SUBMISSION TO THE COMMISSION FOR ENVIRONMENTAL COOPERATION

Pursuant to Article 14, NORTH AMERICAN AGREEMENT ON ENVIRONMENTAL COOPERATION

April 14, 2010

THE SUBMITTING ORGANIZATIONS AND INDIVIDUALS

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I. SUMMARY OF SUBMISSION

This submission requests that the Commission on Environmental Cooperation prepare a factual record of the allegation that the Government of Canada is in breach of its commitment under the North American Agreement on Environmental Cooperation to effectively enforce subsection 36(3) of the Canadian *Fisheries Act* against the practice of leaking deleterious substances from oil sands tailings ponds.

Oil sands tailings ponds result from the extraction of bitumen from mined oil sands deposits in Northern Alberta. The tailings ponds currently have a surface area of 130 square kilometers (50 square miles), with a volume of 720 billion litres (190 billion gallons).

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.

Tailings ponds are constructed from the earthen materials that oil sands companies mine from the area. They are not lined and therefore leak contaminated substances into the environment. Companies attempt to recapture the leakage, but do not recapture it all.

One study used industry data to estimate 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. This contamination can migrate to reach surface waters due to a hydrogeological setting that is punctuated by downcutting glacial and post-glacial meltwater channels and modern stream courses.

There are 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).

Subsection 36(3) of the Canadian federal *Fisheries Act* establishes a general prohibition on the deposition of deleterious substances into waters frequented by fish. The second half of subsection 36(3) also prohibits the indirect deposition of deleterious substances and has a preventative element of prohibiting deposition "in any place under any conditions where the deleterious substance may enter into such waters."

The Canadian federal government is on record several years ago with concerns regarding contaminated tailings leakage in the area, and has been present at environmental assessment hearings when companies have projected surface water contamination and water quality degradation.

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.

II. SUBSECTION 36(3) OF THE *FISHERIES ACT*

A. Subsection 36(3) of the *Fisheries Act*

Subsection 36(3) of the Canadian federal *Fisheries Act* deals with pollution prevention, and establishes a general prohibition on the deposition of "deleterious substances" into waters frequented by fish.

Subsection 36(3) 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.[1]

Subsection 36(4) of the *Fisheries Act* provides that a deposit of a deleterious substance is not an offence if permitted by regulation.[2] Subsection 36(5) provides that the Governor in Council may make regulations that permit the discharge of certain deleterious substances in certain locations and under certain conditions.[3]

Pursuant to subsection 36(5), the Governor in Council has made regulations prescribing the allowable deposits from facilities within specific industry classes such as the pulp and paper industry and the petroleum refining industry.[4] The Governor in Council has not made any regulations pertaining to oil sands mining, oil sands tailings ponds or any effluent types released by those operations. Therefore, 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.

In addition to prohibiting the direct deposit of deleterious substances into water frequented by fish, the second half of subsection 36(3) clearly prohibits the *indirect* deposition of deleterious substances and has a preventative element of prohibiting deposition "in any place under any conditions where the deleterious substance may enter into such waters" (emphasis added).

B. Subsection 36(3) is an Environmental Law

Subsection 36(3) of the *Fisheries Act* prohibits the release, discharge or emission of pollutants or environmental contaminants for the primary purpose of the protection of the environment or the prevention of danger to animal or human life or health and as such falls within the definition of an environmental law in Article 45(2) of the *North American Agreement on Environmental Cooperation.*

C. Interpretation of Subsection 36(3)

Canadian case law has clarified that it is not necessary that the receiving water be rendered deleterious to fish – it is the substance itself being deposited that is deleterious or not. In *R. v. Kingston (Corporation of the City)*, (2004) 70 O.R. (3d) 577, (2005) D.L.R. (4th) 734 (Ont. C.A.) ("Kingston"), the Court stated:

> [64] I agree with the interpretation of s. 36(3) given by Seaton J.A. in *MacMillan Bloedel* [*R. v. MacMillan Bloedel (Alberni) Ltd.* (1979) 47 C.C.C. (2d) 118 (B.C.C.A.)]. As he noted at pp. 121-22: "What is being defined is the substance

> that is added to the water, rather than the water after the addition of the substance."
>
> [65] The focus of s. 36(3) is on the substance being added to water frequented by fish. It prohibits the deposit of a deleterious substance in such water. It does not prohibit the deposit of a substance that causes the receiving water to become deleterious. It is the substance that is added to water frequented by fish that is defined, not the water after the addition of the substance. A deleterious substance does not have to render the water into which it is introduced poisonous or harmful to fish; it need only be likely to render the water deleterious to fish. The actus reus is the deposit of a deleterious substance into water frequented by fish. There is no requirement in s. 36(3) or paragraph (a) of the definition of the term "deleterious substance" in s. 34(1), of proof that the receiving waters are deleterious to fish.

In Canada, jurisdiction over environmental matters is shared between the provincial and federal governments. Therefore, the issue can arise as to whether provincial permitting can serve as a defence to the contravention of a federal law. However, under the doctrine of federal paramountcy, where there is an inconsistency or conflict between a federal law and a provincial law, the federal law prevails.[5]

A provincial approval cannot excuse the proper enforcement of federal law. Furthermore, the existence of a federal-provincial cooperation agreement does not excuse the federal government from the responsibility to enforce its legislation.

III. EVIDENCE OF TAILINGS POND LEAKAGE

A. Oil Sands Tailings Ponds Leakage

Canada's oil sands are a large deposit of thick hydrocarbons trapped in sand and clay in Northern Alberta. Once considered uneconomic, successive Canadian and Albertan governments have actively encouraged their exploitation, to the point where the oil sands industry is now a major one in Canada.

The thick hydrocarbons, called "bitumen," are currently extracted by one of two methods: (1) strip mining or (2) melting it in place (in situ) by injecting steam into the ground and pumping the bitumen out of the ground.

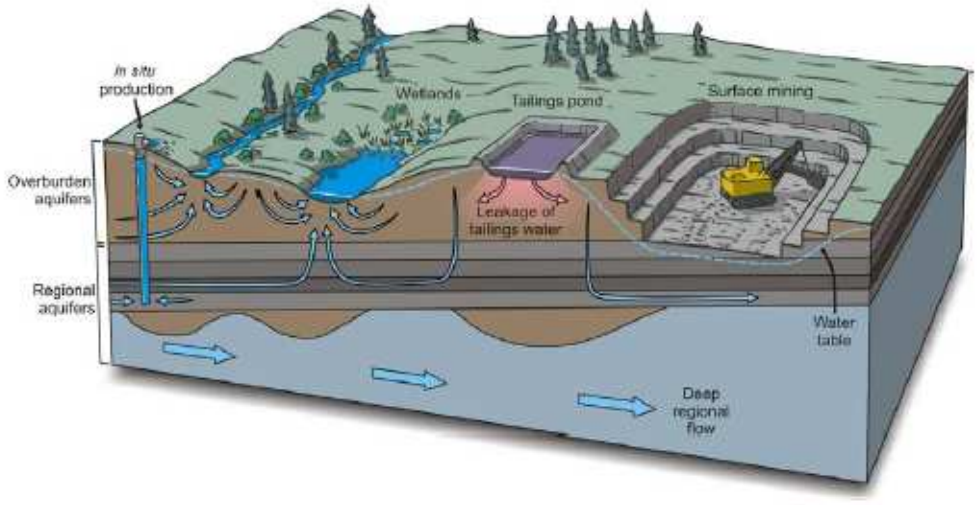
In the strip mining method, hot water is used to help separate the bitumen from the clay, sand, and other materials. This results in a large stream of contaminated liquid waste that is put into holding areas called "tailings ponds," although they are more like lakes in size.

Oil sands tailings ponds already have a surface area of 130 square kilometers (50 square miles), with a volume of 720 billion litres (190 billion gallons).[6] The volume is expected to exceed a trillion litres (264 billion gallons) by 2020.[7]

The containment areas for tailings ponds in the oil sands are built from materials the companies excavate from the surrounding area – earthen materials – and are not lined. In their project proposals,[8] companies assume that tailings ponds will systematically leak into the surrounding area, and the companies deploy a range of measures to recapture some of the leakage.

These recapture methods, however, are imperfect. As outlined below, there have been documented cases of contaminated tailings materials reaching surface waters, and leakage to deeper aquifers is not recaptured.[9] The following diagram is from the Council of Canadian Academies' Expert Panel on Groundwater report in 2009.[10]

Figure 6.9: Schematic Diagram of Key Groundwater Issues in the Athabasca Oil-sands Region



In December 2008, Environmental Defence Canada released a report that for the first time publicly estimated how much contaminated water the tailings ponds leak. The report compiled company data from environmental assessment reports to conservatively estimate 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. The report is included as Appendix I.

There are also documented cases of contaminated tailings water reaching surface water. As noted below, in an environmental assessment Shell Canada Ltd. projected that contaminated tailings from its operations would reach Jackpine Creek.[11] An academic study from the University of Waterloo estimates that Suncor Energy's Tar Island pond had been leaking almost 6 million litres a day into the Athabasca River.[12]

Another incident is documented in correspondence between the Alberta government and Syncrude. In correspondence dating across the mid 2000's, it is clear that leakage occurred from the Mildred Lake tailings pond into Beaver Creek, a tributary of the Athabasca River.[13]

An academic account of the Suncor South Tailings Pond acknowledges that leakage into the adjacent McLean Creek will not be stopped, but rather than the company would try to manage the concentrations of deleterious substances in the creek.[14]

With regards to the medium to long term issue of what happens to the leakage to deeper aquifers from tailings ponds, migration of contaminants in tailings leakage from groundwater into surface water over time can be facilitated by the hydrogeological setting of the oil sands. A case study on the oil sands by the Council of Canadian Academies' Expert Panel on Groundwater, states:

> The land cover in the Athabasca oil-sands area is primarily wetlands and boreal forest. These are underlain by varying thicknesses of overburden, comprising a range of coarse materials in buried valleys or glacial deposits and modern organic deposits sitting atop thick clay tills and sandy tills. The overburden is vertically punctuated by downcutting glacial and post-glacial meltwater channels and modern stream courses.[15]

The issue of more permeable underlying settings for tailings ponds can be seen with the example of Suncor's South Tailings Pond of its Millenium mine. There, the Pleistocene meltwater channel deposits underneath the pond have led to a management strategy of letting contaminated leakage into an adjacent creek, as referenced above.[16]

Given that the second half of subsection 36(3) of the *Fisheries Act* prohibits the indirect discharge of deleterious substances from areas that "may" lead to surface waters frequented by fish, deep leakage into deeper aquifers in an area "punctuated by downcutting glacial and post-glacial meltwater channels" 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.

B. Evidence of Harm

Tailings ponds contain a large variety of substances that are deleterious to fish. A recent scientific article 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 of the Environment (CCME) Canadian Environmental Quality Guidelines: Surface Water Quality Guidelines for the Protection of Aquatic Life[17] for several substances including ammonia, benzene, cyanide, oil and grease, phenols, toluene, polycyclic aromatic hydrocarbons, arsenic, copper and iron. The author concludes that:

> Chemicals of environmental concern in oils sands process water include NA's [naphthenic acids], bitumen, ammonia, sulphate, chloride, aromatic hydrocarbons,

> and trace metals. While NA's are the main contributors of acute toxicity to aquatic biota, various compounds have exceeded CCME water quality guidelines at some point during oil sands operations and could contribute to chronic toxicity in reclaimed aquatic environments.[18]

Naphthenic acids are of particular concern not just because of their toxicity, but also because of their longevity, taking many decades to break down.[19]

While the case law cited above confirms that it is the deposited substance itself that is classified as "deleterious" rather than the receiving waters, there is nonetheless emerging evidence that the surface waters of the region are rendered more harmful to fish by oil sands activities. An independent water monitoring study conducted in 2008 found concentrations of polycyclic aromatic compounds (PAC) at levels several times over the levels considered toxic to fish embryos in areas most heavily impacted by industry, and concluded:

> PAC may contribute to a greater prevalence of abnormal juvenile and adult fish captured in the Athabasca near and downstream of oil sands mining.[20]

IV. CANADA'S FAILURE TO ENFORCE SUBSECTION 36(3)

A. Environment Canada's Monitoring Failure

In 1994, Canada and Alberta signed the *Administrative Agreement for the Control of Deposits of Deleterious Substances under the Fisheries Act* ("*Agreement*"). While the *Agreement* provides for a sharing of responsibility for responding to and investigating releases that may contravene subsection 36(3) of the *Fisheries Act*, the *Agreement* designates Alberta Environment as the lead agency in responding to and investigating releases within Alberta. However, Annex 3 of the *Agreement* confirms that:

> 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.

The *Agreement* confirms that the federal government will continue to have the responsibility to conduct inspections, investigations, and prosecutions under the *Fisheries Act*.

In practice, Environment Canada has relied on Alberta Environment to monitor, report and investigate releases from tailings ponds that may contravene subsection 36(3),[21] and as such has abdicated its responsibility to enforce this provision of the *Fisheries Act*.

Further, Alberta Environment relies on industry self-reporting of tailings leakage.[22] Both the provincial and federal levels of government have delegated regional monitoring of releases to an organization called the Regional Aquatic Monitoring Program (RAMP).[23] RAMP is funded by the oil sands operators, and despite being billed as having a "multistakeholder" governance structure, key First Nation and environmental participants have distanced themselves from RAMP.[24]

An independent expert review of RAMP in 2004 found "significant concerns" with scientific leadership, effective design, and a failure to incorporate a regional approach.[25] A recent independent monitoring study in the oil sands by leading water specialists found high levels of contamination unreported by RAMP and concluded that:

> Our study confirms the serious defects of the RAMP…More than 10 years of inconsistent sampling design, inadequate statistical power, and monitoring-insensitive responses have missed major sources of [polycyclic aromatic compounds] to the Athabasca watershed.[26]

Environment Canada's reliance on the discredited RAMP program for monitoring of tailings pond leakage is a further abdication of its responsibility to monitor, investigate and enforce subsection 36(3).

B. Environment Canada's Failure to Enforce Subsection 36(3)

Despite the failure to directly monitor and investigate subsection 36(3) violations, Environment Canada has known for several years about the problem of contaminated tailings pond leakage. In 2004, the National Energy Board wrote:

> …the principal environmental threat from tailings ponds are the migration of pollutants through the groundwater system and the risk of leaks to the surrounding soil and surface water…the scale of the problem is daunting...[27]

Under the *Canadian Environmental Assessment Act,* each proposal for a new oil sands mine and associated tailings ponds goes through a Joint Review Panel (in partnership with the Alberta Energy Resources Conservation Board). The proponent provides all relevant federal agencies with information regarding the project.

As outlined below, notable about the environmental assessment process is 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) or regulate the releases pursuant to subcetion 36(4) of the *Fisheries Act*. For example, the Joint Review Panel in the Shell Jackpine project noted that:

> Shell stated that it would construct a 6 m deep perimeter ditch to intercept seepage flow from the tailings disposal area, but that some seepage would discharge to the

> ground surface between the tailings area and Jackpine Creek and that half of this seepage would enter the creek.[28]

In the CNRL Horizon decision, the Joint Review Panel noted the company's admission regarding overall impacts on water quality:

> CNRL acknowledged that it predicted some chemical substances would exceed chronic effects levels for fish and other aquatic biota, but it did not believe that there would be any effects on fish health as a result of those exceedances.[29]

In a January 2009 Memorandum to Canada's Environment Minister from his Deputy Minister (see Appendix II), Environment Canada acknowledges the leakage ("seepage") issue, and the fact that the agency is alerted to it by oil sands companies:

> Seepage would not likely be directly into surface waters, but move first into groundwater. It may take decades to reach surface waters. In their environmental assessments, many oil sands companies acknowledge that this may occur.[30]

Two things are notable about this statement. First is the qualification of "not likely" in the first sentence regarding leakage into surface waters, which is an acknowledgement of the prospect of it taking place. Second is an acknowledgement that the leakage may reach surface waters in "decades," well within the life span of naphthenic acids, one of the key pollutants from tailings ponds.

The federal government claims that "Alberta has a zero-discharge policy for oil sands tailings ponds,"[31] yet the Alberta government sanctions the leakage from tailings ponds under its *Environmental Enhancement and Protection Act*. The Alberta legislation is structured similarly to the *Fisheries Act* in that it states a general prohibition on the release of pollution unless authorized by the regulator.

In March, 2009, Environment Canada communicated with the Canadian Parliament's Standing Committee on the Environment and Sustainable Development where the specific question regarding how Environment Canada enforces the *Fisheries Act* with regards to tailings leakage was taken up (see Appendix III). In its communication, Environment Canada indicates that despite the fact that "Alberta Environment inspectors are not designated as Fisheries Inspectors under the *Fisheries Act,*" it is the practice of Environment Canada (EC) to wait for a referral from Alberta Environment should the latter suspect a *Fisheries Act* violation. And,

> To date, EC Enforcement has not received a referral from Environment Alberta indicating that they suspect any possible *Fisheries Act* violations.[32]

To repeat, no referrals from Environment Alberta have been forthcoming, and this is despite the documented instances of contaminated tailings pond leakage reaching surface waters outlined above.

It is also clear that Environment Canada is fully aware of the general issue of groundwater contamination and migration to surface waters, and in other circumstances is an advocate against the practice. On its webpage on groundwater contamination, Environment Canada states:

> It has often been assumed that contaminants left on or under the ground will stay there. This has been shown to be wishful thinking.[33]

Environment Canada is also aware of the issue of migration of groundwater pollution:

> Several studies have documented the migration of contaminants from disposal or spill sites to nearby lakes and rivers as this groundwater passes through the hydrologic cycle, but the processes are not as yet well understood. In Canada, pollution of surface water by groundwater is probably at least as serious as the contamination of groundwater supplies. Preventing contamination in the first place is by far the most practical solution to the problem.[34]

Environment Canada's failure to enforce the pollution prevention provisions of the *Fisheries Act* has been taken up more than once by Canada's Commissioner of the Environment and Sustainable Development. In a 1999 report, the Commissioner found several shortcomings in the approach of Environment Canada,[35] yet a subsequent 2009 review found that the problems persisted. In 2009 the Commissioner concluded:

> Environment Canada does not have a *Fisheries Act* compliance strategy for the industries and activities that must comply with the Act's prohibition requirement against the deposit of harmful substances in water frequented by fish.[36]

In 2009, the Commissioner also specifically addressed Environment Canada's enforcement with regards to its administrative agreement with Alberta and oil sands tailings pond contamination. It's conclusion in this regard was:

> Environment Canada relies on the Agreement and the arrangements with Alberta to meet its Fisheries Act responsibilities. However, 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.[37]

C. Submitters' Past Requests for Enforcement

As outlined above, the Canadian federal government has known about the problem of oil sands tailings leakage for several years, and has also participated in environmental assessment processes where specific instances have been identified.

When Environmental Defence released its December 2008 report on tailings pond leakage and failure to enforce the *Fisheries Act*, there was extensive media coverage

across Canada. A national newspaper, *the Globe and Mail,* ran an editorial that concluded that "the federal government has failed to enforce the *Fisheries Act*."[38]

In January 2009, Environmental Defence Canada (EDC) began direct written correspondence with Environment Canada (EC) to request enforcement of the *Fisheries Act* with regards to tailings pond leakage (see Appendix IV). Here is a summary:

- January 26, 2009: EDC to EC. EDC summarizes findings of its report and requests enforcement.

- April 7, 2009: EC to EDC. EC claims no evidence of particular point of leakage into Athabasca watershed and says will visit oil sands sites to investigate.

- May 8, 2009: EDC to EC. One letter to Deputy Minister regarding the narrow-casting of the leakage issue into specific surface water incidents rather than considering long-term groundwater leakage. Another letter to enforcement division outlining specific instances of surface water leakage and the law.

- May 29, 2009: EDC to EC. Enclosed copies of 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. Again flags indirect leakage issue.

- July 6, 2009: EC to EDC. Reports that its studies are inconclusive to date.

- September 28, 2009: EC to EDC. Sylvie Ladouceur, Executive Assistant to the Deputy Minister declined via email an in-person meeting with EDC

- January 13, 2010: EDC to EC. Request results of studies and flags new independent monitoring report of Dr. David Schindler finding elevated pollution levels in Ahtabasca and tributaries near oil sands.

- February 22, 2010. EC to EDC. Indicates that studies are still underway.

- March 25, 2010. EDC to EC. Flags that studies at this point are unlikely to capture information about past surface water incidents. Also flags that EC has known about the leakage problem for several years. Outlines what enforcement of the *Fisheries Act* would look like.

Finally, regarding the sincerity of the leadership of Environment Canada to address this issue, during a water conference at McGill University on March 26, 2010, federal Environment Minister Jim Prentice, responsible for the enforcement of subsection 36(3), responded to a specific question about the amount of contaminated tailings leaking into the groundwater by saying it was "garbage science."[39] This comment exposes the 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.

V. ARTICLE 14 REQUIREMENTS

A. This is a Submission the Secretariat May Consider – Article 14.1

This Submission meets the threshold requirements established under Article 14.1 of the NAAEC.

Article 14.1(a). The Submission is presented in English.

Article 14.1(b). Environmental Defence Canada presents the Submission on behalf of itself, the Natural Resources Defence Council, John Rigney, Don Deranger, and Daniel T'seleie (the "Submitters").

Article 14.1(c). This Submission is based on information and documentary evidence contained in environmental assessment submissions, regulatory correspondence, academic papers, and other sources.

Article 14.1(d). The Submitters have a long-standing interest in the health of natural ecosystems, including water pollution issues. The Submitters do not have a financial interest in oil sands operations or their competitors. The Submitters present this Submission with the aim of promoting enforcement.

Article 14.1(e). This matter has been communicated in writing to Environment Canada in a series of correspondence dating back to January 2009 (see Appendix IV). The Submitters believe this lengthy correspondence is failing to result in enforcement measures, and as outlined above, question the sincerity of the responsible Minister.

Article 14.1(f). The Submitters are not-for-profit organizations and individuals based or residing in the territory of Canada and the United States.

B. The Issues Raised in this Submission Merit a Response from the Government of Canada – Article 14.2

The Submitters respectfully submit that they have met the criteria set out in Article 14.1, and ask that the Secretariat request a response from the Government of Canada.

Article 14.2(a) - Harm to the Submitters

The individual Submitters are people who have lived, hunted, and fished downriver from the oil sands for decades. The non-governmental Submitters 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 the reduction and elimination of pollution from industry.

The Submitters and their members make use of these waters and water pollution harms the entire ecosystem, including people, fish and their habitat. The harm that the contaminants found in tailings ponds can do is not in dispute, and as outlined above, contaminants like naphthenic acids are very long-lived, with their toxic legacy extending into many decades. Given the amount of tailings being generated, the scale of the problem is of national, if not international concern.

Article 14. 2(b) - Advancing the Goals of the NAAEC

This Submission raises matters whose further study in this process would advance the goals of the NAAEC. In particular, the preparation of a factual record would:

- Foster the protection and improvement of the environment for present and future generations (Preamble par.1, Article 1(a));

- Promote sustainable development based on cooperation and mutually supportive environmental and economic policies (Article 1(b));

- Increase cooperation between governments to better conserve, protect, and enhance the environment (Articles 1(c), and 10(2)(i));

- Avoid trade distortions by Canada's failure to enforce the *Fisheries Act* – a U.S. organization called Domestic Energy Producers Alliance is already on record alleging unfair trade practices from "cheap, dirty Tar Sands"[40] (Article 1(e));

- Strengthen cooperation on the development and improvement of environmental laws, regulations, procedures, policies and practices (Article 1(f));

- Enhance compliance with, and enforcement of, environmental laws and regulations (Articles 1(g), and 10(2)(p)); and

- Promote pollution prevention policies, practices, techniques and strategies (Articles 1(j), and 10(2)(b)).

Article 14. 2(c)-Private Remedies

There are no realistic alternative private remedies available. The Submitters either do not have status for civil remedies or they 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 without access to significant resources, and such proceedings do not address the systemic problem of persistent non-enforcement by the authorities.

Also, private prosecutions can be stayed by the Crown. Private prosecutions are beyond the financial capacity of most citizens, and are not a viable option for effective enforcement where there are numerous violations of federal law. The Government of

Canada has the resources and the obligation to effectively enforce these domestic environmental laws.

Article 14. 2(d)-Mass Media Reports

This Submission is based primarily upon information obtained from governments, industry, and academic research resources, and not simply mass media reports.

Remedy

The Submitters therefore respectfully ask that the CEC prepare a factual record of the allegation 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.

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[1] *Fisheries Act*, R.S.C. 1985, c. F-14, s. 36(3).
[2] *Ibid.*, s. 36(4).
[3] *Ibid.*, s. 36(5).
[4] *Pulp and Paper Effluent Regulations*, S.O.R./92-269; *Petroleum Refinery Liquid Effluent Regulations*, C.R.C. c. 828.
[5] Peter W. Hogg, *Constitutional Law of Canada*, 2005 Student Ed. (Toronto: Thomson Carswell, 2005) at 16.1.
[6] Backgrounder: Oil Sands Tailings and Directive 074, Pembina Institute, Dec. 1, 2009.
[7] Backgrounder: Oil Sands Tailings and Directive 074, Pembina Institute, Dec. 1, 2009.
[8] For a summary of company estimates of tailings ponds leakage rates, see "Appendix 1 – Methodology and Sample Calculations," by Jeremy Moorhouse, Pembina Institute, December 2008 at http://www.environmentaldefence.ca/reports/pdf/Seepage%20Appendix%20rA.pdf
[9] See "11 Million Litres a Day," by Matt Price, Environmental Defence Canada, December 2008, p. 11.
[10] "The sustainable management of groundwater in Canada," Expert Panel on Groundwater, May 2009, 3915.
[11] Joint Panel Report, 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.
[12] "Attenuation of Contaminants in Groundwater Impacted by Surface Mining in Oil Sands, Alberta, Canada," Jim Barker et al, University of Waterloo, November, 2007.
[13] Ecojustice Canada summarized some of this correspondence in its submission to the Standing Committee on Environment and Sustainable Development, May 7, 2009, pp. 32-34. See: http://www.ecojustice.ca/publications/submissions/Ecojustice%20Submission%20to%20StandingCommittee%20FINAL%202009-05-11.pdf/view?searchterm=oil%20sands
[14] "Design of Tailings Dams on Large Pleistocene Channel Deposits, A Case Study – Suncor's South Tailings Pond," by B. Stephens et al, date unknown.
[15] "The sustainable management of groundwater in Canada," Expert Panel on Groundwater, May 2009, 3891-3896.
[16] "Design of Tailings Dams on Large Pleistocene Channel Deposits, A Case Study – Suncor's South Tailings Pond," by B. Stephens et al, date unknown.
[17] See: http://ceqg-rcqe.ccme.ca/
[18] Erik W. Allen, "Process water treatment in Canada's oil sands industry: I. Target pollutants and treatment objectives," Journal of Environmental Engineering and Science, 7:123-138.
[19] See: "Napthenic Acids in Athabasca Oil Sands Tailings Waters Are Less Biodegradable than Commercial Nathenic Acids," Angela C. Scott et al, Enviorn. Sci Technol. 2005, 39, 83888-8394; and

Imperial Oil Resource Ventures Limited: Kearl Oil Sands Project – Mine Development Application and Supplemental Information," Imperial Oil Ltd., 2005, Volume 6.
[20] "Oil sands development contributes polycyclic aromatic compounds to the Athabasca River and its tributaries," E. N. Kelley at al, Proceedings of the National Academy of Sciences, December 2009, p. 5.
[21] See: "Follow-Up On Committee Hearings," by Environment Canada to the Standing Committee on the Environment and Sustainable Development, House of Commons, March 20, 2009. See Appendix III.
[22] See: "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 as marked on the document in Appendix III.
[23] See: http://www.ramp-alberta.org/RAMP.aspx
[24] The Athabasca Chipewyan First Nation released a Media Release on May 9, 2008 titled "ACFN Withdraws from R.A.M.P and W.B.E.A." Personal communication on November 18, 2008 from Shannon Crawley with the Chipewyan Prairie First Nation confirms that Band wrote to RAMP in 2008 to withdraw. Personal communication with Simon Dyer of the Pembina Institute on April 9, 2010 confirmed that Pembina asked RAMP to remove its name from the RAMP website in 2009.
[25] "Oil Sands Regional Aquatic Monitoring Program (RAMP) Scientific Peer Review of the Five Year Report (1997-2001)," Submitted to the RAMP Steering Committee, February 13, 2004, prepared by G.B.Ayles et al.
[26] "Oil sands development contributes polycyclic aromatic compounds to the Athabasca River and its tributaries," E. N. Kelley at al, Proceedings of the National Academy of Sciences, December 2009.
[27] "Canada's Oil Sands: Opportunities and Challenges to 2015," National Energy Board, 2004.
[28] Joint Panel Report, 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.
[29] Joint Panel Report, 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.
[30] "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.
[31] "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.
[32] "Follow-Up On Committee Hearings," by Environment Canada to the Standing Committee on the Environment and Sustainable Development, House of Commons, March 20, 2009.
[33] See: http://www.ec.gc.ca/eau-water/default.asp?lang=En&n=6A7FB7B2-1
[34] See: http://www.ec.gc.ca/eau-water/default.asp?lang=En&n=6A7FB7B2-1
[35] See: 1999 Report of the Commissioner of the Environment and Sustainable Development, Chapter 5—Streamlining Environmental Protection Through Federal-Provincial Agreements: Are They Working?
[36] Report of the Commissioner of the Environment and Sustainable Development—Spring 2009 Chapter 1 p. 35. See also: http://www.oag-bvg.gc.ca/internet/English/parl_cesd_200905_01_e_32511.html#hd4b
[37] Report of the Commissioner of the Environment and Sustainable Development—Spring 2009 Chapter 1 p. 39.
[38] "Prevention is best," the *Globe and Mail*, December 12, 2008.
[39] "Conservatives work hard to avoid dealing with tarsands," by Cameron Fenton, *the Concordian*, March 30.
[40] See: http://depausa.org/dyn/showpage.php?id=15