House of Commons
CANADA

# Standing Committee on Environment and Sustainable Development

ENVI • NUMBER 039 • 2nd SESSION • 39th PARLIAMENT

**EVIDENCE**

## Wednesday, June 18, 2008

---

## Chair

**Mr. Bob Mills**

Also available on the Parliament of Canada Web Site at the following address:

**http://www.parl.gc.ca**

# Standing Committee on Environment and Sustainable Development

**Wednesday, June 18, 2008**

● (1535)

[*English*]

**The Chair (Mr. Bob Mills (Red Deer, CPC)):** I'd like to welcome our guests. Thank you for coming.

As you probably are aware and have been informed of by our clerk, we are doing a preliminary sort of overview of the oil sands and the water supply issue. Basically, the two meetings, Monday and today, are for more or less an overview and general information. Our members will have questions. In the fall we will go into it in depth and will plan exactly how we're going to deal with that. If you could, keep that in mind as you address this.

I'd like to have each of you give a brief overview of your position and what you do and some information, and then we'll go to questions.

Welcome. Thank you for being here.

We'll start with Mr. Burgess.

**Mr. Steve Burgess (Acting Vice-President, Operations Sector, Canadian Environmental Assessment Agency):** Thank you, Mr. Chairman.

My name is Steve Burgess. I'm acting vice-president of operations at the Canadian Environmental Assessment Agency. With me is Steve Chapman, who is acting director of the panel secretariat group in our organization.

I understand that a presentation, or a deck, has been distributed.

**Mr. Brian Jean (Fort McMurray—Athabasca, CPC):** On a point of order, Mr. Chair, I'm just wondering, with all the criticism from the NDP, the Bloc, and some of the Liberals in relation to the oil sands, to make sure they get the proper information, it might be appropriate to wait for them. I'm not sure. Obviously that is in the chair's hands. But certainly they have been critical time and time again. They seemed to be last time. Mr. Cullen was not present. They're the ones who seem to need the education in relation to what it does for the economy, so I can't see why they would miss the opportunity to be here today. Maybe we should wait. I'm not sure. Obviously it's....

**The Chair:** I appreciate your information. We would have had to wait two hours for Mr. Cullen last time. I don't think I can tell anyone to be here or not. But the blues are available, and I'm sure they know that and can check those for the information. Of course we will have a steering committee meeting prior to beginning this study and setting the format and so on. Anyway, I appreciate your comment.

Go ahead, Mr. Warawa.

**Mr. Mark Warawa (Langley, CPC):** Speaking to the point of order, I know that Mr. Cullen is here, because I saw him in the House. Are you aware of whether he is on his way? If he is, maybe we should hold on.

**The Chair:** I can check with the clerk. I don't believe he's been notified, or he would have mentioned to me to wait. So I have to assume that those who are here are here to get the information, and we should proceed. We have enough members here. We have our quorum, so we need to proceed.

**An hon. member:** We certainly have quality in the room.

**Mr. Brian Jean:** We certainly do have quality, but this is his opportunity to ask questions. Of course he can review the blues, as all Canadians can, but he simply has not appeared. To criticize on one hand, and then on the other not be here to hear the information....

**The Chair:** I would note that it is Mr. Scarpaleggia's motion that we are proceeding with. I'm sure that Mr. Scarpaleggia would like us to get on with hearing the witnesses.

**Mr. Francis Scarpaleggia (Lac-Saint-Louis, Lib.):** I would note that on the Liberal side we are well represented by a former chair of the committee and a former Minister of Fisheries and Oceans.

**The Chair:** Yes, certainly. I can see that representation, and I know the quality of it. Thank you for pointing that out, Mr. Scarpaleggia. That's very helpful.

Anyway, if we can, let's begin.

Sorry, Mr. Burgess, for the interruption.

**Mr. Steve Burgess:** In fact, Mr. Chairman, it may be that I am the one who should apologize. We had prepared a presentation that I had hoped would have been distributed to committee members before my arrival, and that appears not to have happened. I'll endeavour to have it delivered during the course of the meeting, if that will be helpful.

In the meantime, I thought I would go through the presentation. It focuses on the federal environmental assessment process as it applies to the oil sands and the oil sands project specifically. It's a fairly long presentation. I hope that's acceptable.

Mr. Chairman, what I plan to do is focus on four main issues or themes as part of this technical briefing. First I'd like to provide members with some background on the federal environmental assessment process, with specific focus on environmental assessments for oil sands projects. I think it will be helpful to understand how our process works a little bit in having this technical discussion.

I'd also like to talk a little bit about how we work in conjunction with the Province of Alberta in conducting environmental assessments. As you're no doubt aware, natural resource management is really the purview of the provincial governments; nonetheless, the federal government has certain interests in respect of oil sands projects that are assessed as part of environmental assessments federally.

Then I'd like to talk a little bit about some recent environmental assessments and concrete examples to show how those assessments have dealt with some of the issues that I think are of interest to the committee, including those related to water or water management, migratory birds, and climate change.

Finally I'd like to talk a little bit about what we expect for the next few years from an environmental assessment perspective, some of the changes or enhancements that we might see coming forward over the next few years.

[*Translation*]

I would now like to explain what an environmental assessment is. It is a process that must apply early in the planning of a project. It is not a regulatory decision, but rather a planning tool. The environmental assessment allows us to analyze and predict possible environmental affects and to propose measures to mitigate adverse affects. Public participation is a very important aspect of this process. Environmental assessments provide a meaningful opportunity for the public to influence decisions about projects in their communities. Finally, environmental assessments are a key tool for the promotion of sustainable development.

● (1540)

[*English*]

Now I'll talk a little bit about how the environmental assessment process works.

The Canadian Environmental Assessment Act, which is the governing legislation for the federal environmental assessment process, applies to proposed projects wherein a federal authority—that would be a federal department or agency—has a specific decision to make with respect to a proposed project. It could be as the proponent of the project, a source of financial assistance that would allow the project to proceed in situations where the federal government might dispose of lands or allocate an interest in lands in order for a project to occur, and finally as a regulator.

I should say that in the case of oil sands projects, the primary trigger, if you will, for the federal environmental assessment process is with respect to the regulatory decisions that can be made by the federal government concerning oil sands projects. Those typically are authorizations under the federal Fisheries Act, and in some cases, approvals or permits issued pursuant to the Navigable Waters Protection Act, which is administered by Transport Canada.

Not all oil sands projects require a federal decision of this sort, and in those cases in which there isn't a federal decision to be made, the federal environmental assessment process would not be triggered. These would include in particular in situ projects, SAGD projects or steam-assisted gravity drainage type projects, which very often can be designed in a way that avoids adverse effects to fish habitat or interference with navigation, because they don't involve water courses directly.

Oil sands projects, on the other hand, of the mining type very often and typically would involve a federal decision or trigger of some sort.

Before a federal department is able to issue the regulatory approval, it first has to have completed an environmental assessment and have determined that the effects of the project would not be significant or unacceptable.

There are several types of environmental assessment under the legislation federally. The most common assessments that are undertaken are what we call screenings. I'll talk a little later about some of the factors that must be taken into account in conducting a screening.

Another type of assessment is what we call a comprehensive study, which is a slightly more rigorous assessment that takes into consideration factors that wouldn't be taken into consideration as part of a screening.

Then finally we have what we call review panels, which essentially involve public hearings and which are sometimes, if not more frequently, undertaken in the context of oil sands projects.

[*Translation*]

I would now like to speak briefly about the requirements of the process.

All assessments must include consideration of environmental effects, including effects from possible accidents and cumulative effects, the significance of effects, mitigation measures and public comments, if any.

Comprehensive studies, the more detailed ones, and review panels must also look at the purpose of the project, it must be determined why this is an important project, alternative means of carrying out the project and the capacity of renewable resources significantly affected by the project to meet present and future needs.

● (1545)

[*English*]

I think now I'll talk a little bit about the role of our agency compared to the roles of other departments, and a little bit, as well, about the major projects management office, which I think our president spoke to a couple of weeks ago when he was before you on the main estimates.

A key feature of the environmental assessment process is that it's what we call a self-assessment process. That means that each department that has a decision to make with respect to a project is obliged to conduct an environmental assessment. There is no central agency that conducts environmental assessments on behalf of the federal government. It's a distributed responsibility that resides with each individual decision-making department.

Our agency is really the overall administrator of the process—guardian of the process, if you will. An important additional role for the agency is to support the workings of environmental assessment review panels.

One of the relatively new responsibilities that has come to the agency is in response to the initiative to enhance the effectiveness of the regulatory system for major resource development projects, the major projects management office initiative. What that means for the agency is that we've taken on a greater role than is called for under the legislation with respect to the management of the environmental assessment process. That would include, obviously, projects like the oil sands. We also have enhanced responsibilities for the coordination and conduct of aboriginal consultations related to environmental assessment.

[*Translation*]

During the evaluation, other federal authorities, with expertise in the area, are responsible for providing specialist and scientific or technical information. For example, Environment Canada has expertise in the area of migratory birds, species at risk, air emissions and water quality; Health Canada has expertise regarding potential human health impacts and drinking water quality; Natural Resources Canada has expertise in earth sciences.

The expert departments are a very important part of the process, because they provide advice to the relevant authorities regarding the scientific or technical aspects of the project.

The Major Project Management Office is a new coordinating body in Natural Resources Canada. This office provides over-arching management for major resource projects during the federally regulatory process. This includes the environmental assessment process and the post-evaluation regulatory process.

A very important aspect of the environmental assessment process is cooperation with other jurisdictions, particularly the provinces. We have entered into cooperation agreements with all the provinces, except the Atlantic provinces. That includes, Quebec, Ontario and the Western provinces, including Alberta. These cooperation agreements are very important in avoiding overlapping and promoting coordinated environmental processes.

Operationally, this cooperation often results in joint review panels. There are integrated information requirements for the proponent. This cooperation draws on the experience and expertise of the two levels of government in meeting the environmental challenges related to specific projects.

● (1550)

[*English*]

I'll turn now to the question of public participation.

As I mentioned earlier, a very important element of the environmental assessment process is to encourage an appropriate level of public engagement or participation as part of the process. This provides both proponents and government decision-makers with better information about possible effects of projects that are being proposed.

Joint review panels, for example, provide the opportunity for public intervention, and this is supported by participant funding that our agency administers.

Comprehensive studies also have certain requirements for public consultation and participation. Again, there is public funding available to encourage participation.

For screenings, public participation is discretionary on the part of the responsible authorities or the departments that are undertaking the assessments.

A relatively new feature of the environmental assessment process is that we have created a specific capacity-funding envelope for aboriginal groups to support the government's obligations with respect to aboriginal consultation. This is in the case of both comprehensive studies and review panels.

The outcomes of the environmental assessment process are an important aspect as well. The main purpose of an environmental assessment is to provide government decision-makers with enough information to decide whether or not a project is going to have significant adverse environmental effects, and indeed whether or not the government should support a project.

There are various outcomes that could occur as a result of the process. The most common outcome would be that a project is deemed to have no significant adverse environmental effects, in which case the federal authority would be in a position to proceed with its regulatory approvals or provide funding or whatever other decision is being made with respect to the project.

If, after a screening is undertaken, it's concluded that the effects could be significant, then at that point the project would be referred to a review panel if there might be some justification for those impacts. It would be up to the review panel, at that point, to make a recommendation to government through the Governor in Council as to whether or not the effects are significant enough that the project should or should not proceed.

If it's determined at the end of the process that impacts are significant and cannot be justified, then the federal authority would be prevented from taking any action that would allow the project to proceed.

I'll turn away from the Canadian Environmental Assessment Act a little and talk a bit about an issue that has been of concern for some years with respect to the oil sands, and continues to be a concern, and that has to do with cumulative effects.

In the late nineties it became clear that assessment of cumulative effects of oil sands projects on a project-by-project basis was relatively ineffective and had some severe limitations. The concentration of these kinds of projects in one area presents challenges unlike any other clustering of developments that we've seen to date.

As a result, in 2000 the Cumulative Effects Management Association was created—which is a multi-stakeholder body that includes the Canadian Environmental Assessment Agency, as well as other federal departments—to produce information on cumulative effects that could be used in future environmental assessments.

● (1555)

CEMA is essentially funded by industry, with some support from the Alberta government. It's truly a multi-stakeholder initiative. It works on issues that are raised in project-specific EAs but that are not confined to a single project. So they're really global issues, if you will, the idea being to produce measurement frameworks that would address those issues.

I should say, too, that the goal is a consensus-based environmental management system that would apply to the Regional Municipality of Wood Buffalo, which is where the majority of oil sands occur. It's also to be implemented through what's called “the regional sustainable development strategy” for the oil sands.

To date, as I understand it, there have been six management frameworks put in place and two that are close to being finalized. To date, we have measurement frameworks with respect to trace metals, ozone, ecosystem tools, land capability and classification, and acid deposition; and two that are in progress have to do with eutrofication and the terrestrial ecosystems.

I thought what I'd do as well is, using some recent case studies if you will, illustrate how the EA process has contributed, we think, to improved projects in the oil sands area, reducing impacts associated with oil sands projects, and relate it to some of the issues that I understand have been of interest to the committee. These have to do with the whole question of water management, issues related to migratory birds—and perhaps the recent incident where a number of birds were lost in a tailings area—and climate-change issues.

Some of the projects that have dealt with these issues in the recent past include the Kearl oil sands environmental assessment, Muskeg River Mine expansion, and the Jackpine Mine, as well as the Horizon oil sands project. In all these cases, we feel that the environmental assessment process resulted in changes to the project design that improved those projects to some extent from an environmental perspective.

With respect to water issues, the main issues have really revolved around water withdrawals and water volumes, particularly in the Athabasca River, as well as water quality. And one of the things that has occurred fairly recently is that Fisheries and Oceans Canada and Alberta Environment are jointly developing a framework for regulatory decision making and setting out procedures for managing the oil sands water withdrawals from the lower Athabasca River. The framework recommends a precautionary approach to this issue. It's being implemented in phases, starting last year in 2007 and going through 2010.

On the issue of water quality, there have been concerns raised about predictions as to whether effects will indeed be negligible as a result of oil sands projects. As a result, in the case of most of the environmental assessments that are undertaken—notably Kearl, Muskeg, and Jackpine—there have been requirements set for water quality monitoring to ensure water quality standards are not exceeded.

● (1600)

With respect to migratory birds—and I'm coming to the end, I can assure you—Environment Canada, which has principal interest in this issue from a federal perspective, works in very close cooperation with Alberta Environment to ensure that mitigation is applied to projects to prevent unacceptable impacts to migratory birds. Using simple mitigation measures such as refraining from land-clearing during nesting periods is one example.

Recently, concerns have been raised about endangered species, such as the yellow rail, which is a migratory bird under the Species at Risk Act. Surveys are being undertaken to provide the baseline data that are necessary to ensure that mitigation is developed to protect the species in the Athabasca region.

The recent incident at the Aurora North Mine tailings pond involving the death of about 500 mallard ducks illustrates the need for improved measures to mitigate and avoid those kinds of effects. Part of the benefit of environmental assessment, in our view, is to learn from those kinds of experiences so that they can be applied to future projects.

[*Translation*]

With respect to climate change considerations, managing greenhouse gas emissions is an area that is evolving in the context of environmental assessment. I do acknowledge that this represents a huge challenge in the assessment of a specific project.

After identifying the challenges with respect to specific projects, the agency had worked a few years ago in cooperation with the provinces, in order to develop a guide for environmental assessment practitioners about the inclusion of climate change considerations based on environmental assessments. In concrete terms, that means that a specialized federal authority, such as Environment Canada, provides advice to proponents about the way to reduce their energy use by means of co-generation, regular vehicle maintenance and other methods of minimizing or reducing greenhouse gas emissions.

Beyond the environmental assessment process, as you know, regulations are being developed under the Canadian Environmental Protection Act which would be applied to large emitters, including the oil sands.

● (1605)

[*English*]

You'll be glad to know this is my final slide.

Looking ahead, you're likely aware of the recent decision in the case of the Kearl oil sands, where the Federal Court concluded that the panel hadn't properly provided sufficient rationale to justify its conclusion of insignificant effects related to greenhouse gas emissions. I think that will have the effect in future panel reviews of ensuring that the proper justifications are included in those kinds of decisions.

Secondly, I think it's prudent for us at the agency to plan for not only the current volume of projects likely to come forward, but for what we think may be an increasing number of these kinds of projects.

Thirdly, the Alberta government's regional sustainable development strategy is also being reviewed, and we're hoping that updates to that may provide us with additional context or benchmarks for future environmental assessments.

Finally, as you may know, the Canadian Environmental Assessment Act is due to be reviewed by a parliamentary committee in 2010. We hope we will be able to bring to you some of our experiences with these types of projects and others to inform your deliberations on how to strengthen the federal environmental assessment process.

Mr. Chairman, that's my presentation.

Thank you for your attention.

**The Chair:** Good. Thank you.

We will start with Mr. Scarpaleggia, for ten minutes.

**Mr. Francis Scarpaleggia:** Thank you.

Mr. Burgess, the world of environmental assessment is a very Byzantine and dense world. It's very hard. I remember when CEAA was promulgated, so I've been following these issues for some time. It's just so difficult to get a grip on it; thank you for being here and giving us a rundown of how the system works.

Let me ask you a couple of basic questions that are probably very simplistic.

Based on what you've said, my understanding is that the office cannot stop a project. It basically does an assessment; based on the assessment, it can propose mitigation measures to make the project less damaging to the environment.

Who can really stop the process? I would assume it would be the government, the cabinet, and the ministers involved, such as the fisheries minister or another minister. I suppose they can refuse to give a permit for a particular project.

How does the process work? Do they employ objective measures, or do they receive your report and then look at it, judge the economic and environmental trade-offs, and make almost a value judgment on whether the project should go ahead or not?

**Mr. Steve Burgess:** Mr. Chairman, that's a very good question and one that is important to understand.

The environmental assessment process is not a project approval process per se, as you've indicated. The purpose of the process is to provide information to federal authorities, or the responsible authorities, prior to decisions that would allow a project to proceed. Those decisions include situations in which the federal government would be a project proponent, situations in which the federal government is providing funding to allow a project to proceed, situations in which the federal government is divesting itself of an interest in land in order for a project to occur, or situations in which certain regulatory approvals are issued. The intent of the process is to be an information-gathering tool.

At the same time, though, if through the course of the environmental assessment the conclusion is that the project could have significant adverse environmental effects, then the responsible authority—let's use the Department of Fisheries and Oceans as an example—would be prevented from issuing its Fisheries Act authorization until that assessment had been referred to a public review panel. The panel would examine the issues in a public forum and make a recommendation to government as to the significance of the environmental effects—and, I would suggest, as to the justifiability or acceptability of those effects as well. Then cabinet, through an order in council, would ultimately decide whether a project should or should not proceed.

● (1610)

**Mr. Francis Scarpaleggia:** You make stop or go recommendations. You would make a recommendation to the government.... A review panel would say to the government that they don't believe the project should go ahead until mitigation measures are adopted; then it is up to the cabinet to decide whether it accepts that recommendation or whether there are overriding considerations that would lead it to approve the project. Is that correct?

**Mr. Steve Burgess:** That's correct.

**Mr. Francis Scarpaleggia:** Do you know of any projects that have actually been stopped in their tracks?

**Mr. Steve Burgess:** Mr. Chapman may be able to give a more complete answer.

**Mr. Steve Chapman (Acting Director, Panel Secretariat, Canadian Environmental Assessment Agency):** I think your question is a good one. We've had two recent examples, not in the oil sense, of review panels coming out with reports indicating that from their standpoint a project should not proceed. They are the Whites Point quarry project in Nova Scotia and the Kemess North gold project in British Columbia.

The panel concluded that there would be significant adverse environmental effects and made a recommendation to cabinet stating that the projects, from their standpoint, should not proceed. Cabinet agreed with those recommendations, so the federal government didn't issue permits for those two projects.

**Mr. Francis Scarpaleggia:** The major projects management office of your agency—was that created to deal with oil sands projects?

**Mr. Steve Burgess:** The major projects management office isn't part of our agency.

**Mr. Francis Scarpaleggia:** Oh, sorry.

**Mr. Steve Burgess:** They report to Natural Resources Canada. Their role is to oversee, if you will, and ensure that environmental assessments of major resource projects are conducted in an efficient manner.

**Mr. Francis Scarpaleggia:** But one would think that it was created with the oil sands in mind. I guess you're not in a position to comment on why NRCan created this office.

**Mr. Steve Burgess:** I can offer a view. I think the office is not related specifically to oil sands projects but more to the resource sector as a whole—mining, oil and gas, hydroelectric developments, and other forms of energy projects.

**Mr. Francis Scarpaleggia:** Thank you. I don't mean to interrupt, but we have limited time.

In terms of projects—this may be a bit off topic—you assess GHG emissions, but against what? There are no regulations.

**Mr. Steve Burgess:** Yes. This is a significant challenge, I have to say.

The approach we've recommended in our guidance material is that in the absence of specific regulation or policy direction, we feel that it's nonetheless important to consider the greenhouse gas component as one of the environmental effects of concern. So we ask that the environmental assessments include analyses of the amount of emissions that will occur as a result of a project and compare them with any policies, regulations, or whatever form of direction exists in order to see whether or not they're acceptable.

**Mr. Francis Scarpaleggia:** In terms of the oil sands, the impression we were given at the last meeting was that when it comes to water there's nothing to worry about. We have tailings ponds for the surface mining projects, which are on their way out anyway because things are moving toward in situ production. We've been told also that between 70% and 90% of the water is recycled.

Based on the environmental assessments that your office has been responsible for with respect to the oil sands, have they identified problematic situations involving the oil sands and water? If so, what remediation measures were recommended?

● (1615)

**Mr. Steve Chapman:** Certainly all four of the recent review panels that produced reports on developments in the oil sands had water use as a primary focus in their reports, recognizing that, from a cumulative effects standpoint, there continued to be issues associated with water withdrawal, particularly from the Athabasca River.

In terms of mitigation measures, it was suggested by the review panels that work be done by CEMA, which is the Cumulative Effects Management Association, to determine essentially the baseline—

**Mr. Francis Scarpaleggia:** Sorry to interrupt you again, but is that association, CEMA, the one that you said was funded by industry?

**Mr. Steve Burgess:** Correct, and by governments as well.

**Mr. Francis Scarpaleggia:** Just Alberta, just federal, or both? You know, many people will say that the Alberta government and industry are one and the same. I don't mean to be inflammatory or cynical, but.... So is it just the federal government, maybe NRCan?

**Mr. Steve Chapman:** I'd have to check on that. Certainly the federal government has membership on the committee, but as to whether or not there's direct funding, I'd have to check.

**Mr. Francis Scarpaleggia:** Okay, could you?

Thanks, Mr. Chair.

**The Chair:** Mr. Jean.

**Mr. Brian Jean:** On a point of order, Mr. Chair, I understand that a former Liberal staffer—Mr. Tonks' former staffer—is actually one of the senior people at CEMA in Fort McMurray now. It's Kyle something; I don't remember his last name. If Mr. Tonks would like to, he could get in contact with him directly and find out the funding.

**Mr. Bernard Bigras (Rosemont—La Petite-Patrie, BQ):** That's not a point of order.

**An hon. member:** No, that's a point of information.

**Mr. Francis Scarpaleggia:** I won't go there.

Anyway, if he worked for Mr. Tonks, I'm sure he's been well trained on how to keep the interests of the environment first and foremost.

**Mr. Brian Jean:** That was exactly my point.

**Mr. Alan Tonks (York South—Weston, Lib.):** Mr. Chairman, I taught him everything he knows—and he still doesn't know much, I think.

**Voices:** Oh, oh!

**The Chair:** On that note, I'll go on to Mr. Bigras.

[*Translation*]

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

I would like to thank the representatives from the Canadian Environmental Assessment Agency for explaining the process to us.

However, I would like to come back to the Imperial Oil project. I think we have no choice but to come back to this project, which is worth $7 billion and is designed to produce 300,000 barrels of oil per day for the next 50 years. Unless I am mistaken, and you may correct me if I am wrong, that is roughly the equivalent of 800,000 cars on the road.

This project has gone to the Federal Court. I have been a member of Parliament for 11 years, and I was involved in the amendments to CEPA, the Species at Risk Act, the Community and Environmental Assessment Act, to mention just a few—Mr. Tonks was the chair at the time—and I think there was an amendment made to the Canadian Environmental Assessment Act.

Am I mistaken in saying that projects must be assessed for greenhouse gas emissions? Am I wrong in saying that the act provides there must be an assessment of the greenhouse gas emissions the projects will entail?

[*English*]

**Mr. Steve Chapman:** The amendments put forward under Bill C-9 did not include a specific amendment for greenhouse gas emissions. Notwithstanding that, I can confirm that the review panel that was struck to conduct an environmental assessment of the Kearl oil sands projects did look at the environmental impacts associated with air quality and particular greenhouse gas emissions.

[*Translation*]

**Mr. Bernard Bigras:** Given that, can you tell me why—and once again I may be mistaken—Federal Court Justice Douglas Campbell, whom you probably know and whose decision you have probably read, said that in the case of the project we are talking about, the Canadian Environmental Assessment Agency recommended that a permit be granted, but neglected to check on the greenhouse gas emissions, and consequently did not comply with the Canadian Environmental Assessment Act?

Is that incorrect information, or is that what Justice Campbell of the Federal Court said in his ruling?

● (1620)

[*English*]

**Mr. Steve Chapman:** Generally what I would say is that you are correct, that in fact we did have a review panel. The report was found to be incomplete by the Federal Court, and in particular the Federal Court found that the review panel did not provide enough rationale to support its conclusion that there would be insignificant effects associated with the emissions related to air quality. The review panel in the case of Kearl was therefore reconvened, and it provided additional rationale to support its conclusion that there would be no significant adverse environmental effects associated with air quality.

[*Translation*]

**Mr. Bernard Bigras: tar** But how do you explain that a Federal Court justice would make such a ruling? You tell us that the agency's role is to be the watchdog of the process. That is what you told us. You also said on three occasions that the issue of climate change was a challenge.

Tell us why there was this Federal Court ruling. Is there a problem in the process? I understand when you say there are no regulations—you said it and I can understand that—but there have been some problems with the review of this project as regards the Canadian Environmental Assessment Act.

What I understand as well is that following the Federal Court decision, the project was sent back to the federal-provincial committee for authorization to complete it.

First of all, are you on this federal-provincial committee? And what argument did the proponent put forward to ensure that it will meet the Federal Court's requirements?

**Mr. Steve Burgess:** I will start by answering your question, and ask Mr. Chapman to add to it perhaps.

The joint review panel had looked at the issue of greenhouse gas emissions and global warming. The judge decided there was inadequate justification for the conclusion that the impacts of these two considerations would not be significant. There was no detailed justification given in the panel's report.

In the end, the panel reviewed these issues and backed up its findings with some justifications. This included, among other things, information that was submitted to the original panel, most of which came from the proponent. So this aspect was taken into account.

At the outset, the judge found that the report did not contain enough justification, but that does not mean the information was not available.

In the end, the report was revised and information was added to it. Finally, the report was submitted to cabinet for approval. I must add that the final decision is not made by our agency.

**Mr. Bernard Bigras:** I understand.

I have another question for you. When your president testified before the committee on the estimates, he said—and this was stated clearly in his text—that there had been some project assessment, but there was also a responsibility to do a strategic environmental assessment.

Was a strategic environmental assessment of this project done?

● (1625)

**Mr. Steve Burgess:** Strategic assessments are mandatory when the government is putting forward a policy or a plan that may have some environmental impact. Strategic assessments do not apply to the tar sands project.

**Mr. Bernard Bigras:** I understand that, but you must acknowledge that even in the case of a project assessment, some strategic considerations are included in the environmental assessments.

In Quebec projects are carried out and when the time comes to do so, we look at what the policy says and what are the government plans and programs. Furthermore, we check to see whether or not the proponent follows government policies.

To the extent that our efforts to fight climate change are enshrined in an international commitment—there is a signature at the end of the document and there is a Kyoto Protocol—my question is whether this project was assessed? I understand that there is not a specific project assessment.

In the review, what consideration did you give to the strategic aspects of the project? Do you understand what I mean?

[*English*]

**Mr. Steve Burgess:** *Oui*.

Do you want to answer that?

**Mr. Steve Chapman:** I think I understand the question.

Certainly in the environmental assessment reports developed by review panels, they do question whatever international obligations or agreements are pertinent to the project, including issues that deal with air quality. Our review panels certainly do look at the cumulative environmental effect. They don't look at these projects in isolation; they look at the interaction of these potential effects coming from one project with other existing projects or future projects. It is a mandate of our review panels to do that.

[*Translation*]

**Mr. Bernard Bigras:** I want to make sure that the information is accurate.

Have you also concluded that this project, as initially presented, would correspond to the equivalent of 800,000 additional cars on the highways? Given the mitigation measures presented by the proponent, how much CO2 would this project emit if it were implemented?

I would image that when this project was reviewed by the federal-provincial committee, the proponent said that there was indeed a problem and would have indicated what these mitigation measures would mean. If I'm not mistaken, production should start in 2010. Can you provide us with the estimated amount of CO2 that will be generated as a result of this project?

[*English*]

**Mr. Steve Chapman:** Certainly the panel was aware in terms of the total estimate of greenhouse gas that could be emitted, but I'm not prepared at this time to say what that would mean in the equivalent number of cars on the road, if that is your....

**The Chair:** Mr. Bigras, your time is up.

Mr. Cullen.

**Mr. Nathan Cullen (Skeena—Bulkley Valley, NDP):** Mr. Burgess, I'll just give you a minute to finish your thought there in terms of Mr. Bigras' question.

[*Translation*]

**Mr. Steve Burgess:** I would like to add something. We can certainly provide you with this information.

[*English*]

**The Chair:** You can just provide that to the clerk, and then he can circulate it. Thank you.

Mr. Cullen.

**Mr. Nathan Cullen:** Thank you, Mr. Chair, and thank you to the witnesses.

There are a couple of angles I want to take us on here. First, when I'm talking to mining companies or energy companies that are dealing with your office, there's a general interest in getting the most expedient type of process possible, the one with the shortest timeline and the one with the least amount of rigour and public hearings and all the rest.

From my understanding, and correct me if I'm wrong, to trigger one process versus another, one type of screening level to another, it's often based on total tonnage being presented in the project, or there are various criteria you folks use. How do you get around the angle that some companies will play, which is the underbidding process? They say, "You say it's 1,000 tonnes a day. Anything above that will bump us up to a more arduous process. We're going to say 990 tonnes, go through our environmental assessment at a lower level, and then, lo and behold, one year after the projects start, we're up to 1,500 tonnes. Who knew?" How do you get around that?

● (1630)

**Mr. Steve Burgess:** That is a very challenging issue. We certainly can't question sometimes the information we're being provided with by proponents.

**Mr. Nathan Cullen:** Even if you suspect it might be...?

**Mr. Steve Burgess:** There may be situations where we suspect that things may not be adding up. I know we've had situations in the past where different pieces of information from the company say different things.

**Mr. Nathan Cullen:** What they say to their investors will be something very different from what they're proposing to you and the government.

**Mr. Steve Burgess:** What we do is a bit of due diligence to make sure that, on the basis of the information available, the process that applies is the appropriate one. We don't have access to insider information or any other information, so we have to rely on publicly available information or information that's provided to us by the proponent.

**Mr. Nathan Cullen:** This is a strange moment for me. I'm trying to understand the way the investment cycle works. Whether you folks pick a screening or a comprehensive study can in effect make a decision that costs or does not cost the company many months and sometimes millions of dollars of production.

I've sat with companies and they say, "Here's our estimate if we go through the lowest-level process, the quickest one. This is how much money we can return back to shareholders. If we get bumped up to a more arduous process, it's less money." We can be talking about millions and millions of dollars, particularly if you get into some of the more extensive projects.

Say a project gets approved at a smaller screening level but then bumps up into some larger, more significant category. It seems strange to me that there's no way for you to request that the government pull their licence or have some sort of consequence to essentially lying to the regulators and getting around the system rather than playing fairly.

**Mr. Steve Burgess:** We certainly can do that in situations where, during the course of the environmental assessment, we see that the project has changed to the point that it requires a different type of assessment.

**Mr. Nathan Cullen:** I'm talking about once production has started, though. That's often when modifications are made.

**Mr. Steve Burgess:** If the project changes, if it expands, for example, following approval, we have limited ability to react, I have to say.

The nature of the triggers will sometimes influence what action can be taken. If we have a regulatory trigger, a Fisheries Act authorization, for example, for the harmful alteration of fish habitat, and that harmful alteration of fish habitat has occurred, and the expansion has no bearing on that, then there's really no trigger to have us renew or undertake a new environmental assessment. But if the project changes, and if it triggers a new or modified federal approval of some sort, then we have the opportunity to undertake an assessment.

**Mr. Nathan Cullen:** I guess I'm speaking more about once the horse is out of the barn.

I'm going to spend some time on this Cumulative Effects Management Association. It's in your deck here. It's funded by industry and the provincial government of Alberta.

**Mr. Steve Burgess:** Yes.

**Mr. Nathan Cullen:** Is it housed within Natural Resources Canada?

**Mr. Steve Burgess:** No. CEMA is an independent.... It's a stand-alone body. It's a multi-stakeholder body. I think there are something like 41 organizations in it, including environmental groups, aboriginal groups, industry representatives, and government—federal and provincial. Its responsibility is to address systemic issues related to....

**Mr. Nathan Cullen:** It doesn't shepherd any one particular project through the process.

**Mr. Steve Burgess:** No. It's meant to provide advice and information in support of environmental assessments for oil sands projects.

**Mr. Nathan Cullen:** How do you get around...? I'm going to step into the realm of cumulative impacts and cumulative effects, which you talk about with respect to one project, the Kearl oil sands project. What's the cumulative...?

From my understanding of CEAA—and I'm no expert—there's no way to also assess the cumulative impact of the projects in the area, even within the same watershed.

We've noticed that with some mining projects in B.C. it's almost like they exist in their own separate universes, even though they might all occupy the same watershed. They say that there's a certain amount of effect from this mine, and it's of a low enough standard that the mine can go ahead. And it's the same for that one. And then you have three or four or five of them proposed within one area, and there is nothing within the law to say that it's common sense to take the assessment of all of these on this one watershed, because it's only one watershed.

This is not rocket science. There must be some consideration of this.

● (1635)

**Mr. Steve Burgess:** There is. In the case of the oil sands, the main purpose of CEMA is to take a look at cumulative effects more broadly, rather than on a project-by-project basis.

**Mr. Nathan Cullen:** But you folks do it project by project.

**Mr. Steve Burgess:** We do it project by project. And I agree that there are challenges, on a project-by-project basis, in assessing the cumulative effects of a whole range of projects, particularly when we're talking about projects that might occur sometime in the future, for which we have very little information.

One of the approaches we're looking at to help us address those sorts of issues is the use of regional sustainable development strategies.

**Mr. Nathan Cullen:** Let me ask you this: Is there no way, if a few oil sands projects were being proposed, for you to actually identify the carrying capacity of that ecosystem for these types of projects and say that the amount of contaminated water that could be absorbed in this type of ecosystem is this much, the project we just approved takes 80% of that, and what remains is thus? Is there any way for you to note to the public, to note to government, that in this area, with this type of ecosystem, we are going to have an assessment of what the immediate environment can actually handle? That is as opposed to, again, having these snapshots and saying "Yes, you're approved, because you're within the limit".

The total cumulative effect you would never allow in one project. If they were all mushed together and then given to you folks for the go-ahead, there would be no way. There would just be way too much impact. But because they're done separately, they somehow get through. I don't understand how that can be.

**Mr. Steve Burgess:** Steve may have more to add to this, perhaps, but we have a real challenge, I would agree. It's very difficult to understand the overall carrying capacity, if you will, of an ecosystem, a drainage basin, or an airshed in the context of individual environmental assessments.

What we do is require proponents to look at past history to determine the extent to which impacts have occurred in the area already. We ask proponents to look at the future, to the extent that we know what the future is and whether or not there are other projects being proposed. Finally, we try to ensure that proponents minimize impacts to the extent possible to avoid reaching thresholds.

**Mr. Nathan Cullen:** I have one last question.

You mentioned the Kemess North project. In the assessment you handed down, the first nations component was significant in terms of the impact on their lives and the environment they use. It was quite an extraordinary panel review and assessment; shock waves went through the industry. Is there any sort of new adaptation to the strength of litigation on the books right now in terms of first nations consultation, authority, or direction? It was a surprise to the mining company. It was a surprise to many people in the region. Is this some potential new trend or new effect in terms of the consultations for first nations people?

**Mr. Steve Burgess:** Steve's probably closer to that project than I am. I would say, though, that I don't think it reflects a trend. I think it reflects a new reality, though, which is that both proponents and governments need to pay attention to aboriginal rights, and particularly governments need to ensure that appropriate consultation occurs in relation to development projects that occur in areas where first nations and aboriginal people have interests.

So if the question is whether turning down mining projects is a trend, I would say no.

● (1640)

**The Chair:** Thank you very much, Mr. Cullen.

Mr. Warawa.

**Mr. Mark Warawa:** Thank you, Chair.

I want to focus on the process initially. The environmental assessment process has evolved over the years. How long did it take, in the initial stages, to do an assessment? Now, it depends on the type of assessment, but let's go to a review panel, which is the most stringent type, and that's likely what we'd be looking at if it were in the oil sands, and I think that's the purpose of the meeting today: to look at the oil sands and the process. So if a project was proposed for the oil sands ten years ago—1998, or even 1995—how long did it take to go through that process?

**Mr. Steve Burgess:** I could answer that question generically, and perhaps Steve can answer it more specifically.

I should stress that for oil sands projects in particular, but in many other situations as well where both a provincial and a federal process applies, we work very closely with our provincial counterparts to conduct what we would call a joint review. Typically, those reviews would largely follow the provincial process. So from the standpoint of timing we would try to follow that, as best we could, and in fact in the case of panels we would definitely work to match the provincial process for the conduct of the review. In the case of the oil sands, we worked with the energy utilities board in the past and now with the energy resources conservation board to ensure that our process matches their process.

So whatever timing the province has for its process is the same timing we would have for our process.

**Mr. Mark Warawa:** The federal government has equivalency agreements with a number of provinces and territories. We do with Alberta. But my question is about the process. My question was how long did it take 10 to 15 years ago. So you know my next question will be what is it now. Is the process longer or shorter?

**Mr. Steve Chapman:** I'd say that 2003 marked the first time we actually had oil sands developments go before a review panel, so that was essentially the starting point for us. It's difficult to look at trends, since we've had only four projects go before review panels since the act came into force. We have one current proposal, the Joslyn North project, that's been referred to the review panel. I don't see a difference in timelines between the projects that were assessed in 2003 versus the projects that were assessed in 2005.

**Mr. Mark Warawa:** That's interesting.

You're aware of the government's “Turning the Corner” plan. By regulation we're requiring mandatory reductions within the oil sands. Future projects will require carbon capture and storage. So if that will now be part of the requirement, do you think it will lengthen the time or make any difference? It's just a requirement, and it will be a requirement for you to recommend it to go ahead.

**The Chair:** Go ahead.

**Mr. Mark Warawa:** Do you understand my question?

On the new requirement from the government to have absolute reductions of 20% by 2020, that is what the industy will have to do when they build that infrastructure, that project. Is that going to lengthen the project, or do you see that having no impact on the timeframe?

**Mr. Steve Burgess:** You're asking us to speculate a little, and it may be difficult to do. Generically, I would say that any time the requirements are clear for a proponent as to what mitigation measures are going to be required and what the environmental assessment process is going to be—what the expectations are of the proponent—that facilitates both the design of projects by the proponents and the assessment of projects by the regulators.

The other side of that, of course, is technically how simple or easy it will be for a proponent to design such a facility. But from a process perspective, that would facilitate the environmental assessment process. Whether it would make it shorter is a matter of speculation.

● (1645)

**Mr. Mark Warawa:** The two types of mining are surface mining and in situ. I think Mr. Scarpaleggia was asking some questions about that. I want to ask about the timeframe. Is there a difference between an environmental assessment for open mining as opposed to in situ? There will be different environmental impacts.

**Mr. Steve Burgess:** Those are key. Our experience is that the in situ projects have fewer environmental effects. In fact, they very often don't trigger the federal environmental assessment, because no federal decisions related to those projects are required. But in the case of oil sands mines, very often they have important effects on surface water, water courses, fish habitat, and so forth.

If there is a trigger with an in situ project, it would typically be conducted at the screening level, as opposed to having a public review through a panel review. So the environmental assessment process in the case of a screening would be a little more straightforward than in the case of a review panel.

**Mr. Mark Warawa:** How much time do I have?

**The Chair:** You have three and a half minutes.

**Mr. Mark Warawa:** Hindsight is often 20/20. I pulled out one of my old briefing books, which I had picked up about two and a half years ago—November 2005—from Pembina. Of the ENGOs, they seem to be one of the dominant advisers on the environment from that perspective, so for great entertainment last night, I reread it, and it was really quite interesting.

This was written two and a half years ago. They said that oil sands production more than doubled, to approximately 1.1 million barrels per day, between 1995 and 2004. That was 16 years before the time anticipated for coming to production of a million barrels of oil a day. Because of the driving force of transportation needs to get oil, and also the increased price of crude, suddenly it grew very quickly, and within that short period of time, 1995 to 2004, they were producing their million barrels of oil a day.

They went on to say that through 1999-2004, Suncor and Syncrude both expanded their surface mining operations. Four new surface mines and seven new in situ operations were also approved. They also said that more recently the Government of Canada—referring to the previous government—envisioned producing six million barrels per day by 2030.

They quoted the then-environment minister, now the leader of the Liberals, who said:

> There is no environment minister on earth who can stop [the oil from coming out of the sand]...because the money is too big.

It was very interesting reading, to hear that perspective. But this government is very committed to making sure it's done in an environmentally friendly way—

**Some hon. members:** Oh, oh!

**Mr. Mark Warawa:** —and of course we're not supporting the carbon tax. But also, I think the general public is very concerned about what we now see in the oil sands, the surface mining.

Over the years since 2003, I think you said, there's been the process of the environmental assessment. I have visited the hardworking, incredible MP from that area, Mr. Jean, and he took me on a tour. I saw the bitumen oozing out of the rocks right along the shore. But I was also looking for reclaimed sites, sites where they've taken the bitumen out of the sand and the sand has been put back in place and there are trees growing and you have a healthy ecosystem that has been reintroduced—it might be different, but again a healthy ecosystem.

My question to you is about success stories among projects for which you've done an assessment and which have developed as they presented in the assessment, and in which now the site has been reclaimed and you're happy with the results.

Maybe there could be a quick story on.... Well, if you go to something that's been very disappointing, it's difficult to put you in a position of giving specifics. But maybe you can share a success story in which you're happy with the results and which is a good example of how future projects need to be developed.

● (1650)

**Mr. Steve Chapman:** Certainly I'd say that site reclamation has been one of the primary focuses of review panels.

One thing I should mention with these truck-and-shovel operations, these large mining projects, is that they certainly have a long life span. Seeing that they just went through the environmental assessment process in 2003, they're really just ramping up into production mode and finishing construction, for the ones that went through in 2003. More recently, of course, the committee is aware of the Kearl oil sands project; they are just in site preparation.

Typically, site reclamation wouldn't happen until midway or three-quarters of the way through the project. With those particular projects, although they certainly in the EA process looked at site reclamation and their plans, we haven't seen yet, for the projects that went under environmental assessment by review panel, that they've actually progressed to the stage where they could be looking at full-scale site reclamation.

**Mr. Mark Warawa:** How far down the road would it be? Is it years?

**Mr. Steve Chapman:** I'd have to check.

It's safe to say, certainly, that they mine in segments through the area, and typically once they're done mining in one particular location, they'd look at the potential for using that area for site reclamation. So yes, I think years is....

**The Chair:** Thank you, Mr. Warawa. Your time is up.

We'll go to the second round, to Mr. Tonks, former chair of the environment committee. Welcome, Mr. Tonks.

**Mr. Alan Tonks:** Thank you very much, Mr. Chairman. I'm absolutely delighted to be here.

The document that I read, similar to Mr. Warawa, was by Pembina. I think it was EAs for dummies. I wonder if I could borrow that. I forgot most of.... I'm just kidding, Mark.

There are two issues that I'd like to address.

I was also given the tour by the hardworking member from Wood Buffalo in the Fort McMurray region. When we were there, various industry proponents and those who were active made it clear that they wanted to know what the rules would be in terms of what Mr. Warawa has referred to, in terms of mitigation, sequestration, and the full gamut of legislative regimes that would be in place.

It occurred to me, and it occurs to me from what you've said, that the regional strategic sustainable study is in the process of being updated by the Alberta government. Am I correct in assuming that the agency, along with its role in terms of its knowledge of the mitigation issues related to climate change, which have been mentioned, and also in relation to the mandate of the regional plan that deals with acids, metals, organics.... But you didn't mention water. You mentioned water a little later in your deposition.

Would it be your role to make sure that both the latest mitigation techniques and the issue with respect to cumulative impacts, such as on water, would be part of the updated plan, part of the updated Wood Buffalo regional plan? I ask this because that seems to be a template that is very important with respect to both cumulative and mitigation initiatives and restrictions.

**Mr. Steve Burgess:** Perhaps I should say that our role in that would be really more of an advisory nature. Our specific jurisdiction, if you will, relates to the oversight and administration of the Environmental Assessment Act, so our job is to make sure that departments respect the requirements of the legislation.

With respect to these sorts of issues related to oil sands or otherwise, we have a very keen interest in ensuring that environmental assessments are done properly. There's always room for improvement, in our view.

One way to do that is to encourage the kinds of initiatives that we see happening in the oil sands, under CEMA, with respect to the regional sustainable development strategy, and under the water management framework that the Department of Fisheries and Oceans and Alberta are developing or have developed. Our role in those is really one of providing whatever advice we can, within our areas of expertise, to encourage others to participate and so forth. But we don't have any authority, if you will, to make it happen. I think I can put it that way.

● (1655)

**Mr. Alan Tonks:** I see that as a little problematic, but that's something we can maybe talk about later.

I have a second question, if I have a minute, Mr. Chairman.

From time to time there's the notion of an environmental assessment bump-up. Could you outline for the committee how many screenings actually become bumped up, joint review panels?

The reason I ask that question is that there is no intervenor funding provided for in the screening, yet it could be that participation of aboriginal communities or simply those who are interested regionally, in terms of the impact, might be denied the opportunity of having intervenor funding.

Can that be clarified, in terms of how that process clicks in? What are the triggers, and who decides how the intervenor funding is going to be provided and to whom?

**Mr. Steve Burgess:** I can speak to the generalities, and Steve might be able to give you some details on the numbers of projects.

The way that works is that the vast majority of projects that are assessed undergo screening-type assessments, probably in the order of 6,000 to 7,000 projects a year across government.

For the most part, those are relatively small projects with relatively minor environmental effects. They can range, at the lowest level, if you will, from park benches in a national park, or something along those lines, to what I would consider to be fairly important projects, and in some cases to certain types of mining projects, and so forth.

The decision as to whether or not a project is a screening-type assessment or a comprehensive study type of assessment, which is the more rigorous version of the assessment process, is set out in regulation. Where a project meets the criteria set out in regulation, a comprehensive study would be required—so mining projects above a certain production capacity, hydro-electric projects above a certain production capacity, roads longer than a certain distance, and so forth.

In the case of comprehensive studies, there is participant funding available and funding for aboriginal groups to participate. And if I'm not mistaken, there will probably be, at any one time, a couple of dozen, or perhaps more, comprehensive studies being assessed at a given time—so 25 to 40, perhaps, at any one time.

As well, in situations where, as a result of a screening-type assessment, or when it's determined that the effects resulting from the project could be significant, the project could be referred to a review panel. And participant funding is available for those as well. Those can be stand-alone review panels, federal-only review panels, or joint review panels with another jurisdiction. And we have one active right now. There are others coming, we expect.

That gives you a sense of how we arrive at whether or not a project is a comprehensive study or a panel, whether or not funding is available, and an order of magnitude, at least, of the numbers of projects we're talking about.

● (1700)

**The Chair:** Thank you, Mr. Tonks.

Mr. Vellacott.

**Mr. Maurice Vellacott (Saskatoon—Wanuskewin, CPC):** Thank you, Mr. Chair.

I have a couple of very simple questions. I want to get some answers or clarification on them before I move to my bigger question here.

You made reference at one point to tailings ponds. Can you describe for me what we mean by “tailings” and “ponds”? It's been in the news a bit. It was on the CBC the other night. Maybe you can give us some insight on that.

**Mr. Steve Chapman:** Typically, with a truck-and-shovel operation, when they're extracting the bitumen from the ground, it's combined with all the sand, cobble, and gravel. Essentially the tailings are the leftover waste after the bitumen is extracted. So tailings typically are wet as a result of the extraction process, and it's a mixture of sand, larger particles, water, and other contaminants potentially that go into these holding areas.

The goal is that through a settling process, the heavier solids would settle out to the bottom and the water on top would then be available for recycling through the operation. That's typically what the tailings pond would be.

**Mr. Maurice Vellacott:** You speak in reference, obviously, to oil sands at that point. If it's tailings for something else, it's the leftover rocks. The minerals, the metals are already extracted. So we just have, in some cases, rocks. No contaminants? Nothing?

**Mr. Steve Chapman:** My example is specifically with oil sands. But in a mining operation certainly the tailings would be the fines as a result of the crushing or refining processing, say, for a gold mining operation.

**Mr. Maurice Vellacott:** It would be the rocks—the metals, the minerals removed, and we have rocks left over that are put in water. Is that what you would describe it as?

**Mr. Steve Chapman:** Sure. I think rocks.... Typically they are much finer particles, so sand and silt-sized particles typically would make up tailings.

**Mr. Steve Burgess:** And I should add, too, that these tailings are very often contaminated with heavy metals and other contaminants that are exposed and released as a result of the crushing process and so forth.

**Mr. Maurice Vellacott:** Then I need to ask this question. Maybe you could walk us through what it might look like hypothetically. In Saskatchewan, for example, we have a fair number of oil sands towards the Alberta border and elsewhere in the province, and also uranium. We've talked here mostly about oil sands to this point.

Could you give this committee a bit of the sense of the process for uranium, which we have in the north? You might recall some years ago some major public issues were raised in the Saskatoon area, in Warman. I'm not sure if either of you were in your particular positions at that time. But what would it look like if we had a typical environmental assessment process with respect to uranium development, through to refinement? What would that look like? Would it look different from oil sands?

**Mr. Steve Burgess:** From a process perspective?

**Mr. Maurice Vellacott:** Yes.

**Mr. Steve Burgess:** Certainly the main regulator with respect to uranium mining and the nuclear industry generally is the Canadian Nuclear Safety Commission. They have a very complete regulatory process that would apply not just to nuclear power projects, but also to uranium mining projects.

**Mr. Maurice Vellacott:** So you're not involved in that at all?

**Mr. Steve Burgess:** At the same time, though, before the CNSC issues certain permits with respect to uranium mines, for example, they first have to do an environmental assessment to deal with the environmental effects. I can't speak to specifics, but normally the Nuclear Safety Commission would undertake the assessment as part of its normal regulatory process and then ultimately make a decision at the end of the day.

In some cases there could be a joint review panel that might be established, as we might see for some of the generating projects in Ontario, for example. In that case, it would be a joint review panel consisting of a member or members appointed by the Minister of the Environment, as well as regular members of the CNSC. It would look very much like a joint review panel that you would see in other situations.

**Mr. Maurice Vellacott:** Right. And then they'd carry it the rest of the way, with uranium, for example?

● (1705)

**Mr. Steve Burgess:** That's right.

**Mr. Maurice Vellacott:** Okay.

Getting back to if we were to do some oil sands development along the Alberta border in Saskatchewan, what would be the very first step, the very first part of the process as the application comes forward from the company?

**Mr. Steve Burgess:** I'm not sure if you've received a copy of the deck, but in the presentation there's an outline of the review process, which starts, really, at the formal stage of a review panel.

**The Chair:** Could you give us a page reference?

**Mr. Steve Burgess:** It's page 10.

Obviously, a project such as this doesn't come together overnight. A proponent does quite a bit of planning ahead of time, before even submitting an application to the regulators. Usually what will happen is that there will be communication between the proponent, the various regulators provincially, as well as the various departments federally to begin the process of shaping the environmental assessment, perhaps developing a rough work plan, and so on.

Then the first formal step in the process is normally the submission of a project description, which provides an understanding of the project as well as some of the key environmental issues that might arise as a result of the project.

From there, federally at least, we decide what relevant departments ought to be involved in the environmental assessment, either as decision-makers or in the provision of expert advice. Depending on the process—if it's a screening, it's one process; if it's a review panel, it's another process—usually what then happens is that the proponent is expected to produce an environmental impact statement or report that provides detailed information on the nature of the project, its environmental effects, and mitigation measures that are proposed to deal with the adverse effects. That would be used by the regulators, either provincially or federally, to make decisions as to whether or not the project should proceed.

**Mr. Maurice Vellacott:** Will they have a consultant involved in that area who will do that for them? Will they have a consultant involved, a specific specialist?

**Mr. Steve Burgess:** Yes, normally they'll produce that report.

**The Chair:** Thank you, Mr. Vellacott.

Are there any requirements to have it translated into English? I've seen some of the proposals put forward. I mean, for the layman.... You say that the public is involved, but they're done by lawyers, and they're 800 pages long. For the average citizen to get involved at that point can be pretty darn tough. Do you have any requirements for putting those forward?

**Mr. Steve Chapman:** Typically we'd ask the proponents to prepare an executive summary outlining the main findings of the environmental assessment documentation. Certainly the agency also plays a key role, I think, in helping the public access information they require and helping them understand not only the process but the potential environmental impacts of a project, as well.

**The Chair:** Thank you.

We'll go to Mr. Bigras and then Mr. Jean.

[*Translation*]

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

I would like you to provide me with some clarification about something you said earlier in answering Mr. Warawa's question. You indicated that the oil sands extraction projects had been subject to an environmental assessment since 2003. Is that what you said exactly?

[*English*]

**Mr. Steve Chapman:** I want to clarify that the first review panel struck to conduct an environmental assessment of an oil sands project was in 2003.

[*Translation*]

**Mr. Bernard Bigras:** When did the agency begin doing assessments?

**Mr. Steve Burgess:** I should point out that our staff and not the agency did the assessments.

**Mr. Bernard Bigras:** I understand that.

**Mr. Steve Burgess:** The Canadian Environmental Assessment Act came into force in 1995.

● (1710)

**Mr. Bernard Bigras:** And the first oil sands projects were assessed in 2003.

**Mr. Steve Burgess:** By the Commission.

**Mr. Bernard Bigras:** Why are Quebec's hydro-electric projects subject to environmental assessments? The Toulnustouc hydro-electric project comes to mind, and it represents 526 megawatts of clean energy. It is acknowledged that, environmentally speaking, this is clean technology.

Moreover, this project reminds me a great deal about what occurred in 2001. From time to time I meet with people from Hydro-Quebec. They are not very pleased with the lead times and the number of questions imposed on them with respect to these projects.

The act was adopted on 1995 and the first oil sands extraction project was assessed in 2003. However, meanwhile, Hydro-Quebec has continued submitting clean energy hydro-electric projects.

Why do we have to conduct environmental assessments for these projects? Perhaps I am completely off base, but I would like somebody to explain why we have to do environmental assessments for hydro-electric projects but not for oil sands projects.

**Mr. Steve Burgess:** At the federal level, the triggers for the process constitute a very important factor. In the case of hydro-electric projects, the triggers reside primarily with Fisheries and Oceans Canada.

**Mr. Bernard Bigras:** There is also the Navigable Waters Protection Act.

**Mr. Steve Burgess:** Indeed. Just about every hydro-electric project has to be approved in accordance with the Fisheries Act or the Navigable Waters Protection Act.

In each case, there is a trigger and an assessment has to be conducted. With oil sands projects, there is no trigger for the situations, and that explains to a large extent why assessments are not done in every case.

Perhaps I should also describe the history of assessments on oil sands projects. Mr. Chapman could assist us.

[*English*]

**Mr. Steve Chapman:** That's correct. In some cases, there was a federal environmental assessment of a component of a project. We have the True North Energy project that was assessed. The assessment started in the year 2000, and that was a screening level of assessment for that particular project. So in fact we did have some environmental assessment responsibilities prior 2003 for some oil sands projects, but only a component of that particular project. It wasn't a full assessment of the entire project. It was some component that required federal authorization of that particular project.

[*Translation*]

**Mr. Bernard Bigras:** If I've understood you correctly, you're saying that in some instances, between 2000 and 2003, an environmental assessment could have very well been conducted. There could have been a trigger, however, nothing was triggered. There were reasons for conducting environmental assessments between 2000 and 2003, but nothing was triggered. There were assessments for hydro-electric projects to enable Canada to comply with its commitments made in 1997, in Kyoto, but there wasn't any assessments done for projects related to the oil sands, which are contributing to a very global problem.

That is the way I understand it. Between 2000 and 2003, there were reasons for triggering an assessment, but this did not occur.

**Mr. Steve Burgess:** I should clarify that there were triggers. Assessments were conducted, but they focused on components of the projects, and not necessarily on the projects in their entirety.

[*English*]

**The Chair:** Mr. Bigras, just so you don't feel bad, initially the Province of Alberta was going to have me do a noise impact study for my solar panels. So it happens everywhere.

Mr. Jean.

**Mr. Brian Jean:** Thank you very much, Mr. Chair, and thank you to the witnesses.

I was disappointed to see Mr. Cullen leave after asking his questions, because I thought he would want to hear more information. That's unfortunate indeed.

I think Mr. Scarpaleggia mentioned that the water that touches the water that goes back into the river is full of contaminants. I thought you'd mentioned that.

Clearly there are two types of water, and I want to establish that. One is to cool the equipment that's working, which obviously doesn't get any contaminants in it, and that goes back into the river after making sure there are no contaminants in it. And the second is water that touches raw oil sands, and that raw oil sand water is not allowed to go back in. In fact, I know first-hand that Syncrude, Albian, and CNRL recycle 100% of their water, and of course the tailing water that's there now that has been discussed in detail. There is a lot of that. I've seen that first-hand on a continuous basis.

I wish Mr. Cullen would have been around to have the opportunity to hear more. He's always good in question period to ask and criticize, but he's not so happy here to listen. Most people know I'm not a partisan person, of course, but I want to make sure that people recognize that on the record.

I think we should offer congratulations, as Mr. Warawa said. Indeed, Syncrude has reclaimed some of its land this year. It received an award for that reclamation. It looks great, and it's a good job by them.

In fact, Suncor is going to reclaim the very first tailing pond by 2010, which is the only one that I understand has leaked any effluent into any water system at all. I'm very pleased to hear that. Indeed, I think what I've heard from the president of Suncor today is that there is technology out there now to reclaim tailing ponds and to get that system back to 100%, and it's their intention to do that by 2010. So that is good news, and I think congratulations are in order for those oil sands companies.

I see Mr. Bigras is unhappy, but everybody in this room uses oil sands. They use it in their vehicles. Mr. Bigras, unless you flew to the Hill, you did, because the oil sands were used originally—

**An hon. member:** And you?

**Mr. Brian Jean:** I do use it, frequently.

I just want to be clear, Mr. Chair, if I can—

● (1715)

**The Chair:** We have witnesses, so let's ask them the questions.

**Mr. Brian Jean:** The oils sands actually were used to pave roads, to pave Parliament Hill and to pave Jasper Avenue in Edmonton. So everybody has used it, because they walk on it.

I just want to be clear about the Athabasca River, which has been sort of the subject. It flows into the Arctic Ocean—is that correct? So that water ultimately flows into the Arctic Ocean and becomes part of that ocean.

**Mr. Steve Burgess:** Yes.

**Mr. Brian Jean:** Okay.

Is the testing that was done, the water table and plant and animal testing, affected by the season in which it's done, whether it's done in the winter or in the summer? Do you have any expertise in that area?

**Mr. Steve Burgess:** I certainly don't have expertise. I'm sorry.

**Mr. Brian Jean:** That's all right. I wasn't sure if indeed you did.

I know there have been a lot of tests there. Since 1997 there have been tests on the aquatic system on the lakes in the area and the rivers in the area. It was interesting. I did notice that in one particular test.... It is on page 41 of a regional aquatics monitoring program that started in 1997, and this is ten years later. This report was done in 2007. I quote:

> There is also no evidence to conclude that there have been any significant changes in lake chemistry in the RAMP ASL lakes over the monitoring period.

So there's been no change.

I was also interested to find in the same study that there are four different assessments for water, including discharge. There's negligible, low, moderate, and high. In mean open water season discharge and in mean winter discharge, in annual maximum daily discharge and in minimum open water season discharge, all four were negligible, with the lowest possible testing result.

Are you aware of that?

**Mr. Steve Burgess:** No, I'm sorry.

**Mr. Brian Jean:** I'd be happy to provide you with a copy of the report.

In fact they also found in this report that "...no effects of local human activities were apparent on water quality in the Athabasca River in 2007."

Were you aware of that? I'm just curious. You haven't seen a copy of this report?

**Mr. Steve Burgess:** No, I'm sorry.

**Mr. Brian Jean:** It goes on further to say that they "...do not suggest changes in sediment quality over time". It appears there were some remarks at Monday's meeting.

**The Chair:** Mr. Bigras.

[*Translation*]

**Mr. Bernard Bigras:** On a point of order, I would like the member to tell me what document he is quoting from. What is his source, the reference?

[*English*]

**The Chair:** Mr. Jean, could you provide a copy of that to the clerk for us and then we can distribute it?

**Mr. Brian Jean:** Certainly, but I will just put it on the record. I'm referring to the executive summary of the regional aquatics monitoring program, which is RAMP, the final 2007 technical report. I have a copy here, and I'd be pleased to give that to the clerk afterwards.

Do you know what baseline these tests were done on by the Alberta government, or indeed by you? Was there any baseline test used?

● (1720)

**Mr. Steve Burgess:** No, I'm sorry. We don't have that level of technical information.

**Mr. Brian Jean:** You are aware, of course, that oil has seeped into the Athabasca River for tens of thousands of years?

**Mr. Steve Burgess:** I understand that this is the case, yes.

**Mr. Brian Jean:** You haven't been around, and I haven't either.

I don't know if you've had the opportunity to visit. During the summertime I would recommend to many members to visit that area, because it's unique. The oil actually seeps right into the water system, and it has for a long time—I would imagine, as long as it's been on the riverbanks. It actually seeps in there when it's warm.

I'm not certain as to your expertise in uranium mining. As you are maybe aware, in Saskatchewan, which is in the Athabasca water aquifer, there was a uranium mine on the east part of that lake for many years. Is that correct?

**The Chair:** Mr. Jean, your time is up. Perhaps you could just come to a close.

**Mr. Brian Jean:** I was having so much fun. Did I get deducted for Mr. Bigras' comments, Mr. Chairman?

**The Chair:** No, not really. You're at seven minutes, so not really.

**Mr. Brian Jean:** I'll leave it then, Mr. Chairman.

**The Chair:** Okay. Thank you.

Mr. Scarpaleggia.

**Mr. Francis Scarpaleggia:** On a point of clarification, when we talk about environmental assessments that are conducted in the context of where there are equivalency agreements between the federal government and the provincial government, as in Quebec, as in Alberta, what does the process look like? Is it just a question of two sets of experts, one federal and one provincial, operating under the provincial guidelines?

**Mr. Steve Burgess:** I should clarify.

We have what we call harmonization agreements with the various provinces. Under those agreements, we agree to cooperate in a way that facilitates an efficient and effective environmental assessment process that basically meets the needs of both jurisdictions.

**Mr. Francis Scarpaleggia:** What does that mean? Are there two sets of experts—the federal, the provincial?

**Mr. Steve Burgess:** In situations where we had a review panel, normally what will happen is we will have one panel that consists of members appointed by both jurisdictions. Very often, if we're working in cooperation with provincial jurisdiction—the Bureau d'audiences publiques, for example, in Quebec—the chair will be appointed principally by the Bureau d'audiences publiques as well as by another member. There will then be a federal member appointed by the Minister of the Environment.

**Mr. Francis Scarpaleggia:** And chances are there is no disagreement between the federally appointed and the provincially appointed members.

**Mr. Steve Burgess:** It would be very unusual for there to be disagreement between the members that makes its way into the final report.

**Mr. Francis Scarpaleggia:** From the sounds of it, all the water that is taken for oil sands mining, whether it be in situ or surface mining, comes from the Athabasca River, basically.

**Mr. Steve Chapman:** For the operations in the Athabasca region, the Athabasca River is the principal water body.

**Mr. Francis Scarpaleggia:** And the water table isn't affected by all of this activity?

Again, when we listen to Mr. Jean—and I appreciate that he's well informed on this, and he makes interesting and good points—it sounds like a Disney film, quite frankly, where everything is pristine and working wonderfully and everyone is living happily ever after. Maybe that's the case, I don't know, but it doesn't seem to jibe with what I'm hearing and reading in other places. That's why we're having this study, I guess.

Is the water table not affected? First of all, I don't even believe that we've mapped all our aquifers in Canada; I think only 30% are mapped. I can't believe that injecting all this water into the ground is having a negligible impact. That's one point I'd like you to respond to.

With regard to my second question, if the development process of the oil sands is affecting the water table, or even just through the Athabasca River, and those effects are interprovincial, would that trigger another level of federal authority, if you will? Would that give the federal government more right to assess or look into the matter?

I understand that certain things are provincial only, but once you start affecting the groundwater and it's having interprovincial effects, or even if you're just talking about the river systems, would that give us added authority beyond the need to invoke the Fisheries Act or the Navigable Waters Protection Act?

There has to be some point, especially on the prairies, that there are interprovincial effects, especially in the situation of declining water resources. Would that bring the federal environmental assessment power into the process a little more?

● (1725)

**Mr. Steve Chapman:** On your question about whether there are effects on groundwater, I would say yes. It's been an issue that review panels and environmental assessments have looked at in the Athabasca region. Certainly before you would look at mining an area, typically they want to depressurize it, which means lowering the water table so it doesn't become an issue. Looking at the effects on groundwater is certainly something that our review panels have done in the past.

**Mr. Steve Burgess:** In response to the second part of your question, with respect to whether there is a point at which impacts become so great that the federal government intervenes—I think that's more or less where you were getting—

**Mr. Francis Scarpaleggia:** It's because of the fact that we're crossing provincial boundaries, whether below the surface or above.

**Mr. Steve Burgess:** The federal environmental assessment process does require that transboundary impacts be considered as part of any project level environmental assessment. But to my knowledge there isn't any authority that exists in legislation or regulation that gives the federal government the ability to intervene in situations such as you described.

**Mr. Francis Scarpaleggia:** Okay, thank you.

**The Chair:** Mr. Jean.

**Mr. Brian Jean:** Thank you, Mr. Chair.

I would encourage all members, if they have an opportunity, to review Alberta's oil sands opportunity brochure about its vision for responsible development of the oil sands. It refers to many of the questions that have been asked today.

I know the Alberta government has been monitoring the water quality in the oil sands since the early 1970s. In fact, Mr. Scarpaleggia, the reason it's a minimum impact is that they're not allowed to discharge that water into the system. That's why tailings ponds, of course, are the ultimate resource.

I don't know if you're familiar with the economic impact, but my understanding is that *Maclean's* ran an article recently that said the investment in oil sands will actually be more than $123 billion. But it's going to generate an estimated $885 billion in economic activity, creating 6.6 million person-years of employment, and injecting another $120 billion to $130 billion in federal coffers. That was when oil was at an average price of $32 per barrel. So we're looking at some significant economic impacts.

I know that's not your expertise, but I did want to put that on the record.

I also want to cite this report as well, which indicates that water samples collected since 1990 have shown arsenic levels below provincial guidelines. In fact the report goes on to say that these guidelines and the amounts in this area are consistent with other places throughout the province, and in fact consistent with the average in Alberta.

Is that your information as well? Obviously the water flow is north, into the Northwest Territories, then the Arctic Ocean, and obviously into the ocean and dissipating. But in the southern part, which doesn't have any connection as far as an aquifer, there is the same amount of arsenic in the traditional food supply—moose, deer, elk, etc.—and in the water. It would seem to indicate, to me, that there is no connection between the two. Would that be fair to say?

**Mr. Steve Burgess:** That would be speculation really on my part to proclaim on that. Sorry.

**Mr. Brian Jean:** All right. Those are all my questions.

Thank you, Mr. Chair.

**The Chair:** What I suggest to the members is something to consider. First of all, I wish you all the best through the summer, but I think you might seriously consider taking Mr. Jean up on a visit to the oil sands and get the provincial minister there and the officials there, because there is an overlap. That is something this committee should certainly think about. It has been proposed and rejected, but it is something we should reconsider in the fall.

**Mr. Mark Warawa:** Mr. Chair, maybe we could have you invite us to see your project too.

**The Chair:** It's on the way, yes.

**Mr. Mark Warawa:** Chair, in Alberta there is no tax, and no Liberal carbon tax either.

**The Chair:** On that note, I'd like to thank our guests for being here.

Fortunately, I didn't have to undergo an environmental impact study for my project. It was just too small.

Thank you. Have a good summer.

The meeting is adjourned.

**Published under the authority of the Speaker of the House of Commons**

**Publié en conformité de l'autorité du Président de la Chambre des communes**

**Also available on the Parliament of Canada Web Site at the following address:**
**Aussi disponible sur le site Web du Parlement du Canada à l'adresse suivante :**
**http://www.parl.gc.ca**

---

**The Speaker of the House hereby grants permission to reproduce this document, in whole or in part, for use in schools and for other purposes such as private study, research, criticism, review or newspaper summary. Any commercial or other use or reproduction of this publication requires the express prior written authorization of the Speaker of the House of Commons.**

**Le Président de la Chambre des communes accorde, par la présente, l'autorisation de reproduire la totalité ou une partie de ce document à des fins éducatives et à des fins d'étude privée, de recherche, de critique, de compte rendu ou en vue d'en préparer un résumé de journal. Toute reproduction de ce document à des fins commerciales ou autres nécessite l'obtention au préalable d'une autorisation écrite du Président.**