of reclamation certificates too soon.

[6] The ELC considers that reclamation should be timely and progressive. While suspension of oil sands activity in a particular case may be appropriate as an enforcement measure to ensure compliance with approved reclamation objectives and timelines, the ELC does not consider it necessary or appropriate to suspend all oil sands activity until reclamation is "caught up".

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