Secretariat of the Commission for Environmental Cooperation

Determination in accordance with Article 14(1) of the North American Agreement for Environmental Cooperation

Submitter(s):	Environmental Defence Canada Natural Resources Defense Council (U.S.) John Rigney Don Deranger Daniel T'seleie
Represented by:	Matt Price, Policy Director Environmental Defence Canada
Party:	Canada
Date received:	13 April 2010
Date of the determination:	3 September 2010
Submission I.D.:	SEM-10-002 (<i>Alberta Tailings Ponds</i>)

I. INTRODUCTION

1. On 14 April 2010, Environmental Defence Canada, ("EDC") and the Natural Resources Defense Council (U.S.) ("NRDC"), together with Canadian residents John Rigney, Don Deranger, and Daniel T'seleie (the "Submitters") filed SEM-10-002 (*Alberta Tailings Ponds*) (hereinafter the "Submission") with the Secretariat pursuant to NAAEC Article 14. The Submitters assert that the Government of Canada ("Canada"), specifically Environment Canada ("EC") is failing to effectively enforce its environmental law in relation to alleged leakage of deleterious substances that migrate from existing industrial oil sands tailings ponds to groundwater and the surrounding soil, and into surface waters frequented by fish in Jackpine Creek, Beaver Creek, McLean Creek, and the Athabasca River located in Northern Alberta.¹

¹ Submission at 1-2, 5, 7-8 and Appendix IV, Letters dated May 8, 2009 at 4 to 10 and May 29, 2009 at 1-2 from EDC to EC, Environmental Enforcement Division. The Submitter alleges the environmental assessment for Shell Canada Ltd projected that contaminated tailings from its operations would reach Jackpine Creek. The Submitters cite an academic study (University of Waterloo) that states Tar Island pond ("Tar Island Dyke") had been leaking almost 6 million litres a day into the Athabasca River. The Submitters also note that correspondence between the Alberta government and Syncrude ("2007 Mildred Lake Report") reported leakage of process waters (possibly contaminated groundwater) occurring from the Mildred Lake tailings pond into Bridge Creek and Beaver Creek, both tributaries of the Athabasca River and possibly the Athabasca River itself. Similar alleged contamination reporting is made for the Aurora Tailings Ponds. The Submitters further cite at page 5 of the Submission a reference to an academic account of toxic leakage from the Suncor South Tailings Pond into the adjacent McLean Creek: "Attenuation of Contaminants in Groundwater Impacted by Surface Mining in Oil Sands, Alberta, Canada," Jim Barker et al., University of Waterloo, November, 2007.

2. Upon analysis of SEM-10-002 (*Alberta Tailings Ponds*), the Secretariat finds that the Submission does not meet all the admissibility criteria in Article 14(1), and in particular NAAEC Article 14(1)(c), and that, in accordance with Guideline 6.2, for the reasons set out below, the Submitters are being notified they have thirty days from the date of this Determination to provide a Submission which conforms to all of the requirements of Article 14(1), failing which the Secretariat will terminate the process with respect to this Submission.

II. SUMMARY OF THE SUBMISSION

3. The Submitters assert that Canada, and in particular Environment Canada, is failing to effectively enforce its environmental law as set out in subsection 36(3) of the Canadian federal Fisheries Act R.S.C. 1985, c. F-14 (the "Act"). Subsection 36(3) of the Act provides that:

Subject to subsection (4), no person shall deposit or permit the deposit of a deleterious substance of any type in water frequented by fish or in any place under any conditions where the deleterious substance or any other deleterious substance that results from the deposit of the deleterious substance may enter any such water.

The Submitters state that subsection 36(3) of the Act not only provides a general prohibition on the deposition of deleterious substances into waters frequented by fish, but is also a prohibition on indirect deposition of deleterious substances.²

In support of assertions regarding indirect deposition of deleterious substances, the Submitters cite, among other items, correspondence in Appendix 4 dated May 29, 2009.³

4. The Submitters' primary concern is the alleged lack of effective enforcement of section 36(3) "against the practice of leaking deleterious substances from oil sands tailings ponds".⁴ Despite alleged government knowledge of direct and indirect leakage problems through environmental assessment hearings, whereby "companies have projected surface water contamination and water quality degradation"⁵, and through allegedly documented incidents of leakage attributed to Syncrude and Suncor reaching waterways,⁶ the Submitters assert the "Canadian

² Submission at 2.

³ Submission at 11, Appendix IV, May 29, 2009 referring to the Albian Sands Muskeg River Tailings pond for EC investigation at p.2.

⁴ Submission at 1.

⁵ Submission at 2, 8 and 10.

⁶ Submission at 5. Submitters allege the company Suncor Energy's "Tar Island" tailings pond had been leaking almost 6 million litres a day into the Athabasca River and Syncrude's Mildred Lake pond is leaking into Beaver Creek, a tributary of the Athabasca River.

government has neither prosecuted any company for documented surface water contamination"⁷ nor has "it pursued regulation for the management of leakage from tailings ponds."⁸ The Submitters also claim that the "existence of a federal-provincial cooperation agreement does not excuse the federal government from the responsibility to enforce its legislation."⁹ In support of the latter statement, the Submitters rely on information obtained from government, industry, and academic research resources.¹⁰

- 5. The Submitters state that tailings ponds are created when mining companies extract bitumen from mined oil sands and that these ponds "currently have a surface area of 130 square kilometres (50 square miles), with a volume of 720 billion litres (190 billion gallons)."¹¹ According to the Submitters, scientific evidence has shown these tailings ponds contain "a large variety of substances that are deleterious to fish, including naphthenic acids, ammonia, benzene, cyanide, oil and grease, phenols, toluene, polycyclic aromatic hydrocarbons, arsenic, copper and iron."¹²
- 6. The Submitters note the tailings ponds are constructed "from the earthen materials that oil sands companies mine from the area,"¹³ and they are designed to leak and are not lined. Moreover, the Submitters maintain company efforts to recapture such leakage "do not recapture it all."¹⁴ In support of the latter contention, the Submitters cite their own 2008 study estimating that "the tailings ponds already leak four billion litres (1 billion gallons) each year, with projections that this figure could reach over 25 billion litres (6.6 billion gallons) within a decade should proposed projects go ahead."¹⁵ The Submitters describe what the alleged consequences of leakage into the aquifers near tailings ponds operations are:

With regards to the medium to long term issue of what happens to the leakage to deeper aquifers from tailings ponds, migration of

⁷ Submission at 2.

³ *Ibid.* With respect to regulating deposits of deleterious substances from tailings ponds, the Submitters state that Canada has not pursued special regulations through subsection 36(4) of the *Fisheries Act.* A new regulation under the latter provision could result in specified deposits of deleterious substances being regulated within thresholds and not constitute an offence. The Submitters also rely on subsection 36(5) of the Act which provides that the Governor in Council may make regulations that permit the discharge of certain deleterious substances in certain locations and under certain conditions. Thus the Submitters assert there are no regulatory exemptions from the requirements of subsection 36(3) of the *Fisheries Act* that are relevant to oil sands mining or tailings ponds resulting from oil sand mining, and Canada has a responsibility to enforce subsection 36(3) of the Act. Also see Submission at 8.

⁹ Submission at 4.

¹⁰ Submission at 14.

¹¹ Submission at 1. *See also*, "Backgrounder: Oil Sands Tailings and Directive 074", Pembina Institute, Dec. 1, 2009.

¹² Submission at 2.

¹³ *Ibid*.

¹⁴ Ibid.

¹⁵ *Ibid.*, and Appendix I at 2 in "11 Milion Litres A Day: The Tar Sands Leaking Legacy". According to that report the researchers used industry data to conservatively estimate current tailings ponds leakage.

contaminants in tailings leakage from groundwater into surface water over time can be facilitated by the hydrogeological setting of the oil sands.¹⁶

The Submitters cite to this alleged fact in support of their view that more permeable underlying settings for tailings ponds, e.g. in the area of Northern Alberta where the tailings ponds at issue are located, "is as much of an issue as leakage into surface water in the oil sands region, since over time they could be one and the same."¹⁷ The Submitters allege that permeable underlying settings for tailings ponds contribute to indirect leakage.¹⁸

- 7. The Submitters base their assertions on several alleged "documented cases of contaminated tailings substances reaching or projected to reach surface waters in Jackpine Creek (from Shell), Beaver Creek (from Syncrude), McLean Creek (from Suncor), and the Athabasca River (from Suncor)".¹⁹ Moreover, the Submitters recall that at a House of Commons Standing Committee on Environment and Sustainable Development ("2009 Standing Committee") correspondence from the Alberta government was produced that stated "it is clear that leakage occurred from Mildred Lake tailings pond into Beaver Creek, a tributary of the Athabasca River."²⁰
- 8. The Submitters note the Canadian federal government has been made aware of the concerns about contaminated tailings leakage problems and is "on the record several years ago with concerns" about such leakage of deleterious substances.²¹ According to the Submitters, the Canadian federal government "has been present at environmental assessment hearings when companies have projected surface water contamination and water quality degradation [from tailings ponds leakage]."²²
- 9. In order to further support the allegation that "Environment Canada has known for several years about the problem of contaminated tailings pond leakage,"²³ the Submitters cite an energy market assessment prepared by the National Energy Board in 2004 that states that the migration of pollutants through the groundwater system are the "principal environmental threats" caused by tailings ponds and "the scale of the problem is daunting."²⁴

¹⁶ Submission at 6.

¹⁷ Ibid.

¹⁸ Submission at 11. Syncrude groundwater monitoring report and Expert Panel on Groundwater of the Council of Canadian Academies that flags risk to Athabasca River of oil sands operations.

¹⁹ Submission at 2 and Appendix I.

²⁰ Submission at 5.

²¹ Submission at 2.

²² *Ibid.*, and Appendix I at 16-21.

²³ Submission at 8.

²⁴ Ibid., The Submitters also cite the National Energy Board, "Canada's Oil Sands: Opportunities and Challenges to 2015," 2004, p.68.

- The Submitters describe how each proposal for a new oil sands mine must go 10. through a Joint Panel Review, pursuant to the Canadian Environmental Assessment Act²⁵ that requires the proponent to provide all relevant federal agencies with information regarding the project.²⁶ The Submitters assert "the companies themselves predict to relevant agencies tailings leakage into surface waters an water quality impacts, yet Environment Canada does not enforce subsection 36(3) or regulate the releases pursuant to subcetion 36(4) [sic] of the Fisheries Act."27
- 11. The Submitters include two examples of oil sands companies noting projected seepage and cite a January 2009 memorandum to Canada's Environment Minister from the Deputy Minister that acknowledges the tailings ponds seepage issue and that it was brought to Environment Canada's attention by oil sands companies' own environmental assessments reports available to various federal departments.²⁸
- 12. The Submitters further assert that Environment Canada, by relying on Alberta Environment to monitor, report, and investigate releases from tailings ponds that may contravene subsection 36(3) of the Fisheries Act, is "abdicating its responsibility to enforce this provision of the Fisheries Act".²⁹ The Submitters consider that the federal-provincial agreement under the Fisheries Act (the "EC – Alberta Agreement")³⁰ "provides for a sharing of responsibility for responding to and investigating releases that may contravene subsection 36(3) of the Fisheries Act."³¹
- The Submitters state that the EC Alberta Agreement designates Alberta 13. Environment as the lead agency for such responses and investigations for releases within Alberta;³² however, the Submitters add that Environment Canada retains

²⁵ S.C. 1992, c. 37.

²⁶ Submission at 5 and 8. See description of the Joint Review Panel.

²⁷ Submission at 8. Appendix I, p. 13. "The Tar Sands Leaking Legacy", December 2008. The latter report refers to company environmental assessment data in Methodology and Sample Calculations. See also Appendix II, page 48.

²⁸ Submission at 8-9. Joint Panel Reports: EUB Decision 2004-009, Shell Canada Limited, Applications for an Oil Sands Mine, Bitumen Extraction Plant, Cogeneration Plant, and Water Pipeline in the Fort McMurray Area, February 5, 2004, page 43 and EUB Decision 2004-005, Canadian Natural Resources Limited, Application for an Oil Sands Mine, Bitumen Extraction Plant, and Bitumen Upgrading Plant in the Fort McMurray Area, January 27, 2004, page 49 ["EUB Decisions"].

²⁹ Submission at 7.

³⁰ Ibid.

³¹ *Ibid.* The Submitters also cite sections 2.1, 3.1 and 3.2.8, Annex 3 of the Alberta Agreement:

[&]quot;2.1 The Parties are responsible for inspections under their respective legislation...

^{3.1 [}Environment Canada and Alberta Environment] will conduct investigations into alleged contraventions of their respective legislation...

^{3.2.8} The parties recognize that both federal and provincial Attorneys General retain their discretion to prosecute violations of their respective legislation..." ³² Submission at 7.

ultimate responsibility to conduct inspections, investigations and prosecutions pursuant to the Fisheries Act, and in accordance with Annex 3 of the EC-Alberta Agreement.³³ The Submitters opine on the legal interpretation of the legislation and in particular subsection 36(3) of the Act and the respective responsibilities of the Province and Federal Government.³⁴ According to the Submitters, the EC-Alberta Agreement confirms, "that the federal government will continue to have the responsibility to conduct inspections, investigations, and prosecutions under the Fisheries Act."³⁵ The Submitters maintain that "the existence of a federal-provincial cooperation agreement does not excuse the federal government from the responsibility to enforce its legislation".³⁶

- 14. The Submitters note that the Alberta government's "zero-discharge policy for oil sands tailings ponds" provides for sanctions against tailings ponds leakage under its Environmental Enhancement and Protection Act,³⁷ which is, according to the Submitter, structured similarly to the federal Fisheries Act.³⁸ The Submitters cite communications between Environment Canada and the 2009 Standing Committee to clarify that Alberta Environment inspectors are not designated as Fisheries Inspectors under the Fisheries Act.³⁹ According to the Submitters, "it is the practice of Environment Canada (EC) to wait for a referral from Alberta Environment inspectors are not even designated or trained as federal Fisheries Inspectors.⁴⁰
- 15. The Submitters allege that Environment Canada is fully aware of the general issue of groundwater contamination and migration to surface waters.⁴¹ In that connection, they quote text from Environment Canada's website on the migration of contamination.⁴² The Submitters also cite text from the 2009 report by Canada's Commissioner of the Environment and Sustainable Development which states that Canada has failed to create "a *Fisheries Act* compliance strategy for the industries and activities that must comply with the Act's prohibition requirement

³³ *Ibid. See also* Appendix III: "Follow-Up on Committee Hearings," by Environment Canada to the Standing Committee on the Environment and Sustainable Development, House of Commons, March 20, 2009 at page 72.

³⁴ Submission at 3 & 4.

³⁵ Submission at 7.

³⁶ Submission at 4.

³⁷ Submission at 9. Environmental Protection and Enhancement Act, R.S.A. 2000, c. E-12. Section 227 of the Act creates prohibitions that relate to contravention of an approved code of practice (s.88.1) and or to release a substance into "any part of a waterworks system that causes or may cause the potable water supplied by the system to be unfit for any of its intended uses" (s.148).

³⁸ *Ibid.* "Memorandum to the Minister, Oil Sands Tailings Ponds," MIN-118731, revised Jan. 19, 2009, signed by Ian Shugart, Deputy Minister, Environment Canada. *See* Appendix II.

³⁹ *Ibid.*, and Appendix II.

⁴⁰ Ibid.

⁴¹ Submission at 10. Environment Canada website "Groundwater Contamination, online at http://www.ec.gc.ca/eau-water/default.asp?lang=En&n=6A7FB7B2-1.

⁴² *Ibid.*, Environment Canada website "Groundwater Contamination http://www.ec.gc.ca/eau-water/default.asp?lang=En&n=6A7FB7B2-1).

against the deposit of harmful substances in water frequented by fish."⁴³ The Submitters continue quoting from that 2009 report and maintain that Environment Canada's reliance "on the Agreement and the arrangements with Alberta to meet its Fisheries Act responsibilities"⁴⁴ is ineffective because "the Agreement's Management Committee has not provided its oversight role in over two years and Environment Canada has not formally assessed the extent that the arrangements with Alberta fulfill the Department's Fisheries Act responsibilities."

- 16. Further, the Submitters state that "Alberta Environment relies on industry selfreporting of tailings leakage...".⁴⁶ The Submitters note that both "the provincial and federal levels of government have delegated regional monitoring of releases to an organization called the Regional Aquatic Monitoring Program ("RAMP")".⁴⁷ RAMP, according to the Submitters, "is funded by the oil sands operators", and its functioning has been discredited⁴⁸ The Submitters assert that enforcement of the law at issue is not occurring because there have been no forthcoming referrals from Alberta Environment indicating they suspect such violations, "despite the documented instances of contaminated tailings pond leakage...".⁴⁹
- 17. The Submitters allege "tailings ponds contain a large variety of substances that are deleterious to fish."⁵⁰ The Submitters refer to a recent scientific article which purportedly "compiles the results of several studies of the inorganic chemistry, organic chemistry and toxicity of oil sands tailings waters and finds the waters exceed the Canadian Council of Ministers (CCME) Canadian Environmental Quality Guidelines: Surface Water Quality Guidelines for the Protection of Aquatic Life for several substances including ammonia, benzene, cyanide, oil and grease, phenols, toluene, polycyclic aromatic hydrocarbons, arsenic, copper and iron."⁵¹ The Submitters cite other scientific studies, one mentioning polycyclic aromatic compounds (PAC)⁵² but conclude that it is the "deposited substance itself that is classified as deleterious and not the receiving waters".⁵³
- 18. The Submitters point out that their members make use of these waters and that "the individual Submitters are people who have lived, hunted and fished

⁴³ Ibid., at 10 (quoting from the Report of the Commissioner of the Environment and Sustainable Development—Spring 2009 Chapter 1 p. 35). See also Submission at 2 and 8.

⁴⁴ *Ibid.*, Quoting from the Report of the Commissioner of the Environment and Sustainable Development— Spring 2009, Chapter 1 p. 39.

 $^{^{45}}$ *Ibid*.

⁴⁶ Submission at 8. Appendix I, page 17.

⁴⁷ Ibid.

⁴⁸ *Ibid*.

⁴⁹ Submission at 9.

⁵⁰ Submission at 6.

⁵¹ *Ibid*.

⁵² Submission at 7.

⁵³ *Ibid.*, and Appendix I at 20.

downriver from the oil sands for decades"⁵⁴, and furthermore that three of the Submitters live in the Athabasca region. The Submitters state that the members of Fort Chipewyan community "live in fear of what tar sands pollution may be doing to their water, the fish and wildlife they depend on, and on their health."⁵⁵ The Submitters state that deformed fish have been "showing up downriver from the tar sands."⁵⁶ The Submitters also note that they no longer participate in the oil sands program through RAMP, the agency set up to monitor tailings leakage.⁵⁷

- 19. The Submitters state they have written EC several times requesting "enforcement of the *Fisheries Act* with regards to tailings pond leakage."⁵⁸ They provide correspondence with the Party from January 2009 to March 2010.⁵⁹ The Submitters assert that there is a "lack of commitment at the highest level of Environment Canada to enforce the *Fisheries Act* when it comes to pollution from oil sands tailings ponds." As recently as this year, the Submitters state, it was reported that the Environment Minister publicly said at a conference on water, that the amount of contaminated tailings leaking into the groundwater was based on "garbage science"⁶⁰ The Submitters however sent a supplemental letter to the CEC Secretariat observing that upon reviewing a video tape of the conference, they concluded that the Environment Minister had not in fact used the phrase "garbage science". In that same letter, the Submitters corrected the misreported quote that was in the Submission by including the relevant transcription of the Minister's response to a question from the audience.⁶¹
- 20. With respect to the Submitters obtaining private remedies for their assertions of the failure to enforce subsection 36(3) of the Act, the Submitters state:

The Submitters either do not have status for civil remedies or they [private remedies] would be impractical to pursue. While Canadian citizens do have the right to commence private prosecutions under the Fisheries Act and its regulations where the government refuses to enforce the law, the evidentiary burden is hard to meet for actors

⁵⁴ Submission at 12.

⁵⁵ Submission at Appendix I at 18. The First Nation community sits on Lake Athabasca, 200 km

downstream of the oil sands. Health incidences involving rare cancers have allegedly been documented. ⁵⁶ *Ibid*.

⁵⁷ Submission at 8. The Athabasca Chipewyan First Nation was a stakeholder and withdrew participation in RAMP in the spring of 2008.

⁵⁸ Submission at 11 and Appendix IV, Letter dated January 26, 2009 from EDC to EC.

⁵⁹ Ibid. Appendix IV includes other correspondence between the Submitter and Environment Canada: Letter dated April 7, 2009 from EC to EDC. See also, Submission, Appendix IV: Letter dated May 8, 2009 from EDC to EC Deputy Minister; Letter dated May 29, 2009 from EDC to EC; Letter dated July 6, 2009 from EC to EDC; Letter dated January 13, 2010 from EDC to EC; Letter dated February 22, 2010 from EC to EDC indicating that studies are still underway; and, Letter dated March 25, 2010 from EDC to EC.

⁶⁰ *Ibid.* Media article reported in a University paper called "The Concordian": "Conservatives work hard to avoid dealing with tar sands" March 30, 2010.

⁶¹ Letter from Submitters dated 20 April 2010 and filed with the CEC after the Submission was received, and available on the CEC website at: http://www.cec.org/Storage/84/8365_11-NOT.pdf.

without access to significant resources, and such proceedings do not address the systemic problem of persistent non-enforcement by the authorities.⁶²

The Submitters state that private prosecutions "can be stayed by the Crown" and that such actions "are not a viable option for effective enforcement where there are numerous violations of the federal law."⁶³

21. The Submitters set out why they consider that the Submission meets the criteria of Article 14(1) (a)-(f), and that it merits a response from the Government of Canada. The Submitters believe that the Submission raises matters that would advance the NAAEC objectives found in NAAEC Articles 1(a), (b), (c), (e), (f), (g), and (j) and further that the Submission supports the NAAEC's Council functions set out in NAAEC Article 10(2)(b), (i), and (p).⁶⁴ The Submitters conclude that "the Government of Canada is in breach of its commitment under the NAAEC to effectively enforce subsection 36(3) of the *Fisheries Act* against the practice of leaking deleterious substances from oil sands tailings ponds".⁶⁵

III. ANALYSIS

22. Articles 14 and 15 of the North American Agreement on Environmental Cooperation (the "NAAEC" or the "Agreement") provide for a process allowing any person, or non-governmental organization to file a Submission asserting that a Party to the Agreement is failing to effectively enforce its environmental law. The Secretariat of the Commission for Environmental Cooperation (the "Secretariat"

⁶² Submission at 13. The Submitters do not cite other remedies as Canada does not regulate the releases of tailings under under 36(4) of the Fisheries Act. *See* Submission at 8.

⁶³ Ibid.

⁶⁴ Ibid.

⁶⁵ Submission at 14. NAAEC Article 1 reads in relevant parts:

[&]quot;The objectives of this Agreement are to:(a) foster the protection and improvement of the environment in the territories of the Parties for the well-being of present and future generations;

⁽b) promote sustainable development based on cooperation and mutually supportive environmental and economic policies;

⁽c) increase cooperation between the Parties to better conserve, protect, and enhance the environment, including wild flora and fauna;

⁽e) avoid creating trade distortions or new trade barriers;

⁽f)strengthen cooperation on the development and improvement of environmental laws, regulations, procedures, policies and practices;

⁽g)enhance compliance with, and enforcement of, environmental laws and regulations; and

⁽j) promote pollution prevention policies and practices."

NAAEC Article 10 reads in relevant parts,

^{(2):}

[&]quot;The Council may consider, and develop recommendations regarding:

⁽b) pollution prevention techniques and strategies; (i) the conservation and protection of wild flora and fauna and their habitat, and specially protected natural areas; (p) approaches to environmental compliance and enforcement."

of the "CEC") initially considers a Submission to determine whether it meets the criteria contained in NAAEC Article 14(1) and the Guidelines for Submissions on Enforcement Matters under Articles 14 and 15 of the NAAEC (the "Guidelines"). When the Secretariat determines that a Submission meets the criteria set out in Article 14(1), it then determines, pursuant to the provisions of NAAEC Article 14(2), whether the Submission merits a response from the NAAEC Party named in the Submission. In light of any response from the concerned Party, and in accordance with NAAEC and the Guidelines, the Secretariat may notify the Council that the matter warrants the development of a Factual Record, providing its reasons for such recommendation in accordance with Article 15(1). Where the Secretariat decides to the contrary, or certain circumstances prevail, it then proceeds no further with the Submission.⁶⁶

23. As the Secretariat has found in previous NAAEC Article 14(1) determinations,⁶⁷ Article 14(1) is not intended to be an "insurmountable screening device", which means that the Secretariat will interpret every submission in accordance with the Agreement and the Guidelines, yet without an unreasonably narrow interpretation and application of those Article 14(1) criteria. The Secretariat will now treat each requirement of NAAEC Article 14(1) in turn.

Article 14(1) Opening Paragraph

- 24. The opening paragraph of NAAEC Article 14(1) provides: "[t]he Secretariat may consider a submission from any non-governmental organization ("NGO") or person asserting that a Party is failing to effectively enforce its environmental law", as long as the submitter is not affiliated with or under the direction of any government.⁶⁸
- 25. The Submitters are Environmental Defence Canada, Natural Resources Defense Council (U.S.), and three Canadian residents residing in the Athabasca region. The Submitters state that the residents named are "people who have lived, hunted, and fished downriver from the oil sands for decades."⁶⁹ The Submitters state that the two organizations are "non-governmental Submitters" and "are organizations whose members include over 1 million individuals who have a shared interest in protecting the ground and surface waters of Canada and North America, including

⁶⁶ Full details regarding the various stages of the process as well as previous Secretariat Determinations and Factual Records can be found on the CEC's website at: http://www.cec.org/citizen/index.cfm?varlan=english.

⁶⁷ See SEM-97-005 (*Biodiversity*), Article 14(1) Determination (26 May 1998); and SEM-98-003 (*Great Lakes*), Article 14(1)(2) Determination (8 September 1999).

⁶⁸ Both Environmental Defence and NRDC meet the definition of "non-governmental organization" in Article 45(1), where non-governmental "[...] means any scientific, professional, business, non-profit, or public interest organization or association which is neither affiliated with, nor under the direction or, a government."

⁶⁹ Submission at 12.

the reduction and elimination of pollution from industry."⁷⁰ Further, the Submitters state that they "are not-for-profit organizations and individuals."⁷¹ The Secretariat finds that the two organizations meet the definition of NGO in Article 45(1), and the three persons who reside in Canada named in the Submission are clearly identified and appear to not be affiliated with or under the direction of any government. The Submitters thus meet the establishment requirement in the opening paragraph of Article 14(1).

- 26. The Secretariat next analyzes whether the Submitters meet the requirement in the opening paragraph of Article 14(1) that assertions regard ongoing failures to effectively enforce the environmental law at issue. The Submission includes a summary of the Submitters' correspondence through early 2010 with Environment Canada regarding enforcement of subsection 36(3) of the Fisheries Act.⁷² A letter from Environment Canada's Deputy Minister to Environmental Defence dated 22 February 2010, states that enforcement efforts are ongoing and testing is being conducted by EC to determine "toxicity to fish and fish habitat, and the results are expected by spring 2010." Also included in the Submission is "A Memorandum to the Minister: Oil Sands Tailing Ponds" from January 19, 2009 the purpose of which was "[t]o inform [the Minister] of the environmental impact of oil sands tailings ponds", and which states that "the industry has been unable to meet its own predictions for performance of tailings management systems with the result that larger volumes of tailings need to be stored in ponds than has been predicted during regulatory review and approval processes".⁷³ The latter Memorandum also suggests that there is uncertainty regarding the efficacy of industry methods for mitigation of toxic tailings and that the current monitoring and testing regime may be inadequate for detecting possible tailing ponds seepage into groundwater.⁷⁴ The Submitters include several recent documents that demonstrate the matters in assertion are current as of the time of filing their Submission.⁷⁵
- 27. Thus, the Secretariat finds that the assertions meet the temporal requirement of the opening paragraph of Article 14(1) since the alleged failures to effectively enforce the environmental law apparently concern an ongoing matter at the time of filing.⁷⁶

⁷⁰ Ibid.

⁷¹ *Ibid*.

⁷² Submission at 11. See also Submission at Appendix IV.

⁷³ Submission, Appendix II at 2.

⁷⁴ *Ibid.*, at 3.

⁷⁵ Submission at 11. *See also* Submission at Appendix IV; Submission at Appendix II; Supplemental letter filed by Submitters on April 20, 2010.

⁷⁶ See SEM-09-005 (Skeena River Fishery); SEM-00-003 (Jamaica Bay); SEM-99-02 (Migratory Birds); SEM-97-03 (Quebec Hog Farms), all discussing the need for assertions regarding failures to effectively enforce to meet a temporal requirement of being an "ongoing" situation at the time of submission.

- 28. NAAEC Guideline 1.1 provides that a Submission [...] is a documented assertion that a Party to the NAAEC "is failing to effectively enforce its environmental law." Moreover, Guidelines 5.1 and 5.3 require respectively that assertions in a submission "focus on any acts or omissions of the Party asserted to demonstrate such failure", and "provide sufficient information to allow the Secretariat to review the submission, including any documentary evidence on which the submission may be based". In accordance with Article 14(1) and the Guidelines, an assertion ought to include an indicative positive and explicit statement that a Party is failing to effectively enforce a certain environmental law (or laws), and the Submission must provide sufficiently documented reasons for any assertion, rather than merely implying a failure to enforce through references to quotations, studies, scientific research, or the like (such references, etc., should of course be used to directly support an assertion). As Guidelines 5.1 and 5.3 make clear, it is not for the Secretariat to infer from the mere statement that "a Party is failing to effectively enforce its environmental law", how such failure is allegedly occurring, rather that is a task for the submitter. There are numerous precedents for properly documented and reasoned assertions having been accepted in previous Secretariat determinations which prospective submitters may consult on the CEC Submissions and Enforcement Matters Registry.⁷⁷
- 29. As noted in the above summary of the Submission, the Submitters' primary assertion is "that the Government of Canada is in breach of its commitment under the [NAAEC] to effectively enforce subsection 36(3) of the Canadian Fisheries Act against the practice of leaking deleterious substances from oil sands tailings ponds". The Submitters expound on that assertion, stating:

The Canadian government has neither prosecuted any company for documented surface water contamination, nor has it pursued regulation governing tailings pond leakage. It relies on the Government of Alberta to alert it to possible violations of the *Fisheries Act*, and Alberta in turn relies on industry self-reporting. An industry-funded regional water monitoring body that Canada relies on – the Regional Aquatic Monitoring Program – has been discredited as scientifically inadequate and for failing to identify significant water pollution in the region.⁷⁸

30. The Submitters also assert that the Party has not "prosecuted companies" for alleged "documented contaminated tailings substances reaching or projected to reach surface waters at Jackpine Creek, Beaver Creek, Maclean Creek and the

⁷⁷ See <u>http://www.cec.org/Page.asp?PageID=751&ContentID=&SiteNodeID=250&BL_ExpandID</u>=. See for example, submission SEM-09-005 (Skeena River Fishery) Determination 18 May 2010, at 7-14, whereby the Secretariat considered that assertions of a failure to effectively enforce the environmental law at issue were indicative, positive, explicit, and properly documented and reasoned. Of course each Determination is made on a case-to-case basis, and fact patterns vary.

⁷⁸ Submission at 2.

Athabasca River, all of which the Party" is also allegedly aware of.⁷⁹ Further, the Submitters state that the Party does not regulate releases from tailings ponds under Subsection 36(4) of the Act. The Submitters assert that the Party's reliance on the Government of Alberta to report suspected violations of the Act is an abdication of its responsibility to enforce subsection 36(3) of the Act. In that connection, the Submitters note that "Alberta Environment relies on industry self-reporting of tailings leakage".⁸⁰ The Submitters note that Alberta environment inspectors do not have the inspection capacity to determine *Fisheries Act* violations as Alberta Environment inspectors are not designated as Fisheries Inspectors under the *Fisheries Act*.⁸¹

- 31. In sum then, the Submitters assertions are that Canada has 1) breached its commitment under the NAAEC; 2) not prosecuted documented violations of subsection 36(3) of the Act, although it is allegedly aware of these violations; 3) not regulated releases pursuant to subsection 36(4) of the Act although tailings waters contain "deleterious substances" and companies predict tailings leakage into surface waters and water quality impacts; and, 4) not directly carried out its obligations to "monitor, report, and investigate releases from tailings ponds that may contravene subsection 36(3) [...of the Act]". Each of the foregoing statements will be analyzed further below.
- 32. The Secretariat next turns to consideration of whether the laws, the effective enforcement of which is the subject of the assertions in the Submission, are "environmental law" in accordance with NAAEC. The Secretariat notes that the primary purpose of subsection 36(3) of the Act, appears to be pollution prevention. This provision can be considered an "environmental law" as defined by NAAEC Article $45(2)(a)^{82}$, and indeed the Secretariat has interpreted subsection 36(3) of the Act as meeting the NAAEC definition of environmental law in previous determinations, and moreover the latter provision has also been

⁷⁹ Ibid.

⁸⁰ Submission at 8.

⁸¹ Submission, at 9.

⁸² NAAEC Article 45 defines the term "environmental law" as follows: "2. For purposes of Article 14(1) and Part Five:(a) 'environmental law' means any statute or regulation of a Party, or provision thereof, the primary purpose of which is the protection of the environment, or the prevention of a danger to human life or health, through (i) the prevention, abatement or control of the release, discharge, or emission of pollutants or environmental contaminants, (ii) the control of environmentally hazardous or toxic chemicals, substances, materials and wastes, and the dissemination of information related thereto, or (iii) the protection of wild flora or fauna, including endangered species, their habitat, and specially protected natural areas in the Party's territory, but does not include any statute or regulation, or provision thereof, directly related to worker safety or health.

^{[(}b)...]

⁽c) The primary purpose of a particular statutory or regulatory provision for purposes of subparagraphs (a) and (b) shall be determined by reference to its primary purpose, rather than to the primary purpose of the statute or regulation of which it is part."

treated in several factual records.⁸³ The Secretariat may consider further the Submitters' assertions regarding subsection 36(3) of the Act.

- 33. As noted above, the Submitters also cite subsection 36(4) of the Act and assert that Environment Canada "does not enforce subsection 36(3) or regulate [tailings pond] releases pursuant to subsection 36(4) [sic] of the Fisheries Act", despite the fact that tailings ponds contain "deleterious substances" (i.e. the Submitters in essence imply that Canada must enforce subsection 36(3) of the Act by "at least" regulating discharge of deleterious tailings pond substances pursuant to subsection 36(4) of the Act). Subsection 36(4) of the Act provides an exception for deposits of pollutants regulated pursuant to Subsection 36(5) of the Act, and it appears to meet the definition of environmental law in accordance with Article 45(2)(a)(i) and (ii), i.e. its primary purpose is protection of the environment through control of the discharge of pollutants or environmentally hazardous or toxic substances. Therefore, the assertion regarding regulation pursuant to subsection 36(4) of the Act may be further considered by the Secretariat.
- 34. The Submitters' assertion that the Government of Canada has not directly carried out its obligations to "monitor, report, and investigate releases from tailings ponds that may contravene subsection 36(3) [...of the Act]" concerns not only subsection 36(3) of the Act, but also the "Administrative Agreement for the Control of Deposits of Deleterious Substances under the Fisheries Act" (the "Administrative Agreement").⁸⁴ The inter-government administrative agreement concerns how the Province and the government of Canada are to coordinate implementation of the Act for the control of deposits and deleterious substances. Although the Administrative Agreement concerns how the Province and the government of Canada are to coordinate implementation of the Act, it is not clear to the Secretariat that the Administrative Agreement is an environmental law as it does not appear to be "a statute or a regulation of a Party" in accordance with NAAEC Article 45(2). In that connection, any revised submission may provide more information on the legal status of the Administrative Agreement, as well as whether and how the asserted monitoring, reporting, and investigative obligations flow directly from the Fisheries Act, or the Administrative Agreement as the case may be.

⁸³ See for example, SEM-98-004 (BC Mining), SEM-03-001 (Ontario Power Generation), and SEM-03-005 (Montreal Technoparc).

⁸⁴ According to the Submitters, these obligations flow from Annex 3 of the "Administrative Agreement for the Control of Deposits of Deleterious Substances under the Fisheries Act". The Submitters also cite the "doctrine of federal paramountcy" which they say [Submission at 4] means that "where there is an inconsistency or conflict between a federal law and a provincial law, the federal law prevails". The Submitters do not however discuss whether, and if so how, they consider that federal and provincial laws are in conflict such that the doctrine of paramountcy would apply to the relationship between the Administrative Agreement and the Act, and what enforcement obligations the Federal government of Canada might have as a consequence. A revised submission may provide more information on this assertion.

- 35. The Submitters may also address whether the asserted monitoring, reporting, and investigative "obligations", are requirements of section 36(3) of the Act (and if so, why), or rather if they are enforcement policy choices of the Party.⁸⁵
- 36. As in previous determinations⁸⁶, the Secretariat does not consider further the Submitters' assertion that Canada "is in breach of its commitment under the [NAAEC] to effectively enforce subsection 36(3) of the Canadian *Fisheries Act*"⁸⁷ (emphasis in original), as the NAAEC is not considered the Party's environmental law in accordance with NAAEC Article 45(2).

Article 14(1)(a) requires that a Submission be: "in writing in a language designated by that Party in a notification to the Secretariat [...]"

37. The Secretariat notes that the Submission meets the criteria of Article 14(1)(a) as it is in English, an official language designated by the Parties for filing a Submission.⁸⁸

Article 14(1)(b) requires that a submission: "clearly identifies the person or organization making the submission [...]."

38. The Secretariat considers that the Submitters are clearly identified including the names of the organizations and the individual Submitters along with their contact information. Therefore the Submission meets the criteria of Article 14(1)(b).

Article 14(1)(c) requires that a submission provide: "sufficient information to allow the Secretariat to review the submission, including any documentary evidence on which the submission may be based [...]."

39. The Secretariat finds that the Submission does not fully satisfy the requirements of Article 14(1)(c) as it does not provide sufficient information and supporting documentation in accordance respectively with Guidelines 5.1 and 5.3.⁸⁹ In that connection, the Submitters in any revised submission may wish to provide further

⁸⁵ NAAEC Article 45(1)(a) and (b) describes a Party's discretion in enforcing environmental laws.

⁸⁶ See for example, the Secretariat's Determination in SEM-09-005 (Skeena River Fishery), at para. 29.

⁸⁷ Submission at 1.

⁸⁸ Cfr. Guideline 3.2.

⁸⁹ Guideline 5.1 provides that "The Submission must assert that a Party is failing to effectively enforce its environmental law and should focus on any acts or omissions of the Party asserted to demonstrate such failure. For purposes of determining if a submission meets the criteria of Article 14(1) of the Agreement, the term "environmental law" is defined in Article 45(2) of the Agreement." Guideline 5.3 provides that "[s]ubmissions must contain a succinct account of the facts on which such an assertion is based and must provide sufficient information to allow the Secretariat to review the submission, including any documentary evidence on which the submission may be based."

information on acts or omissions of the Party intended to support the assertion that the Party has failed to enforce subsection 36(3) of the Act with regard to asserted "documented cases of contaminated tailings reaching surface water"⁹⁰. The Secretariat notes that key information, to the extent it may be available, regarding such "documented cases" of seepage from tailings ponds, in terms of specificity as to what and how much was allegedly leaked where, and consequentially what particular enforcement action the Party was obligated to take under subsection 36(3) of the Act (or other laws as the case may be), may be included in any revised submission. The Submitters may also wish in any revised submission to include further information on assertions of indirect deposits of deleterious substances pursuant to subsection 36(3) of the Act and in accordance with NAAEC Article 14(1) and Guideline 5.1.

- 40. Regarding Guideline 5.3, the Submitters cite several reference documents which may provide supporting information for the assertions and the environmental law at issue, but in certain instances, the Submitters fail to attach key documents relied on which would enable the Secretariat to fully review the Submission. Not providing a referenced document or a series of documentation in a Submission does not automatically result in a Submission failing to meet the requirement set out in NAAEC Article 14(1)(c). Yet relevant factual documents that may provide the Secretariat with information to properly assess an assertion, and that are cited in the Submission should generally form part of the Appendices.⁹¹
- 41. In particular, the Submission cites two Joint Panel Reports,⁹² an Expert Panel Export on Groundwater,⁹³ oil sands company environmental assessments,⁹⁴ and

⁹⁰ Submission at 5.

⁹¹ See B.C. Logging at footnote 13 (page 4) where in its B.C. Logging Determination, the Secretariat made the following observation: "Some of the publications that the Submitters cite in support of their assertions about the harmful consequences of certain logging practices are not attached to the submission. The better practice is for submitters to attach relevant pages of all material to which a submission refers, even if in support of a background assertion. At a minimum, to promote timely processing of submissions, submitters should make every effort to attach relevant portions of all documentation supporting assertions that are central to a submission, unless that documentation is easily accessible to the public, the Parties and the Secretariat through the internet or other widespread and readily available means." The Secretariat notes that it does not have a library where it may easily find the literature cited in the Submission. In order to save paper, the Submitters may include Appendices saved on electronic media such as a compact disc or USB key.

⁹² Submission at 5, 8 & 9. See the description of the Joint Review Panel at p. 8 and two Joint Panel Reports: EUB Decision 2004-009, Shell Canada Limited, Applications for an Oil Sands Mine, Bitumen Extraction Plant, Cogeneration Plant, and Water Pipeline in the Fort McMurray Area, February 5, 2004, page 43 and EUB Decision 2004-005, Canadian Natural Resources Limited, Application for an Oil Sands Mine, Bitumen Extraction Plant, and Bitumen Upgrading Plant in the Fort McMurray Area, January 27, 2004, page 49. ["EUB Decisions"].

⁹³ Submission at 5 and Footnotes 10 & 15. "The Sustainable Management of Groundwater in Canada," Expert Panel on Groundwater, Canadian Council of Academics, May 2009, (270 pages).

⁹⁴ Submission at 5 and Footnote 8. The Pembina Institute, "Methodology and Sample Calculations" Pembina Report, December 2008, p 3-18. The report provides "Seepage Data from Environmental Impact Assessments" taken from applications and EA assessments". [the "Pembina Report"]

relevant federal case law⁹⁵ all not included with the submission, and although footnotes were provided for some of the aforementioned documents, the Secretariat expects that submissions include actual copies of key documents in accordance with Guideline 5.3. Several other relevant documents supporting assertions advanced in the Submission are also absent such as the December 2008 Pembina Institute Appendix I entitled Methodology and Sample Calculations"⁹⁶ and the "Canada-Alberta Administrative Agreement for the Control of Deposits of Deleterious Substances" under the Fisheries Act."⁹⁷ There are also references to documents that may or may not be publicly available such as "Syncrude Canada Ltd., the 2007 Groundwater Monitoring Report, Syncrude Canada Limited, Aurora", ("2007 Aurora Report),⁹⁸ Mildred Lake Site (" Mildred Lake Report")⁹⁹, the "2008 Groundwater Monitoring Program: Muskeg River Mine" (the "Albian Sands Report"),¹⁰⁰ and two studies on oil sands substances and harm to fish.¹⁰¹ Moreover, a document referred to in the 13 January 2010 letter from Environmental Defence to Deputy Minister Shugart in Appendix IV refers to a study by Erin N. Kelly, for which a hyperlink is provided, but which link does not appear to function; that too should be included in any revised submission.

- 42. The Secretariat finds that in order to review the Submission, any revised submission should therefore attach relevant documentary evidence in appendices or if such documents are not available to the Submitters, indicate why they are unavailable.
- 43. For the foregoing reasons, the Secretariat finds that the Submission does not satisfy the requirements of Article 14(1)(c) and any revised submission should address this lack of sufficient information, and focus assertions on the specific acts or omissions of the Party in accordance with Guideline 5.1.

⁹⁹ Submission at 5, Footnote 13. Appendix IV, Letter dated 08 May 2009 at 8.

 ⁹⁵ Submission at 3 & 4, citing *R. v. Kingston (Corporation of the City)*, (2004) 70 O.R. (3d) 577, (2005)
D.L.R. (4th) 734 (Ont. C.A.).

⁹⁶ Pembina Report, *supra* note 95 and Appendix I at 13. The report is cited along with the location of the report in the text, but is not attached to Appendix I.

⁹⁷ Supra note 94. As noted in SEM-00-004 (BC Logging) the Submitters, Parties and the Secretariat may utilize the internet to provide copies of key documents and/or internet links when the documents are publicly available but it is preferable for ease of reference that the document be included with the Submission, either in hard copy, or electronically. The Secretariat also notes that the use of online information that is publicly available for documents also applies to Article 15(4) for the development of a factual record.

⁹⁸ Submission, Appendix IV at 8, Letter ED to EC, 8 May 2009.

¹⁰⁰ Submission at Appendix IV, Letter dated 29 May 2009.

¹⁰¹ Submission at 6 & 7. Subtsance studies by Erik W. Allen, and Angela C. Scott were not readily available.

Article 14(1)(d) requires that a submission: "appears to be aimed at promoting enforcement rather than at harassing industry [...]."

- 44. The Secretariat considers the Submission satisfies the criteria of NAAEC Article 14(1)(d) as the Submission appears to be aimed at promoting enforcement of the laws at issue rather than at harassing industry.¹⁰² Moreover, the Submitters include copies of correspondence demonstrating that they have contacted Canada requesting enforcement repeatedly and have shown no effort to target any individual company or the industry.¹⁰³
- 45. The Secretariat also considers whether the Submission appears to be focused on the alleged acts and omissions of the Party in accordance with Guidance 5.4, rather than focusing on compliance by a particular oil mining company or a specific oil related business operating in Northern Alberta. The Submitters assert they "do not have a financial interest in oil sands operation or their competitors," and "present this Submission with the aim of promoting enforcement."¹⁰⁴ The Submitters do mention specific oil sands companies and their environmental assessment processes, but use these examples to demonstrate "that the companies themselves predict to relevant agencies tailings leakage into surface waters and water quality impacts, yet Environment Canada does not enforce subsection 36(3)..."¹⁰⁵ Therefore, the Secretariat finds that the Submission is focused on the alleged acts and omissions of the Party rather than on compliance by a particular company in accordance with Guideline 5.4. For the foregoing reasons, the Secretariat finds the Submission meets the requirements of Article 14(1)(d).

Article 14(1)(e) requires that a submission: "indicates that the matter has been communicated in writing to the relevant authorities of the Party and indicates the Party's response, if any [...]."

46. The Submission includes, in its Appendix IV, copies of correspondence to Environment Canada, the relevant authority for the enforcement of the Canadian federal *Fisheries Act*, requesting enforcement of the environmental law and

¹⁰² See the Guidelines at 5.4(a), which provides that to determine whether the Submission is aimed at promoting effective enforcement and not at harassing industry, the Secretariat will consider whether: "the Submission is focused on the acts or omissions of a Party rather than on compliance by a particular company or business; especially if the Submitter is a competitor that may stand to benefit economically from the Submission."

 ¹⁰³ Submission, Appendix IV. The Submitters attach email and letters from ED to EC dated 25 march 2010,
13 January 2010, 28 September 2009, 29 May 2009, 08 May 2009, and 26 January 2009.

¹⁰⁴ Submission at 12.

¹⁰⁵ Submission at 8-9. It refers to the Shell Jackpine project Joint Review Panel and CNRL Horizon Joint Review Panel as examples of the environmental assessment process the companies use to notify relevant agencies of predicted seepage).

responses given by Environment Canada.¹⁰⁶ The correspondence dates back to January 2009. The Submitters made available their 2008 study "11 Million Litres a Day" to the Party.¹⁰⁷. Thus, the Secretariat finds that the Submission indicates that the matter has been communicated in writing to the relevant authority of Canada and the Submission meets the requirements of Article 14(1)(e) and is in accordance with Guideline 5.5.

Article 14(1)(f) requires that a submission: "is filed by a person or organization residing or established in the territory of a Party."

47. The Submission is filed by Environmental Defence Canada, Natural Resources Defense Council, and three individuals. Environmental Defence Canada is an organization established in Canada, Natural Resources Defense Council is an organization established in the United States, and the three individuals are persons residing in Canada. The Secretariat considers that the Submission is filed by organizations and persons residing in and established in the territory of a Party, and thus satisfies the requirements of Article 14(1)(f).

IV. DETERMINATION

- 48. Submission SEM-10-002 (*Alberta Tailings Ponds*) does not meet all the criteria for admissibility contained in NAAEC Article 14(1), and in particular Article 14(1)(c).
- 49. In accordance with Guideline 6.2, the Submitters have thirty calendar days from the date of this Determination (**4 October 2010**) to provide a submission which conforms to the requirements of Article 14(1)(a-f), failing which the Secretariat will terminate the process with respect to this submission.

Secretariat of the Commission for Environmental Cooperation

(original signed)

per: Dane Ratliff Director, Submissions on Enforcement Matters Unit

¹⁰⁶ Submission at 11. See Appendix IV: 2009 Correspondence between Environmental Defence Canada (EDC) and Environment Canada (EC) 2009 and 2010. requesting enforcement of the *Fisheries Act* with regards to tailings pond leakage specifically letters from EDC to EC, 26 January 2009; 8 May 2009; 29 May 2009; and 13 January 2010.

 ¹⁰⁷ *Ibid.* See Letter EDC to EC, 26 January 2009.Appendix I, "11 Million Litres a Day," by Matt Price, Environmental Defence Canada, December 2008.

(original signed)

- p.p.: Marcelle Marion Legal Officer, Submissions on Enforcement Matters Unit
- c.c.: Mr. David McGovern, Canada Alternate Representative Ms. Michelle DePass, US Alternate Representative Mr. Enrique Lendo, Mexico Alternate Representative Mr. Evan Lloyd, Executive Director, CEC Submitters