

Canadian Institute of Resources Law
Institut canadien du droit des ressources

**Closing the Performance Gap:
The Challenge for Cumulative Effects
Management in Alberta's
Athabasca Oil Sands Region**

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Executive Summary

Interest in cumulative effects management for Alberta's Athabasca oil sands region can be traced back at least to public hearings before Alberta's Energy and Utilities Board (EUB) in 1997. Faced with a significant increase in project applications and planned development, key players quickly recognized the limitations of a project-by-project approach to environmental regulation.

This broad consensus led to two related initiatives. The first was a process of multi-stakeholder collaboration that resulted in the establishment of the Cumulative Environmental Management Association (CEMA) in 2000. The second initiative was the Government of Alberta's Regional Sustainable Development Strategy (RSDS) for the Athabasca Oil Sands Area, released in 1999.

These initiatives were intended to address the challenges of managing the cumulative effects of large-scale oil sands development by identifying issues, developing work plans, establishing management frameworks, and harnessing the expertise and commitment of government, the private sector, Aboriginal organizations and other stakeholders. RSDS and CEMA also complemented a broader policy on integrated resource management (IRM) that the Alberta Government was developing at the same time. In addition, they were consistent with efforts by the federal and Alberta governments to implement legal requirements and policy statements that required consideration of cumulative environmental effects within project-specific environmental assessment.

Ten years after the original impetus for these initiatives, the pace, scale and intensity of oil sands development have vastly exceeded initial expectations and continue to increase rapidly. At the same time, troubling questions are being asked about the effectiveness of both CEMA and RSDS. The EUB has expressed concern about slow progress in generating management frameworks for cumulative effects in a series of decisions beginning in 1999. According to the Board, these frameworks are needed to assist it in discharging its statutory mandate to ensure the orderly development of oil sands resources and to determine whether or not proposed projects are in the public interest.

Participants in CEMA from the federal government, Aboriginal organizations and environmental non-governmental organizations (ENGOS) have also raised concerns about the slow progress of CEMA in achieving tangible results. Possible explanations of CEMA's performance gap were explored in 16 interviews with participants in CEMA from the Government of Alberta, the Government of Canada, the oil sands industry, First Nations, ENGOS, the CEMA secretariat and private consulting firms. Two individuals from the Clear Air Strategic Alliance were also interviewed.

The interviewees addressed the following ten questions:

- Do CEMA's successes to date suggest that it is working and can deliver results?
- Are CEMA's objectives sufficiently realistic and focused?
- Is the performance gap linked to deficiencies in the design and implementation of CEMA's multi-stakeholder process?
- Does CEMA have sufficient financial and human resources to deliver on its objectives?
- Do participants in CEMA agree on the key attributes of cumulative effects management for oil sands development?
- Do participants in CEMA agree on the meaning and practical implications of the 'precautionary principle' and 'adaptive management'?
- Is CEMA responding appropriately to delays resulting from information gaps and value conflicts on key issues?
- Are the incentive structures for participants in CEMA contributing to the performance gap?
- Is CEMA's performance gap linked to its relationship with the EUB's project review and regulatory process?
- Is the Government of Alberta playing the appropriate role within CEMA and establishing the conditions for its success?

Not surprisingly, the interviewees did not agree on the answers to all of these questions. It is clear from the interviews, however, that the factors contributing to CEMA's performance gap may include the complexity of issues relating to cumulative effects management in the oil sands region, deficiencies in the design and implementation of CEMA's consensus-based process, divergence between participants on objectives and approaches to environmental management, incentives facing some member organizations that impede progress towards consensus, and the lack of government leadership within CEMA.

Although the interviewees from CEMA differed on some explanations of the performance gap, there was broad agreement that CEMA needs to be more rigorous in setting and adhering to time lines and maintaining focus on key issues. Many interviewees also agreed that procedures must be in place to determine when 'enough is enough' – in terms of the information required for decision making and the time that should be devoted to consensus building. If consensus decisions cannot be reached in a timely manner, most interviewees suggested that issues should be moved forward by handing off the work accomplished at that point to regulators. Finally, there was virtual

unanimity that the Government of Alberta has an important role to play in closing the performance gap.

Suggested next steps for addressing the performance gap can be grouped into three categories: (1) improving CEMA's efficiency and effectiveness; (2) strengthening the Alberta government's role in support of CEMA; and (3) addressing underlying obstacles to cumulative effects management.

Options for closing the performance gap through improvements to CEMA could focus on ensuring that expectations are realistic, increasing CEMA's capacity to generate results in a timely manner, and focusing attention and effort more narrowly in order to accomplish more in key areas. Specific suggestions deal with setting objectives and timelines, interim recommendations, moving issues forward when consensus cannot be reached, streamlining internal decision-making, defining expectations of CEMA members, improving internal tracking of progress, and undertaking periodic evaluations of CEMA.

The Government of Alberta's ultimate responsibility for managing the cumulative effects of oil sands development stems from its authority to set policy on land and resource use and its role as the owner and primary steward of public land and resources. Interviews for this study suggest that there is a broad consensus among CEMA participants that the government can and should assume a leadership role in closing CEMA's performance gap. In particular, the Government of Alberta could update the RSDS, provide leadership to CEMA, move decisively to take regulatory action if CEMA fails to deliver recommendations within prescribed time lines, make a clear commitment to champion implementation of CEMA's consensus recommendations, improve the process for adaptive management, make CEMA a higher priority for senior officials, and provide support in areas such as facilitation for multi-stakeholder negotiations and capacity building for Aboriginal participants.

The final approach to narrowing or closing CEMA's performance gap is to address underlying problems that make it extraordinarily difficult to manage cumulative effects in the oil sands region. Three areas warrant particular attention:

- The first is the pace of oil sands development. If CEMA is perpetually playing catch-up, limits of acceptable ecological impacts may be crossed before they are even identified and opportunities to identify important environmental values, evaluate trade-offs and direct development in ways that are less environmentally damaging may be missed.
- Second, there is a need to address obstacles to cumulative effects management within the legal, institutional and policy structure of decision making for land and resource use. Cumulative effects management in Alberta is difficult because of a policy and planning vacuum and because the processes for issuing mineral rights

and approving individual projects are not well designed to take account of cumulative effects.

- The third major set of structural issues relates to the legal and policy framework for government consultation with Aboriginal people. These issues are examined by Monique Passelac-Ross in a paper to be published by the Canadian Institute of Resources Law in the spring of 2007.

If CEMA's performance gap is not addressed, more intense conflict around oil sands development is likely and CEMA itself may eventually collapse. That outcome might create new opportunities, but at least in the short term it would also give rise to significant challenges for all interested parties. The magnitude of these challenges and the uncertainty about how they would be resolved constitute strong arguments for rapid and decisive action to close CEMA's performance gap.

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1.0. Introduction

Interest in cumulative effects management for the Athabasca oil sands region in northeastern Alberta can be traced back at least to public hearings before Alberta's Energy and Utilities Board (EUB) in 1997.¹ Faced with the prospect of a significant increase in project applications and development, key players quickly recognized the limitations of a project-by-project approach to environmental regulation. This broad consensus led to two related initiatives.

The first was a process of multi-stakeholder collaboration that resulted in the establishment of the Cumulative Environmental Management Association (CEMA) in 2000. The second initiative was the Government of Alberta's Regional Sustainable Development Strategy (RSDS) for the Athabasca Oil Sands Area, released in 1999. These initiatives were intended to address the challenges of managing the cumulative effects of large-scale oil sands development in Alberta's boreal forest by identifying issues, developing work plans, establishing management frameworks, and harnessing the expertise and commitment of government, the private sector, Aboriginal organizations and other stakeholders.

Ten years after the initial impetus for these initiatives, the pace, scale and intensity of oil sands development have vastly exceeded initial expectations and continue to increase rapidly. A production target of one million barrels per day by 2020 that was set in 1995 was surpassed in 2004.² Estimates of future production vary, but a recent report by the Pembina Institute states that the current wave of development will likely push production past two million barrels per day by 2010-2012, with further increases to five million barrels per day by 2030 being a conservative projection.³ The potential environmental implications of this massive increase in production over a relatively short time period are, to say the least, significant.⁴

At the same time, troubling questions are being asked about the effectiveness of both CEMA and RSDS. The EUB has expressed concern about slow progress in generating management frameworks for cumulative effects in a series of decisions beginning in

¹EUB, Application by Syncrude for the Aurora Mine, EUB Decision 97-13, 24 October 1997, pp. 26-29.

²Dan Woynillowicz, Chris Severson-Baker & Marlo Reynolds, *Oil Sands Fever: The Environmental Implications of Canada's Oil Sands Rush* (Drayton Valley, AB: The Pembina Institute, 2005), p. vii, online: <www.pembina.org>.

³*Ibid.*, p. 5.

⁴*Ibid.*, pp. 27-57; Richard Schneider & Simon Dyer, *Death by a Thousand Cuts: The Impacts of In Situ Oil Sands Development on Alberta's Boreal Forest*, (Drayton Valley and Edmonton, AB: The Pembina Institute and the Canadian Parks and Wilderness Society, Edmonton), online: <www.pembina.org>.

1999.⁵ According to the Board, these frameworks are needed to assist it in discharging its statutory mandate to ensure the orderly development of oil sands resources⁶ and to determine whether or not proposed projects are in the public interest.⁷ Participants in CEMA from the federal government, Aboriginal organizations and environmental non-governmental organizations (ENGOS) have also raised concerns about the slow progress of CEMA in achieving tangible results and the lack of strategic direction and support from the Government of Alberta. While CEMA has produced consensus recommendations in some areas, significant gaps remain and it has consistently failed to meet time lines for key deliverables. The government's RSDS has not been updated since its release in 1999.

There are now compelling reasons for immediate action to address the widening gap between expectations for cumulative effects management in the oil sands region and the results achieved by CEMA and RSDS. Participants in CEMA are increasingly vocal in their concerns and two Aboriginal organizations have recently withdrawn. The EUB and joint EUB-Canadian Environmental Assessment Agency panels have also been pointed in their concerns and recommendations. In a decision released in 2006, the EUB called on the Government of Alberta to review both CEMA and RSDS.⁸ While this specific suggestion has not been acted upon, the government is conducting broad public consultations on all aspects of oil sands development.⁹ A final report of the Multistakeholder Committee is expected in June of 2007.

This paper is intended to contribute to the ongoing discussion about cumulative effects management in the Athabasca oil sands region, focusing particularly on the roles of CEMA and RSDS. The discussion begins in Section 2 by tracing the origins of these two initiatives. Their objectives and design are described in Section 3. Early commentary that highlighted their potential and raised several red flags is then reviewed in Section 4. In Section 5, the paper turns to the record of EUB decisions and other published material that document growing concern with CEMA and RSDS. Explanations for the gap between performance and expectations are explored in Section 6, based on interviews with a broad range of participants in CEMA. Section 7 reviews options for closing the performance gap. Brief concluding comments are included in Section 8.

⁵These decisions are discussed below in Section 5.

⁶*Oil Sands Conservation Act*, R.S.A. 2000, c. O-7, s. 3(b).

⁷*Energy Resources Conservation Act*, R.S.A. 2000, c. E-10, s. 3.

⁸EUB, 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, EUB Decision 2006-112, 14 November 2006, p. 68.

⁹See online: <www.oilsandsconsultations.gov.ab.ca>.

2.0. The Origins of RSDS and CEMA

2.1. Impetus for Regional Cumulative Effects Management

Although oil sands development began in 1962, significant attention to regional cumulative effects was triggered by the announcement of multiple new and expanded projects in 1997.¹⁰ Government agencies, local communities, Aboriginal organizations, ENGOs and the oil sands industry itself recognized that a regional approach to cumulative effects management was desirable given the number, size and proximity of existing and new projects. The focal point for these concerns was the review of project applications by agencies responsible for environmental assessment and regulatory processes.

Syncrude's application to the EUB for approval of the Aurora Mine was the catalyst for specific proposals to address cumulative effects from a regional perspective.¹¹ At the pre-hearing meeting for this project, several additional proposals to expand existing projects or build new ones were tabled by other oil sands operators. The response of interveners was to question the suitability of a project-by-project approach to assessing and managing cumulative effects.

Environment Canada, appearing as an intervener, presented this position as follows:

It appears that there will be significant additional industrial expansion in the Fort McMurray area. Although each of these additional projects and the associated facilities would ... require a cumulative effects assessment, a project-by-project review may not facilitate the most efficient or effective assessment of the effects from the collective development. Mitigation strategies for a specific project may no longer be appropriate when considered in the regional context. Environment Canada believes it is critical that the consideration of future oil sands projects be undertaken in a regional context in order that information gaps can be properly identified, and the most effective mitigation can be assured..¹²

Environment Canada therefore recommended the establishment of a stakeholder forum to identify performance indicators and explore the use of monitoring and feedback mechanisms to address emissions and ecosystem changes in the region. A regional forum

¹⁰Harry Spaling *et al.*, "Managing Regional Cumulative Effects of Oil Sands Development in Alberta, Canada" (2000) 2 *Journal of Environmental Assessment Policy and Management* pp. 507-510.

¹¹*Ibid.*, p. 510.

¹²Environment Canada (1997), Letter from the Regional Director General, Prairie and Northern Region, to the Chairperson, Alberta Energy and Utilities Board, 15 April 1997, quoted in Spaling *et al.*, *ibid.*, p. 510.

to address the protection of fish and fish habitat was also recommended by the federal Department of Fisheries and Oceans.¹³

Concerns with project-by-project cumulative effects assessment were also raised by project proponents.¹⁴ For example, the lack of regional coordination resulted in duplication and inefficiency in the preparation of project applications, particularly for environmental impact statements dealing with cumulative effects. Sharing of baseline information and consultation on impact management had only occurred on an *ad hoc* basis. Harmonization of methodology for cumulative effects assessment was also desirable from the perspective of industry and regulators. Furthermore, regional coordination of development offered the prospect of reduced costs through shared infrastructure, increased resource recovery in the area of lease boundaries, and potentially more effective and less costly reclamation.

Not surprisingly, the EUB was receptive to these arguments. A regional approach to development planning and impact mitigation was consistent with its mandate to optimize resource recovery and address environmental effects. Regional coordination also had potential benefits for the Board's project review and regulatory processes. In the decision report approving Syncrude's Aurora Mine in 1997, the EUB stated that:

The efficiency of the application process for individual developments could be greatly enhanced by the adoption of a regional development approach that had the support of the various corporate interests in the region and other stakeholders. ... The process of reviewing individual applications would be accelerated if there was more information on how co-operative effort might reduce resource losses, enhance environmental protection, and reduce costs... A broadly accepted regional plan would provide a baseline on which individual applications could build, focusing on important site-specific issues. The Board believes that everyone will benefit from addressing regional issues in a regional context.¹⁵

The surge in proposed oil sands projects in 1997 thus produced an apparent alignment of interests among the EUB, key federal government departments, oil sands companies and other stakeholders in favour of a regional approach to assessing and managing the cumulative effects of oil sands development.¹⁶ A multi-stakeholder model for addressing this issue had also been proposed from the outset. Project proponents took the first significant step forward, establishing the Athabasca Oil Sands Cumulative Environmental Assessment Working Group in August 1997. Initial members included Shell Canada Limited, Suncor Energy Inc., Syncrude Canada Ltd., Mobil Oil Canada Properties, Petro-Canada Ltd. and Gulf Canada Resources Ltd. Participants from environmental and

¹³Spaling *et al.*, *ibid.*, p. 510.

¹⁴*Ibid.*, p. 510 (citing the application by Shell Canada Ltd. for the Muskeg River Mine Project (1997) and the application by Syncrude Canada Ltd. for the Mildred Lake Upgrader Expansion (1998)).

¹⁵EUB, *supra* note 1, p. 29.

¹⁶Spaling *et al.*, *supra* note 10, p. 512.

Aboriginal organizations and various levels of government were also involved early in this initiative. The group evolved into the Cumulative Environmental Effects Management Partnership and finally became the Cumulative Environmental Management Association (CEMA), which held its first meeting on June 9, 2000.¹⁷

It was clear from the early stages, however, that integration with an overall government strategy for land and resource management was an important part of any regional response to cumulative effects management that was driven by stakeholders and the EUB. The Government of Alberta therefore began to roll out its own approach to this set of issues during the gestation period for CEMA.¹⁸ Alberta Environment moved to a regional administration for northeastern Alberta in March 1998. In September of that year, it undertook to develop a Regional Sustainable Development Strategy (RSDS) for the Athabasca Oil Sands. The RSDS was released in July 1999. Between November 1999 and June 2000, strategic planning meetings were held to map out the relationship between RSDS and CEMA. Here again, there were strong indications of an alignment of interests and intent between key decision makers in line government departments, the EUB, project proponents and other interested parties (e.g., Aboriginal organizations and stakeholder groups that were involved in CEMA).

2.2. Policy and Legal Context

The emergence of CEMA and RSDS between 1997 and 2000 was not simply a product of regional concerns and pressures emanating from project review and regulatory processes. Broader government policy at the time also appeared to be receptive to these initiatives. In addition, CEMA and RSDS were consistent with efforts by the federal and Alberta governments to operationalize legal requirements and policy statements that required consideration of cumulative environmental effects within project-specific environmental assessment.

2.2.1. The Government of Alberta's Integrated Resource Management Initiative

The implications of rapid growth in resource development and other land uses for land-use conflicts and regional cumulative effects had become evident in Alberta before 1997.¹⁹ In fact, the need for 'integrated' land and resource management was an explicit

¹⁷*Ibid.*, p. 512.

¹⁸*Ibid.*, p. 509.

¹⁹See, for example: Environment Council of Alberta, *The Environmental Effects of Forestry Operations in Alberta: Report and Recommendations* (Edmonton: 1979), pp. 6, 85-86, 130, 154; *Ensuring Prosperity – Implementing Sustainable Development*, Government of Alberta, The Report of the Future Environmental Directions for Alberta Task Force (Edmonton: March 1995), pp. 52-54.

focus of the Eastern Slopes Policy and the province's integrated resource planning (IRP) process that originated in the 1970s.²⁰ By the late 1990s, however, it was clear that the IRP process had run out of steam, in large part due to funding cuts and the ascendance of an anti-regulation and anti-planning ideology within government.²¹ A new initiative was therefore needed to address the significant land-use conflicts that were simmering in several parts of the province and the growing environmental impacts associated with the multitude of activities occurring on Alberta's land base.

An initial indication that the provincial government intended to address these issues was a policy statement entitled *Alberta's Commitment to Sustainable Resource and Environmental Management* (the 'Commitment Document') that was issued in 1999.²² Although this brief policy statement was short on detail and long on generalities, it endorsed the use of integrated regional planning and stated that laws, policies and regulations should reflect principles of sustainable development and integrated resource management.²³

The task of further developing and implementing key aspects of the Commitment Document was assigned to the Alberta Government's Integrated Resource Management (IRM) initiative, launched in 1999.²⁴ Led by the Integrated Resource Management Division in Alberta Environment, this initiative generated a flurry of activity between 1999 and 2001, including the release of several documents that focused on the use of 'regional strategies' as means of implementing IRM.²⁵ These documents all identified the RSDS as a 'pilot' regional strategy. Along with the Northern East Slopes Strategy, RSDS

²⁰Steven A. Kennett, *Integrated Resource Management in Alberta: Past, Present and Benchmarks for the Future*, CIRL Occasional Paper #11 (Calgary: Canadian Institute of Resources Law, 2002) pp. 4-15.

²¹*Ibid.*, pp. 12-14, Roger Creasey, *Cumulative Effects and the Wellsite Approval Process*, Thesis submitted to the Faculty of Graduate Studies in partial fulfillment of the requirements for the degree of Master of Science, Resources and the Environment Program, University of Calgary, December 1998, pp. 78-80; Steven A. Kennett & Monique M. Ross, "In Search of Public Land Law in Alberta" (1998) 8 *Journal of Environmental Law and Practice* pp. 151-159.

²²Government of Alberta, *Alberta's Commitment to Sustainable Resource and Environmental Management* (Edmonton: March 1999).

²³*Ibid.*, pp. 6-8.

²⁴The inaugural event was a multi-stakeholder workshop on "Ideas on Integration: Building a Framework for Regional Strategies", held in Edmonton, December 8-9, 1999.

²⁵For example: Government of Alberta, *Annual Report on the Implementation of Alberta's Commitment to Sustainable Resource and Environmental Management*, April 1999-August 2000, p. 4; Government of Alberta, *Highlights of Integrated Resource Management in Alberta – Year 2000*, pp. 5-6; Government of Alberta, *Regional Strategies for Resource and Environmental Management – An Alberta Framework*, Release 1 (no date); Page Management Counsel Ltd. *Regional Strategy Initiatives Review*, Prepared for Alberta Environment, Integrated Resource Management Division, 31 October 2001.

was promoted as a cutting-edge prototype for developing and testing a new, regionally-focused approach to IRM in Alberta.

For a brief period of time, it appeared that a positive synergy existed between RSDS and the IRM initiative. RSDS offered an emerging real-world application of the IRM principles, effectively helping to kick start the broader IRM initiative. At the same time, indications of a genuine commitment to IRM at the political level and among senior officials of the Government of Alberta offered the possibility of high-level support for the RSDS and CEMA, which were initially rooted in regional issues and driven by regulatory, industry and stakeholder concerns.

The early hopes for the linkage of IRM with CEMA and RSDS are captured in a paper written in 2000 by several of the key architects of CEMA from industry, the federal and provincial governments, and an Aboriginal organization.²⁶ The authors' optimistic assessment was that "the Government of Alberta is undergoing a transformation in the way it does business" as demonstrated by the Commitment Document and its support for the development of regional strategies such as the RSDS.²⁷ They also stated that "at this juncture in the evolution of Alberta's regulation of natural resources, it is being recognized that ecosystem management must be integrated with resource management" and that "integrated planning tools ... are becoming critical components of sustainable development of natural resources."²⁸

In fact, there was no "transformation" of the Government of Alberta's business as usual approach to land and resource management. The IRM initiative stalled as a result of various factors, including resistance from government departments mandated to pursue resource development and inadequate support from senior officials and the political leadership. The IRM initiative's proposed "framework" for regional strategies never progressed beyond a partial first draft.²⁹ Although the Northern East Slopes Strategy was the focus of considerable effort by a multi-stakeholder committee, its recommendations were effectively neutralized by powerful interests within and outside of government. In the end, the Integrated Resource Management Division was disbanded and the IRM initiative quietly disappeared. CEMA and RSDS continued, as they had begun, as

²⁶Don Klym *et al.*, "Managing Cumulative Environmental Effects in the Athabasca Oil Sands Region" in Alan J. Kennedy, ed., *Cumulative Environmental Effects Management: Tools and Approaches*, Papers from a symposium held by the Alberta Society of Professional Biologists (Edmonton: Alberta Society of Professional Biologists, 2002) p. 207. The co-authors of this paper were from two oil sands companies, Environment Canada, Alberta Environment and the Fort McKay First Nation.

²⁷*Ibid.*, p. 210.

²⁸*Ibid.*, p. 211.

²⁹Government of Alberta, *Regional Strategies for Resource and Environmental Management – an Alberta Framework*, Release 1 (January 2002); see Kennett, *supra* note 20 at 19-22.

regional initiatives without clear linkages to a broader provincial strategy for integrated resource and environmental management.

2.2.2. The Regional Management Context for Cumulative Effects Assessment

The origins of CEMA and RSDS in the late 1990s also corresponded with efforts to determine how to implement cumulative effects assessment through project-specific environmental assessment (EA) processes. At the national level, these efforts focused on the implementation of subsection 16(1)(a) of the *Canadian Environmental Assessment Act* (CEAA), which requires consideration of “any cumulative environmental effects that are likely to result from the project in combination with other projects or activities that have been or will be carried out.”³⁰ This provision has both legal and political significance for projects in Alberta, including oil sands projects.

The legal significance is that the requirement for cumulative effects assessment in CEAA applies to projects in Alberta that trigger the federal environmental assessment process. Environment Canada’s letter to the EUB in 1997, quoted above,³¹ could be interpreted as a signal that the federal government had both the legal hook and the policy interest to shine a spotlight on cumulative effects in the oil sands area through the environmental assessment process. Given Alberta’s long-standing interest in minimizing the federal government’s involvement in natural resource and environmental management within its boundaries, the political overlay on this legal position is that the CEAA provisions created an incentive for the province to be seen to be doing something to address cumulative effects.³²

Alberta’s environmental assessment and project review processes also adopted explicit or implicit requirements to consider cumulative effects. The environmental assessment process in Alberta’s *Environmental Protection and Enhancement Act* includes a requirement in subsection 49(d) that detailed environmental impact assessment reports include “a description of potential positive and negative environmental, social, economic and cultural impacts of the proposed activity, including cumulative, regional, temporal and spatial considerations.” Furthermore, both the EUB and Alberta’s Natural Resources

³⁰See, George Hegmann *et al.*, *Cumulative Effects Assessment Practitioners Guide*, Prepared by AXYS Environmental Consulting Ltd. and the CEA Working Group for the Canadian Environmental Assessment Agency, Hull, Quebec, 1999.

³¹*Supra* note 12.

³²Steven A. Kennett, “Meeting the Intergovernmental Challenge of Environmental Assessment”, Chapter 5 in Patrick C. Fafard & Kathryn Harrison, eds., *Managing the Environmental Union: Intergovernmental Relations and Environmental Policy in Canada* (Kingston, ON: School of Public Policy, Queen’s University, 2000) p. 109.

Conservation Board (which reviews certain non-energy projects) had recognized that consideration of cumulative effects fitted within their mandates to determine whether or not proposed projects are in the “public interest.”³³

Implementing cumulative effects assessment in project-specific environmental assessment processes, however, proved to be a significant challenge – reflecting the fact that the term ‘project-specific cumulative effects assessment’ is in some respects an oxymoron. The multiple challenges for cumulative effects assessment have been discussed by commentators³⁴ and will not be repeated here. Suffice it to say that without guidance from a regional management framework, it is difficult for project-specific EA processes to do a credible job of cumulative effects assessment.

RSDS and CEMA were thus initiated at a time when decision makers in EA processes, project proponents and interveners were looking to regional management frameworks for assistance in addressing cumulative effects. The EUB’s explicit reliance on these processes is highlighted below in Section 5 of this paper. Reliance on regional management initiatives to address cumulative effects is also illustrated by two joint EUB-Canadian Environmental Assessment Agency decisions on the Cheviot Coal Project in west-central Alberta in 1997 and 2000.³⁵

The grafting of cumulative effects assessment to project-specific EA processes continues to be the subject of controversy.³⁶ In particular, questions have been raised about the adequacy of follow-up and accountability when the recommendations or decisions of environmental assessment panels rely on regional initiatives to address cumulative effects. Nonetheless, it is important to recall that the initial enthusiasm for RSDS and CEMA was based in part on the belief that they provided a promising way of linking requirements for project-specific cumulative effects assessment with regional approaches to managing and mitigating these effects.

³³See, EUB, Alberta Environment & Natural Resources Conservation Board, *Cumulative Effects Assessment in Environmental Impact Assessment Reports Required under the Alberta Environmental Protection and Enhancement Act* (no date).

³⁴See, for example: Steven A. Kennett, *Towards a New Paradigm for Cumulative Effects Management*, CIRL Occasional Paper #8 (Calgary: Canadian Institute of Resources Law, 1999); P.N. Duinker & G.A. Greig, “The impotence of cumulative effects assessment in Canada: ailments and ideas for redeployment” (2006) 37 *Environmental Management* p. 153.

³⁵Steven A. Kennett, “Lessons from Cheviot: Redefining Government’s Role in Cumulative Effects Assessment” in Alan J. Kennedy, ed., *Cumulative Environmental Effects Management: Tools and Approaches*, Papers from a symposium held by the Alberta Society of Professional Biologists (Edmonton: Alberta Society of Professional Biologists, 2002) pp. 23-27.

³⁶Duinker & Greig, *supra* note 34.

3.0. Objectives and Design of RSDS and CEMA

RSDS and CEMA emerged as the twin pillars of Alberta's approach to managing cumulative effects in the oil sands region. CEMA's multi-stakeholder process has been the most visible initiative and its origins predate RSDS. Nonetheless, there are two reasons why RSDS is the most logical starting point when considering objectives and process design. The first is that government bears ultimate responsibility for determining whether and how to manage the cumulative effects development in the oil sands region. Second, the incentives driving stakeholder initiatives such as CEMA are in large measure a product of government policy, or the lack thereof.

3.1. The Regional Sustainable Development Strategy for the Athabasca Oil Sands Area

The Regional Sustainable Development Strategy for the Athabasca Oil Sands Area (RSDS) was initiated by Alberta Environment in September 1998. The terms of reference stated that the purpose of RSDS "is to ensure implementation of adaptive management approaches that address regional cumulative environmental effects, environmental thresholds, appropriate monitoring techniques, resource management approaches, knowledge gaps and research to fill gaps."³⁷ The policy document describing this initiative (the "RSDS Document") was released in July of 1999. As noted above, the RSDS was adopted as a 'pilot' regional strategy by the government's IRM initiative that was launched later in 1999.

Despite its title, the RSDS Document is not a complete and operational strategy for ensuring sustainable development or even for managing cumulative environmental effects in the oil sands region. Instead, it does two things that could constitute important first steps towards the development and implementation of this type of strategy. First, it sketches a broad conceptual outline for the development of a strategy and associated management framework. Second, it presents the results of an initial issue identification and scoping exercise and sets out a series of 'blueprints for action' describing the activities and tools that will be needed to address these issues.

The conceptual outline for cumulative effects management begins by positioning the RSDS within the policy direction set out in *Alberta's Commitment to Sustainable Resource and Environmental Management*, referred to above. Four very high-level principles are then enumerated: (1) the environment will be protected; (2) resources will be managed effectively; (3) learning will continue; and (4) stewardship will be shared. Each principle is followed by several bullet points that elaborate somewhat on the general principles, without adding much in the way of substantive content. For example, these

³⁷ Alberta Environment, *Regional Sustainable Development Strategy for the Athabasca Oil Sands Area*, July 1999, p. 39.

bullet points state general objectives or values (e.g., “High quality air, land and water will be protected”), make statements that appear to be self-evident (e.g., “Resources will continue to be developed within the requirements of provincial legislation, policies and guidelines”) and summarize policy directions that are inherently vague in key respects (e.g., “Disturbed land will be returned to a *state equivalent to the capability that existed before disturbance*, with *acceptable* landform, soil, vegetation, habitat, wetlands and drainage”).³⁸

The RSDS Document then informs readers that the focus of the RSDS “is to address the need to balance resource development with environmental protection.”³⁹ This statement is followed by a brief list of ways that this challenge will be met, providing once again only high-level generalities. For example, RSDS will “involve regional stakeholders in shared environmental stewardship” and will “create an environmental management framework that can adapt to the changing needs of the area to guide government environmental and resource managers.”⁴⁰ The RSDS Document’s cursory discussion of the initiative’s focus does acknowledge that achieving the balance referred to above “is especially challenging at the regional level, since there are various uses competing for the same resource or land base.”⁴¹ Once again, however, there is no detail about how these competing demands will be reconciled, nor is there any explicit acknowledgement that difficult choices and trade-offs may be required.

The rest of the conceptual outline in the RSDS Document consists of a thumbnail description of the roles and responsibilities of government agencies, an enumeration of key regional issues and themes to be addressed (elaborated on in more detail below), and a brief discussion of proposed timelines, activities and resources for developing responses to these issues. The RSDS Document also comments on the need for an information base for RSDS. Finally, it sets out the broad outlines of a proposed management model that emphasizes continuous improvement through a system that includes regional goals, management objectives, specific management options, information gathering, operational blueprints for action, and periodic evaluation of the system. Stakeholder involvement is identified as central to this management model, thus laying the groundwork for the government’s decision (discussed below) to hand off much of the RSDS agenda to the multi-stakeholder CEMA process.

The second part of the RSDS Document presents a comprehensive situation analysis and scoping exercise, identifying 72 environmental management issues related to oil sands development and organizing them into 14 themes. Blueprints for action address the

³⁸*Ibid.*, pp. 4-5 (emphasis added).

³⁹*Ibid.*, p. 5

⁴⁰*Ibid.*, p. 5.

⁴¹*Ibid.*, p. 6

issues within these theme groups, including estimated time lines and the organizations with responsibility for coordinating actions. In addition, themes are separated into three broad categories, reflecting the perceived urgency of the issues, the state of available information and information gaps, and the work under way at the time. To illustrate these categories, the first four themes are: sustainable ecosystems and land-use; cumulative impacts on wildlife; soil and plant species diversity; and effects of all air emissions on human health, wildlife, and vegetation.

This part of the document lists numerous activities and management tools that could contribute to a strategy and decision-making framework for managing cumulative effects. For example, the proposed activities under the theme of “sustainable ecosystems and land-use” include setting interim terrestrial objectives for various land uses and values (e.g., habitat requirements, biodiversity, traditional use and recreational capability) and developing management protocols, mitigation requirements relating to annual allowable cut, and end land-use planning. Similarly, under the theme of “cumulative impacts on wildlife” the proposed blueprint for action includes the development of interim terrestrial objectives for wildlife requirements and population levels for indicator species, and working on management options such as a regional access management policy.

The RSDS Document thus provides the starting point for discharging the Government of Alberta’s responsibilities as the owner and manager of public land and resources in the oil sands region and as the entity with primary responsibility for environmental stewardship. It states that the RSDS is designed as a “living document” to keep pace with changes in the region.⁴² One might have expected, therefore, that it would be updated and expanded upon over time. Furthermore, one might have expected the government to produce a series of more detailed studies, reports and initiatives to flesh out the strategy and build the management framework.

Instead, the RSDS as an instrument of public policy guiding resource management and environmental stewardship appears to have atrophied virtually from the outset. The RSDS Document and a technical support document also released in 1999 have never been revised. These documents and a single progress report on RSDS that was issued in 2001 are still the only policy documents on the RSDS web as of March, 2007.⁴³ The rest of the website consists simply of a series of newsletters, focusing primarily on CEMA. The last of these newsletters is dated July 2003.

This record suggests that, following the release of the RSDS Document in 1999, there was little or no progress within government to build the legal, policy and institutional framework for managing cumulative effects as the pace of oil sands development continued to accelerate – a conclusion confirmed by interviews conducted for this

⁴²*Ibid.*, p. 3.

⁴³See online <www3.gov.ab.ca/env/regions/neb/rsds/>.

project. What happened almost immediately was a decision to hand many of the key issues over to CEMA, the design of which is described in the following section.

3.2. The Cumulative Environmental Management Association

CEMA was established as a voluntary partnership of stakeholder groups, incorporated as a not-for-profit association in June 2000.⁴⁴ Its purpose is “to provide a multi-stakeholder, consensus-based forum for managing cumulative effects of oil sands development in the Athabasca region.”⁴⁵ The specific objectives of CEMA were to:⁴⁶

1. set up an effective and efficient stakeholder-driven regional environmental management system;
2. establish or recommend regional environmental guidelines, objectives and thresholds;
3. provide a basis for ongoing management of cumulative impacts of oil sands development, including setting priorities for monitoring and recommending option for mitigation;
4. respond to issues brought forward by stakeholders;
5. work co-operatively or link with other environmental management initiatives in the region (e.g., monitoring programs);
6. communicate the need, activities and results of CEMA to internal and external stakeholders;
7. Prepare an annual work plan and budget.

Membership in CEMA has included oil sands companies, conventional oil and gas companies, forestry companies, Aboriginal organizations, ENGOs, several departments from the Government of Alberta and the Government of Canada, the EUB, municipal government and other stakeholders. The membership list in March 2007 consists of 46 organizations.⁴⁷

⁴⁴Spaling *et al.*, *supra* note 10, p. 513.

⁴⁵*Ibid.*, p. 512.

⁴⁶Reproduced in Spaling *et al.*, *ibid.*, pp. 512-513.

⁴⁷Online: <www.cemaonline.ca/members.html>.

CEMA adopted a participatory and consensus-based model for decision-making, following the example of the province's Clean Air Strategic Alliance.⁴⁸ The intent of CEMA was to use an adaptive approach to cumulative effects management, based on:⁴⁹

1. establishing environmental capacity guidelines for each environmental parameter in the oil sands region,
2. setting environmental objectives (thresholds, limits) for each parameter,
3. identifying management actions for meeting the objectives, and
4. monitoring parameters and evaluating actions.

Other elements of CEMA's approach to managing cumulative effects included a common framework for cumulative effects assessment, a regional database, a focus on priority issues and gap analysis, the identification of regional environmental thresholds, and a tiered approach to management that links management response to the intensity of environmental stresses as defined by thresholds.⁵⁰

This management approach appears to be consistent with key elements of the RSDS, notably intent in the 'blueprints for action' to set interim objectives for key environmental and development parameters and identify management options for achieving those objectives. It also reflects a conscious shift in attention from developing a common approach to cumulative effects assessment among project proponents and regulators towards a concern with the management of cumulative environmental effects on a regional basis.⁵¹

Another important linkage between CEMA and RSDS was identified early in the existence of both initiatives in two articles co-authored by several of their key architects. CEMA's status as a voluntary and non-governmental partnership provided no mechanism for implementing and enforcing its decisions or recommendations regarding cumulative effects management. The solution to this problem, according to Spaling *et al.*, was the "alliance" between CEMA and the provincial government's RSDS.⁵² More specifically, they suggested that "CEMA's forum for consultation and expertise in cumulative effects

⁴⁸Spaling *et al.*, *supra* note 10, p. 513. For information on CASA, see online: <www.casahome.org>.

⁴⁹Spaling *et al.*, *ibid.*, p. 514.

⁵⁰*Ibid.*, pp. 516-520.

⁵¹*Ibid.*, pp. 514-515.

⁵²*Ibid.*, p. 515.

will be dovetailed with the management approach and authority of the Regional Sustainable Development Strategy.”⁵³

This relationship was also noted in the second early commentary on CEMA and RSDS. Klym *et al.*, stated that “CEMA is a forum for a voluntary process where the key deliverables are recommendations around environmental capacity limits and management systems.”⁵⁴ This process, they say, is “backstopped” by the government’s RSDS.⁵⁵ The role of the government in providing the policy and regulatory ‘backstop’ to CEMA will be returned to later in this paper.

In summary, the emergence of CEMA and RSDS between 1997 and 2000 established the framework for developing specific management strategies to address the cumulative environmental effects of oil sands development. While the operational management strategy itself was only embryonic at that point in time, the combination of government commitment to regional management and stakeholder involvement to address key issues seemed to be a plausible model. As shown in the next section of this paper, early commentary from participants in these initiatives took a generally positive view of their potential, although several red flags were raised from the outset.

4.0. Early Perspectives on RSDS and CEMA

The launch of RSDS and CEMA in the late 1990s attracted significant interest within Alberta and elsewhere. Early commentary on these initiatives gives a sense of the expectations and enthusiasm that they generated in their early days.

For example, a paper written in 2000 by leading representatives from the oil sands industry, the federal and provincial governments, and a First Nation in the region described the RSDS as “an open and inclusive strategy to manage cumulative environmental effects and to ensure sustainable development for the region.”⁵⁶ The authors went on to state that: “The leading-edge design of the RSDS integrates stakeholder forums, environmental research and regulatory management frameworks into a cohesive environmental management system for the area.”⁵⁷

⁵³*Ibid.*, p. 515.

⁵⁴Klym *et al.*, *supra* note 26, p. 208.

⁵⁵*Ibid.*, p. 208.

⁵⁶*Ibid.*, p. 216.

⁵⁷*Ibid.*, p. 216.

Early commentary on CEMA also identified significant potential for this initiative, focusing particularly on the multi-stakeholder partnership as its defining feature. Spaling *et al.* stated that:

Expected benefits for members in a partnership structure include direct sharing of project information and environmental baselines, setting of regional environmental thresholds acceptable to the partnership, facilitating public participation, and coordinating EIA [environmental impact assessment] submissions and communications with regulatory agencies. An inclusive, multi-stakeholder forum may also increase the level of support among stakeholders for proposed projects and reduce opposition to specific project applications during the regulatory review process.⁵⁸

They concluded their analysis by noting that “a common goal to improve the assessment and management of cumulative effects in the region unites the [CEMA] partnership” and that “regulatory authority through a Regional Sustainable Development Strategy empowers the group.”⁵⁹

RSDS and CEMA were also identified as models for other jurisdictions. For example, they were discussed in a consultant’s report prepared in 2000 on *Regional Approaches to Managing Cumulative Effects in Canada’s North*.⁶⁰ This report reviewed numerous other initiatives relating to cumulative effects management in Canada and concluded that the case study from the Athabasca oil sands region “contributes the most in providing useful examples for a Northern Framework.”⁶¹

Along with the early endorsements of the RSDS and CEMA models for cumulative effects management came some words of caution. For example, Spaling *et al.* stated that maintaining the critical links within the CEMA partnership could be challenging.⁶² They noted that differing views or histories of animosity among partner organizations could create distrust and prevent the development of relationships within CEMA. They also observed that “Aboriginal groups especially have felt that the pressures of expediency and meeting deadlines have interfered with their cultural process of community consultation and conference with elders and chiefs.”⁶³ Regulatory endorsement of CEMA decisions through the RSDS was also identified as a linkage that would be critical to the success of this initiative.

⁵⁸Spaling *et al.*, *supra* note 10, p. 514.

⁵⁹*Ibid.*, p. 524.

⁶⁰AXYS Environmental Consulting Ltd., *Regional Approaches to Managing Cumulative Effects in Canada’s North*, Prepared for the Department of the Environment, Government of Canada, Yellowknife NWT, March 1, 2000.

⁶¹*Ibid.*, p. 15.

⁶²Spaling *et al.*, *supra* note 10, p. 523.

⁶³*Ibid.*, p. 523.

Spaling *et al.* also highlighted an important dilemma relating to CEMA's commitment to adaptive environmental management:

In the midst of considerable uncertainty about regional environmental capacity and thresholds, an adaptive strategy may be the best management approach. However, an adaptive strategy still entails risk. Adaptability preserves future management options but risks delayed or insufficient action. The urgency of potentially irreversible adverse cumulative effects of multiple oil sands projects, especially due to their magnitude and extent, may warrant consideration of a more prescriptive approach to regional cumulative effects management. Though flexibility in management approaches is desirable, precaution and prescription provide a counterbalance to potentially ambiguous adaptive strategies that may be too little, too late. In this situation, a view of adaptive management as "trial and error" must be avoided as errors may be compounded in situations of multiple projects being implemented over short time frames and in close proximity."⁶⁴

These comments are particularly significant from the perspective of 2007, given the surging pace of oil sands development since the initiation of RSDS and CEMA and the evidence – discussed below in Section 6.6 – of growing fault lines within CEMA around the practical application of precautionary and adaptive approaches to environmental management.

Finally, Spaling *et al.* recognized that the CEMA partnership had not yet been tested and that its ultimate success "will greatly depend on a focused vision and sustained commitment to regional cumulative effects management and, perhaps most importantly, on the realization of expected benefits."⁶⁵ These benefits, they noted, included coordinated planning of appropriate oil sands development, established regional environmental thresholds, more efficient regulatory review of multiple project proposals, and collaborative monitoring and management of cumulative effects. In short, it was recognized from the outset that the true value of CEMA and RSDS would be determined by their ability to deliver results. The next section of this paper documents a consistent history of concerns with deficiencies in this area that can also be traced back to the early days of these initiatives.

5.0. Commentary on the Record of CEMA and RSDS

As noted above, the origins of CEMA and RSDS can be traced to the EUB's 1997 decision on Syncrude's Aurora Mine that recognized the need for a regional approach to assessing and managing the cumulative environmental effects of oil sands development. It is not surprising, therefore, that the EUB has maintained an interest in these processes and that its decisions provide one means of tracking their effectiveness in achieving

⁶⁴*Ibid.*, p. 524.

⁶⁵*Ibid.*, p. 525.

intended objectives. Before turning to a couple of additional sources of publicly available commentary on CEMA and RSDS, it is instructive to revisit the EUB's comments over a period of over nine years.

The EUB's early decisions left no doubt about the legal basis for its interest in cumulative effects and its views on the broad outlines of an appropriate management response. For example, in its decision on Suncor's Millennium Development in 1999 the Board affirmed that it "considers cumulative effects in determining the public interest in terms of the economic, social, and environmental effects of proposed projects" as required by section 3 of the *Energy Resources Conservation Act*.⁶⁶ In order to address this issue, the Board stated that "the carrying capacities or environmental limits for the oil sands region need to be studied further," particularly with respect to air emissions.⁶⁷ It also affirmed its confidence that the RSDS and the predecessor organization to CEMA were "acceptable and effective processes through which regional cumulative effects can be addressed."⁶⁸ Furthermore, participation in these initiatives by proponents was expected as a condition of approval for oil sands projects.⁶⁹ Beginning already in 1999, however, the Board's decisions also express growing concerns about the slow progress in generating tangible results.

An early statement of these concerns appears in the EUB's decision approving Shell Canada's Muskeg River Mine in 1999:

... well over a year has transpired since the announcement of several new development projects, yet the Cumulative Environmental Effects Management initiative is just now beginning to address certain aspects of its structure and operating process. *The Board is becoming increasingly concerned that these processes may not be moving forward at a speed sufficient to meet the Board's regulatory requirements...* The Board continues to believe that the two processes, the Cumulative Environmental Effects Management initiative [CEMA] and the Sustainable Development Strategy [RSDS] will create an acceptable and effective framework within which regional cumulative effects can be assessed within the oil sands region. The Board recognizes that for these initiatives to meet their goals within an adequate time frame, considering the intensity of industrial development, will require the dedication and commitment of all parties.⁷⁰

These initial concerns were reiterated with increased urgency in subsequent oil sands decisions.

⁶⁶EUB, Application by Suncor Energy Inc. for Amendment of Approval No. 8101 for the Proposed Project Millennium Development. Addendum B to EUB Decision 99-7, 23 July 1999, pp. 36-37.

⁶⁷*Ibid.*, p. 37.

⁶⁸*Ibid.*, p. 38.

⁶⁹Spaling *et al.*, *supra* note 10, p. 521.

⁷⁰EUB, Shell Canada Ltd. Muskeg River Mine Project, EUB Decision 99-2, 12 February 1999, p. 39 (emphasis added).

The Board discussed RSDS and CEMA again in its decision on Petro-Canada's Mackay River Project in 2000, underlining its strong support for these initiatives and its belief that they would provide the tools needed to address cumulative effects before irreversible environmental impacts occur. However, it expressed concern that "the pace of RSDS implementation could still be exceeded by the rapid rate of oil sands development without strong and active participation in RSDS, particularly by industry."⁷¹ The Board also commented that it "has placed significant emphasis on the success of these processes for ensuring that both existing and future oil sands development remains in the public interest" and warned that "significant delays in the process or the failure of the process to begin to establish environmental objectives and guidelines for the management of cumulative effects within the oil sands region in a timely manner could eventually force the Board to revisit its previous decisions."⁷²

Two years later, in 2002, the EUB again underlined the importance of progress on a regional framework for cumulative effects management in its decision on an application by TrueNorth Energy for an oil sands mine and cogeneration plant. It also reiterated the close connection that it saw between regional processes and its own legal mandate to determine whether or not proposed projects are in the public interest:

In a series of decisions in [the Fort McMurray region], the Board has placed significant reliance on the success of the CEMA process to verify that both existing and future oil sands developments remain in the public interest. The Board believes that CEMA's work is important and that the results will assist the Board in meeting its regulatory mandate to ensure that energy developments are carried out in an orderly and efficient manner that protects the public interest.

The Board understands that CEMA is dealing with complex and difficult issues within a multistakeholder forum. Nonetheless, it is *concerned with delays in the issuance of recommendations*. As a result, it will be discussing options with both the Alberta and federal governments by which the CEMA process can be encouraged to produce more meaningful results in an earlier timeframe.⁷³

By 2004, recognition that oil sands development has significant implications for areas of federal jurisdiction resulted in the establishment of joint federal-provincial panels that brought together EUB project reviews and the federal process under the *Canadian Environmental Assessment Act*. The joint panel decision on Canadian Natural Resources Limited's Horizon Oil Sands Project in 2004 expressed the view "that CEMA's effectiveness may ... be influenced by the volume and complexity of its work, multiple priorities of stakeholders, and funding mechanisms that may not keep pace with CEMA's

⁷¹EUB, Petro-Canada Oil and Gas Steam-Assisted Gravity Drainage Project, Mackay River Project, Athabasca Oil Sands Area, EUB Decision 2000-50, 14 July 2000, p. 14.

⁷²*Ibid.*, p. 14.

⁷³EUB, TrueNorth Energy Corporation Application to Construct and Operate an Oil Sands Mine and Cogeneration Plant in the Fort McMurray Area, EUB Decision 2002-089, 22 October 2002, p. 55 (emphasis added).

increased workload from oil sands expansions, new oil sands mining and in situ projects, and other contributors to regional cumulative effects.”⁷⁴

This issue was returned to in a second oil sands decision issued in 2004, where the joint panel reviewing Shell Canada’s Jackpine Oil Sands Mine stated that:

The Panel has *serious concerns about delays in the issuance of recommendations and the ability of CEMA to meet the proposed timelines*. The Panel heard evidence that AENV [Alberta Environment] is prepared to take action should CEMA not meet deadlines for delivery of recommendations for environmental management systems to regulators for approval. The Panel believes this step is necessary to increase regulatory certainty. Therefore, ... the Panel recommends that AENV and ASRD [Alberta Sustainable Resource Development] consider developing management plans or objectives respecting other environmental issues if CEMA timelines are not met.”⁷⁵

The Joint Panel also re-stated the position that the EUB would consider the need to review approvals for oil sands projects “when CEMA or other regional initiatives have produced substantive results or AENV has acted within its mandate and set management objectives.”⁷⁶

These issues were again front and centre in decisions on oil sands projects two years later. In a decision issued in November 2006 on Suncor’s North Steepbank Mine Extension and Voyageur Upgrader, the EUB stated that it “does recognize stakeholder frustration with the pace of developing targets and timelines for IFN [instream flow needs], water quality, watershed integrity, wildlife, reclamation performance, ozone management, and acid deposition.”⁷⁷ Given these concerns about CEMA, the Board said that “it would be appropriate for Alberta to initiate a review of CEMA’s purpose, priorities, and timelines”; it also urged the Government of Alberta to revisit the RSDS, including “a review ... of the outstanding issues arising from the RSDS with a view to determining whether financial and other human resources are available in the timeframe required to address those issues within their set timelines.”⁷⁸

⁷⁴EUB and Government of Canada, Canadian Natural Resources Limited Application for an Oil Sands Mine, Bitumen Extraction Plant and Bitumen Upgrading Plant in the Fort McMurray Area, EUB Decision 2004-05, 27 January 2004, p. 77.

⁷⁵EUB and Government of Canada, Shell Canada Limited Applications for an Oil Sands Mine, Bitumen Extraction Plant, Cogeneration Plant and Water Pipeline, Fort McMurray Area, EUB Decision 2004-009, 5 February 2004, p. 78 (emphasis added)

⁷⁶*Ibid.*, p. 78.

⁷⁷EUB, 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, EUB Decision 2006-112, 14 November 2006, p. 68.

⁷⁸*Ibid.*, p. 68.

Turning the role of participants in CEMA, the Board stated that it “encourages CEMA members to outline their expectations and the resource allocation needed for such initiatives in order to determine whether the members’ goals and timelines are practicable and achievable”.⁷⁹ Finally, it expressed support for government action to enforce timelines through the use of “regulatory backstops, applicant responsibility, and other means acceptable to the applicant and stakeholders.”⁸⁰

The importance of addressing cumulative effects in the oil sands region and the challenges facing CEMA were again the subject of extensive discussion in a joint EUB-Canadian Environmental Assessment Agency (CEAA) decision report on the Albian Sands Muskeg River Mine that was issued in December, 2006.⁸¹ The Joint Panel began its discussion of environmental effects by stating that “a higher priority needs to be placed on regional cumulative effects, not only from a regional perspective, but also on an individual project basis.”⁸² Later in the decision, when discussing impacts on water, the Joint Panel stated its belief “that cumulative effects is the biggest issue facing the oil sands region.”⁸³

At several points in the discussion of environmental effects, the Joint Panel also noted that CEMA had failed to deliver results on schedule and that Alberta Environment had not provided a regulatory backstop. For example, it noted the recommendation in the joint panel report on Shell Canada’s Jackpine Mine⁸⁴ that CEMA develop a watershed management plan for the Muskeg River Basin by the end of 2005.⁸⁵ That decision also stated that if CEMA failed to do so, Alberta Environment should consider backstopping the process. The Albian Sands panel then noted that a watershed management plan was considered to be a priority at the time of that earlier decision, but that CEMA had not delivered a plan and Alberta Environment had not issued a backstop.⁸⁶

⁷⁹*Ibid.*, p. 68.

⁸⁰*Ibid.*, p. 68.

⁸¹EUB and Government of Canada, Albian Sands Energy Inc. Application to Expand the Oil Sands Mining and Processing Plant Facilities at the Muskeg River Mine, Joint Panel Report and EUB Decision 2006-128, 17 December 2006.

⁸²*Ibid.*, p. 38.

⁸³*Ibid.*, p. 46.

⁸⁴*Supra*, note 75

⁸⁵The Board might also have noted that in its decision on Syncrude’s Aurora Mine, issued in 1997, it had stated that oil sands companies: “should study the Muskeg River drainage basin to identify a mine plan for the entire ore body, ignoring lease boundaries. This approach could optimize resource recovery, minimize surface disturbance, and reduce overall environmental impacts.” *Supra* note 1, p. 29.

⁸⁶EUB & Government of Canada, *supra* note 81, p. 74.

While acknowledging that several factors contributed to CEMA's inability to deliver the watershed management framework by the end of 2005, the Joint Panel stated that the process "requires strong government direction and clearly defined objectives" and that developing the plan "will require significant commitment on the part of its stakeholders."⁸⁷ Noting that the accountability to develop a watershed management plan for the Muskeg River Basin ultimately lies with government, the Joint Panel indicated its support for the consideration by Alberta Environment of interim measures to be implemented until the plan is in place. The Joint Panel also recommended that Alberta Environment use a "regulatory backstop or applicant responsibility" to enforce the current 2007 deadline for CEMA to deliver a watershed management plan.⁸⁸

The Joint Panel also included the following discussion of CEMA and the overall issue of cumulative effects management for the oil sands region:⁸⁹

The Joint Panel acknowledges that the complex issues the RSDS attempted to define and that CEMA is attempting to address require building a body of knowledge and understanding unique in the world. The potential of CEMA to define, fund, and accomplish the necessary scientific and technical studies and research exceeds the capability of any one of its member groups. The Joint Panel believes that CEMA's opportunity to create sound environmental management recommendations founded on good knowledge that is supported and based on consensus is a superior approach to a regulator imposing solutions on the region. The Joint Panel is still of the view that cumulative effects management frameworks present a more effective approach to development than project-by-project application and decision-making regulatory processes. *The Joint Panel observes, however, that oil sands development is proceeding, not waiting for the environmental management frameworks that CEMA is charged with developing.*

It is the Joint Panel's view that CEMA has the potential to be much more effective in developing regional environmental protection and sustainable development recommendations. *The Joint Panel believes that the ultimate responsibility for regulating the cumulative effects from oil sands development lies with government.* The Joint Panel therefore recommends that all government agencies place a greater priority on their roles within CEMA. The Joint Panel recommends that all CEMA stakeholders take steps to prioritize their effective participation in, contributions to, and leadership of CEMA and its working groups.

The Joint Panel recommends that all participants in regional initiatives, including CEMA, assist in setting reasonable goals, timelines, sequencing, and priorities. The Joint Panel recommends that Alberta encourage CEMA members to outline their expectations and required resource allocation for such initiatives to determine whether their goals and timelines are achievable. *If fully researched recommendations cannot be delivered within target timelines, CEMA groups need to make interim recommendations on appropriate environmentally precautionary measures that can be used until recommendations from CEMA are completed. Failing that, the Joint Panel*

⁸⁷*Ibid.*, p.74.

⁸⁸*Ibid.*, p. 75.

⁸⁹*Ibid.*, p. 78 (emphasis added).

recommends that Alberta implement an interim policy, framework or regulatory control as appropriate.

The third recent decision that comments extensively on CEMA is a joint EUB-CEAA panel report on Imperial Oil's Kearl Oil Sands Project that was released at the end of February 2007.⁹⁰ Like the Suncor and Albian Sands decisions released in 2006, the Joint Panel enumerated a series of concerns and recommendations from interveners. Its own assessment of CEMA began with the following strong affirmation the importance of this organization for the project review process and for the longer term management of oil sands development:

The Joint Panel views the work of CEMA as vital in addressing the cumulative impacts of oil sands development on the region and notes that CEMA has been assigned responsibility to address most of the critical cumulative effects challenges. The existence of regulatory standards and thresholds is an important element in determining whether a project is in the public interest from a cumulative impacts perspective and whether the impacts need further mitigation if the project is to proceed. The work of CEMA in developing management frameworks for addressing cumulative effects is central to the sustainable development of the mineable oil sands over the longer term.⁹¹

The Joint Panel then stated that it was “concerned about the capacity of CEMA to complete the management frameworks that have been assigned to it”.⁹² Noting that CEMA “struggles to meet its deadlines”, the Joint Panel said that it was “troubled by the level of concern expressed by some of the interveners over the ability of CEMA to complete its work plan at all.”⁹³ It also noted that despite the assurances in the hearings for the Albian Sands Muskeg River Mine Expansion (discussed above) that CEMA's work on integrated watershed planning for the Muskeg River basin would be completed by the end of 2007, the timeline for this work had been revised again and was now September 2008.⁹⁴

Turning to recommendations for solutions to this problem, the Joint Panel stated its belief “that the efficiency of CEMA needs to be improved in order to keep pace with current development in the region and that there is a need for more definitive priority

⁹⁰EUB and Government of Canada, Imperial Oil Resources Ventures Limited, Application for an Oil Sands Mine and Bitumen Processing Facility (Kearl Oil Sands Project) in the Fort McMurray Area, Joint Panel Report and EUB Decision 2007-013, 27 February 2007.

⁹¹*Ibid.*, p. 92.

⁹²*Ibid.*, p. 93.

⁹³*Ibid.*, p. 93.

⁹⁴*Ibid.*, p. 77.

setting and adherence to deadlines.”⁹⁵ It then offered the following comments and suggestions:

- Alberta should take the lead in updating and prioritizing the RSDS and associated technical documents as soon as possible;
- CEMA could use an updated RSDS to revise its work plan and estimate the time and human resources needed to complete the tasks assigned to it;
- CEMA members are responsible for ensuring that CEMA is adequately staffed to complete its work plan and should “ensure that their organizations are giving sufficient recognition to the demands of CEMA and have the appropriate expertise and level of seniority engaged with CEMA to ensure effective participation”;⁹⁶
- The fact that some of the First Nations and Métis members were reconsidering their continued participation and that one had withdrawn is a matter of concern and CEMA should consider ways of ensuring First Nations and Métis input into work plans and projects, increasing the capacity of Aboriginal organizations to participate, and improving communication with Aboriginal communities;
- First Nations and the Métis Locals should work together to develop joint capability to participate in a meaningful way in CEMA; and
- CEMA should identify opportunities to streamline its operation, improve internal communications, improve support for project management, and strengthen the strategic direction given to its committees and working groups.

The Joint Panel acknowledged that the Management Committee of CEMA and some of its members are taking steps to improve its efficiency. It concluded by stating that it viewed the success of CEMA as “critical” because there is presently no “satisfactory alternative to CEMA for the development of environmental management frameworks to address cumulative effects in the oil sands region using a consensus-based approach.”⁹⁷ However, the Joint Panel reiterated the point that cumulative effects management is ultimately the responsibility of “the regulators” and it encouraged them “to take a more direct leadership role in all aspects of CEMA.”⁹⁸

⁹⁵*Ibid.*, p. 93.

⁹⁶*Ibid.*, p. 93.

⁹⁷*Ibid.*, p. 94.

⁹⁸*Ibid.*, p. 94.

This record of EUB and Joint Panel decisions from 1999 to 2007 leaves no doubt about the chronic underperformance of CEMA and RSDS from the perspective of the key agencies charged with reviewing and regulating oil sands projects. It also constitutes the best source for documenting the growing concerns with these initiatives over the past nine years.

The EUB's recommendation in the 2006 Suncor decision that the Government of Alberta review both CEMA and RSDS reflects the fact that no systematic and public evaluation of these initiatives has been commissioned or undertaken by the government or by CEMA members. However, Alberta Environment and Alberta Sustainable Resource Development published a progress report in July 2001.⁹⁹ This document consists largely of an outline of RSDS and CEMA and a description of activities undertaken by CEMA working groups. It also discusses briefly some of the key challenges facing these processes.

The progress report noted that all CEMA working groups have encountered challenges relating to "timing and urgency".¹⁰⁰ While the original RSDS Blueprints for Action called for the development of management objectives for the high priority themes within two years, the report observed that no management objectives had been completed by the two-year anniversary of the RSDS. It concluded that "the complexity of the environmental issues and the consultative, interactive nature of the partnership process, and the work group's demand for a thorough approach make the strategy's original targets unrealistic."¹⁰¹

Another set of challenges discussed in the progress report related to available human resources. The report noted the intensive demands on participants in CEMA and the fact that "many individuals are currently involved in more than one CEMA project, in addition to their regular work."¹⁰² Difficulties in scheduling meetings and "finding time to do CEMA work between meetings" had slowed progress. Furthermore, the report noted the limited pool of qualified and experienced consultants that can assist the CEMA working groups and observed that this problem "is compounded by the increasing pace of development and large number of projects in the oil sands region that are often drawing on the same consultants."¹⁰³

⁹⁹ Alberta Environment and Alberta Sustainable Resource Development, *Regional Sustainable Development Strategy for the Athabasca Oil Sands Area – Progress Report, July 2001*, online: <www3.gov.ab.ca/env/regions/neb/rsds/>.

¹⁰⁰ *Ibid.*, p. 12.

¹⁰¹ *Ibid.*, p. 12.

¹⁰² *Ibid.*, p. 12.

¹⁰³ *Ibid.*, p. 12.

Finally, the progress report identified some concerns about the adequacy of funding for CEMA, given the volume and cost of the work to be undertaken and the policy of reimbursing environmental and Aboriginal groups. It noted that oil sands companies have been the primary source of funds, with a budget in 2001 of approximately three million dollars. The challenge was identified as obtaining “a broad base of funding from all industrial sectors in the region in a fair and equitable manner, as well as contributions from the regulators.”¹⁰⁴ The report noted, however, that contribution from government regulators had been primarily in the form of in-kind support, although the EUB and the federal Department of Fisheries and Oceans had funded some activities.

In addition to these general comments, specific challenges are identified for each CEMA working group. The report did not, however, provide a detailed synthesis of the impediments to progress, nor did it offer specific recommendations for overcoming these impediments. Finally, it should be noted that no other progress reports on RSDS have been published by the government since the release of this document in July 2001.

Commentary on the record of CEMA and RSDS has also been provided by the Pembina Institute, which has been actively involved as a member of CEMA. For example, a report published in November 2005 states that CEMA “has been far less effective than originally envisioned.”¹⁰⁵ This report includes a table showing that the timelines for delivering many of CEMA’s management plans have been consistently revised between 2001 and 2005.¹⁰⁶ It notes that, throughout this period, projects have continued to be approved and “the steady stream of applications for proposed oil sands projects submitted for regulatory and stakeholder review imposes a significant workload on the government and Aboriginal and ENGO members of CEMA, competing for their time and resources.”¹⁰⁷ The Pembina Institute’s report also notes the lack of response by government agencies to the EUB’s concerns regarding CEMA and RSDS. It concludes that “an ongoing lack of human resources and limited government leadership has hampered CEMA’s ability to achieve its objectives.”¹⁰⁸

While CEMA has delivered recommendations and proposed management frameworks in some areas, the commentary just reviewed leaves little doubt that it has failed to live up to its promise in key respects. Furthermore, the pace of development has accelerated since 1997 and projects continue to be approved, despite the delays in CEMA’s delivery of information, objectives and tools for managing cumulative effects.

¹⁰⁴*Ibid.*, p. 13.

¹⁰⁵Woyillowicz, Severson-Baker & Reynolds, *supra* note 2, p. 54.

¹⁰⁶*Ibid.*, p. 56.

¹⁰⁷*Ibid.*, p. 55

¹⁰⁸*Ibid.*, p. 55.

Concerns identified in EUB decisions and other published material were confirmed in interviews with individuals directly involved in CEMA. While perspectives on specific issues differ among and within government, industry, Aboriginal organizations and ENGOs, there is wide-spread recognition of a significant and growing gap between the expectations of many participants and the results that CEMA has been able to achieve. Furthermore, there is increasing concern among some participants that this performance gap is widening because of CEMA's continuing slow progress in generating results and the accelerating pace of development in the oil sands region. The possible explanations for this performance gap are examined in the next section.

6.0. Explaining the Performance Gap

Possible explanations of CEMA's performance gap were explored in 16 interviews with individuals from the Government of Alberta, the Government of Canada, the oil sands industry, First Nations, ENGOs, the CEMA secretariat and private consulting firms. Two individuals from Alberta's Clean Air Strategic Alliance were also interviewed to facilitate a comparison between this process and CEMA. While these interviews do not constitute a comprehensive survey of all interested parties, they covered a broad spectrum of participants in CEMA. Interviews took place between December 2006 and March 2007 and were conducted on a 'not for attribution' basis to ensure confidentiality. The project overview and questions sent to interviewees are included in this paper as Appendix 1. The following sections of the paper summarize the interviewees' responses to ten questions relating to CEMA's performance gap.

6.1. Do CEMA's Successes to Date Suggest that it is Working and Can Deliver Results?

The first question is whether CEMA's performance gap is simply a lag phenomenon. Perhaps the failure to meet time lines is explained by the time-consuming nature of consensus building around complex issues as opposed to more fundamental obstacles to CEMA's ability to deliver the intended results. The time lag interpretation is supported by the argument that CEMA has already achieved significant successes and this record can be repeated in other areas if the processes for collecting needed scientific information and building consensus around management objectives and solutions are allowed to run their course. The underlying assumption is that past successes are a good indicator of the prospects for future success.

The successes identified by interviewees include CEMA's recommendations in the following areas:¹⁰⁹

- Trace metals management (2001);
- Acid deposition management framework (2004);
- Landscape design checklist (2004);
- Ecosystem management tools (2004);
- Landscape capability classification for forest ecosystems in the oil sands (2006);
- In-stream flow needs (IFN) draft management system (provided to Alberta Environment to assist it in finalizing a management framework) (2005); and
- Ozone management framework for the Regional Municipality of Wood Buffalo Area (2006).

Several interviewees also stated that CEMA is making good progress in a number of other areas and is on track to deliver useful recommendations within the next year or two. A recently released summary of the current and near-term deliverables for CEMA's working groups was compiled for CEMA's submission to the Oil Sands Consultation Panel in October 2006.¹¹⁰

In addition to specific recommendations, a large amount of scientific research has been commissioned by CEMA. While the volume and complexity of this material has clearly been a major challenge for some participants in CEMA, many interviewees acknowledged that cutting-edge research on important and sometimes unique issues raised by oil sands development has been a positive outcome. Several interviewees noted that because oil sands development and reclamation in Alberta's boreal forest raise a series of new scientific, technological and management issues, sustained and focused research of the type that CEMA has initiated is essential and the need for multi-year field studies means that results will inevitably be slow to emerge in the early stages.

There is also widespread recognition of the challenges of consensus decision making and the need for organizations such as CEMA to take time to build a foundation of trust and cooperation among participants. Several interviewees argued that while consensus building takes time, this up-front investment yields significant benefits at the implementation stage because key stakeholders are working from a common information

¹⁰⁹These successes are listed in: CEMA, Written submission to the Oil Sands Consultations Panel, 3 October 2006, p. 15

¹¹⁰*Ibid.*, pp. 8-14.

base and have jointly identified the problems and bought into the solutions. Many interviewees underlined the value of bringing together stakeholders to exchange views, share expertise and work towards consensus on complex and often divisive issues. It was noted that the intangible benefits that CEMA has already achieved, such as increased understanding of the interests of diverse stakeholders and stronger interpersonal relationships, should not be underestimated.

CEMA's performance gap is, however, raising questions about the extent to which past successes provide grounds for optimism regarding future progress. Some interviewees believe that CEMA's successes to date have occurred largely where there was a significant pre-existing body of scientific evidence and management strategies that CEMA could build on and where general agreement existed on the need to take action, the objectives to be achieved, and the measures to be taken. CEMA's acid deposition framework was cited by several interviewees as a success that had at least some of these attributes, notably because of extensive study of this issue in eastern North America and Europe and work already undertaken in Alberta and elsewhere on management options. Even in these circumstances, however, working through CEMA's consensus requirement proved to be time-consuming.

Some interviewees also suggested that successes have occurred in areas not characterized by intense value conflicts and where management options did not entail significant trade-offs or constraints affecting development. For example, it was argued that air issues may be more amenable to technological solutions than some other environmental management challenges.

On the other hand, it was also noted that management of certain air issues, such as sulphur emissions, has entailed significant costs for industry. Several interviewees took the view that most, if not all, of the significant environmental issues raised by oil sands development can be addressed with sufficient funding and innovation. The implication is that there is no significant difference between the issues that have been addressed and those that are still on CEMA's agenda.

If there is some truth to the argument that CEMA has in fact picked the 'low hanging fruit', the question now is whether or not it can deliver results where there is greater scientific uncertainty, where management strategies are untested, where value conflicts may be more intense, and where more difficult trade-offs may be necessary. Some participants are pessimistic, taking the view that CEMA has never reached closure on any really difficult issues. Others argue that as CEMA gains experience it will become better at delivering results in contentious areas.

Time will be the ultimate test of CEMA's capacity to replicate past successes. However, the debate summarized above signals the need to look deeper into the challenges and opportunities facing CEMA as it confronts the complex issues on its agenda for the coming years. If some of the principal conditions that explain CEMA's

successes to date may not be present for issues still to be addressed, actions to bring about these conditions, enhance CEMA's capacity for action, or shift these issues to another forum may be appropriate.

6.2. Are CEMA's Objectives Sufficiently Realistic and Focused?

One possible explanation for the performance gap is that expectations have been unrealistic. Looking back to the origins of RSDS and CEMA, interviewees generally agreed with the issue identification in the RSDS Document but felt that it underestimated the complexity of the issues, the information gaps to be filled through new scientific research (including field work and modeling), and the time-consuming nature of consensus building in CEMA's multi-stakeholder forum.

One interviewee commented that CEMA itself should have conducted an assessment of the original RSDS priorities, based on a realistic assessment of what could be accomplished within given time frames. It is possible that this process did not occur, at least not with sufficient rigor, because many participants in the early days of CEMA lacked sufficient experience with the substantive issues and with the multi-stakeholder process to make this type of judgment. Another interviewee suggested that CEMA should have attached higher priority to gaps in the management framework identified by the EUB in decision reports on oil sands projects. Several interviewees recommended that the Alberta government revise and update the RSDS Document to provide CEMA with guidance on priorities.

Some interviewees argued that significant progress has been made in recent years in CEMA's ability to set more specific and realistic objectives and time lines. One interviewee noted that effort has been directed to drafting more precise terms of reference for CEMA projects and ensuring that working groups adhere to their assigned tasks, rather than expanding or changing their focus over time. This person said that there had been a tendency for groups to 'drift' in response to new issues identified by members, sometimes realizing only much later how far they had departed from their original focus. Taking on new issues before current objectives had been met was also identified as a problem.

While there seems to be general agreement that CEMA 'bit off more than it could chew' at the beginning, it is unclear from the interviews conducted for this paper whether or not the many interests on the CEMA Board and working groups have achieved the level of consensus and the discipline to significantly improve their ability to agree on key priorities, set more focused and realistic objectives, and then deliver recommendations in a timely manner. This is one area where an internal review or external audit of CEMA's structure and operating procedures could provide useful insights and recommendations.

Lessons might also be learned from the process used by the Clean Air Strategic Alliance (CASA). CASA's secretariat and Board have a rigorous protocol for screening "statements of opportunity" suggesting new initiatives, testing the proposals against specific criteria, drafting focused terms of reference, and then monitoring the progress of initiatives to provide advice and assistance if they are drifting off course or failing to make progress.¹¹¹ These mechanisms could help to align expectations and results for CEMA.

6.3. Is the Performance Gap Linked to Deficiencies in the Design and Implementation of CEMA's Multi-Stakeholder Process?

Many interviewees expressed concern that certain features of CEMA's design and implementation have been obstacles to consensus decision-making. Comparisons were often drawn with CASA, which has considerable experience with this type of process and has a reputation for success.

One interviewee commented that many CEMA members are unfamiliar with the operation of multi-stakeholder processes and are therefore ill-equipped to address the complex set of issues that was handed to them. In contrast with CASA, CEMA members have not had extensive experience working together and CEMA itself does not have the established procedures for supporting and tracking its initiatives that CASA has put in place. Other interviewees acknowledged these issues but felt that they would be addressed over time as CEMA matures as an organization.

Other features of CEMA are generally recognized as complicating multi-stakeholder decision making. For example, CEMA includes direct representation of all interested parties, whereas CASA operates through sectoral representatives. Several interviewees commented on the difficulty of making decisions within CEMA when consensus approval is required by a Board of over forty different organizations. Given the established practice of direct representation and the fact that views on key issues tend to vary within sectors, most interviewees were uncertain whether or not a more streamlined approach, such as CASA's model of sectoral representation, would work for CEMA. Several people commented, however, on the possibility that a smaller group of CEMA members could provide leadership and direction through the Management Committee.

The overall balance of representation and influence on CASA was also a concern of several interviewees. Despite the funding made available to ENGO and Aboriginal participants and the leverage provided by the consensus requirement for decision making, some representatives from these groups feel that the playing field is not fully level and

¹¹¹CASA, *The Comprehensive Air Quality Management System: CASA's Decision Making Process* (2005), online: <www.casahome.org>.

that CEMA remains an industry-led and industry-dominated forum. This concern reflects, in part, the numerical weight of industry representatives within CEMA. One interviewee noted that there are many more seats for industry than for Aboriginal organizations and suggested that a rebalancing of representation would enable Aboriginal organizations to participate more effectively. He also argued that a heavier weighting for Aboriginal representation would reflect what he characterized as the higher priority of the rights of Aboriginal people compared with other land and resource users, based on Aboriginal and treaty rights in traditional territories. There is an obvious tension between CEMA's multi-stakeholder model of representation and the view of Aboriginal people that they should not be treated as 'just another stakeholder'.

Access to information was also raised as a concern relating to the level playing field. One interviewee stated that industry has conducted cost studies for certain environmental management and mitigation options (e.g., dry tailings, reclamation) but that this information is not always made available to other CEMA members. There is clearly a perception among some participants that CEMA's ability to have a fully informed discussion about important issues is hampered because industry has the capacity to generate relevant information but sometimes withholds that information unless it sees disclosure as promoting its particular interests.

While challenges are inevitable for a multi-stakeholder process dealing with complex and contentious issues, some concerns identified by interviewees could be addressed through changes to the design and operation of CEMA. A systematic review of these concerns, drawing on experience with other multi-stakeholder processes such as CASA, would likely yield additional options for improving CEMA.

6.4. Does CEMA have Sufficient Financial and Human Resources to Deliver on its Objectives?

Most people interviewed for this project agreed that CEMA currently has adequate funding. Several interviewees noted that finances had been an issue earlier in the process and that some stakeholders felt that there had been a tendency for industry to try to direct and perhaps constrain research through its control of the purse strings. These problems have, it appears, been resolved. In particular, the fact that CEMA has not been able to spend its entire allocated budget is widely seen as evidence that sufficient money is available. Although a couple of interviewees still expressed some concern that industry continues to exercise too much influence in determining CEMA's priorities, this issue may relate to overall governance, the veto power that is conferred by the consensus requirement, and the overall balance of interests within the multi-stakeholder forum as opposed to the exercise of leverage directly linked to funding.

Many interviewees agree, however, that limitations on available human resources are a significant issue for CEMA. In particular, some CEMA participants find it difficult to

find the time necessary to prepare for and attend meetings. Interviewees commented that in some instances it appears that many working group members have not taken the time to review the reports prepared on their issue areas. Discussions therefore occur on the basis of quick reviews of executive summaries, rather than a detailed understanding of the issues at stake. The infrequency of meetings and irregular attendance were also identified as problems, since progress is slow if a working group meets only quarterly and ends up deferring or revisiting issues over several meetings when members are not prepared to move forward because certain people who missed previous meetings need to be brought up to speed and have their views accommodated.

Some interviewees identified information overload as a problem, noting the numerous consultants' reports that CEMA has commissioned. If CEMA participants are unable to understand, absorb and apply the volume of technical information that is submitted to them, one solution is to allocate more time and technically skilled people to the process. Another option is to be more selective in commissioning research, focusing efforts on information that is necessary for decision making on specific issues.

Competition between CEMA and project review processes for scarce human resources was identified as a serious problem. The limited pool of experts combined with the business opportunities for consultants provided by project-specific environmental assessments has meant delays in finding consultants and completing projects for CEMA's working groups. Interviewees from government, industry, Aboriginal organizations and ENGOs all agreed that CEMA participants face tremendous pressure to focus attention on individual project applications, where time frames are short, demands are considerable, and the stakes are high in terms of the consequences of making mistakes and the immediacy of important decisions on tangible issues. Making time for CEMA work when faced with project application and hearing deadlines can be very challenging.

A closely related issue raised by interviewees is that many participants in CEMA apparently view this work as supplementary to their 'regular' jobs. Several interviewees noted that CEMA is a voluntary association and, by implication, individuals and organizations participate in some sense as 'volunteers'. This view of the process as voluntary reflects the formal structure of the organization, but it may be in tension with the central role that the Alberta and federal governments and the EUB have allocated to CEMA in the development of the information base and the frameworks for cumulative effects management in the oil sands region.

The perception that participation in CEMA is 'voluntary' and an 'add-on' to individuals' normal workloads is significant because it speaks volumes about the priority assigned to CEMA within some member organizations. If completion of CEMA's work on key issues was seen by industry as a precondition for moving ahead with their projects – on a par with EUB approvals and other regulatory requirements – then presumably companies would recognize involvement in CEMA as part of the core responsibilities of their employees, as opposed to an add-on.

The issue of relative priorities was also raised by several interviewees who commented that government's participation in CEMA has been hampered because the combination of the increasing number of oil sands applications and inadequate funding within key departments have made it difficult or impossible to deal with the flood of project applications and also focus effort on building the management framework for cumulative effects. One interviewee also commented that government has been much more successful in meeting objectives for expedited project approvals than it has been in achieving goals set for environmental management.

The issue of available human resources is therefore more complicated than might appear at first glance. On the one hand, the pace and scale of oil sands development has clearly taxed the capacity of the limited pool of qualified technical experts in industry, government, consulting firms and other interested parties. However, the availability of people to devote time and effort to CEMA and whether they view this role as central or peripheral to their core job descriptions is a function of priorities and funding decisions within their organizations.

6.5. Do Participants in CEMA Agree on the Key Attributes of Cumulative Effects Management for Oil Sands Development?

One explanation for CEMA's performance gap may be the difficulty of reaching consensus recommendations when participants have different visions of the end point that they are working towards. The interviews for this project suggest that some fault lines relating to the key attributes of cumulative effects management may require attention if CEMA is to move forward.

A major fault line concerns the centrality of scientific and management thresholds¹¹² and regulatory limits within the management frameworks that CEMA is charged with recommending. One interviewee from industry stated that CEMA had evolved from a "naïve" focus on thresholds and limits to a recognition that the objective was to develop broader management frameworks. In contrast, an ENGO representative said that regulatory frameworks without clear and quantifiable limits were little more than "fluff".

Interviewees also disagreed on whether the fault lines in CEMA relating to thresholds and limits are the result of differences in principle about the appropriate approach to environmental management or simply reflect the practical challenges of science-based (and value-based) decision making in this area. Some participants in CEMA apparently feel that there is general agreement in principle that limits of certain types are necessary to manage cumulative effects. For example, they note that water withdrawals from the

¹¹²Management thresholds are pre-determined levels of impacts or development that will trigger regulatory actions to reduce emissions, water withdrawals or other activities affecting the environment.

Athabasca River and emissions of acid rain precursors must be limited at some levels in order to protect ecosystems. The key issue, they argue, is drawing the line in practice. Other interviewees said that, from their perspective, there is a real reluctance by some participants from industry and government to accept ‘hard’ limits that trigger significant regulatory responses or potentially important constraints on development.

This fault line may also reflect different views on the overall approach to cumulative effects management that should be adopted in the oil sands. One perspective is that cumulative effects management involves implementing the regulatory measures that are necessary to set and achieve landscape-scale objectives for the environment, which are set on the basis of land-use scenarios and the assessment of trade-offs and risks. Another perspective is that cumulative effects can be adequately managed through a process of incrementally mitigating impacts to the extent that is technologically and financially possible given the underlying (and externally determined) pace and extent of development. The objective is to reduce impacts when compared with a ‘business as usual scenario’, but management is not directed to meeting an environmental ‘bottom line’ in relation to all land-use values.

This distinction is important because of its potential implications for the pace, scale and intensity of development. Some advocates of an environmental bottom line are willing to limit development to protect environmental values, while those who favour incremental impact mitigation appear more inclined to take the development trajectory as driven by market forces and government policy as a given. One interviewee noted, for example, that cumulative effects modeling within one CEMA working group is focused on ‘tweaking’ the system to generate better environmental outcomes, rather than setting environmental objectives and then working backwards to determine what development scenarios and regulatory requirements are necessary to achieve these objectives. In another interview, an analogy was made with the distinction between intensity targets and absolute limits for managing greenhouse gas emissions. While intensity targets may improve relative performance, they do not yield a reduction in total emissions in situations where decreased GHG intensity per unit of production is swamped by growth in total output.

Several interviewees stated that another fault line within CEMA centres on whether environmental management in the oil sands region should be focused on minimizing exposures and impacts to the full extent that is technologically and economically feasible, or managing impacts if and when they are determined to have significant effects. This is a complex issue that involves assessing risks, weighing costs and benefits, and determining how to establish incentives or regulatory requirements for continuous improvement in managing the cumulative effects of development.

As a practical matter, however, the debate seems to focus on whether or not oil sands development should be required to apply the best available technology to reduce environmental exposures. One interviewee argued, for example, that certain facilities are

being approved in the oil sands region with emissions control technology that simply would not be allowed in some other North American jurisdictions. This approach was criticized because it creates unnecessary environmental risks given the uncertainty regarding the cumulative effects of multiple oil sands projects. In particular, uncertainty in modeling environmental effects may mean that regulatory action will be too late to maintain environmental values if measurable impacts must occur before requiring state-of-the-art pollution control technology. Several interviewees also stated that the notion of ‘best practices’ has tended to be interpreted as requiring companies to do what other oil sands developers are already doing, as opposed to creating incentives for continuous innovation and improvement.

Interviews conducted for this project do not provide a clear indication of whether or not fundamental differences among CEMA members about the attributes of cumulative effects management are a contributing factor to CEMA’s performance gap. There is enough evidence of divergence, however, to warrant a review of this issue by CEMA itself and some specific direction on this point from government. Several interviewees indicated that high-level agreement on guiding principles may mask important differences on how these principles should be applied. In particular, CEMA will have difficulty making progress if hard regulatory limits to protect an environmental ‘bottom line’ are the key litmus test of success for some participants, while others feel that it is impractical or unnecessary to come up with these limits, at least in the short or medium term.

6.6. Do Participants in CEMA Agree on the Meaning and Practical Implications of the ‘Precautionary Principle’ and ‘Adaptive Management’?

Interviewees also indicated that there are potentially important fault lines among CEMA members around the application of the precautionary principle and the commitment to adaptive management. These comments reflect the perception that information gaps and uncertainty have been an obstacle to reaching consensus on specific management response thresholds and ‘hard’ regulatory limits.

The precautionary principle and adaptive management are two general approaches to decision making in the face of scientific uncertainty and risk. The precautionary principle states that uncertainty should not be used as a reason to delay action when doing so creates a risk of serious and potentially irreversible environmental harm. Adaptive management, at least as this term is commonly used, means the incorporation of monitoring and feedback loops into management and regulatory decisions so that they can be modified over time in response to changes in scientific knowledge and policy preferences.

While most if not all CEMA members would likely endorse these principles, there appear to be significant differences in opinion on whether or not they are being applied in practice to oil sands development. In particular, interviewees from ENGOs and Aboriginal organizations and some consultants and government participants in CEMA stated unequivocally that in their opinion CEMA is not applying a precautionary approach to environmental management. Their perspective is that continued approval of oil sands projects given the absence of needed management frameworks for cumulative effects and the considerable uncertainty around mitigation and reclamation cannot be squared with precautionary management.

While acknowledging scientific uncertainty about ecosystem response to various levels of impact, these CEMA participants feel strongly that precautionary limits on development should be set in the short term. The risk that they see of a failure to adopt this precautionary approach is that, given the pace and scale of development in the oil sands region, thresholds for acceptable impacts will be crossed before they are identified with greater precision. They are also concerned that project approvals and development are effectively 'locking in' impacts that may ultimately be found to be unacceptable.

Not all interviewees shared this view. Several interviewees argued that the benefits of proceeding with development immediately should not be foregone because of potential environmental risks. Advocates of this approach also argued that there remains ample opportunity to adjust regulatory requirements in order to meet environmental management objectives that will emerge from CEMA and government regulators in due course.

This argument clearly shows the link between the precautionary principle and adaptive management, thereby highlighting another area where some interviewees identified a significant fault line within CEMA. Advocates of a precautionary approach argue that adaptive management in the oil sands regions should entail early action to identify thresholds and set limits, followed by further scientific research and monitoring to determine whether or not compliance with these limits will achieve identified environmental and other objectives. These initial limits can then be adjusted – either tightened or relaxed – as this new information becomes available and as participants in CEMA confirm or revise their objectives.

Interviewees advocating this approach argue that CEMA's inability to reach consensus reflects the fact that other participants have a fundamentally different approach to adaptive management. The perception is that those opposed to setting limits now see adaptive management as a process that will adapt to unacceptable impacts when there is a high level of certainty that they are occurring or will occur. In other words, adaptive management from this perspective means full speed ahead with development now and adapt later if and when problems arise.

It is not easy to determine the extent to which CEMA members share fundamentally different views on these key principles of environmental management, or simply differ on how they should be applied in specific circumstances. For present purposes it is sufficient to note that there is a perception among some CEMA members that important differences in this area exist and are an impediment to progress. These perceptions are likely to be reinforced if CEMA's performance gap continues to widen, thereby undermining the confidence that there is sufficient agreement on common principles among CEMA members to provide the basis for consensus decision making.

6.7. Is CEMA Responding Appropriately to Delays Resulting from Information Gaps and Value Conflicts on Key Issues?

Whatever fault lines may separate CEMA members on the subject of precautionary and adaptive principles of environmental management, there was broad agreement among interviewees on the need for a better way of ensuring that obstacles to consensus decision making result do not result in excessive delays. The key issue is how CEMA as a consensus-based process charged with making recommendations to regulators should respond to the tendency to defer decisions in the face of scientific uncertainty and value conflicts. Many interviewees commented that CEMA needs a way of deciding when 'enough is enough' in terms of information collection and debate.

A common theme from interviewees representing several sectors is that many CEMA members seem unwilling to accept that decisions can and should be made despite scientific uncertainty. Several interviewees commented that representatives from all sectors within CEMA have been reluctant to move forward on the basis of "80% certainty", even if pushing further toward 100% will take significantly more time and effort and may not yield better decisions. For industry, the concern was characterized by one interviewee as an unwillingness to spend significant amounts of money or potentially constrain development when there remains some uncertainty about the effectiveness of these measures in achieving desired environmental outcomes. This interviewee also argued that Aboriginal organizations and ENGOs have sometimes been reluctant to agree to recommendations in the face of uncertainty about their effectiveness.

From both perspectives, there is a tendency to ask for more information before reaching closure. The consequence, however, may be what one interviewee characterized as "paralysis by analysis". The reluctance to make decisions in the face of uncertainty may be compounded by a lack of faith that these decisions can be revisited in the future in light of better information.

One response to this problem would be to issue interim recommendations, pending further work to resolve scientific uncertainty. Some interviewees strongly supported the increased use of interim recommendations. However, it appears that the resistance to this approach within CEMA sometimes takes the form of arguments that all regulations are

‘interim’ in that they may be modified in light of new information, new technology, changing environmental conditions or changing social, economic and political priorities. From this perspective, the key factor in determining when a recommendation can be developed is whether or not there is sufficient certainty around key issues to warrant regulatory action. This leads back to a debate about the adequacy of current information and the need for more studies and discussion. One interviewee argued that progress had been blocked by these circular discussions about the level of certainty required for CEMA to recommend interim measures.

Several interviewees indicated that the problem of determining when ‘enough is enough’ has been recognized within CEMA and that steps are being taken to address it. One response would be for working groups to be more rigorous in setting and adhering to time lines. In some cases, accepting that CEMA cannot reach consensus within a specified time and that the issue should be handed off to regulators for a decision may be the appropriate response. Giving CEMA members more confidence that interim decisions can be revisited later through a credible process of adaptive management might make it easier to move forward in the face of uncertainty. However, some interviewees suggested that the obstacles to consensus building may be more rooted in the incentives facing some participants in CEMA, with issues relating to scientific uncertainty and the challenges of consensus building serving as pretexts for delaying decisions.

6.8. Are the Incentive Structures for Participants in CEMA Contributing to the Performance Gap?

Many interviewees commented on the incentive structure facing CEMA members, suggesting that these incentives are an important factor contributing to the performance gap. The most common argument is that members of CEMA from industry and the Government of Alberta benefit directly from the policy and regulatory status quo, which permits continuing sales of mineral rights in the oil sands area and a rapid increase in approvals for new and expanded projects in the absence of a comprehensive framework for managing cumulative environmental effects. These member organizations, the argument goes, have strong incentives for delaying progress on the development of regulatory measures to address cumulative effects if these measures could constrain overall development, increase costs, or make it more difficult to get approval for new projects or project expansions. Their interests are seen to be well served by prolonging CEMA’s deliberations and undertaking more scientific studies, while continuing full speed with securing project approvals.

Several other arguments were advanced to support this characterization of the incentive structure facing industry. Companies that have already secured approvals and committed themselves to significant capital investments in plant and equipment may be able to make the case that they have limited ability to adapt to new constraints that could

be viewed as retroactive changes to regulatory requirements. Furthermore, if cumulative limits on water withdrawals, air emissions and landscape disturbance are likely in the future, it arguably makes sense for companies to grab their share of these potentially scarce resources before these limits are set. While some retrospective reallocation of entitlements may be inevitable, experience with environmental regulation suggests that established operations are often better positioned than new entrants when constraints are imposed.

Interviewees from industry disagreed strongly with this characterization of their incentive structure. They argued that industry dislikes the regulatory uncertainty that will persist until frameworks for managing cumulative effects are in place. As a result, they said, industry's interests are served by the timely completion of CEMA's work. Company representatives pointed out that retrospective changes to environmental regulations have occurred in the past, despite significant financial implications for industry. For example, some companies incurred large expenses to retrofit facilities in response to limits on sulphur emissions. Interviewees from industry therefore felt that their companies will incur significant financial risks if they proceed with designing and building facilities based on mistaken assumptions about future regulatory constraints in relation to issues such as water availability, air emissions or land disturbance.

This position was endorsed by one non-industry interviewee who stated that CEMA participants from industry tend to be environmental managers who believe in the need to regulate cumulative effects and operational people who simply want certainty for project planning. He therefore discounted arguments that CEMA's performance gap may be linked to incentives for industry to delay regulatory measures.

In response to this argument, several interviewees expressed skepticism about the regulatory uncertainty facing industry and the real risk of unanticipated changes to approvals and regulatory requirements. From their perspective, Alberta has consistently provided a very favourable and predictable regulatory and policy environment for the oil sands industry. These interviewees were also doubtful, based on experience to date, that the Alberta government is likely to have the political will to impose significant constraints on the oil sands industry by way of 'retroactive' changes to approvals and regulatory requirements. The alignment of economic interests between the oil sands industry and government and the unparalleled ability of industry leaders to influence policy through 'back door' access to decision makers are two key reasons why several non-industry interviewees discounted the argument that regulatory uncertainty is a significant driver for industry when compared with the advantages of delaying constraints until project approvals are in hand.

Another argument raised by company representatives is that because they are paying the costs of CEMA and committing significant time to this process, they have a strong interest in seeing it succeed. Furthermore, they argued that CEMA's performance gap has created additional controversy and uncertainty at the project review stage. Issues not

resolved through CEMA will constitute recurring obstacles for project applications. As discussed in more detail below, CEMA's slow progress has also meant that potential benefits of a regional approach to cumulative effects issues for the cost and efficiency of project review processes have not yet been realized. For these reasons, it was argued, timely completion of CEMA's work would yield tangible benefits to industry as it seeks approval for new projects.

Once again, ENGO and Aboriginal interviewees in particular expressed skepticism about these arguments. One interviewee noted that CEMA has effectively provided "cover" for industry and for the EUB on issues relating to cumulative effects. Project proponents and the Board have been able to point to CEMA as the appropriate venue for resolving these issues, thereby avoiding the need to address them in detail within the project review process. Although increasing concerns with CEMA's performance gap has made it impossible to ignore cumulative effects altogether in EUB hearings, the discussion in recent Board decisions has tended to focus on the effectiveness of CEMA rather than the actual cumulative environmental effects of oil sands development. The ENGO and Aboriginal argument, then, is that the benefits at the project review stage of shifting cumulative effects issues to another forum may outweigh the costs to industry of funding and participating in CEMA.

The incentives facing ENGO and Aboriginal participants in CEMA were also discussed in some interviews. Interviewees from these groups argued that they see an urgent need to implement regulatory limits and frameworks to manage cumulative effects given the pace and scale of oil sands development. However, one interviewee from industry expressed the view that some participants from other sectors may not in fact want CEMA to succeed. This comment was based in part on the observation that some groups, particularly Aboriginal groups, are questioning their involvement in CEMA (or, in one case, had formally withdrawn) at a time when this interviewee felt that CEMA had significantly improved its effectiveness and was making good progress in several areas.

Another view was that some non-industry participants may have an interest in showing that CEMA cannot work in order to strengthen arguments in other forums that the pace of oil sands development should be slowed. The political, legal and regulatory leverage exercised to date by ENGOs and Aboriginal groups suggests that this would be a risky strategy, although Aboriginal groups in particular may have some significant legal resources that they have not yet used to full advantage.

The suggestion was also made that some ENGO or Aboriginal participants may lack incentives to pursue consensus-based decision making because they have already taken rigid positions about the outcomes that they want to see from CEMA. In particular, one interviewee suggested that some of these groups may be unwilling to participate constructively in CEMA when the scientific evidence does not support their predetermined positions. As with other comments about underlying incentives and motives, this assertion cannot be verified on the basis of interviews conducted for this

project. A reluctance to shift from fixed positions when other parties feel that scientific evidence does not support those positions could be related to different perceptions of risk and the role of precautionary and adaptive approaches to environmental management, as discussed above. Aboriginal groups may also be basing their positions on traditional environmental knowledge that yields different conclusions than those derived from currently available western science.

Sorting out the incentive structures facing participants in CEMA is further complicated because it may be inappropriate to generalize within sectors. Some interviewees – including company representatives – pointed out that differences may exist among companies' approaches to CEMA. These differences may be reflected in the fact that certain companies are seen as active participants in leading CEMA, while others appear less committed to contributing to progress. One non-industry interviewee commented, however, that industry tends to “run as a pack” in CEMA meetings, with an apparent reluctance of the companies to break ranks on key issues. The result, according to this interviewee, is that the industry position tends toward the lowest common denominator, which means lower levels of environmental performance.

Aboriginal groups and ENGOs also differ from each other in terms of their objectives, strategies and incentive structures. For example, one interviewee noted that the concerns of some Aboriginal groups with cumulative effects may be balanced against the tangible economic benefits that they receive from oil sands development. Another interviewee suggested that Aboriginal withdrawal from CEMA may be related to negotiations with government to secure funding for monitoring programs and capacity building. Some Aboriginal groups are also vulnerable to pressure and may modify their behaviour accordingly. For example, it was noted that one Aboriginal group experienced economic pressure in the form of a significant decline in contract opportunities and other benefits when it objected strongly to a development proposal. Similarly, the incentives facing ENGOs may differ depending on their overall objectives regarding oil sands development and the opportunities that they see for achieving tangible gains through bilateral negotiations with individual companies.

The incentive structures motivating CEMA participants are undoubtedly complex and their implications are difficult to determine. Nonetheless, there is clearly a widespread perception that incentives to ‘foot-drag’ are contributing to the performance gap. Identifying and changing these incentives might therefore help to close that gap. Efforts to address this issue may also be warranted because the perception that some CEMA members are both contributing to and benefiting from delay has the potential to damage the relationships among stakeholders that are important for consensus building.

6.9. Is CEMA's Performance Gap Linked to its Relationship with the EUB's Project Review and Regulatory Process?

CEMA was created in response to the challenges of addressing cumulative effects through project-specific environmental assessment and regulation, so it is worth considering possible linkages between CEMA's performance gap and the EUB process. The initial hope and expectation, as described above in Sections 2.1 and 4, was that addressing cumulative effects on a regional basis through CEMA would yield both better environmental management and a more efficient environmental assessment and regulatory process. It appears that this synergy has yet to be achieved. In fact, the relationship between CEMA and the EUB process is problematic in several respects and may be contributing to the performance gap.

As noted above, EUB hearings compete with CEMA for human resources, providing a magnet for both CEMA participants and private consultants. Several interviewees commented that CEMA's delays, in turn, have meant that the expected benefits of regional cumulative effects frameworks in streamlining project-specific environmental assessments and EUB hearings have not been realized.

The pressures may be accentuated if some CEMA members come to the conclusion that CEMA's performance gap is chronic and widening in part because the EUB continues to issue project approvals despite the failure of CEMA to deliver expected results. While the EUB decisions reviewed above in Section 5 raised serious concerns about CEMA's failure to adhere to time lines and even called upon regulators to step in to fill the gaps, the Board has been unwilling to apply significant regulatory pressure to CEMA. Despite stating repeatedly that it has been relying on CEMA to provide the tools necessary to carry out its statutory mandate, the EUB has yet to reject or delay a project application because of the failure of CEMA and government regulators to deliver management tools for cumulative effects.

Several interviewees expressed frustration that the EUB is not taking a firmer stand to require meaningful progress on frameworks for cumulative effects management before approving more oil sands development. They also raised the concern that the EUB is using CEMA as a convenient way to offload cumulative effects issues that might otherwise constitute an obstacle to project approvals. Some interviewees indicated that participants' commitment to CEMA could be called into question if this process seems to be stalling while the EUB continues to approve projects without creating clear regulatory incentives to close the performance gap. Even if CEMA participants stay the course, one interviewee noted that consensus building within CEMA may become even more challenging as its failure to address contentious issues means that CEMA participants find themselves increasingly in adversarial relationships within other forums, notably EUB hearings and bilateral negotiations.

Finally, several interviewees suggested that the relationship between CEMA and the EUB raised important questions about the structure of decision making for cumulative effects management. The key issue is whether the EUB's project-by-project review process is appropriate in the context of the massive regional development that is underway in the oil sands region. From this perspective, the disconnect between CEMA's performance gap and the EUB's continuing approval of oil sands projects may be a symptom of deeper structural problems that should be addressed through an integrated regional approach to land-use planning, mineral rights issuance, and project review.

6.10. Is the Government of Alberta Playing the Appropriate Role Within CEMA and Establishing the Conditions for its Success?

Despite their different views on other issues, there appears to be almost universal agreement among interviewees that the Government of Alberta bears significant responsibility for CEMA's performance gap. Interviewees raised concerns in six areas.

The first point is the perception that the Alberta government handed off many of the important issues identified in the RSDS Document to CEMA and then provided no further significant leadership. Several interviewees stated that the government essentially left participants in the CEMA to struggle with these complex issues in a policy vacuum and without the procedural assistance needed to make the consensus-based process work effectively. For example, one interviewee commented that government did not step forward to provide independent facilitation and guidance on multi-stakeholder decision making.

Second, several interviewees raised concerns that the government's overall policy on oil sands development has undermined CEMA's efforts to develop a management framework for cumulative effects. In particular, there is a perception that the government's policy of facilitating and encouraging rapid development of the oil sands in response to market forces and through fiscal incentives brings with it a reluctance to take regulatory measures that could slow down project approvals and the pace of development. Several interviewees see this policy as manifesting itself in decisions by the Department of Energy to issue oil sands leases and in project approvals by the EUB, despite the fact that the regulatory framework for managing cumulative environmental effects is not yet in place. In this policy context and without a credible 'regulatory threat', several interviewees suspect that government sees CEMA as a 'parking lot' for issues rather than a source of impetus and input to cumulative effects management. Another interviewee argued that the policy vacuum relating to cumulative effects means that CEMA is confronted with value conflicts and trade-offs that it is not able to address.

A third area of concern, shared by almost all interviewees, is that the Alberta government's participation in CEMA is inadequate. One common complaint is that the provincial representatives are too junior to play an effective role. In particular, junior

officials do not have decision-making authority, may not understand their department's position on key issues, and may have inadequate technical expertise to address the issues that CEMA is examining. As a result, they cannot contribute effectively to decision making and too often simply play the role of rapporteur, taking the results of CEMA discussions back to their departments.

A closely related issue is the perception that government representatives in CEMA are often either unable or unwilling to take clear positions or provide guidance on important issues. The inability or reluctance of government representatives to indicate their positions is detrimental to the process because stakeholder effort may be wasted if the recommendations that they produce are based on inaccurate assumptions about government policy direction. One interviewee noted that government representatives had been slow to indicate that the course of action taken by a CEMA working group was departing from the government's policy direction. Another indicated that time was being spent examining land-use scenarios that might not be politically realistic. The comment was also made that some government representatives appeared to be pursuing "personal" agendas that did not reflect their department's positions. Several interviewees argued that involvement from the Deputy Minister or Assistant Deputy Minister levels would provide valuable input to CEMA when setting objectives and selecting policy options to include in recommendations.

The provincial government's commitment to implement CEMA's recommendations is a fourth area of concern. While some interviewees argued that the record thus far is positive, others felt that implementation of consensus recommendations on contentious issues is far from certain given the government's overall policy direction (noted above) and its low-profile role within CEMA. Once again, the contrast with CASA is striking. Information published by CASA states that participating provincial government departments "have committed to support CASA's consensus recommendations for decision and implementation by the Alberta Government."¹¹³ This commitment implies active government involvement in helping to shape consensus recommendations that senior bureaucratic and political decision makers will be likely to endorse. It also provides a clear signal to other stakeholders that efforts to reach consensus will likely yield tangible results. Thus far, the Government of Alberta has not made a similar formal commitment to implement consensus recommendations from CEMA.

The fifth area of concern is the Government of Alberta's response in the event that CEMA fails to deliver results in a timely manner or cannot achieve consensus on important issues. The commitment by government to take action in these circumstances has been referred to by the EUB and others as a regulatory 'backstop' for CEMA. This terminology is itself problematic for some interviewees, because it appears to imply that primary responsibility for action rests with CEMA. One interviewee argued that backstop

¹¹³CASA, *supra* note 112, p. 4.

analogy is completely inappropriate because the process of managing cumulative effects should be led by government, with CEMA providing a vehicle for stakeholder input on the appropriate regulatory responses.

Many interviewees also felt strongly that multi-stakeholder processes like CEMA are likely to be much more productive and focused if government has clearly identified a problem to be solved and has indicated that it intends to decide on and implement regulatory and policy changes itself should the multi-stakeholder process fail to produce consensus recommendations. Here again, CASA provided a basis for comparison. Several interviewees noted that one factor contributing to CASA's success on certain high profile issues such as flaring and venting was the recognition by everyone at the table that government had acknowledged the seriousness of the problem and indicated that regulation was inevitable. In this context, the task at hand was to fashion a regulatory solution that met, to the extent possible, the needs of all stakeholder groups. The incentive structure was conducive to consensus building because of a fear that a government-imposed solution was a less favourable option. This situation was contrasted with CASA's failure to make progress on issues where the problem was apparently not a priority for government and there was little credible threat of regulatory action (e.g., greenhouse gas emissions).

Several interviewees argued, therefore, that for every issue addressed by CEMA there should be a clear commitment by government to move ahead with regulation within a specified time period, whether or not CEMA succeeds in reaching consensus recommendations. Under these circumstances, it was argued, CEMA would face strong incentives either to reach consensus or to clearly define options and areas of disagreement among participants. One interviewee stated, however, that the threat by government to take the issue out of the consensus-based process after a certain time period would inhibit compromise and failed to recognize the time-consuming nature of consensus building.

Several interviewees also raised specific concerns regarding the exercise of government's 'backstop' role in relation to instream flow needs (IFN) for the Athabasca River. In this instance, CEMA completed a significant amount of work but was ultimately unable to reach consensus. Under pressure from the EUB, Alberta Environment stepped in to provide the regulatory 'backstop' and CEMA handed over its work at the end of 2005. A draft management framework was released by Alberta Environment in 2006 and the final version was issued on March 1, 2007. Several interviewees commented that the long delay in issuing the final framework undermined the credibility of government's 'backstop' role. One interviewee argued that the delay was difficult to understand because most of the work had already been completed by CEMA.

Another concern was the lack of transparency in decision making once government stepped in and the perception that there was considerable 'backroom' pressure from

industry and certain interests within the provincial government to weaken the IFN requirements. However, one interviewee argued that government's consultative process when developing policy is necessarily different from the transparent multi-stakeholder discussions within CEMA and that the potential for behind-the-scenes lobbying is an inevitable consequence of transferring leadership from CEMA to government.

The sixth set of concerns centres on the relationship between CEMA and the government's decision-making processes relating to land use, resource management and cumulative effects. Inadequate land-use planning, the Department of Energy's approach to issuing mineral rights and the limitations of project-by-project reviews by the EUB were all identified as structural issues with implications for CEMA. From this perspective, the need to enhance government's role in relation to CEMA goes beyond more effective participation and creating a credible 'regulatory threat' to promote consensus building by stakeholders. Changes to the overall structure of government decision making will also be necessary in order to improve cumulative effects management.

6.11. Summary and Implications

The research and interviews conducted for this paper indicate that a range of factors may be contributing to CEMA's performance gap. These factors include the complexity of issues relating to cumulative effects management in the oil sands region, deficiencies in the design and implementation of CEMA's consensus-based process, divergence between participants on objectives and approaches to environmental management, incentives facing some member organizations that impede progress towards consensus, and the lack of government leadership within CEMA and in establishing the conditions for its success.

The review of these and other issues in the preceding sections has canvassed the range of views expressed by interviewees, but in many instances it is difficult to reconcile different perspectives and reach definitive conclusions about the contribution of specific factors to CEMA's performance gap. Nonetheless, the information and ideas presented above raise some serious concerns about the future of CEMA and also suggest several areas for action to close the performance gap. This section of the paper discusses briefly the implications of the picture of CEMA that emerges from the interviews. The paper then turns to possible next steps in Section 7.

The support in principle for a multi-stakeholder and consensus-based approach to cumulative effects management in the oil sands region has been demonstrated by the tremendous amount of time and effort that stakeholders have devoted to CEMA since its creation. Commitment to CEMA is, however, being severely tested for some stakeholders by the concerns, fault lines and uncertainty that are evident from the discussion of factors contributing to the performance gap. CEMA's performance gap may also trigger a negative dynamic, where participants are suspicious of the motives of other member

organizations and where attempts to build trust and identify common interests within CEMA are undermined by increasingly adversarial interactions within CEMA and in other forums. CEMA has also been subject to public criticism by some members, something that one interviewee argued was damaging to the process.

Frustration with the performance gap could reach a tipping point for CEMA if enough key participants withdraw from the process. Several interviewees stated that some Aboriginal groups feel that their concerns are not being listened to and addressed within CEMA and that, as a result, two groups have already withdrawn and others may follow suit. According to some interviewees, it might be difficult or impossible for CEMA to survive the departure of the Aboriginal participants. Another interviewee said that at least one ENGO had also indicated that it will not participate indefinitely if CEMA fails to deliver timely results in key areas.

While CEMA is clearly under strain and several interviewees stated that its may be close to the brink, the alternative to this process remains uncertain. The collapse of CEMA might change the political dynamic around oil sands development. Groups that have moderated their criticisms in the interests of promoting consensus building through CEMA might take more aggressive positions in public debate and through legal and regulatory channels. This new political dynamic might open up or close various options for managing cumulative effects. Predicting the course of events is not easy.

The collapse of CEMA could also create significant problems for the existing environmental assessment and regulatory processes. As discussed above in Section 2.2.2, regional initiatives such as RSDS and CEMA have been promoted as a response to the difficulties of cumulative effects assessment within project-specific review processes. Having agreed that its ‘public interest’ mandate requires consideration of cumulative effects, it is unclear how the EUB would react if CEMA collapsed and government regulators were unwilling or unable to step in to establish regional management frameworks. CEMA’s collapse could also have implications for oil sands projects that trigger federal environmental assessments under the *Canadian Environmental Assessment Act* because of the reference in that statute to reliance on “regional studies” (subsection 16.2).

Several interviewees commented, however, that CEMA’s collapse would not remove the fundamental obstacles to cumulative effects management, but rather would shift both conflict and problem solving to other forums. Interviewees were not asked specifically about the implications of further erosion of commitment to CEMA on the part of key stakeholders, but several people made the point that the essential challenges of establishing the scientific basis for management decisions, consulting with interested parties, and attempting to reconcile competing interests and values would have to be addressed with or without CEMA. Furthermore, a number of interviewees suggested that shifting CEMA’s function to government would not necessarily result in more rapid progress.

As discussed above, one point that most interviewees agreed on it is the insufficient leadership and commitment to CEMA – and, by implication, to cumulative effects management – that has been shown thus far by the Government of Alberta. The delays in implementing the regulatory ‘backstop’ for instream flow needs (IFN) were also cited as illustrating limitations in government’s capacity and political will. Furthermore, one interviewee pointed out that the collective expertise from various sectors that is currently harnessed through CEMA would be virtually impossible to recreate within a regulatory agency.

In important respects, therefore, if CEMA ceased to exist it would have to be re-invented. This conclusion has important strategic implications. It appears likely that most interviewees are interested in improving CEMA and creating conditions for success. Despite the frustrations, closing the performance gap is generally regarded as preferable to closing down CEMA at the present time. This situation creates a window of opportunity to take decisive action to address the serious concerns that were summarized above and that have been documented in EUB decisions and elsewhere.

7.0. Closing CEMA’s Performance Gap and Testing its Capacity to Deliver Results

Participants in CEMA clearly believe that a number of important issues may be contributing to the performance gap. However, the range of views on these issues suggests that it will be difficult to arrive at a definitive explanation of this problem. There are obviously many unanswered (and in some cases unanswerable) questions that emerge from the views canvassed in Section 6 of this paper. For example, it is difficult to determine whether the interests of some CEMA members are really served by delaying the process and how this incentive structure may be affecting their behaviour. It is also challenging to determine the extent to which different understandings of the objectives for cumulative effects management and the measures to be included in management frameworks are in fact obstacles to consensus-building within CEMA. On other issues as well, explanations of the performance gap remain untested and controversial hypotheses.

Despite this uncertainty, there is significant consensus in several important areas. There was broad agreement among interviewees that CEMA needs to be more rigorous in setting and adhering to time lines and maintaining focus on key issues. Many interviewees also agreed that procedures must be in place to determine when ‘enough is enough’ – in terms of the information required for decision-making and the time that should be devoted to consensus building. If consensus decisions cannot be reached in a timely manner, most interviewees suggest that issues should be moved forward by handing off the work accomplished at that point to regulators. Finally, there is virtual

unanimity that the Government of Alberta has an important role to play in closing the performance gap.

These areas of consensus suggest that agreement on measures to close the performance gap may be easier to achieve than full agreement on its causes. Several options could be pursued to create favourable conditions, establish benchmarks and accountability mechanisms, and align incentives so that CEMA will be more likely to generate deliverables in a timely fashion. Furthermore, uncertainty about the objectives, interests and incentives governing the behaviour of CEMA members may be resolved in practice by putting the process to the test.

The next steps for CEMA could therefore be directed to achieving two objectives. The first is to strengthen the process and build conditions for success. The second objective is to specify measurable objectives against which to test CEMA's ability to deliver results. The following sections consider briefly a range of opportunities to achieve these objectives by improving CEMA's effectiveness and efficiency, strengthening the Alberta government's role in support of CEMA, and addressing underlying obstacles to cumulative effects management.

7.1. Improve CEMA's Effectiveness and Efficiency

Improving CEMA is a logical place to bring efforts to close the performance gap. There are three broad options for bringing results in line with expectations: (1) modify expectations so that they are more realistic; (2) increase CEMA's capacity to generate results quickly; and (3) narrow the focus of CEMA in order to accomplish more in key areas. Interviewees made specific suggestions in all of these areas.

Options for improving CEMA's performance include:

- Reconfirm with CEMA members the strategic objectives and the overall vision for cumulative effects management in the oil sands region – notably by achieving greater clarity, if possible, on the meaning and practical implications of precautionary and adaptive management and on the role and importance of management thresholds and regulatory limits within management frameworks.
- Set clear and realistic timelines for delivery of recommendations in priority areas and provide the oversight, support and accountability mechanisms within CEMA to ensure that these time lines are met. Accountability mechanisms within CEMA should be reinforced by commitments to timely action by government departments and the EUB.
- Make a firm commitment to present interim recommendations in instances where scientific uncertainty persists at levels that make some or all participants reluctant

to sign off on definitive recommendations – recognizing that all regulatory and management recommendations are interim in the sense that they should be subject to periodic review and revision in light of new scientific information or changes in management objectives.

- Break through the circular discussions around the amount and quality of information and the degree of consensus building that is needed for ‘interim recommendations’ by clearly defining this term to mean recommendations based on the best available scientific information, risk analysis and professional judgment of CEMA participants at a specified point in time (or before project approvals or development on the ground reach specified thresholds).
- Develop an ‘adaptive management’ protocol for ongoing research and consensus building following the submission of interim recommendations, thus providing CEMA members with assurance that there is a systematic process for revisiting recommendations that were made in conditions of scientific uncertainty.
- Develop a clear protocol for moving issues forward when consensus cannot be reached – including guidelines and a process for determining when efforts to reach consensus should be terminated and attention shifted to providing a non-consensus report to regulators that incorporates the work accomplished to date by CEMA, identifies issues where consensus was achieved, and sets out a range of options for addressing the issues where consensus was not attainable (including a summary of the arguments for and against these options from the perspective of CEMA members).
- Streamline operational decision making within CEMA in order to reduce the procedural barriers to consensus decision making in a body with over forty member organizations. Options could include delegating more tasks and responsibility to a senior management group (perhaps comprised of sectoral representatives), increasing the frequency of meetings, making use of independent facilitators to expedite discussions, and providing additional support and training to CEMA members in order to enhance their ability to function effectively in a multi-stakeholder and consensus-based decision process.
- Implement a rigorous process for identifying specific priorities and drafting precise terms of reference for CEMA working groups in order to ensure that effort is focused in key issues, improve accountability, and reduce the risk of ‘drift’ away from initial priorities.
- Develop and obtain endorsement from CEMA members for clear guidelines that define expectations for CEMA participants in terms of seniority of representation, time commitment, level of involvement and continuity of representation – and create internal incentives or procedures to encourage active participation by

CEMA members, empower those who make significant contributions to the process, and reduce the ability of ‘seat warmers’ and intermittent participants to slow down decision making.

- Define expectations regarding information sharing, so that all CEMA members can be confident that they have access to the best available information (while respecting the need for confidentiality for some commercially sensitive information).
- Establish an internal tracking and public reporting process to improve transparency and accountability by regularly documenting progress against objectives and benchmarks.
- Establish a procedure and time line for the periodic evaluation of CEMA’s strategic priorities, operations, and success in achieving deliverables. These evaluations should incorporate systematic input from CEMA members and could be undertaken either internally by the CEMA Board or through an external audit of the process by independent experts.¹¹⁴ Clear terms of reference for the review or audit would be developed in advance and approved by CEMA members. The results of the audit or review, including recommendations for improving the process, would be presented in a publicly available report.

Useful guidance on many of these issues is readily available from the extensive experience of CASA in addressing complex environmental management issues through a multi-stakeholder and consensus-based process. While the CASA model may not be directly transferable to CEMA in all respects, it appears from the interviews that opportunities for CEMA to benefit from CASA’s experience have not been fully explored. Furthermore, a systematic evaluation of CASA’s strengths and limitations combined with an examination of relevant differences between the two processes and the issues that they are addressing could provide useful information to CEMA as it struggles with the performance gap.

There are no guarantees, of course, that implementing some or all of these options for improving CEMA will succeed in closing the performance gap. It is possible that the fault lines regarding key objectives and management approaches that now divide CEMA members cannot be bridged. It is also possible that improving CEMA’s process from within is a necessary, but not sufficient, precondition for closing the performance gap because of the influence of other factors. Nonetheless, the options identified above could create significant incentives and opportunities for improving CEMA’s efficiency and

¹¹⁴Precedents for this type of audit are the reports of the Federal Commissioner for the Environment and Sustainable Development and the Northwest Territories Environmental Audit, undertaken pursuant to Part 6 of the *Mackenzie Valley Resource Management Act*.

effectiveness and they would also have advantage of putting the process to the test in important respects.

7.2. Strengthen the Government of Alberta's Role

The Government of Alberta's ultimate responsibility for managing the cumulative effects of oil sands development stems from its authority to set policy on land and resource use and its role as the owner and primary steward of public land and resources. Interviews for this study suggest that there is a broad consensus among CEMA participants that the government can and should assume a leadership role in closing CEMA's performance gap. In particular, the Government of Alberta could:

- Update the RSDS, beginning with a review of the identification and prioritization of issues and the time lines for action that were included in the original RSDS Document. The RSDS could also be fleshed out into a more complete strategic framework for managing cumulative effects. In particular, it could bridge the gap between the very general statements of principle and the work plans for specific issues by providing more details on the government's environmental objectives for the oil sands region and the legal, policy and institutional means that will be used to achieve those objectives.
- Provide leadership and direction to CEMA by setting specific objectives and time lines and making a firm commitment to regulatory action in the event that CEMA does not deliver recommendations within the specified time.
- Make a clear commitment – as Alberta Environment has done in CASA – that government departments will act as champions within policy, legislative and regulatory processes to take forward and implement consensus recommendations from CEMA. This commitment would require a firm undertaking at the political and senior bureaucratic level to move forward with cumulative effects management for the oil sands region and it would demonstrate a significant measure of confidence in CEMA.
- Establish a protocol for moving forward with regulatory and management decisions when CEMA fails to reach consensus. This process should reflect the fact that even when CEMA cannot reach full consensus, it may have initiated valuable scientific research, narrowed the areas of disagreement, identified key issues where uncertainty remains, evaluated the risk associated with this uncertainty, highlighted differences in values and objectives among stakeholders, and explored the rationales for various policy options and their environmental, financial and other implications.

- Establish a transparent and predictable process for adaptive management whereby policy and regulatory decisions are systematically reviewed. CEMA could be given a central role in this review process.
- In situations where CEMA recommends interim measures or fails to reach consensus and hands the issue over to regulators to resolve, enable CEMA to remain engaged in addressing information gaps and exploring management options.
- Make participation in CEMA a priority in terms of staff time and resources, notably by ensuring that government representatives are sufficiently senior and well briefed to enable them to make commitments on behalf of their departments and provide useful direction to CEMA regarding government policy direction and receptivity to proposed recommendations.
- Work with CEMA to provide support in areas such as assistance with multi-stakeholder processes, independent facilitation, and capacity building for Aboriginal participants.

Leadership and direction from the Government of Alberta is critical to closing CEMA's performance gap. Government is ultimately responsible for oil sands regulation and its more active engagement in and support for CEMA would send a clear message to stakeholders that this process is important. Focusing attention on the role that government is willing to play in CEMA is also a way of testing this process. For CEMA members who are suspicious that government is using CEMA to deflect issues and defer decisions and who doubt the government's commitment to managing cumulative environmental effects in the oil sands region in order to respect their environmental, social and cultural values, actions such as those enumerated above might be more persuasive than words as they decide whether or not to continue participating in this process.

7.3. Address Underlying Obstacles to Cumulative Effects Management

The final approach to narrowing or closing CEMA's performance gap is to address underlying problems that make it extraordinarily difficult to manage cumulative effects in the oil sands region. While a detailed discussion of these problems is beyond the scope of this paper, three issues are touched on in this section: (1) the pace of oil sands development; (2) the structure of decision making on land and resource use; and (3) the legal and policy framework for Aboriginal consultation in Alberta.

The pace of development is a key factor in CEMA's widening performance gap because many participants feel that progress in developing the regulatory framework for cumulative effects management is slow, while the growth of the oil sands industry is

accelerating. A logical solution from the perspective of environmental management would be to slow the pace of project approvals and development until scientific research, cumulative effects modeling, and stakeholder discussion of management options have yielded a more complete framework for addressing cumulative effects.

Several ENGOs and Aboriginal groups participating in CEMA are calling for a pause or temporary moratorium on the sale of oil sands leases and on new approvals by the EUB because they view this option as the only realistic way that environmental management can get ahead of development. Their argument is that if CEMA is perpetually playing catch-up, limits of acceptable ecological impacts may be crossed before they are even identified and opportunities to identify important environmental values, evaluate trade-offs and direct development in ways that are less environmentally damaging may be missed.

The Regional Municipality of Wood Buffalo also asked the EUB to delay new project approvals at several hearings in 2006 because of the adverse socio-economic consequences of rapid growth. The socio-economic issues parallel environmental concerns in many respects, notably the absence of effective planning, the lack of attention cumulative effects when making key decisions on energy development, and the detrimental effect of rapid growth on quality of life. Like the regulatory 'infrastructure' that is needed to manage cumulative environmental effects, the physical and social infrastructure to address cumulative socio-economic impacts appears unable to keep pace with development.

The potential role of the EUB in slowing the pace of development warrants particular attention. As shown above in Section 5, the Board has recognized that it must take cumulative effects into account when determining whether or not proposed projects are in the public interest. It has also has stated clearly that it is relying on CEMA and government regulators to provide the guidance on cumulative effects that it needs in order to discharge this legal mandate. Nonetheless, it has continued to approve projects in the absence of management frameworks for important cumulative effects. A key question is therefore whether or not the Board will reject or delay applications at some point in time if it finds itself continuing to operate in a policy and planning vacuum around cumulative effects.

The pace of development was also a principal theme in many submissions to the Multistakeholder Committee that is undertaking the Government of Alberta's oil sands consultations. Several of the principles included in the committee's interim report raise issues relating to the pace of development.¹¹⁵ If this consultation process results in recommendations for curbing the pace of development that are adopted by government,

¹¹⁵Government of Alberta, *Oil Sands Consultation Multistakeholder Committee Interim Report*, 30 November 2006, online: <www.oilsandsconsultations.gov.ab.ca>.

one benefit would be to give CEMA some breathing room to begin closing the performance gap.

The second area for a broader examination of cumulative effects management is the legal, institutional and policy structure of decision making for land and resource use. Cumulative effects management in Alberta is difficult because of a policy and planning vacuum and because the processes for issuing mineral rights and approving individual projects are not well designed to take account of cumulative effects. CEMA is charged with developing regional frameworks for cumulative effects management, but it remains unclear how these ‘outputs’ from CEMA will contribute to an integrated regime for land and resource management. The existing arrangements are incomplete and may not be effective in supporting CEMA and incorporating its recommendations into decision making.

Integrated land-use planning is one area for structural reform that is directly relevant to CEMA. Many of CEMA’s working groups are engaged in activities that are logically components of regional planning, but their relationship to an overarching policy and planning process has yet to be clearly defined. For example, it is not certain how the land-use scenarios currently being explored by the Sustainable Ecosystems Working Group (SEWG) will be translated into integrated land-use planning. Another planning and integration issue identified by one interviewee is the weak linkage between SEWG and the CEMA working group charged with developing a management framework for the Muskeg River Watershed. It is also unclear how CEMA’s recommendations will be integrated with forestry planning by Alberta-Pacific Forest Industries Inc., a company whose 5.7 million hectare Forest Management Agreement area includes a significant portion of Alberta’s Athabasca oil sands area.

Structural limitations in the planning context for CEMA also make it difficult to consider land-use objectives and trade-offs across broader spatial scales. For example, the extent and intensity of proposed development within the Athabasca oil sands area may make it very difficult and costly to achieve certain important environmental objectives, such as the persistence of some wildlife species, within that area. An argument might be made, therefore, that it would be more efficient and effective to focus attention on achieving these objectives in other areas where the direct and opportunity costs are smaller.

These types of trade-offs could be made through priority land-use zoning over large areas – such as all of Alberta or the Canadian boreal forest as a whole. The decision to sacrifice certain values within an area of intensive oil sands development could then be linked to land-use designations and management strategies directed to maintaining them in other parts of the boreal forest. There is currently no policy and planning structure at the provincial or national levels, however, that would enable members of CEMA to engage in a broader societal consideration of these types of trade-offs when setting objectives, determining priorities and designing management frameworks.

The oil sands tenure regime also raises important structural issues, since the development process is initiated by the Department of Energy's decision to issue mineral rights through an auction process in response to requests from companies. These rights issuance decisions are a key determinant of the pace and extent of development, but they are made without an effective and transparent process for considering cumulative environmental effects. The structural disconnect is underlined by the fact that, as noted by one well-placed interviewee, the Department of Energy is not an active participant in CEMA despite its key role in oil sands development.

The EUB's project review process was also identified in the interviews as a candidate for structural reform. Several interviewees argued that the existing project-by-project review process for oil sands development is no longer an efficient or effective way of regulating development and that a reorientation of the EUB's mandate and process towards a longer term, regional perspective could align it more closely with the cumulative effects issues that need to be addressed. Consideration of periodic regional hearings to examine the cumulative effects of oil sands development was also recommended by EUB Chairperson Neil McCrank in a speech delivered in March, 2007.¹¹⁶

Structural changes of this type could help to achieve the synergy between CEMA and the EUB process that was envisaged at the outset of CEMA but has not yet been realized. Placing project review and regulatory decision making in a regional context would, presumably, make approvals contingent on projects 'fitting' within regional land-use objectives and constraints relating to cumulative effects. In this context, CEMA's mandate would be central to the approval process – giving it a higher priority. Progress by CEMA could also offer more tangible benefits to project proponents, government, Aboriginal groups and stakeholder organizations in terms of facilitating regionally-focused review processes.

The third major set of structural issues relates to the legal and policy framework for government consultation with Aboriginal people. While CEMA does not constitute a consultation process from the perspective of Aboriginal representatives interviewed for this study, government's legal duty to consult with Aboriginal people regarding infringements of their constitutional and treaty rights is a central issue for the Aboriginal organizations and communities affected by oil sands development. Steps to improve consultation could yield benefits for Aboriginal participation in CEMA. Aboriginal consultation and oil sands development raises a distinct set of issues that are examined by Monique Passelac-Ross in a paper to be published by the Canadian Institute of Resources Law in the spring of 2007.

¹¹⁶Geoffrey Scotton, "Oilsands need holistic approach: regulator", *Calgary Herald* (15 March 2007) p. C1.

8.0. Conclusion

Concerns with CEMA's performance gap are evident in EUB and joint panel decisions and are clearly shared by representatives from a range of member organizations who are frustrated with the slow pace of their work when compared with the flood of new mineral leases, project approvals and development in the oil sands region. If rapid growth in oil sands development continues, there is a real risk that CEMA's performance gap will widen further.

There are, however, a range of options for enhancing and testing CEMA's capacity to contribute to cumulative effects management. Improvements to CEMA's process, a renewed and tangible commitment by the Government of Alberta to participate in and support this initiative, and attention to the underlying obstacles to managing the cumulative effects of oil sands development could together create conditions for success.

If CEMA's performance gap is not addressed, more intense conflict around oil sands development is likely and CEMA itself may eventually collapse. That outcome might create new opportunities, but at least in the short term it would also give rise to significant challenges for all interested parties. The magnitude of these challenges and the uncertainty about how they would be resolved constitute strong arguments for rapid and decisive action to close CEMA's performance gap.

Appendix 1 – Cumulative Effects Management in the Oil Sands Region: An Assessment of CEMA and RSDS

Project Overview for Interviewees

What are the objectives of the project?

This project will examine the strengths and limitations of CEMA and RSDS and the principal factors affecting the ability of these processes to achieve intended results. The project will also generate recommendations for improving cumulative effects management in the oil sands region.

Who is undertaking this project and how is it funded?

Steve Kennett, Research Associate at the Canadian Institute of Resources Law (CIRL), is undertaking this project as part of a larger CIRL project on legal and policy issues relating to oil sands development. Contact information is provided below. This work is funded by a grant from the Alberta Law Foundation. CIRL is an independent research institute affiliated with the University of Calgary. Information on CIRL is available at www.cirl.ca.

How will research findings be communicated?

The results of this project will be published by the CIRL. Copies of the publications will be sent to all interviewees.

How and when will research be conducted?

Interviews with individuals familiar with CEMA and RSDS are central to this project. Telephone interviews will be completed by the middle of February, 2007. Research will also include a review of published articles, government documents, EUB decisions and other relevant material.

Will interviewees be quoted directly in publications?

No. Interviews will be conducted on a confidential (not for attribution) basis and interviewees' comments will not be quoted or referred to in publications from this project in a way that could be traced to identifiable individuals. The purpose of the interviews is to inform the researcher's analysis of the strengths and limitations of CEMA/RSDS.

What issues will be raised in the interviews?

Interviews will be open format, allowing interviewees to raise any issues relating to CEMA and RSDS that they consider to be important. Interviewees will also be asked the following questions:

1. What does the experience with CEMA and RSDS tell us about the appropriateness of the objectives set for these processes and the level of effort required to achieve these objectives?
2. What issues have CEMA and RSDS been most successful in addressing and what issues have proven to be most challenging? Why?
3. What features of the design and implementation of CEMA and RSDS have been most and least successful?
4. What factors external to CEMA and RSDS have been most important in determining their level of success in achieving their objectives?
5. Are challenges relating to the complexity of issues to be addressed and the adequacy of funding and human resources the root causes of difficulties experienced by CEMA, or are they symptoms of more fundamental issues affecting the success of this initiative?
6. Have the basic assumptions underlying the CEMA model for addressing cumulative effects in the oil sands region proven to be valid? For example, is a multi-stakeholder, consensus-based process the appropriate way of addressing the issues identified in RSDS and by CEMA? Do stakeholders have sufficiently similar interests, objectives and levels of commitment to enable them to achieve meaningful and timely progress on cumulative effects management?
7. Is the incentive structure that applies to CEMA as a whole and to its individual members conducive to timely progress on cumulative effects management? What are the incentives for progress and how might they be strengthened? If there are disincentives to progress, what are they and how might they be addressed?
8. Have the regulatory and policy ‘backstops’ for CEMA (e.g., RSDS, the EUB, other regulatory approvals, etc.) worked effectively? What improvements, if any, could be made in this area?
9. Have regulators and resource managers (i.e., the EUB and government departments) responded appropriately to the inability of CEMA to generate recommendations in key areas within expected timelines? Are there appropriate accountability mechanisms for cumulative effects management within and outside of CEMA and RSDS?

10. Have CEMA and RSDS achieved an appropriate balance between a commitment to ensuring a sound scientific basis for recommendations and the adoption of a precautionary approach in the face of uncertainty regarding cumulative environmental effects and liabilities?
11. Can CEMA and RSDS make a significant contribution to establishing an adequate framework for managing cumulative environmental effects in the oil sands region? If they can, what specific results can they be expected to achieve and what steps are needed to bring about these results? If they cannot, what alternative approach is needed?

Interviewees will also be asked to suggest other people who should be interviewed and documents that are relevant to this project.

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