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Chair

Mr. James Bezan



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● (0905)

[English]

The Chair (Mr. James Bezan (Selkirk—Interlake, CPC)): I call this meeting to order. We're going to continue with our study on the oil sands and Canada's water resources.

We want to welcome to the table again Cynthia Wright. She's had a busy week with us at committee on two separate issues. Welcome back. She is the acting assistant deputy minister for the environmental stewardship branch of the Department of the Environment. She is joined by Albin Tremblay, who is the chief enforcement officer, and Fred Wrona, who is the acting director general for water science and technology.

From the Department of Health we have John Cooper, who is the director of the water, air and climate change bureau in the healthy environments and consumer safety branch. He is joined by Roy Kwiatkowski, who is the director of the environmental health research division of the first nations and Inuit health branch. Welcome. We have Wadieh Yacoub, who is the medical officer and director of health protection, first nations and Inuit health, of the Alberta region.

Welcome to all of you.

We'll turn to our opening comments. Please keep them within ten minutes.

We'll go to you, Ms. Wright.

Mrs. Cynthia Wright (Acting Assistant Deputy Minister, Environmental Stewardship Branch, Department of the Environment): Thank you, Mr. Chair.

I'm here today on behalf of Environment Canada and my colleagues to describe to you some of the roles and responsibilities that we have as they relate to oil sands and to describe some of our priority work in this area.

As you well know, the management of the environment is a shared jurisdiction between the federal and provincial governments. At the federal level, Environment Canada's role relates to the management of transboundary issues, including those related to water, migratory birds, species at risk, and toxic substances.

Environment Canada has responsibilities under the Canadian Environmental Protection Act, the Species at Risk Act, the Migratory Birds Convention Act, and the Fisheries Act. We are also involved with activities that are enabled under the Canada Water Act, such as cooperation with jurisdictions on research and monitoring. Through this work we provide our knowledge and

technical expertise to inform the decision-makers at all levels of government in Canada.

Slide 3 shows that there are three ways in which Environment Canada interacts with the oil sands. The first is through the fulfilment of our statutory and regulatory obligations. The second is through the provision of expert advice to regulatory authorities in the environmental assessment process. The third is through research and monitoring, including collaboration in multi-stakeholder environmental management initiatives. We'll describe a bit of each of these.

Next is slide 4. I'll speak briefly to our statutory and regulatory obligations under the Fisheries Act, the Canadian Environmental Protection Act, the Migratory Birds Convention Act, and the Species at Risk Act.

We'll go on to slide 5. Environment Canada administers subsection 36(3) of the Fisheries Act, which prohibits the deposit of any deleterious substance in water frequented by fish.

The Province of Alberta issues permits for the oil sands tailing ponds. One of the requirements of those permits is that there not be a discharge of water into the environment. The general prohibitions of the Fisheries Act, however, would still apply and could be used in the event of a spill or an unusual discharge. The department does monitor the oil sands activities. It has conducted 18 inspections over the past few years and has not yet found any violations of the Fisheries Act.

The Canadian Environmental Protection Act is a keystone piece of legislation to reduce the release of harmful chemicals in the environment. Under Canada's chemicals management plan, 98 high-priority substances have been identified as potentially substances in the oil sands sector. These substances are currently being assessed. The act has other relevant provisions, including reporting requirements under the National Pollutant Release Inventory, and emergency provisions that include the requirement for emergency plans for a number of substances associated with the oil sands.

Next is slide 6. The Migratory Birds Convention Act and its regulations ensure the conservation of migratory birds. Specifically, the act prohibits the damage or destruction of migratory birds, nests, and eggs. It prohibits the deposit of substances harmful to migratory birds in any waters frequented by migratory birds. It is under this act that Environment Canada laid charges against Syncrude for allegedly depositing, or permitting the deposit of, a substance harmful to migratory birds.

The Species at Risk Act, as you well know, was created to protect wildlife species from becoming extinct by providing for recovery of species due to human activity and by ensuring the sound management of species of special concern so that they don't become endangered or threatened. The act includes prohibitions against the killing, harming, harassing, capturing, or taking of species at risk and against destroying their critical habitat.

Slide 7 relates to how Environment Canada provides expert advice in support of federal environmental assessments. This advice includes technical advice related to water quality, quantity, and prediction modelling; ambient air quality and mine fleet emissions technology; cumulative effects of oil sands development and the need for integrated monitoring; and migratory birds, species at risk, and their habitat. Environment Canada has been involved in about 12 environmental assessments for oil sands projects, including five joint panel reviews.

We will go to slide 8. Environment Canada has extensive expertise, and we undertake to share that information broadly. We carry out ecosystem science in this region of the Mackenzie Basin, and we collaborate with the provinces, territories, university, industry, and other stakeholders. For instance, we are engaged in the Cumulative Environmental Management Association.

We also chair the Mackenzie River Basin Board and conduct research in support of the board's primary goals. We are engaged in research related to ecosystem impacts, including downstream effects on such things as water availability, ecosystem flow needs, and contaminants.

Environment Canada also led earlier research conducted in the oil sands region as part of the northern river basins study, the northern rivers ecosystem initiative, and the Peace-Athabasca delta technical studies. This work has influenced a number of industry regulations and operating standards that apply to the oil sands. We've also undertaken targeted research on oil sands-related contaminants.

Slide 9 shows a number of key Environment Canada priorities that, going forward, will help support decisions related to the oil sands activities. For instance, some of our current research includes continuing the assessment of toxicity and potential effects of tailings pond waters, assessment of acidifying emissions from oil sands and their impact on lake ecosystems, and assessment of the impacts of changes in flow and water levels in the Peace-Athabasca delta.

As I previously mentioned, we also have extensive work under the chemicals management plan, which has organized work related to the oil sands sector and identified 98 potential substances whose risk we are currently assessing. Some of these substances are related to the mining and extraction activities, such as purchased drilling fluids, and others relate to upgrading activities. As risks are

identified, we will manage those risks, and of course we continue to carry out our enforcement responsibilities.

Thank you, Mr. Chair.

(0910)

The Chair: Thank you very much. Thanks for being under time.

Mr. Cooper, you're on.

Mr. John Cooper (Director, Water, Air and Climate Change Bureau, Healthy Environments and Consumer Safety Branch, Department of Health): Thank you. I would like to thank the committee for inviting Health Canada to appear before you today.

We can move to slide 1 to give a sense of how I'd like to approach this. Initially, I'll briefly discuss the roles and responsibilities of Health Canada as they relate to health and water. Then I'll move to a consideration of the Athabascan region and the particular potential sources of health risk associated with that area. Third, I'll briefly discuss some of the health concerns that have been raised. As you're aware, Dr. John O'Connor and the people of Fort Chipewyan have raised concerns about cancers. Some studies have looked at this issue and have come to certain conclusions, and I'll briefly touch on those. Finally, I'd like to discuss the way forward and give conclusions about where we need to go in the future.

One of our primary roles in Health Canada is drinking water quality. It's important to understand that responsibility for drinking water quality is shared between federal and provincial governments. The federal government has responsibility for the safety of drinking water on passenger conveyances—ships, trains, and airplanes—and on federal lands.

In the context of first nations, Health Canada works with Indian and Northern Affairs Canada to assist first nations in dealing with the issue of safe drinking water. To be more specific, first nations have day-to-day responsibilities for the provision of drinking water, the operation of the treatment systems, and the testing that goes along with that. Health Canada provides advice and ensures that monitoring programs are in place on first nation reserves.

In terms of shared federal, provincial, and territorial management of drinking water, Health Canada is responsible for developing the risk assessment of chemical, microbiological, and radiological contaminants. These guidelines are used as the basis for standards and regulations in all the provinces and territories. In other words, these become enforceable standards in all jurisdictions across Canada and provide a common benchmark for safe drinking water.

I would like to give a quick overview in terms of how effective this approach is. I would suggest that since the Walkerton and North Battleford crises in 2000 and 2001 respectively, both the quality and the management of drinking water have improved substantially. This improvement includes the adoption of a multi-barrier approach, which essentially means that it's not sufficient just to have a good treatment system or a treatment plant. Instead, you really need to focus your attention on major issues, such as the protection of the source water of lakes, rivers, and groundwaters. This is key to protecting health. You must also ensure that you have operators and training in place.

The provinces and territories have all updated their legislation, regulations, and policies since 2000 and 2001. That said, we still face challenges in drinking water. In particular, I would point to water supplies in small communities. Those communities lack the capacity and the resources to provide the treatment and protection to which larger communities have access. Health Canada works with provinces, territories, industries, NGOs, and the academic community to try to move this issue forward so that we can address this challenge.

Health Canada also has responsibilities related to food. They are primarily in relation to the level of exposure to chemical contaminants in retail food, which is regulated under the Food and Drugs Act. However, in the context of the meeting here today, I think the issue is more in terms of country foods. Health Canada conducts risk assessments of country foods and provides advice in terms of health protection to provinces so that they are able to issue advisories specifically in relation to the consumption of fish and other food taken from the wild.

● (0915)

Health Canada also has responsibilities related to environmental contaminants. Cynthia Wright has already gone into the Canadian Environmental Protection Act and the chemicals management plan, which assesses and manages chemicals considered at risk and looks at industrial sectors, so I won't add anything to that area.

Finally, Health Canada has a role in environmental assessments and in identifying the potential health risks associated with development projects.

Now, if I can turn my attention to the Athabascan region and the potential sources of health risk, I'll give a brief overview of that.

Certainly there are contaminants of concern. These are mostly in the source waters and these derive from natural sources, such as the bitumen that leaks into the rivers and lakes, and also arsenic and mercury that come from natural sources. But the Athabascan region has had a history of development that includes a uranium mine that I understand is no longer in operation. There are pulp and paper mills, the agricultural sector, and of course, the petroleum industry, the oil sands. All of these factors contribute to the overall quality of the source water, which is a primary concern.

Accordingly, when we're engaged in environmental assessments, our advice is to focus on source water quality monitoring and protection, the prevention of leaks and spills; and if there are leaks or accidental spills, it's important to notify downstream treatment operators and citizens of a release so they can take action to prevent

any health risk. Having said that, there are issues with source water quality. The quality of drinking water is good in all the communities downstream of the oil sands.

I'll move now to country food. Yes, there have been issues with country food. There has been an advisory issued by Alberta since 1990 that relates to the consumption of walleye, and it's related to mercury contamination.

I'm sure the committee is aware of Dr. John O'Connor's concern—and the community of Fort Chipewyan has raised concerns over the years—about the frequency of cancers occurring in the community, rare cancers such as bile duct cancers and colon cancers. There was a preliminary and fairly limited study presented in 2006 that indicated that there were no significant increases in the cancer rate.

Subsequent to that, a more rigorous and complete study was conducted by the Alberta Cancer Board, and they concluded that the observed rates of cancer, the rare cancers, the bile duct cancers, were within the norm, not outside the expected range of these cancers. They also did indicate that the overall cancer rate was slightly higher than expected. The conclusions they reached or the explanations they linked to that finding were that this could be due to a simple matter of chance because of the very small sample size, it could be related to increased detection because of the more rigorous examination of the charts and medical history of the community, and it could also be related to a real health risk.

• (0920)

In conclusion, the study, at least so far, indicates that the rare cancers are probably within the expected range. There's indication that the overall cancer rates may be higher, and we would suggest that this needs further study.

The treated drinking water is safe; however, drinking directly from source water would not be advisable. In terms of the way forward, clearly, protecting source waters is key and preventing leaks and accidental spills is our priority. I think all of us do not want to see any added contamination of the system. We think it's very important that the province continues to monitor the source and the treated drinking water and that governments take regulatory action as required.

In terms of Health Canada, one of our priorities is to continue developing guidelines and to identify and assess and manage contaminants under the chemical management plan. We have a continuing role in providing advice and support in any further cancer studies, and certainly in terms of working with first nations communities to ensure safe drinking water and improvement of health status.

Thank you very much.

The Chair: Thank you, Mr. Cooper.

Mr. Scarpaleggia, could you kick us off on the seven-minute round, please?

Mr. Francis Scarpaleggia (Lac-Saint-Louis, Lib.): Thank you for your presentations.

Going back to the health studies on the first nations people of Fort Chipewyan, how many studies have been done either by the government or by outside scientists? Is it just one or two studies that contradict each other; therefore, we conclude that there's no real conclusion to draw from them? Could you repeat how many studies there have been?

The Chair: Mr. Yacoub, please.

Dr. Wadieh Yacoub (Medical Officer, Director, Health Protection, First Nations and Inuit Health, Alberta Region, Department of Health): To my awareness, there are only two studies for human health. The two were conducted, and the first one was in 2006, by Alberta Health and Wellness. They did a review of the health status of the community of Fort Chipewyan. In that review, they looked at not just cancers but the whole range of chronic diseases and so forth. In that study in 2006, they reported directly to the community the findings of the last study, and it reflected increased rates of diabetes, of renal disease, of hypertension, but they didn't find any increased rates of cancers at the time. However, with the continuing concerns being voiced by the community, by the physician, a more specific request was made to the Alberta Cancer Board to do a review of the first study.

They did, and this was done with the participation of the community and with the participation of federal and provincial jurisdiction, but the Alberta Cancer Board was the lead. It is the lead because it is the body that has the data on cancer for all Albertans in Alberta.

Mr. Francis Scarpaleggia: That study has been completed?

Dr. Wadieh Yacoub: Yes, that was just released in February of this year, and it was shared with the public. It is available, and the officials are ready to go and visit the community and also sit with them and go forward on what they do next.

Mr. Francis Scarpaleggia: What was the result of the latest study, the one that was released in February?

Dr. Wadieh Yacoub: The more recent study, the more rigorous—and I say rigorous because it has been peer-reviewed by professors around the world—found the following. The initial concern that was voiced was that there were findings of a rare cancer, cholangio-carcinoma. The initial numbers cited were six cholangiocarcinomas in the community. Off and on in the media, these numbers were reviewed to six, to five, to four, to three. That's why the investigation was undertaken, to verify this.

The final finding of the community, by the cancer board, is as follows. There were only two cholangiocarcinomas confirmed. One of the two is only confirmed clinically and by ultrasound. That means it's not fully confirmed by pathology. But I submit to you that there are two cholangiocarcinomas in that community.

• (0925)

Mr. Francis Scarpaleggia: So this was basically to respond Dr. O'Connor's concerns or to his study.

If one looks at what Alberta Health and Wellness is saying and at what the Alberta Cancer Board is saying, it was just a rogue study by Dr. O'Connor, I guess. Is that what we're saying?

Dr. Wadieh Yacoub: Dr. O'Connor never undertook a study. Dr. O'Connor only suggested that there were six cases he had seen.

Mr. Francis Scarpaleggia: Oh, I see. Okay, thank you so much.

Ms. Wright, does the NPRI, the National Pollutant Release Inventory, include data on the chemicals in the tailings ponds?

Mrs. Cynthia Wright: The chemicals in the tailings ponds are not being released into the environment, so most of the NPRI reporting would be related to air emissions in the oil sands area.

Mr. Francis Scarpaleggia: I see. Does Environment Canada from time to time send an inspector to the tailings ponds to inspect, on a sort of fact-finding mission, what is going on in the tailings ponds? Where do you get the data to suggest that the ponds would not be leaking, for example?

Mrs. Cynthia Wright: I'll let my colleague Monsieur Tremblay *répondre à cette question*.

[Translation]

Mr. Albin Tremblay (Chief Enforcement Officer, Department of the Environment): Thank you, Cynthia.

In recent years, a total of 18 inspections were done of oil sands tailing ponds. In addition to these inspections, under the Fisheries Act, we have an agreement with the Alberta Environment Department, which does regular inspections of the monitoring wells. These follow-up inspections are mandatory, under the permits issued by the province. If the information obtained by the province indicates that there is a potential violation, especially of the Fisheries Act administered by Environment Canada, the province informs us. This is one of the conditions of the agreement with the environment department.

Inspections are thus done directly on the sites, not necessarily for the oil sands tailing ponds, but for all operations carried out there, such as processing.

Mr. Francis Scarpaleggia: As concerns the oil sands tailing ponds, what type of inspection do you perform? What is the procedure when you inspect a site?

Mr. Albin Tremblay: There are no inspections as such done on the oil sands tailing ponds, except for the information we receive from the environment department. As Ms. Wright mentioned, in principle, there are no emissions of any kind released by tailing ponds, unless they come from underground water. This is monitored through inspection of the monitoring wells.

Mr. Francis Scarpaleggia: Who inspects the monitoring wells?

Mr. Albin Tremblay: They are inspected by the Alberta Environment Department.

Mr. Francis Scarpaleggia: Do the department representatives go on site or do they receive the information directly from the companies?

Mr. Albin Tremblay: Both. In general, the companies, using clearly defined processes, ensure that the data is not disturbed and provide information to the environment department. The department checks the accuracy of this information on a regular basis. It carries out its own well inspections to check the information obtained from the companies. Based on this information, we receive this data, and use it to determine whether there have been any violations.

The Chair: Thank you very much.

Mr. Bigras, you have seven minutes.

Mr. Bernard Bigras (Rosemont—La Petite-Patrie, BQ): Thank you, Mr. Chair.

Thank you for your presentation. You are undoubtedly aware that the UN will be releasing, this morning in New York, its third three-year report on world water development. The UN is very critical about oil sands and water. One author of the report states that the use of water by the oil companies working in the oil sands is extremely inefficient and therefore, absolutely not sustainable. That is what the UN has said, as we are working here in committee.

I would like to know whether you participated in this UN report. I have trouble reconciling these results with the department's findings, when you state: "Environment Canada provides advice in support of federal environmental assessments. This advice includes [...] cumulative environmental effects of oil sands development on water and sediment quality."

What was your contribution to this study that will be unveiled this morning at the UN? Is it being taken into account? I'm trying to understand

• (0930)

[English]

Mrs. Cynthia Wright: As far as we know, we haven't been involved with that UN study. I haven't seen it, so I don't know if they cite some of our published literature. All of our science, of course, is published in peer reviews. I don't know if they've used that or not.

[Translation]

Mr. Bernard Bigras: As concerns health, Dr. O'Connor sounded the alarm in 2006 when CBC, among others, announced that five people had died in Fort Chipewyan from a rare tumour. Health Canada's only answer was that Mr. O'Connor was frightening Canadians needlessly. I'm not making this up, Health Canada said that

A mandate was given to the College of Physicians and Surgeons of Alberta and an inquiry was launched to follow up on Mr. O'Connor's report.

This morning, you told us that, according to the results of a study conducted by Alberta's health services agency, released in February 2009, the number of observed cases of colon and bile duct cancer is within the expected range. However, the report shows an increase of 30% of cancer rates in Fort Chipewyan as compared to the provincial average. So you're telling us that everything appears normal, whereas in fact, the cancer rate is 30% higher in Fort Chipewyan than in the province on average.

How can you look us in the eye this morning and tell us honestly that the number of cases is within the expected range?

[English]

Dr. Wadieh Yacoub: The Alberta Cancer Board did a rigorous study that was reviewed by peer reviewers from across the world on the methods used and the results. Every single peer review is published on public websites. You can read the reviewers' comments on the study.

We at Health Canada have concurred with the findings of this study. We believe the number of cases is definitely within the expected range. First nation cancer rates are usually below the provincial average for cancers across Alberta, except for cholangio-carcinoma. Cholangiocarcinoma is known to be higher in native Americans and indigenous people around the world, and in Alberta the rate of cholangiocarcinoma is two to three times higher than for the rest of Albertans.

So it definitely is the case that it is within the expected range. The fact that two cases happened one after the other in the next year is probably, likely, due to random variation and chance because of the small size of the population.

As for the colon cancer, the physician submitted 12 cases of colon cancer that he said he'd seen. From the 12 he submitted, only three were confirmed to be colon cancers. Because of the rigorous work of the Alberta Cancer Board, they found another three that he had not submitted.

There definitely are small increases in the rates of the other cancers that the board reviewed—blood cancers, lymphatic cancers, soft tissue carcinomas. However, even for those cancers, these are the number of cancers, not the number of people. Some people have actually more than one cancer.

I submit to you that the findings are valid. They have been very well reviewed by independent people. They're the cancers we need to follow. That's why we at Health Canada concur that we need to continue monitoring the cancer incidence.

If these rare cancers happen again, that truly will be a cause for concern and follow-up in a more rigorous way. That's why the Alberta Cancer Board has made a great effort to visit the community and sit down with the local physician who currently is actually reporting cancers. Dr. O'Connor did not report these cancers when they happened. Now this current physician has the form, and he currently reports everything to the board.

I submit to you that the next step, for sure, is to continue monitoring closely to see whether these are true increases in rates or these are true random variations, as many cluster investigations like these have found around the world.

• (0935)

The Chair: Merci beaucoup.

Ms. Duncan, go ahead, please.

Ms. Linda Duncan (Edmonton—Strathcona, NDP): Thank you, Mr. Chair.

Dr. Yacoub, I'm a little bit concerned about what you're suggesting here. Are you suggesting that the only problem with health in Fort Chipewyan is Dr. O'Connor? You're suggesting, first of all, that Health's Canada's response was to file complaints with the College of Physicians and Surgeons. I understand that four of those five complaints were found invalid. The only one outstanding is your complaint that he caused undue alarm. Is it not true that had it not been for Dr. O'Connor's interventions there wouldn't have been any investigation whatsoever initiated into this?

Mr. Mark Warawa (Langley, CPC): I have a point of order, Chair.

The Chair: Mr. Warawa, on a point of order.

Mr. Mark Warawa: The purpose of today's meeting is to research oil sands and the water. None of us is encouraged to cross-examine witnesses in a Perry Mason style of interrogation.

Ms. Linda Duncan: Mr. Chairman, the representative of Health Canada—

The Chair: Mr. Warawa has the floor.

Ms. Linda Duncan: —is suggesting that Dr. O'Connor did not do his work properly, so I am inquiring about that.

The Chair: Ms. Duncan, please.

Mr. Mark Warawa: Chair, what I am encouraging is that we stay on topic.

Ms. Linda Duncan: I fail to see how this is not on topic.

The Chair: I have to rule against that point of order, because Ms. Duncan is following up on comments that Mr. Yacoub made. So I will give the floor to Ms. Duncan to continue on with her questioning.

I didn't deduct any time from you for that point of order. Please begin.

Dr. Wadieh Yacoub: Thank you for the question.

The number one priority for us in Health Canada is to protect first nations and Inuit health. The response of Health Canada, as soon as Dr. O'Connor phoned us, was to immediately instigate an investigation to follow up on the claims of a cluster of cancers. This was done in cooperation with Dr. O'Connor, and actually it has been three years to the day as of yesterday since we did that. We immediately flew, upon his agreement, to Fort Chipewyan to meet with him, which happened on May 17, 2006, at which time Alberta Health and Wellness, Public Health Agency of Canada, and Health Canada representatives met with Dr. O'Connor to investigate his concerns. At no time did we suggest that his concerns were invalid or anything like that.

We pursued with the college other things that caused us concern, because we are all members of the College of Physicians and Surgeons, and under our ethical and professional obligations, which we all meet as physicians, we spoke with the college. The college rulings have not been made public. In particular, the one you refer to is still pending investigation.

● (0940)

Ms. Linda Duncan: Is that not because your charge is outstanding? Is it not true that the community of Fort Chipewyan has unanimously asked that Health Canada withdraw that allegation?

Dr. Wadieh Yacoub: Health Canada never laid charges.

Ms. Linda Duncan: You filed a complaint, did you not?

Dr. Wadieh Yacoub: There were complaints, but not charges, and the complaints were based on ethical and professional issues related to conduct.

Ms. Linda Duncan: Thank you.

Dr. Cooper, I am very encouraged by your statement that you think it is very important to focus on the source water and on preventing the contaminants from getting into the river. Does Health Canada, in cooperation with Environment Canada, have any intention of initiating studies on the source water, particularly in the area of Fort Chipewyan, in comparison with water upstream of Fort McMurray?

Mr. John Cooper: I'll probably turn to my colleagues at Environment Canada.

While we very actively promote source water protection as a means of ensuring safe drinking water, we have to rely very extensively on provincial and territorial jurisdictions and the roles of Environment Canada that have a lead in terms of water management in the lakes, rivers and—

Ms. Linda Duncan: Perhaps Mrs. Wright or someone would respond. I understand that under the Canada Water Act, Environment Canada has an extensive mandate to look at source water and water management.

Mrs. Cynthia Wright: I'll let Dr. Wrona describe the research program.

Mr. Fred Wrona (Acting Director General, Water Science and Technology, Department of the Environment): Thank you.

With respect to the kinds of activities we've been doing in the region, since 1991 in a number of our technical studies and other initiatives we certainly have been working at the issue of source water quality in the basin.

Ms. Linda Duncan: Do you carry out your own review or do you rely on the RAMP work?

Mr. Fred Wrona: We participate in processes such as RAMP, but we have our own work that we do. We have monitoring stations. We do actually have one Environment Canada water quality monitoring station right at the Wood Buffalo National Park site. A lot of water quality monitoring within the basin itself is actually done by the Province of Alberta, and those data are publicly and freely made available to us.

Ms. Linda Duncan: Dr. Wrona, are there actually any standards for you to compare to when you're monitoring? For example, as I understand, Environment Canada, under the Fisheries Act and CEPA, has issued standards for pulp and paper, for secondary lead smelters, and so forth. Why is Environment Canada not issuing regulatory standards for the tar sands facilities?

Mrs. Cynthia Wright: I can take that question.

With respect to deciding to make a specific regulation under any of our legislation, we have to look at whether there's a likelihood of a source that is not currently controlled. In this case the Government of Alberta has a zero discharge permitting policy that is enforceable from their perspective. That's why my colleague Mr. Tremblay explained that they are looking at whether there is any seepage through the monitoring that's done to determine if that zero discharge permitting policy is in fact being implemented. All the information to date for us has said that, yes, that is the case. So there is not a release into the water that we would then be able to regulate.

The Fisheries Act, though, has that similar prohibition against a discharge, so it's a tool we can continue to use to ensure the zero discharge permits of the Government of Alberta are enforced.

Ms. Linda Duncan: Under the Fisheries Act—I suppose DFO would speak to that—they do also have powers to intervene for preventive action, whereas under Environment Canada it's after the fact, after a spill, as I understand. Doesn't Environment Canada also have a responsibility to be looking at the water withdrawals, not just the fact of whether or not there is seepage from these tar ponds? There's mounting concern that perhaps the Athabasca River cannot handle the level of extraction of these facilities at the pace they're going.

Are you in specific discussions with Alberta Environment on their proposal where they may return the water from these tar ponds into the lake to make up the loss of water in the river?

Mrs. Cynthia Wright: I'll make just two points, if I may, Mr. Chair, to correct a misperception I may have left with respect to the Fisheries Act.

If you make a regulation under the Fisheries Act, essentially that allows a level of discharge. That's the nature of the regulation-making power. Otherwise, it's prohibited. So in this case there's no point in making a regulation that would allow a discharge when a discharge is prohibited. I think everyone agrees that this is the preferred approach here.

With respect to water quantity, we do have 47 hydrometric stations that measure the water quantity in the region, and there is research that Dr. Wrona can describe that relates to the effect of water withdrawals on instream flow.

• (0945)

The Chair: Time has expired. Thank you.

Mr. Warawa.

Mr. Mark Warawa: Thank you, Chair.

Thank you to the witnesses for being here.

I want to talk about water, the management of that resource, and the potential risks to that resource. That's the ultimate goal, I believe, of the committee—to look at the water.

We heard last week that approximately 80% of that resource will be dealt with using in situ. At this point 20% of the resource is open pit mining, and that's often where the questions are focused. I'd like to focus on both.

For example, Ms. Wright, you talked about the environmental assessments. You said that you'd been involved in approximately 12 environmental assessments for the oil sands. In situ, is there a requirement for an environmental assessment?

Mrs. Cynthia Wright: I just want to be clear that I understand your question with respect to in situ. Do you mean if there is an impact within the tailings ponds, but contained and not released into the environment?

Mr. Mark Warawa: No. There would be no tailings ponds. It would be in situ, as opposed to open pit, to get at the bitumen. We were told that at 75 metres or deeper they use in situ as the technology to get the resource. If there was a proposal to use in situ to get at the bitumen, will there be an environmental assessment required?

Mrs. Cynthia Wright: There wouldn't be a federal trigger in that case. It would come under the provincial environmental assessment authorities.

Mr. Mark Warawa: That was my understanding.

So the water research we're looking at is primarily the Athabasca River and the tailings ponds. Has there been a look at the possible impact on the aquifer? Right now you're looking at the Athabasca River, but has there been a look at the impact on aquifers as opposed to surface water sources?

Mrs. Cynthia Wright: The authorities for groundwater are provincial authorities, so that would be a question the provincial government would answer.

Mr. Mark Warawa: Mr. Cooper, on health.

Mr. John Cooper: My understanding is that all the communities downstream are on surface water, not groundwater.

Mr. Mark Warawa: So at this point we're not looking at that.

Mr. John Cooper: It is a very important area that should be looked at if it is a problem.

Mr. Mark Warawa: If 80% of that resource is going to be used in situ, and we're not looking at the groundwater, you're suggesting that it might be something we look at. Is that correct?

Mr. John Cooper: It would be something the Alberta government should take the lead on, and certainly from our perspective, we would be interested in any findings.

Mr. Mark Warawa: Thank you.

Visiting the area a couple summers ago and walking along the shore of the Athabasca River, I could see rocks oozing bitumen right into the watercourse. That has been going on forever, for as long as that has existed. So we're looking at additional possible contaminants from the tailings ponds. And at this point, there has been no evidence of any leaching from these tailings ponds into the Athabasca River. Is that correct?

Mrs. Cynthia Wright: That is correct.

Mr. Mark Warawa: Maybe you could share with us how a tailings pond is designed—and it's very important to make sure that it is being assessed on a regular basis—to ensure that it will not leach.

Mrs. Cynthia Wright: I'm not an engineer, so I couldn't describe in detail the engineering. But essentially they're looking for material to line the ponds.

(0950)

Mr. Mark Warawa: Is it a clay lining?

Mrs. Cynthia Wright: Yes, and then they have the monitoring stations beyond that point to determine whether there is leakage.

Mr. Mark Warawa: As for water management federally, within the departments, we're going to hear a report on drinking water from the commissioner at the end of this month. We're not focusing on the oil sands in his report. How is water management, generally speaking, being managed interdepartmentally and also by different jurisdictions—provincial and federal and municipal?

Mrs. Cynthia Wright: There is a federal interdepartmental committee on water. There are lots of working groups on water.

In terms of the interjurisdictional area, particularly for Alberta, there are a number of different planning exercises and multistakeholder groups. Of particular interest in this one, of course, is the Cumulative Environmental Management Association work, which includes water. And that's where all jurisdictions come together with local communities, including aboriginal people.

Mr. Mark Warawa: Do you feel that the management of the water resource by federal departments is improving? I'm looking forward to this report of the commissioner, of course, but what is your take on it?

Mr. John Cooper: Actually, the report we tabled focuses mostly on drinking water in federal jurisdiction and deals with the guidelines and process, and also the provision of drinking water on federal lands and passenger conveyances.

Certainly there have been substantial improvements over the past few years. There's an interdepartmental working group that has published a guidance document on the management and safety of drinking water on federal lands, including national parks, penitentiaries, and Canadian Forces bases so there's some consistency in benchmarking of practices. This is currently being updated. It's very important that we ensure there are good practices. Although we have no responsibilities as the Department of Health for the practices of other departments, they recognize the importance of working collectively and coming up with common systems for the protection of people working there and also visiting their federal lands.

In the same way, certain actions have been taken to improve the safety of drinking water on public conveyances. In terms of drinking water guidelines, there was criticism in 2005 that these were out of date because they were 15 years old and our process was slow. All these factors have been addressed.

We work with the federal-territorial committee on drinking water, so there's a consistent set of standards applied across the country in terms of protection of drinking water. We develop the guidelines, and they adopt them and enforce them. Some jurisdictions, certainly Quebec and Ontario, will take certain guidelines and enforce standards that may be slightly more rigorous.

The Chair: Thank you. Time has expired.

Ms. Wright, Mr. Warawa just asked you about the designing of the tailings ponds. I know you don't have the answer, but could I task the department to provide the committee with information on the role of Environment Canada in tailings pond design, licensing, and the engineering of those? If there's any role the department plays in that, could we have that information as committee?

Mrs. Cynthia Wright: We wouldn't have a role in the design of that, but we could get the information to the committee to describe how they are engineered.

The Chair: Okay, I would really appreciate that. Thank you very much.

Mr. Trudeau, you have the floor for five minutes.

Mr. Justin Trudeau (Papineau, Lib.): Thank you.

To follow up a bit on some of the questions that Mr. Warawa was bringing forward, so that it's clear, roughly what percentage of drinking water in Alberta, for example, is drawn from groundwater sources? I know it's fairly high across the country.

Mr. John Cooper: I would have to get back to you on that. Across the country, it is approximately 30%. In Alberta, it's mostly from surface water, but certainly there are groundwater sources. I cannot give you a percentage offhand.

Mr. Justin Trudeau: And Environment Canada has no jurisdiction over aquifers in terms of analyzing, in terms of monitoring, and in terms of testing, obviously.

Mrs. Cynthia Wright: No, groundwater is considered a provincial resource.

[Translation]

Mr. Justin Trudeau: Mr. Tremblay, you referred to 18 inspections, but you said that none of them were done on the oil sands tailing ponds as such. Is that correct? Then what did you inspect? Where were these 18 inspections done?

• (0955)

Mr. Albin Tremblay: Most inspections are done on the effluent released by the camps on these sites, municipal effluent, in a sense. Other inspections deal with the treatment process, for example the cooling water retention ponds used for oil separation. There is a cooling process for this water which flows directly into the Athabasca River. Environment Canada also does ongoing monitoring and inspections. Those are the two main categories of inspections.

Mr. Justin Trudeau: So every time you think there may be a spill in the river, you are tasked with carrying out an inspection.

Mr. Albin Tremblay: As Ms. Wright explained, under section 36 of the Fisheries Act, the spill must have occurred in an area where there is fish. If it remains within the ponds, no inspection is required, but if it reaches the river, that's where we come in.

Mr. Justin Trudeau: I understand.

How can you be sure that there is no leakage from the oil sands tailing ponds into the river?

Mr. Albin Tremblay: The permits issued to create these ponds include a series of conditions, one of which is that a series of wells must be installed to control any leaks. Permit holders must be able to detect and assess any leaks into groundwater. The wells are monitored constantly, and reports are submitted regularly. As I explained, Alberta's Environment Department conducts its own inspections and informs us of the results.

The only way these ponds could have an impact on areas where there are fish is if there is seepage of groundwater, which is, as we know, is an important source of water for the river itself.

Mr. Justin Trudeau: Excuse me. You said that groundwater is an important water source for the river itself?

Mr. Albin Tremblay: Yes, much of the river water comes from underground wells.

Mr. Justin Trudeau: Doesn't that rather contradict the fact that you don't focus on groundwater because it is under provincial jurisdiction? In this case, couldn't we say that the groundwater ends up as surface water and should thus be monitored by DFO?

Mr. Albin Tremblay: Ms. Wright didn't say that we don't focus on it. She simply said that it was under provincial jurisdiction.

Mr. Justin Trudeau: But if it has—

Mr. Albin Tremblay: We do focus on it. That's one of the reasons we want to obtain the results.

Mr. Justin Trudeau: But if it has an impact on waters like those in the Athabasca River, then it becomes our problem, especially for Fisheries and Oceans Canada.

Mr. Albin Tremblay: And for Environment Canada, under section 36. That's why we want to obtain the results of the

inspections done on the monitoring wells, to ensure that there is no seepage.

Mr. Justin Trudeau: So these monitoring wells are inspected under the authority of Fisheries and Oceans Canada. The department trusts them to perform these inspections properly.

Mr. Albin Tremblay: In fact, it is the Alberta Environment Department that inspects these wells under the permits it has issued to the companies that operate these ponds, and the results are provided to us under an administrative agreement that we have with the province for the application of the Fisheries Act.

Mr. Justin Trudeau: Okay. So these are inspectors who are qualified to perform inspections under the Fisheries Act.

Mr. Albin Tremblay: That is a somewhat technical point. I will check and get back to you with the right answer.

Mr. Justin Trudeau: I would appreciate that. If that means that the Fisheries Act is protected, verified or followed by Alberta or, more importantly, by the companies themselves which then report to Alberta, I would like to make sure that the Fisheries and Oceans standards are currently being followed and that inspectors' qualifications meet departmental standards.

Mr. Albin Tremblay: There again, there are no specific standards. As Ms. Right mentioned, there are no regulations containing standards which authorize a specific level. There is a total ban under the principle of section 36. The direct toxic effect on the fish must be measured. There are no authorized levels.

The Chair: Thank you very much.

[English]

Mr. Calkins.

I just want to remind all members that even though we don't always enforce the rules of the House in committee, we are still expected to address questions and comments through the chair, and the same stands for witnesses.

Mr. Calkins, you're on.

● (1000)

Mr. Blaine Calkins (Wetaskiwin, CPC): Thank you, Mr. Chair.

The approach I'm going to take is to basically try to establish baseline information. I have a question for either the Health Canada or Environment Canada officials.

What do we know about the natural versus unnatural or anthropogenic causes of different toxins or other substances that might appear, or that have appeared historically, in the Athabasca River? From a fisheries perspective, we talk about the bioaccumulation of various toxins, particularly mercury. The Athabasca River is not the only river in Canada that has advisories on it as far as fish consumption is concerned.

I would like some clarification on what we know about these levels of contaminants, whether natural or anthropogenic. Do we know what they were before 1965? Do we know what they've been? Have we been monitoring them all along? And relative to other drainage systems we have in Canada, is the Athabasca River normal in what we would expect to see, given that the river does flow through some very interesting geography? Are there any other drainage systems in Canada that have similar levels of heavy metals and other things that occur naturally?

Mrs. Cynthia Wright: Mr. Chair, if I could, I think Dr. Wrona could describe the extensive baseline research that Environment Canada did to answer those kinds of questions.

Mr. Fred Wrona: Thank you, Mr. Chair.

Our department has been involved in numerous technical studies since the early 1990s involving quantification of the ecological state, contaminant levels, and sources of contamination in the Athabasca system. As the committee members know, the Athabasca River flows through a geographic area with multiple developments and municipalities. In that basin we have pulp and paper development, forestry, oil sands development, and other activities.

The studies we've been involved in, along with other departmental colleagues and university collaborators over the years, have improved our understanding of baseline conditions of these particular types of contaminants. Over the years, through our research efforts and the various monitoring programs, we have seen improvements in levels of contamination, particularly related to processes such as pulp and paper development in the area, and so on.

The complication we have related to the oil sands was mentioned. We have conducted research as part of these initiatives, trying to assess the role of natural hydrocarbons and the effects on the environment, as opposed to ones that are from actual oil sands activities. We published some preliminary results in this vein in 2003 and during the northern rivers ecosystem initiative, showing the potential effects of natural hydrocarbons on fish health and ecosystem health.

Mr. Blaine Calkins: Is there anybody from Health Canada who can add to that?

Mr. John Cooper: I'm sorry, this is an area that is managed more by Environment Canada.

Mr. Blaine Calkins: Okay. So let me take it a step toward where Health Canada would become involved. Just so the committee is very clear, we heard testimony that the water used by the residents of Fort Chip is all surface water. They're not using groundwater; they're not drilling water wells or anything like that for human consumption in the area.

What can you tell us about the state of the water treatment facilities in all first nation communities downstream of the oil sands? Fort Chip is not the only one that's downstream. What do we know about the state of water treatment facilities throughout the entire basin?

Mr. Roy Kwiatkowski (Director, Environmental Health Research Division, First Nations and Inuit Health Branch, Department of Health): Thank you, Mr. Chairman. Fort Chip is not an Indian reserve; it has an Alberta municipal water system, so if you want information on that, you would ask them. Our understanding is that the water quality there is good.

At Health Canada we indeed monitor water quality on all the Indian reserves. We do it consistent with the Canadian drinking water guidelines in terms of the parameters, frequency, etc. As soon as we get that information, it is passed on to the chief and band council. In the last five years—I've had the region check—the water quality has never exceeded any of the guidelines that exist with regard to heavy metals or toxic organics. So I would say the water quality in all the reserves downstream is good.

(1005)

Mr. Blaine Calkins: When were those guidelines published?

The Chair: Your time has expired, Mr. Calkins.

[Translation]

Mr. André.

Mr. Guy André (Berthier-Maskinongé, BQ): Thank you.

Good morning. I am happy that you're here today. I'm going to go back to some questions that were asked earlier.

You do not seem to be saying that there is a causal link between extracting the oil sands and cancer. There may be an increase in Fort Chipewyan, for example, but that could be coincidence. You say that there is no direct link. I am wondering how I, myself, would react if someone were to say "perhaps" or "we may be". That is not very reassuring for the local population. I would like to hear your comments on that.

Your mandate includes protecting public health. I would like to know if you put in place an action plan when the effect of the oil sands on public health was raised. Were the people living in the vicinity of oil sands operations screened? Do you have an action plan to prevent disease that may occur? Has Health Canada planned measures to reassure the population?

[English]

Dr. Wadieh Yacoub: Thank you for the question.

The Alberta Cancer Board study was a study to describe the incidence of cancer and not the risk of cancer. That's a major difference, because it's not conclusive at all about why the cancer has occurred.

I agree with you that it is of utmost importance to follow up, and it is our intent in Health Canada to work with the Alberta Cancer Board and the Fort Chipewyan Nunee Health Board Society to continue monitoring the incidence of cancer.

In all the situations that have been reviewed, especially the rare cancers, in its report the board reviewed the medical charts, and all the risk factors contained in those two cases were the known risk factors. We are not saying there is no relationship to the environment or anything like that; we're just saying this requires further monitoring.

Our plan of action is to concur and work with the Alberta Cancer Board in continuing to monitor the incidence of these cancers. We will ensure that the cases of cancer that are identified in the community by the physicians are followed up. We will ensure the continuation of the health promotion and disease prevention activities to prevent cancer and promote healthy lifestyles, because lifestyles could very well be part of the picture of the cancer incidence in the community.

We concur with the actions proposed by the Alberta Cancer Board, and we will work with the community and collaborate wherever we can.

[Translation]

Mr. Guy André: Lifestyle could well be part of the picture, but so could oil sands operations. I agree that it could be one or the other, but the fact remains the processing of the tar sands releases massive amounts of nitrogen oxides, sulfur dioxide and volatile organic compounds into the atmosphere. There are other risks for public health, and you are undoubtedly aware of that. Other studies show that people could develop respiratory problems linked to the air quality, as well as multiple sclerosis.

Do you have data showing that tar sands operations could in fact cause other diseases?

● (1010)

[English]

Dr. Wadieh Yacoub: Health Canada has not seen any other studies related to the exposure in the community to any of the environmental factors to health. Going back to the notion of environmental exposure, one of the things the Alberta Cancer Board points to is the absence of any childhood cancers in the community. Childhood cancers would be one of the strong signals of environmental exposure. The second factor the report points to is that communities that are closer to the oil sands have not seen any elevation in their rates of cancer. These communities were compared in the report as well.

So we are not saying there is no environmental exposure. We are saying we need to look at both environmental and other exposures, including occupational exposures, because you would expect that the people working in the oil sands would also have elevated rates of cancer. We need to look into that.

[Translation]

The Chair: Thank you very much. Your time is up.

[English]

Mr. Braid, the floor is yours.

Mr. Blaine Calkins: On a point of order, Mr. Chair, I think Mr. Cooper wanted to add something to that last comment.

The Chair: Unfortunately, the time allocated for Monsieur André has expired, so we have to move on in order to be fair to all members.

Mr. Braid, you have the floor.

Mr. Peter Braid (Kitchener—Waterloo, CPC): Thank you for ensuring fairness, Mr. Chair.

Thank you to our officials and departmental witnesses for their participation and testimony this morning.

I have some questions for Health Canada from previous conversations.

Could you describe specifically what aspects of health within first nations communities in Alberta are under the jurisdiction of Health Canada?

Mr. Roy Kwiatkowski: We supply health services to first nations on-reserve, which means the doctors, nurses, dentists, pharmacists, etc. These are the services we provide.

In terms of the environment, we have environmental health officers who work for Health Canada, but work in close cooperation with the chief and band council. They look at issues like mould in housing. They do the drinking water quality monitoring. They will do food inspections for specific events that are held on-reserve. There's a number of activities that will be carried out by the environmental health officers.

Mr. Peter Braid: Specifically with respect to the monitoring of water quality, could you describe or explain the division of roles and responsibilities between Health Canada and authorities in a first nations community?

Mr. Roy Kwiatkowski: All the water quality monitoring done on Indian reserves is done by the environmental health officers of Health Canada. That information is shared with the chief and band council. The province is not involved.

If the source water is drawn off-reserve, then that source water, of course, would be monitored by the province and we would get that information from them. Once it's on-reserve, it is strictly a Health Canada area of monitoring.

Mr. Peter Braid: Treatment facilities are under the responsibility of the first nations community itself.

Mr. Roy Kwiatkowski: That's correct. The funding to build, etc., is from INAC, Indian and Northern Affairs, but the operations are part of the band council's responsibility. Health Canada then monitors the finished drinking water. So it's a cooperative arrangement.

Mr. Peter Braid: That cooperation, that joint responsibility, works well from your perspective.

Mr. Roy Kwiatkowski: Yes, absolutely. As I said, the band council gets the information as soon as we do.

Mr. Peter Braid: If I understand correctly, there were guidelines issued recently with respect to the water monitoring, within the last couple of years. Is that correct?

• (1015)

Mr. Roy Kwiatkowski: John, maybe you could talk about the actual Canadian drinking water guidelines.

Mr. Peter Braid: How are those guidelines working?

Mr. John Cooper: Your question related to the guidelines for water monitoring, correct?

Mr. Peter Braid: That's correct.

Mr. John Cooper: I believe that was issued by the first nations branch.

Mr. Roy Kwiatkowski: Yes, we monitor the guidelines on a regular basis to look at frequency and parameter lists, but the parameters we are measuring are the ones that show up in the federal-provincial-territorial guidelines, because we have to have the actual number. What we're looking at, of course, is the sampling, but we have to compare our value against the guideline that is issued.

Mr. Peter Braid: Guidelines have been issued by the federal government. When were those guidelines issued?

Mr. John Cooper: This is an ongoing process. We have approximately 90 chemical guidelines, and microbiological and radiological guidelines on top of that. In general, we update guidelines every five to ten years and add new priority substances. On average, we're producing about five to seven guidelines per year, or revising them.

This is an ongoing process. We work with the provinces, which puts them into standards, and they're also used by first nations.

Mr. Peter Braid: Is there an opportunity for first nations communities to provide input on the development and ongoing revision of those guidelines?

Mr. John Cooper: Actually, we post for consultation. Part of the process is to take comments from anybody—the public, first nations, or what have you—on any of our guidelines. There is a process.

Mr. Peter Braid: What is your assessment of how well the guidelines are working, and are there any opportunities for improvement?

Mr. John Cooper: I think the guidelines are working. They're comparable to international guidelines and standards. They are designed to be protective of health, and we do certainly follow up on all the new science in terms of health impacts and levels of exposure across the country, and we work closely with the provinces to get that information.

Where we see the biggest challenge, as I mentioned during the presentation, is the small community water supplies where you actually don't necessarily have the treatment technology, the operators, the funding, or the source water protection you need to provide the same level of drinking water quality you would in a larger town. This is an area where Health Canada is trying to focus very strongly in terms of helping smaller communities improve their drinking water safety, and that would include working with first nations groups.

The Chair: Thank you. Your time has expired.

Mr. McGuinty, you have the floor.

Mr. David McGuinty (Ottawa South, Lib.): Thanks very much, Mr. Chair.

I'd like to address my first questions to Ms. Wright.

Ms. Wright, in your deck on pages 7 and 8 you talk about how you do quite a bit of work on cumulative environmental effects. You mention that you have been involved in 12 EA reviews for oil sands projects and five joint panel reviews. You also say that you collaborate with the Cumulative Environmental Management Association.

I want to ask two very quick questions. How much collaboration do you have with CEMA? For example, do you fund it, in part?

Mrs. Cynthia Wright: At this point we're currently not giving a contribution, but we have extensive staff involvement, including chairing some committees and providing technical expertise for a number of working groups.

Mr. David McGuinty: I'm sure there's a lot of sharing of data going on between their research and your research and a lot of cooperation between your scientists and their scientists.

Mrs. Cynthia Wright: That's correct. We're helping to shape what their research is and participating in executing that research.

Mr. David McGuinty: Generally speaking, is their work considered to be robust? Is it helpful?

Mrs. Cynthia Wright: Yes, and I think the Alberta government is recognizing that by increasing the demand and the priority they give to that work, so we are increasing our effort to be further engaged in it

Mr. David McGuinty: I need to ask this, partly on the basis of water and the analysis, because they do have what I guess they call a water working group there.

Mrs. Cynthia Wright: Yes. It's the surface water working group.

Mr. David McGuinty: On that surface water working group, partly as a result of a lot of the analysis, I'm led to understand that CEMA wrote to the Alberta government in January 2008 calling, effectively, for a moratorium on the further granting of new resource tenures—basically, licences—until January 1, 2011. CEMA was concerned. They wanted to maintain what they called "the conservation opportunity in the areas identified by CEMA as having high conservation value".

Is it the position of the Department of the Environment or the Government of Canada that these new resource tenures should now be held back on an interim basis until January 1, 2011?

• (1020)

Mrs. Cynthia Wright: I think, Mr. Chair, the member is referring to a moratorium that was asked for until some work could be completed on what was called the ecosystem management framework. That was in order to keep opportunities for conservation identified.

CEMA works by consensus. There are a number of government departments in it. The practice is for the federal government members to abstain from giving direct advice to the Alberta government, which is where the CEMA recommendations go. It's a view of Environment Canada that that the consensus process should operate, but we don't vote, if you will, on the actual recommendations that flow into the Government of Alberta.

Mr. David McGuinty: Let me ask you, then, from what you know about CEMA's work, which is evidence-based work and research, are the Canadian people supposed to believe CEMA, as a multi-stakeholder group, when they call for this interim moratorium on new resource tenures? Are we supposed to trust that work or not?

Mrs. Cynthia Wright: What I can say is that CEMA is an experts-based group. There is a high degree of expertise from a number of different departments and jurisdictions, which informs CEMA's advice.

Mr. David McGuinty: You're the official who's implementing and coordinating this, I understand, so what is our position right now with respect to the department and the government on this call for a suspension of new resource tenures until January 1, 2011? Do we support that call?

Mrs. Cynthia Wright: I explained, Mr. Chair, that this is advice that goes to the Government of Alberta folks, so we abstain from commenting on a specific recommendation going to the Government of Alberta

Mr. David McGuinty: I don't want to put you on the spot with the Government of Alberta, but what's their position with respect to this call?

Mrs. Cynthia Wright: I don't have the current information right now on where they stand.

Mr. David McGuinty: So we don't have a position on CEMA's call because it's advisory only, and we don't really respond to it because it's made only to the Government of Alberta?

Mrs. Cynthia Wright: That's correct. Its purpose is to give advice to the Government of Alberta.

Mr. David McGuinty: Are your water scientists and engineers concerned about what CEMA is saying here?

Mrs. Cynthia Wright: Our scientists are there to provide their technical expertise, which informs the multi-stakeholder analysis that CEMA then provides to the Government of Alberta.

The Chair: You will have the Government of Alberta at the committee, I would hope, when we're out there with them.

Mr. David McGuinty: Do I have time remaining?

The Chair: Actually, time has expired. Thank you, Mr. McGuinty, but we will be able to ask those questions of the Government of Alberta at that time.

Mr. Watson.

Mr. Jeff Watson (Essex, CPC): Thank you very much, Mr. Chair, and to our witnesses for appearing here today.

I don't know if too much lag time has passed, Mr. Cooper, but I sensed that you wanted to respond to Mr. André's last question. Would you care to add your response in with respect to the issue of cancer and communities?

Mr. John Cooper: Yes. I want to comment very briefly in respect to the air pollution and that dynamic in terms of the oil sands and how important that is. Certainly we recognize their emissions as a concern. With the oil sands, they are certainly not at the level that we see in southern Ontario, for example, in terms of particulate matter, and that links to trace metals or ozone. But both of these certainly are reasons to be concerned. I just wanted to highlight the importance of addressing air pollution in the overall context in dealing with the oil sands.

Mr. Jeff Watson: Thank you. I wanted to ensure that got on the record as well.

Ms. Wright, earlier when the chair was asking about providing some information of the community, you said that Environment Canada is not involved with the design of tailings ponds in any fashion. I would presume that an environmental assessment has to be done on a project requiring a tailings pond, so there would have to be some knowledge or expertise in the department as a lead agency under the CEAA. So there would have to be some knowledge of design or some concern around that.

Can you reconcile your answer with what my understanding is, or am I off base on that?

• (1025)

Mrs. Cynthia Wright: Under the Canadian Environmental Assessment Act, there are a number of triggers that cause the federal government to carry out an environmental assessment. It could be federal funding or it could be a river crossing or some loss of fish habitat that would trigger the review. So if the tailings pond is not in a fish-bearing water, is not crossing a river, then it wouldn't trigger the federal environmental assessment, and so the federal government wouldn't be directly involved. Of course, all of the scientific knowledge that we have at Environment Canada is publicly available and could be used by the provincial assessment, but we're not directly involved in a provincial environmental assessment.

Mr. Jeff Watson: So no tailings pond construction has triggered any environmental assessment that Environment Canada has been involved in?

Mrs. Cynthia Wright: There have been assessments that relate to the oil sands, but my understanding is that the ponds themselves are not in fish-bearing water.

Mr. Jeff Watson: Okay.

I wanted to ask about one of my favourite topics here, the chemicals management plan. How will the chemicals management plan make a contribution to environmental protection associated with the oil sands? Can you explore that a little bit for the community? What kind of an impact will that process have on environmental impacts to the oil sands?

Mrs. Cynthia Wright: What the chemical management plan has done is taken the 4,300 substances of concern that were identified through an initial screening and put some into a high-priority fast track or priority analysis and put them also in a perspective of sector approach. So there is always a trade-off when the government is working on chemicals. Do you look at it substance by substance or do you look at clusters and groups? So in this case we're actually trying to do both.

And the reason to look at it by a sectoral approach is to enable industry to start to understand the magnitude of their problem holistically and to start to enable them to identify trade-offs, substitutions, changes to processes that could address more than one substance. So for the case of the chemical management plan, when we clustered them from an oil and gas perspective, we found that 98 substances are relevant. And our objective is to assess those within two to three years. And then if they are found to be substances meeting the criteria under the Canadian Environmental Protection Act, to add them to the schedule, risk management instruments would be developed. So preliminary risk management instruments would be developed at the same pace as the risk assessments are done.

So there will be 98 substances that are currently of concern, and we will have an idea of how many those should have action taken on them, and that preliminary action starts to develop. And of course, as Mr. Cooper explained, this is work we do with Health Canada, so we're working at the same time with both the health impacts and the environmental impacts.

The Chair: Thank you, Mr. Watson. Your time has expired. I know when you're having fun it slides right by.

Mr. Woodworth, you're on.

Mr. Stephen Woodworth (Kitchener Centre, CPC): Thank you very much.

I find the technical aspects of this quite challenging, especially to try to comprehend it in the speed of the five-minute conversations we have. I'd like to do something a little summative and start with the three points I think I've gathered so far to see if I have it right, and then I'll ask for some detail.

First of all, do I understand correctly that studies have concluded that there is no leakage from the tailing ponds?

Mrs. Cynthia Wright: Correct.

Mr. Stephen Woodworth: Second, do I understand correctly that studies have determined that the surface waters do not contain toxins that exceed any customary standards of acceptable content?

I don't know who to ask these questions to.

Mrs. Cynthia Wright: I think you're asking about the drinking water

Mr. Stephen Woodworth: Yes.

Mr. John Cooper: The treated drinking water is safe in terms of the suite of chemicals and microbiological contaminants. Surface water is a slightly different issue.

• (1030)

Mr. Stephen Woodworth: Thank you.

And third, do I understand that there is no evidence of any unusual health difficulties in any of the downstream communities from the oil sands?

Dr. Wadieh Yacoub: There was no increase in unusual or rare cancers. There was a small increase in three cancers, but these increases are very small because the numbers are very small. We're talking about two or three cancers, and because of the small size of the population, a variation by one cancer can make the rate go up or down. At this time the conclusion is that we need to continue monitoring for these cancers.

Mr. Stephen Woodworth: Do I understand from your response, being limited to cancers, that there is evidence of any other unusual incidents of illness or health difficulty in the downstream communities?

Dr. Wadieh Yacoub: The health assessment done by the province has been communicated to the community in regard to other health issues like diabetes and hypertension, and the province has indicated its willingness to work with the community on these health issues.

Mr. Stephen Woodworth: Is there any evidence that the higher incidence of diabetes or hypertension may be related to any environmental cause?

Dr. Wadieh Yacoub: We have never seen any such evidence.

Mr. Stephen Woodworth: And regarding the treatment of surface water mentioned earlier, can you give us more detail about that? What is the treatment alleviating? As a lay person, I'm imagining that there is something in the water that the treatment removes. Can you tell me anything more about that?

Mr. John Cooper: For example, Fort Chipewyan has a fairly sophisticated drinking water treatment plant, which includes filtration, flocculation, coagulation, and a holding tank. It's considered fairly effective, and it's very good in removing trace metals, certain PAHs. They are currently meeting all the guidelines in terms of safe drinking water because of the treatment capabilities. That's not to say we're still not concerned that the surface water.... If you take a multi-barrier approach, you don't want to just rely on the treatment facilities; you want to ensure that the source water is as clean as possible.

Mr. Stephen Woodworth: Right. I'm gathering that the untreated source water does contain some metals or other contaminants. Is that correct?

Mr. John Cooper: That certainly is my understanding in terms of anecdotal reports from elders and first nations people who used to drink untreated water. They're not comfortable drinking it now.

Mr. Stephen Woodworth: Have there been any scientific studies of the level of contaminant in the untreated surface water?

Mr. John Cooper: In terms of responsibility and information on surface water quality, as soon as there is some information it will be from Alberta and from Environment Canada.

Mrs. Cynthia Wright: Most of the work is done by the Government of Alberta, but we also do sediment work, and Dr. Wrona could speak about that.

There are issues because of the naturally occurring bitumen. I think that is the bottom line.

Mr. Stephen Woodworth: That was going to be my next question.

The Chair: Mr. Woodworth, perhaps Mr. Wrona could respond very quickly. Your time is up.

Mr. Stephen Woodworth: I won't get my next question in, but go ahead, please.

Mr. Fred Wrona: We have had studies actually quantifying the amount of both naturally occurring and other industrial-related contaminants in that system. The monitoring of many of those is done by the Province of Alberta. As I mentioned, we have one water quality station near Wood Buffalo National Park that looks at standard nutrient and other water quality parameters. We have research studies that have assessed contamination levels both in sediment and in water over a number of years within this basin.

The Chair: Thank you. That completes our second round. We're going to kick off our third round.

Mr. McGuinty, you have five minutes.

(1035)

Mr. David McGuinty: Thank you, Mr. Chair.

I want to go back to my last series of questions for Environment Canada. I'm having a very hard time squaring the circle.

We have a multi-stakeholder group set up by different orders of government, which has as its membership governments, aboriginal elders, non-governmental environmental organizations, scientists, and university representatives. I can't remember how large the group is. A year and a half ago they issued an urgent letter to, as Ms. Wright has pointed out rightly so, the Province of Alberta.

The federal government may not fund CEMA now, but I understand it used to. It certainly must be helping with research. It must be sharing its data and its analysis. But 83% of CEMA's budget is funded by industry itself, and a letter is issued saying we want to put a hold on this. We want a moratorium on new resource tenures until January 1, 2011. In fact, it's so serious that, four months later, CEMA sent a second letter to the Government of Alberta, again calling for an interim moratorium on new resource tenures.

The federal government, as I understand, Ms. Wright, has a representative on CEMA.

Mrs. Cynthia Wright: We participate in the working groups on CEMA. CEMA was created by the Alberta government and has

invited all these partners that the member has listed to be part of it. So yes, Environment Canada participates in the working groups.

Mr. David McGuinty: Did Environment Canada participate in the letter calling for a moratorium?

Mrs. Cynthia Wright: Environment Canada participated in the working group that drafted that report and the letter. But as I said, the position of the government is that we don't want to be seen to be voting on what advice goes back to the Government of Alberta. We're there as technical advisers to provide the best quality information we have into this multi-stakeholder process.

The Chair: I do point out, Mr. McGuinty, that according to chapter 20 in Marleau and Montpetit, at the top of page 864, "The role of the public servant has traditionally been viewed in relation to the implementation and administration of government policy, rather than the determination of what that policy should be." So I'd just ask that you keep your questioning based upon what the department is doing, rather than whether or not they should be influencing the policy of the government.

Mr. David McGuinty: Which government?

The Chair: The Government of Canada, and I'm concerned that you're trying to put the officials into a position where they're going to be dictating to the province or wanting to reach into another jurisdiction in which they have no constitutional right.

Mr. David McGuinty: I hear you, Chair, loud and clear, and I'm going nowhere near that. What I'm trying to find out for Canadians is how we square the circle. How is it possible that the multistakeholder group set up to examine the development of the oil sands, the tar sands, has recommended a moratorium until January 1, 2011, obviously saying that not everything is all right. They pull together a terrestrial ecosystem management framework, which the federal government has officials contributing to, and all of a sudden all I'm hearing today is that everything is okay.

How can Canadians square this? Do we have a position? That's a fair question for the officials. Do we have a position on the CEMA report?

Mrs. Cynthia Wright: What I'm trying to say is that we don't take a position. We provide our technical information, our science, and our knowledge.

Mr. David McGuinty: Is that technical information and science and knowledge that you have provided to CEMA, which has led them to conclude that we should have a moratorium until January 1, 2011, disclosable? Can we have that information?

Mrs. Cynthia Wright: CEMA would have taken multiple sources of information. So our information with respect to the ecosystems working group would have been related to wildlife issues under our authority and under species at risk, migratory birds, water quality issues, air quality issues—a whole host of issues. There would have been expertise from a number of other federal and provincial departments, as well as external expertise.

Mr. David McGuinty: I'm still at a loss. How do we explain this to working Canadians? How do we distinguish between two different jurisdictions, two different groups of scientists who are working together, aboriginal elders, environmental NGOs, all the industry groups that are actually mandated...? Many of the industries are mandated through their licensing to sit on CEMA. It's a condition of licensing. They fund it to 83% or 84%. How are we supposed to explain it to Canadians?

I'm just trying to figure out what's going on here. Can someone at the table help me understand?

● (1040)

Mrs. Cynthia Wright: I think, if I can, Mr. Chair, that the advice to CEMA is consensus based. So all those who voted on it—and they record that—support the advice. So it was mixed. Some industries supported it; some didn't. If I recall, all the NGOs supported it. But the federal government is trying to avoid stepping into the jurisdiction of the Alberta government by abstaining—

Mr. David McGuinty: Absolutely.

The Chair: Time has expired. I thank you for that answer.

Monsieur Bigras, cinq minutes.

[Translation]

Mr. Bernard Bigras: Thank you, Mr. Chairman.

Ms. Wright, I can understand the answers you have given Mr. McGuinty, but you do have regulatory and fiscal tools available to you. That is the reality. The principle of ecoconditionality exists. I do not know if you are familiar with it, but it involves requiring industry to comply with a number of conditions prior to providing assistance. You can talk about a moratorium and licences because the Province of Alberta has jurisdiction over them, but bear in mind that between 1996 and 2002, the federal government gave the oil industry \$1.2 billion which contributed to increasing greenhouse gas emissions and environmental degradation. That represents \$200 million per year for one industry.

In light of the federal funding for this industry which is not helping improve the environment, you must surely have a strategic environmental assessment. Does this industry meet the environmental assessment criteria?

[English]

Mrs. Cynthia Wright: When there is a federal policy, there is a strategic environmental assessment done on that broad policy. If there is federal funding in a project, it triggers the Canadian Environmental Assessment Act, so then there is a federal role in assessment. That's when Environment Canada would bring in its expertise. The lead federal department would be either the department whose legislative or regulatory tool was triggered or the one that was doing the funding. Environment Canada has not

been a trigger for any of the oil sands development, but we provide expertise if the federal authorities—

[Translation]

Mr. Bernard Bigras: I want this to be clear. Strategic environmental assessments exist for this type of project. The Department of Finance provides financial assistance to the industry. Were you consulted? I understand that you did not want to give the Government of Alberta advice. You do not want to be perceived as trying to exert influence, but are you in a position to advise the Department of Finance which, for its part, contributes to this industry by way of tax incentives? Have you issued a notice on assistance provided to this industry as part of the strategic environmental assessment?

[English]

Mrs. Cynthia Wright: I'd have to confirm whether or not we provided direct advice to the Minister of Finance in those areas. I don't know that from my head.

[Translation]

Mr. Bernard Bigras: The National Energy Board has said that over the next few years we would see an increase of two to five million barrels of oil per day. I do not know if the figure is accurate; so it is subject to correction. Nevertheless, I would like to know if your assessments of the project take this increase into account. That will certainly have a direct impact on the amount of water pumped. In fact, if it takes four barrels of water to produce one barrel of oil and there is a significant increase expected in the number of barrels of oil per day, more water will have to be pumped.

Have you assessed the impact of this increase in production anticipated by 2012?

● (1045)

[English]

Mrs. Cynthia Wright: In terms of Environment Canada's advice into environmental assessments, yes, we do give advice with respect to the impact on water quantity and the potential impact of that water quantity on the ecology and health of river ecosystems.

[Translation]

Mr. Bernard Bigras: The figures are released in National Energy Board reports. You could perhaps confirm them for me. How much of an increase is expected by 2012, in terms of the number of barrels per day? If daily oil production quadruples, what consequences should we expect in terms of the removal and use of water resources? We must be in a position to assess that.

[English]

Mrs. Cynthia Wright: Yes, I don't have those figures today. A lot of that would be the province looking at the flow, but Environment Canada provides the information on what the ecological effects might be if there is a lowering of the water flow. So we provide that information and then the Alberta government uses that information in setting its permits for water withdrawals.

[Translation]

Mr. Bernard Bigras: Could you-

The Chair: Your time is up.

[English]

Mr. Bernard Bigras: No, it's not a question.

[Translation]

Could you table those reports with the committee, if they are available?

[English]

The Chair: Certainly if there is something you can share with the committee, I would ask that you forward it as part of your homework.

Mr. David McGuinty: Not if there is.

The Chair: Mrs. Wright, is there a report you would be able to share with the committee?

Mrs. Cynthia Wright: On the impacts of water withdrawals?

The Chair: Yes.

Mrs. Cynthia Wright: Yes, I'm sure we could find one.

The Chair: Thank you very much.

Ms. Duncan, the floor is yours.

Ms. Linda Duncan: Thank you, Mr. Chair.

To the Department of Health, it is my understanding that over the last 10 years there have been at least half a dozen requests to Health Canada to undertake health studies and there have been responses by Health Canada. Could Health Canada provide to the committee the information on those requests and the replies provided?

Dr. Wadieh Yacoub: The municipality of Fort Chip is part of the provincial jurisdiction, and our work with Fort Chip was in collaboration and partnership with Fort Chip.

Ms. Linda Duncan: With all due respect, Dr. Yacoub, I'm well aware that both the Dene nation, the community of Fort Chip—

Mr. Stephen Woodworth: On a point of order, Mr. Chair, I've heard witnesses being interrupted a number of times in the middle of an answer and I think I just heard it again. It seems to me to be inappropriate and unfair to the witness. I would like to hear the whole answer the witness has to give before another question is asked.

The Chair: Mr. Woodworth, you have a good point of order, because in chapter 20 of Marleau and Montpetit, page 863, it says: "Members have been urged to display 'the appropriate courtesy and fairness' when questioning witnesses".

So Ms. Duncan, I'd ask that you show that courtesy and fairness to our witnesses.

Mr. Yacoub, you may respond.

Ms. Linda Duncan: I would encourage you to answer quickly so I can continue.

Dr. Wadieh Yacoub: As I responded in an earlier question, as soon as we were informed by Dr. O'Connor of his concerns specifically in March 2006, we immediately reacted by proposing and working to implement a cluster investigation. We assembled the team to respond to that study immediately. That work ultimately resulted in the Alberta Cancer Board's study that was released in 2009. That is the only study we have been approached to deal with.

I have received no other information that suggested we would work with them on any other study. This is the main concern that was relayed to the public health officer in this case. And as you probably know, the public health system in Alberta is a seamless system, so if any other concerns had come through any other agency we would be collaborating.

Ms. Linda Duncan: Dr. Yacoub, I'm not querying the efficacy of the study that you did or the fact that you did the study. My question is not related to that.

It's my understanding over the last 10 years that there have been at least a half a dozen requests by the Dene, by the community in Fort Chip, through a petition to the Commissioner for Sustainable Development. I'm simply asking if you could provide, for the edification of the committee, the requests that have been received and what the reply was that was provided. This is not the specific studies that you've undertaken, but simply the requests that you've received and the responses you have given.

• (1050)

Dr. Wadieh Yacoub: I have not received any requests in first nations and Inuit health. If other requests have been sent, they probably never came to first nations and Inuit health. Perhaps they have come to other branches of Health Canada. As you are probably aware, Health Canada is a member of many groups like CEMA and—

Ms. Linda Duncan: Perhaps you can inquire?

Dr. Wadieh Yacoub: I certainly could inquire.

Mr. Stephen Woodworth: On a point of order, Mr. Chair, I'm sure I heard the witness being interrupted in the middle of a sentence. I want to hear the witness's whole answer.

The Chair: I agree, Mr. Woodworth.

Again, Ms. Duncan, I ask that you show courteousness to our witnesses.

Ms. Linda Duncan: I am being very courteous.

The Chair: I do ask, as well, Ms. Duncan, that you address your questions through the chair.

Ms. Linda Duncan: I would be the first one to do that, Mr. Chair.

The Chair: I've already asked other witnesses to do the same.

Ms. Linda Duncan: Yes, Mr. Chair.

I would like to ask a question of Environment Canada.

Environment Canada has said that they have a monitoring station at Wood Buffalo National Park. I'm wondering if they're considering establishing a monitoring station at Fort Chip. Apparently the scientists have advised that there's a tendency of a concentration of heavy metals more likely in the Athabasca Delta than in the river due to the fine silt. Scientists are finding much higher elevated levels of arsenic, mercury, and polycyclic aromatic hydrocarbons in the area in the Athabasca Delta, likely due to the fact that the regime is different there.

I'm wondering if Environment Canada could respond to that question.

The Chair: Mrs. Wright.

Mrs. Cynthia Wright: There would be two points to that, Mr. Chair.

On the first point on whether we would be putting in a monitoring station, our authority for water quality monitoring is related to transboundary issues, so we would probably not be putting a station in there.

The other thing is that measuring water quality for some of these substances is difficult. That's why we do have a research study that's looking at sediment and ecotoxicological effects to get an understanding of what the ecosystem impacts are.

If there is time, Dr. Wrona could elaborate.

The Chair: Dr. Wrona.

Mr. Fred Wrona: We have been conducting studies in the area related to contamination and we've done toxicological work in terms of sediment toxicology in other areas.

Regarding the monitoring station that you're referring to, the position of that monitoring station before Wood Buffalo National Park was because it was entering a federal national park and we were concerned about the types of water quality that were going into that particular area. That is one of the headwater regions into the Peace-Athabasca Delta. From our perspective, we are getting baseline information in terms of fundamental water quality parameters going into that system, but we do rely on Alberta Environment and other research efforts that are going on, both within the region and in related areas, to obtain more information on many of the constituents you've talked about.

Ms. Linda Duncan: Thank you, Dr. Wrona.

The Chair: Your time has expired.

The final question goes to Mr. Warawa.

Mr. Mark Warawa: Thank you, Chair.

Thank you for the challenge to make sure we speak through you, Chair, and that all questions go through you.

I'll summarize what I've heard today. It has been actually quite enlightening that there have been no discharges, no leaching of water from the tailings ponds. That water is all reused. It's cleaned and reused in the whole process and 90% of the water is recycled. All the water in the tailings ponds is reused. Drinking water is good and

actually safe downstream. That was good to hear. Rare cancers are in the expected ranges. I didn't expect to hear that, so it's good to hear.

I'm also surprised, Chair, to hear that the Liberals are calling for a moratorium on the oil sands. I do have a—

Mr. David McGuinty: On a point of order, Mr. Chair, just to clarify the record, the Liberals have never called for a moratorium. Mr. Warawa should be judicious in the choice of his words to make sure he does not misrepresent either members' or parties' positions.

Thank you, Chair.

• (1055)

The Chair: Mr. Warawa, you have the floor.

Mr. Mark Warawa: Thank you, Chair.

Mr. McGuinty said that he was trying to get direction from the government, and he was wondering about the CEMA report, and it appeared to me that he was pushing—that the Liberal position was pushing—for a moratorium on the oil sands, so we'll look for further clarification on that.

The Chair: We'll review the blues. I think this is more an issue of debate than a point of order.

Mr. Mark Warawa: Thank you, Chair. I appreciate that clarification.

I'd like to ask a question on the baseline and carry on from some of the questioning by Mr. Calkins.

In the summer you have a natural leaching of hydrocarbons into the Athabasca, when the bitumen warms up in the warmer temperatures. We've heard that in the colder temperatures it's like a hockey puck, so it's not naturally leaching to the same degree. So through you to the witnesses, is there testing year-round, and do we find that during the summer months, the warmer months, the amount of natural leaching is higher? And how does that possibly impact the health of Canadians?

The Chair: Ms. Wright.

Mrs. Cynthia Wright: I think Dr. Wrona would be well positioned to answer that.

The Chair: Dr. Wrona.

Mr. Fred Wrona: Within the oil sands area, we actually have only one study, which was conducted under the northern rivers ecosystem initiative. It looked at the potential effects of natural hydrocarbon deposits and seepage on fish health. We used wild fish populations that occurred in the regions, and in fact, in that study, which was published in 2003 and scientifically peer reviewed, we indicated that we did see both hydrocarbon exposure in natural fish populations and elevated stress activities in these fish. Both related to areas near the oil sands but also to natural hydrocarbon deposits.

Beyond that, we have actually done no additional in-field studies looking at fish health effects.

Mr. Mark Warawa: Are there plans to do future water sampling during those months to determine the amount of hydrocarbons in the water?

The Chair: Dr. Wrona.

Mr. Fred Wrona: Most of the water sampling that is done in those reaches is done by Alberta Environment, and we would have to verify and determine what their plans are in terms of taking those types of samples.

Mr. Mark Warawa: Thank you.

Do I have time for a quick question on reclamation?

The Chair: You do.

Mr. Mark Warawa: While I was at the site, I was surprised to see the degree of reclamation in one area. I did not have a fly-over, which I hope we can have when we have our trip to the oil sands. Could Environment Canada share with us whether they are satisfied with the integrity of reclaimed land at the oil sands?

The Chair: Ms. Wright.

Mrs. Cynthia Wright: Briefly, Mr. Chair, the reclamation is just starting with respect to the first tailings ponds, so these are early days with respect to the tailings ponds, if that's what your question is about

Mr. Mark Warawa: No, I'm talking about not just tailing ponds but the actual reclaimed land that we—

The Chair: You mean the mined area.

Mrs. Cynthia Wright: Okay, you are talking more broadly.

Coincidentally, I met with CEMA earlier this week, and they are actually asking for greater involvement by Environment Canada in reclamation. Normally reclamation would be a provincial responsibility, but because we have authority with respect to the migratory birds, species at risk, and other areas of interest, they would like to tap into more of our knowledge to participate in reclamation.

Mr. Mark Warawa: Are we satisfied with the integrity of reclaimed lands to this date?

Mrs. Cynthia Wright: We've been less involved in that because of our responsibilities, so we've been asked to have a greater involvement.

Mr. Mark Warawa: Thank you.

The Chair: Your time has expired, and time has actually expired for the committee meeting as well. I do thank all witnesses for appearing and sharing their expertise with us and helping us along with our study of the oil sands and their impact on water.

With that, we are going to adjourn. I ask that all witnesses and observers clear the room, because we have an in camera meeting that starts right after this.

Thank you very much. The meeting is adjourned.

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