PUBLIC HEARING

SYDNEY TAR PONDS AND COKE OVENS SITES

REMEDIATION PROJECT

JOINT REVIEW PANEL

V O L U M E 5

HELD BEFORE: Ms. Lesley Griffiths, MCIP (Chair)
Mr. William H.R. Charles, QC (Member)
Dr. Louis LaPierre, Ph.D (Member)

PLACE HEARD: Sydney, Nova Scotia

DATE HEARD: Thursday, May 4, 2006

PRESENTER: Environment Canada:
Mr. Jim Abraham
Mr. Bill Ernst
Mr. Michael Hingston
Mr. Greg Bickerton
Ms. Maria Dober
Mr. Chris Marshall
Ms. Anne Marie Drake

Health Canada:
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I N D E X O F P R O C E E D I N G S

--- Upon commencing at 9:04 a.m.

THE CHAIRPERSON: Ladies and gentlemen, good morning.

We're going to begin this mornings session.

Before we return to this morning's presenter, which is Environment Canada, I have two things under the heading of housekeeping.

The first thing, I would like to encourage all presenters to submit a copy or an outline or summary of their presentations ahead of time, if it's at all possible.

We asked for that in our procedures for this hearing. Some presenters have been doing it and we are very grateful. I think it really improves the effectiveness and efficiency of the Panel's review of the presentation, and our ability to ask questions.

I think it helps other participants as well, so I would really encourage you, if you are a registered presenter, please try to get us a copy of something about your presentation ahead of time. You can give that to the Secretariat.

And the second thing we need to do is, I will ask if any of the participants in the hearings who have made undertakings have anything that they wish to

submit, and I will turn first to the proponent, the Sydney Tar Ponds Agency.

MR. POTTER: Yes, we do. There was a request yesterday for some mapping of the Tar Ponds, showing the legal line -- federal/provincial line.

Mr. Brophy was the person asking that we -- Mr. Brophy yesterday reviewed a map that was suitable and it's actually in the EIS report, Volume 1, Table 1.3-1, for the people who would like to reference it. I'm sorry, Figure 1.3-1.

THE CHAIRPERSON: Thank you very much.

Are there any other parties who made undertakings yesterday who have anything they would like to submit?

If not, I would like to welcome our next presenters from Environment Canada, and you have 40 minutes to do your presentation.

--- PRESENTATION BY ENVIRONMENT CANADA (MR. JIM ABRAHAM)

MR. ABRAHAM: My name is Jim Abraham and I'm the Acting Director General for Environment Canada here in the Atlantic -- Atlantic Region.

I'd like to thank the Panel for this opportunity to share Environment Canada's perspective on the information contained in the Environmental Impact Statement.

Just to point out, that I'm joined here by core members of our team, and several departmental reviewers of the EIS.

On my left here is Bill Ernst. Bill's specialty is toxic chemicals and ecological risk assessment.

Michael Hingston is our air quality specialist in the middle, and on the far end is Greg Bickerton, and Greg is from our National Water Research Institute in Burlington, and he's a hydrogeologist.

Chris Marshall, in the middle, to my right, he's from hazardous waste unit at our national headquarters, and his focus during the presentation and the questions is with respect to regulations, respecting PCBs.

And then, of course, we have two experts -- two specialists from our Sydney Tar Ponds office, Maria Dober, who is next to me and Anne Marie Drake, and they've worked on the file for quite a few years.

Maria has worked on the file for the last 10 years and Anne Marie for the last five years.

There's several other key reviewers who have participated in the review of the document, and just to point out that if there are any questions that pertain to their particular area of expertise, we hope that the

Panel will permit us some time to obtain answers to some of the questions detailing those, perhaps, technical questions.

I'm going to start off by describing Environment Canada's role and responsibilities in this phase of the Project.

As many of you are aware Environment Canada has had as long history with this file. Environment Canada is the responsible authority and a federal authority under the Canadian Environmental Assessment Act.

Now, as a responsible authority our department is obliged to make project related decisions as a result of the potential requirements for authorization under the Federal Mobile PCB Treatment and Destruction Regulations, which fall under the Canadian Environmental Protection Act or CEPA.

In addition, it is possible that a Disposal at Sea Permit may be requested for the disposal of material in the North Tar Pond.

Now, as a federal authority, Environment Canada is in possession of specialists or expert information or knowledge in a number of areas pertinent to the Project. And, therefore, is in a position to provide such information and advice to the Panel.

In this capacity we have the responsibility to identify issues, ask questions and make recommendations to the Panel.

Now, we, in Environment Canada, we've reviewed the Environmental Impact Statement, the Supplemental Information Responses, two Information Requests that the proponent has provided, and in conducting the review of the EIS we recognized that there was a relatively short time frame in which to fully analyze a great deal of very complex data.

We did put the necessary resources in place to conduct a comprehensive review, and as a result we called upon several specialists with expertise in a variety of program areas.

The department's written submissions and information requests outline our views, following a thorough review of the EIS, as well as the Supplementary Information.

Now, our submissions identify issues where further clarification should be provided and we make recommendations to this Joint Panel Review for your consideration.

Now, it's my understanding that a great deal of information has been presented and discussed over the course of the hearing, thus far, including many

issues that Environment Canada has already raised in our written submissions.

However, the issues we have raised in these submissions are important, and do warrant additional attention this morning.

Now, our most recent written submission is focused on the following areas:

Air quality, specifically issues related to air emissions, resulting ambient air concentrations and the potential cumulative effects.

Water quality, specifically issues related to surface water, groundwater and waste water management. The marine environment with a focus on contaminant modelling and ecological risk assessment and technologies including stabilization, solidification as well as capping.

Malfunctioning and accident prevention, environmental effects monitoring and follow-up programs.

In the interest of time and focusing in on what we perceive to be the most important aspects of our submission, we will devote the majority of our presentation to the following areas: Air quality, water quality and management and environmental effects monitoring and follow up.

So, I'll start with air quality.

During the review of the air quality and emissions information provided to the EIS, Environment Canada focused on three main areas, the management of emissions, the resulting ambient concentrations and cumulative effects of air pollutants and third the proposed monitoring and follow-up actions that will take place during the actual operation of the Project.

Effective emissions management is required to ensure the Project will be capable of meeting regulatory requirements. Environment Canada recognizes that at this stage of the Project design more detail is required to fully demonstrate the ability of the Project to meet regulatory requirements.

Furthermore, additional information is needed to clarify uncertainties with respect to the Project details.

For example, I understand that one inconsistency that we've noted, Environment Canada, whether there will be one incinerator or two.

Now, that's been discussed over the past few days of the hearings. And I'm referring to the Response and Information Requests, specifically IR-41 in Table 41-1.

The clarification of the number of incinerators to be used in this Project and then thru-put

is necessary to determine how the emissions could change.

It's the Department's recommendation that upon completion of the final project design, whether it includes one incinerator or two, the Proponent be required to demonstrate that the Project will be capable of meeting all emission requirements.

Now, with regard to ambient concentrations and cumulative effects of air pollutants, Environment Canada found that the modelling of these factors was done correctly; however, we do have some questions with respect to the data used to create these models, and I understand that the Proponent, in fact, has discussed this issue in the previous days.

For example, it appears that the precipitation data for Yarmouth were used, rather than those for Sydney. The precipitation levels for Sydney are greater than those in Yarmouth, and they have underestimated the amount of wet deposition predicted by the model.

Additionally, the same surface roughness characteristics were not used for all of the models, which leads to questions on whether the appropriate roughness characteristics were selected for all of the cases.

Two different models, two different sets

of meteorological data were used in the EIS, yet no justification for these differences was provided, and finally limited information was provided on the actual specific emission rates.

While it's not possible to estimate the significance of these issues without rerunning -- actually rerunning the models, we do recognize that the models are inherently conservative and the fact that the majority of the emission rates entered into the model are also conservative, it's important to demonstrate, though the potential cumulative effects from this project in conjunction with other activities in the area. In its response to the Information Requests -- and these are IR-48 and IR-72, the Proponents suggested that there are no cumulative effects associated with this project or other activities in the area.

However, Environment Canada is of the opinion that more information is required in order to support this statement. We've also identified some apparent information gaps in how the Proponent has estimated cumulative ambient air concentrations. It appears that the predicted concentrations in Tables IR-72-1 to IR-72.12 do not include emissions from the incinerator. And estimate of the total ambient concentrations, once the emissions of the proposed

activities are added to the pollutants currently present in the air shed is needed.

These calculations are essential to understand the cumulative effects of air quality. As well at this time it appears that only select pollutants have been assessed for cumulative effects. These include benzoate pyrene, total suspended particulate matter as well as naphthalene. Other air pollutants, such as PM2.5, this is particulate matter that's 2.5 microns in diameter and smaller, as well as PM10 which is 10 microns. PCBs and dioxins and furans do not appear to have been considered in the cumulative effects assessment.

An estimate of the total expected ambient concentrations due to the combination of all project related emission sources as well as the existing pollutant levels in the local airshed is required. And these calculations are essential to the understanding of the cumulative effects on ambient air quality. This analysis may impact ecological and human health risk assessments and as such these assessments should be re-evaluated.

So I'll move on to some comments now on water quality. We also reviewed the EIS based on issues affecting water quality as a result of the project. The

Tar Ponds and Coke Oven sites have had an impact on water quality in the surrounding environment and the proposed project is designed to minimize or eliminate current and future potential effects of the contamination in three ways.

The first way is treatment and containment stabilization of the contaminants. The second is the isolation and the diversion of uncontaminated streams and lastly the interception and treatment of waters that remain contaminated.

It's Environment Canada's perspective that the interaction of surface water with groundwater is a key consideration in the overall approach to mitigating or eliminating the effects on ground and surface water at and around the sites. An extensive network of engineered controls is proposed and consists of configuration of vertical barrier walls, diversions, trenches, interceptor trenches, infiltration galleries, french drains, pump and treat systems and surface caps.

At this point the network of control structures has not been fully specified. The proposed construction of line channels to reroute the surface waters in the project area and the solidification stabilization of the Tar Ponds will also alter the current groundwater discharge patterns.

By design these features are intended to modify the flow patterns of the existing surface and groundwater systems within the remediation sites and thus have potential for alteration of the existing groundwater and surface water flow patterns in the surrounding environment. The proposed engineering activities identified in EIS focus on the shallow components of the local groundwater system.

Relatively little information is available on these lower bedrock units. Even though contaminants have been documented in the intermediate bedrock. Thus it's -- if the proposed control features along with the treatment of contaminated waters achieve their purpose, then these changes will be mostly positive. However, there is still some uncertainty as to how the groundwater and surface water contamination or movement is to be minimized or controlled.

A preliminary quantitative assessment of the proposed control measures would have been helpful in evaluating the project at this stage. Thus it's even more important that a proper monitoring network be implemented prior to construction so that the actual response of the groundwater system can be tracked and the project activities adjusted accordingly.

Now with respect to the generation of

waste water the anticipated types of waste water are not unique to this site. And Environment Canada acknowledges that technologies exist to treat these two acceptable levels. While there are information gaps, the Proponent has stated that the discharges will meet the requirements of the Fisheries Act -- for the Fisheries Act. Environment Canada is responsible for administering the pollution prevention provisions of this legislation. As such the department will be diligent in verifying compliance as the project proceeds.

In the EIS the Proponent indicates that during remediation there will be an increase in the flux of five times the current release volume and that following a remediation the contaminant flux will be reduced by up to an order of a magnitude -- reduced by an -- up to an order of magnitude of the current release rate.

We've heard during these hearings that these are assumptions used by the Proponent but the supporting rationale for these estimates have not yet been provided. While ecological risk assessments were conducted on the proposed land farming operation at the Coke Ovens site and the incinerator operation the proposed remediation work within the Tar Ponds was not carried forth in the ecological risk assessment, despite

the fact that there is potential exposure to aquatic organisms from these remediation activities.

Since the remediation of the Tar Ponds is a major component of the project and the EIS suggests containment concentrations will exceed probable effects levels, we believe that the ecological risk assessment would have helped to identify potential impacts to the marine receptors. The results of the ecological risk assessment would inform the development of a marine monitoring program.

Environment Canada has made a series of recommendations with respect to water management issues. These include the development of a detailed groundwater monitoring program and a fresh water aquatic monitoring program associated with the anticipated airborne emissions from the incinerator operation. In addition, Environment Canada recommends that the Proponent conduct a quantitative ecological risk assessment of appropriate marine receptor organisms and commit to follow up monitoring of the marine environment.

We make this recommendation to lessen or eliminate adverse effects of the remediation work on marine habitats at the site and the living things within them. For example, a real time monitoring program measuring the flux contaminates from Muggah Creek would

be useful. Given that Environment Canada has specialized expertise in this area, the department would be pleased to assist the development of the detailed monitoring program along with other appropriate government agencies.

It's also the department's recommendation that a detailed groundwater monitoring program be developed and implemented for the various project areas, incorporating hydrogeological model results in the final design of the groundwater and surface water control measures and the monitoring network.

Now, I've spoken quite a bit about monitoring and I'll add some details on monitoring and follow up. Monitoring and follow up programs are essential components of the Environmental assessment process. It is through these programs that the predictions outlined in the EIS and the effectiveness of the proposed mitigation measures are verified. More importantly the information gained through these programs can and actually should be used for management of unacceptable and unexpected effects of the project.

It's essential to understand that monitoring programs are only the first step in follow up. The information generated through monitoring programs must be used to manage unanticipated issues that arise during the course of the project. As a result there may

be need to take corrective action and make a commitment to continually enhance the project to ensure that regulatory and environmental criteria are being met.

Throughout this presentation we've made numerous references to the need to monitoring and follow up programs, as I mentioned. These programs will be an essential part of the overall remediation project. Environment Canada recognizes the Proponents' commitment to work collaboratively with all appropriate stakeholders in the design and implementation of these programs should the project be approved and proceed.

Environment Canada looks forward to actively participating in the development and implementation of the monitoring and follow up programs. And we do recommend a formal mechanism be put in place to enable the appropriate stakeholders to participate in the design and the implementation of these monitoring programs.

Now we're going to present some additional information. The first information, the panel has asked us in Environment Canada for information pertaining to the Stockholm Convention on persistent organic pollutants. The toxic substances management policy as well as the federal mobile PCB treatment and destruction regulations. So I'll give some details of those three

specific policies and regulations.

Now with respect to the Stockholm Convention, actually this weeks as it turns out, the Conference of Parties is meeting in Geneva. And as a result, both the departmental specialists are really not available to speak directly on this issue. Nevertheless, we are able, in general terms, to speak on the convention. And I'd like to offer the panel my assurance that we'll answer any questions pertaining to the details of the convention as the best of our abilities but notwithstanding that most of the experts are away in Geneva this week. And we will get back to you if there's some detailed specific questions that we're unable to answer.

Now the Stockholm Convention is a global agreement that came into effect in May of 2004 with the objective of protecting human health and the environment from persistent organic pollutants. Now Canada is a party to the Stockholm Convention. And as a result, we have an obligation to develop and implement a National Implementation Plan outlining current and projected initiatives to meet the requirements of the Convention.

These initiatives include legislation, regulations, voluntary programs, standards, policies, programs and other related measures including actions by

Canadians to manage and/or eliminate persistent organic pollutants in the environment. Now Article 5 of the Convention stipulates that the National Implementation Plan include a National Action Plan for reducing unintentionally produced persistent organic pollutants, including dioxins and furans, HCB and PCBs.

Under Article 7 of the Convention each party must complete and send it's National Implementation Plan to the Conference of the Parties within two years. And for Canada, the deadline for submitting our National Implementation Plan will be this month. In fact, it's May 17th in 2006. Canada will also be conducting periodic reviews and updates of our National Implementation Plan in accordance with the schedules to be determined by the Conference of Parties.

Now a few words on the Toxic Substances Management Policy. This policy was created with two objectives. The first goal is the virtual elimination of toxic substances from the environment that result predominantly from human activity and as well that are persistent and biocumulative. An example of these kinds of substances would be PCBs.

Now we refer to these commonly as track 1 or level 1 substances. Now the second goal of the management of other toxic substances -- we have a second

goal and it's the management of other toxic substances and substances of concern throughout their entire life cycles to prevent or minimize the release into the environment. Now example of these type of substances would be PAHs, poly aromatic hydrocarbons. These now, we refer to them as track 2 or level 2 substances. And these do have potentially harmful effects on the environment.

Now under the Toxic Substances Management Policy, remediation may be used to address track 1 substances like PCBs when they already exist in the environment. The policy also allows for a cost benefit analysis to identify the appropriate course of action, management strategies focusing on minimizing the exposure and the site's potential risks are permitted to be implemented.

And, finally, the federal Mobile PCB Treatment and Destruction Regulations, these apply to mobile systems for the treatment and description of chlorobiphenols that are operated on federal lands or operated by, or under contract with, federal institutions.

The operation of incineration systems on federal lands requires ministerial authorization and must specify PCB release limits, operating standards and

emission testing methods.

These regulations were enacted in 1990 and with the development of the Canada-wide standards for emissions of dioxins, furans and mercury are no longer current. It is intended that these regulations will be amended in the near future.

Now, I understand that there were some questions raised over the last few days with regards to the Canadian Council of Ministers of the Environment Guidelines, the so-called CCME Guidelines, so I'd like to take this opportunity to share some information and perhaps some insight into the use of these guidelines.

The CCME National Guidelines for Hazardous Waste Incineration were developed in 1992 and the guidelines for mobile PCB destruction systems were developed in 1990. In fact, our current Mobile PCB Treatment and Destruction Regulations which came into force in 1990 contain the same emissions criteria as these 1990 or 1992 guidelines.

However, the department is in the process of revising our regulations and these will be completed in the very near future as we recognize that they're no longer current.

Now, since the early 1990s the Canada-wide standards were developed -- I think they were developed

in 2001 -- and these outline more stringent acceptable emissions criteria for dioxins, furans and mercury from incineration systems. We do recognize, however, there are other elements in those CCME Guidelines that may be helpful to inform this process, and that's why we referenced them in our submissions.

For example, Environment Canada believes that the guidance on ash residue disposal, handling and storage procedures for waste, spill handling procedures and common components included within operating permits in the CCME Guidelines may actually be relevant for this project.

With regards to the CCME Guidelines respecting the 1,500-metre separation distance between an incinerator and public buildings, this criterion was established to provide general guidance. However, there are other methodologies that are equally as conservative but that also take into consideration the unique characteristics of specific sites like this one, for example.

For example, the air emission and dispersion modelling, in concert with a human health risk assessment, are also appropriate methodologies to determine the need for, and the extent of, a separation distance between the proposed incinerator and public

buildings.

This is consistent with other CCME Guidelines that identify generic criteria while also endorsing the development of site-specific recommendation objectives to account for the unique characteristics of an individual site.

Now, it's also important to note that these CCME Guideline documents are no longer on the active publication list, in fact, of the CCME Secretariat and, in fact, they're not even -- they're no longer even available for distribution.

Now, as a result of all these factors, Environment Canada accepts the continued use of these documents for general guidance but endorses the use of site-specific details in the development of remediation plans. We believe the inclusion of these details will culminate in the development of a tailored approach to the development of remediation plans.

Now, in a related area I thought it would be helpful to provide the Panel with some additional information regarding the regulatory contexts associated with the project. More specifically, I'd like to provide some clarification with respect to Environment Canada's role within this framework.

First, as I mentioned earlier, Environment

Canada administers Section 36, paragraph 3, of the Fisheries Act. This section prohibits the deposition of deleterious substances into waters frequented by fish. This is often referred to as the General Pollution Prevention Provisions of the Fisheries Act.

In general terms, the deposit of any material, such as waste water or solids, generated as a result of the project activities would be required to meet the Act. Compliance monitoring, which is done to ensure that the project meets the requirements of the Fisheries Act, includes testing for acute lethality and sub-lethal or chronic effects.

With respect to the application of the federal Mobile PCB Treatment and Destruction Regulations, these regulations apply to the proposed location of the incinerator, as it currently resides on federal land.

As a result, Environment Canada has premised its review of the EIS on the assumption that those regulations will apply. However, once Environment Canada has been advised that the ownership of the land has been transferred to the province, federal Mobile PCB Treatment and Destruction Regulations would not apply and the operation of the incineration system would fall under provincial jurisdiction.

So, I hope some of this background

information on some of the regulatory contexts and some of our policy and regulations has been useful.

I'm going to make some comments on broad summary recommendations. At this time there are a number of outstanding information gaps with respect to several components of the project, the specifics which have been outlined in our written submission.

Environment Canada is of the opinion that these issues can be addressed as the design process unfolds, provided that the Proponent commits to the recommendations outlined in the department's submission.

Specifically to that, the Proponent must commit to conduct a further analysis to confirm predictions when more design details are available, to develop and implement detailed monitoring plans, to establish appropriate follow-up and mitigation strategies, and, as well, to engage Environment Canada and other appropriate stakeholders in the development and implementation of these programs.

This additional information and further analysis must be provided to the satisfaction of the appropriate government departments prior to the issuance of regulatory approvals and authorizations and, therefore, prior to the construction of the project.

Environment Canada believes that the

issues identified in the department's review can be addressed provided the Proponent commits to the recommendations outlined in our written submission.

So, finally, I'd like to provide the Panel with my personal commitment on behalf of Environment Canada to continue working with you, with the Proponent and with the people of Cape Breton to develop an appropriate remediation strategy that may move forward without adverse environmental effects.

Environment Canada will be diligent in enforcing its applicable regulations. To that end, an enforcement officer position here in Cape Breton has been staffed and will be fully functional by early July of this year.

Once again, I'd like to thank the Panel for your attention, and we would be pleased to answer any questions that you may have. Thank you once again.

THE CHAIRPERSON: Mr. Abraham, thank you very much for your presentation. We appreciate receiving your presentation ahead of time and the clarity of the way it was organized, and you have, in fact, answered at least some of the questions that we were prepared to ask you but I'm sure we've got plenty more.

ENVIRONMENT CANADA AND GOVERNMENT SERVICES AGENCY

--- QUESTIONED BY THE JOINT REVIEW PANEL

THE CHAIRPERSON: I think I would like to start with a very general question and I will use for the example the comments that you made with respect to the control of ground water and surface water.

I think in the way you phrased that you let me infer -- and then you can correct me if that's incorrect -- that you're suggesting that it's a fairly complex undertaking that the Proponent is making to control both surface and ground water flows.

Now, you've said that there's not as much information as you would like in the EIS. You have then gone on to say that that's unfortunate but what you really recommend is they come up with a good monitoring plan.

I appreciate the fact that from your regulatory position the regulatory involvement that you have, in a way that's what triggers your ability to take action, is monitoring the monitoring results, so it's kind of something goes wrong and you're there.

From our perspective as a Review Panel that's trying to make some sense of the proposed remediation and to make some meaningful recommendations, we're I guess equally, if not more, interested in the front-end and avoiding anything -- and I'm sure you are too -- requiring you to take action under Section 36 of

the Fisheries Act.

Therefore, I am -- are you -- let's take the ground water and surface water. Do you have anything more to add in terms of -- I think we need some help, you know, in terms of assessing do we have enough information here.

You don't have a guaranteed involvement, there's no sort of regulatory step in which you will be required to approve more detailed information on that system. Is that correct?

MR. ABRAHAM: Not with respect, if I understand correctly, to the design, but we've brought Greg here as a hydrogeologist to provide some expert advice. You're right, it's very complex, the hydrogeology and the water flow systems being proposed are very complex.

I'm just wondering if Greg has any comments with respect to further information that might be needed or ---

MR. BICKERTON: I think I can provide some further comment if you'd like. Conceptually, the way it's laid out, I have no difficulty with it at all, and the reason for suggesting the monitoring is just for verification that it will perform as suggested.

And as Jim had mentioned, ideally it would

be nice to have more detail, but I do understand at this stage that some of that information is not available, but conceptually it's rather straightforward in terms of the ground water at least.

I can't speak to the surface water aspects, but in terms of the ground water conceptually what they're proposing is a really straightforward concept.

THE CHAIRPERSON: And you have experience of seeing similar systems work in other remediation cases?

MR. BICKERTON: Certainly nothing of that scale. On a much smaller scale in terms of collection trenches, I have some experience, not with diversion walls and things, but the concept is -- it's just a barrier to flow, so that in itself isn't causing me -- the concept is fairly straightforward. So, hopefully that answers your question.

THE CHAIRPERSON: Well ---

MR. ABRAHAM: But as you mentioned, I guess one area that -- where we do have jurisdiction on the Fisheries Act is the waste water, and so we will need more detail on the plans in order for us to be comfortable with the waste water aspects so that we're in a position to regulate and exercise our authority.

THE CHAIRPERSON: And is it fairly common practice that you work with your provincial counterparts? Do they consult with you on matters like this? Would you expect as a matter of course that you will, in fact, end up reviewing more detailed specifications and providing advice?

MR. ABRAHAM: Well, one thing we at Environment Canada -- we recognize that we do have scientific and monitoring expertise and one of our roles within the federal government is to make that expertise available to provincial governments, certainly for important projects like this.

So, regardless of our regulatory authority -- or responsibilities, our responsibilities from a federal government point of view with the science and monitoring infrastructure is to provide advice, especially to our provincial colleagues and especially on an important project like this.

So, we do make that expertise available and we do encourage the Provincial Governments to ask for advice of the experts that we have, and in many cases the Provincial Governments do not.

THE CHAIRPERSON: So when panels make recommendations to that effect, it might be helpful.

MR. ABRAHAM: I would suspect so.

THE CHAIRPERSON: My second fairly general question, and it kind of relates, I think, is, I'm looking at your written submission, the most recent one, of your presentation. And in your first recommendation you say that:

> "It is recommended that the proponent, upon completion of the final project design be required to demonstrate that the project will be capable of meeting all emission requirements."

And then you go on to say:

> "This will include documentation of the successful operation of the specific technology at other sites similar to the Tar Ponds."

Now, was this recommendation made -- it's under "Air" so it's only made with respect to the incinerator, not to any other aspects.

MR. ABRAHAM: Yes, that's, in fact, correct. It's with respect to the incinerator itself and with respect to the air aspect.

THE CHAIRPERSON: The panel asked a less precise question, I guess, but we certainly asked a related question in one of our Information Requests with

respect to information on other hazardous waste incineration projects. You've had a chance to review the reply to that?

MR. HINGSTON: Yes, we have, and I think one of the weaknesses might have come, as you said, from the less precise question.

We did get a fair bit of demonstration on requirements for other incinerators. What we didn't get was a lot of information saying "Well, do those incinerators indeed actually meet those limits or what limits did the incinerators actually meet." So I think we're sort of looking for the demonstrated "This is what's measured coming out of a stack of an operating incinerator."

THE CHAIRPERSON: And is that information generally readily available?

MR. HINGSTON: It often is. Quite often information in many jurisdictions, including Nova Scotia where we don't have other operating incinerators, in terms of what's required in approval and the monitoring thereof, is often available through other jurisdiction -- through the jurisdiction part of the approval process.

THE CHAIRPERSON: And does Environment Canada have a database of that information for incinerators that have been operating in Canada?

MR. HINGSTON: We would have some information through our national pollutant release information system on some emissions. We probably don't have our own sort of general database that would cover everything.

THE CHAIRPERSON: But I would assume you'd have information on anything that received approvals on mobile PCB incinerator regulations.

MR. HINGSTON: We'd have anything, yes, that was in the federal jurisdiction.

THE CHAIRPERSON: Well, I guess that can lead me to the next question which is how many mobile PCB incinerators have been permitted under those regulations, and when -- what dates were they ---

MS. DOBER: My understanding is that there have probably been a maximum of two or three incinerators that would have received authorizations under the federal regulations, and the last ones probably would have been Goose Bay and a proposed facility for Sarawak, which I'm not sure if that one ever actually did get off the ground.

THE CHAIRPERSON: So if it was two or three, you've named two, there's a third one? Or do you think it's two?

MS. DOBER: I'm not entirely sure, and we

would have to go back and check our records for that, and we would commit to doing that.

THE CHAIRPERSON: Okay. Well, we'll take that as an undertaking to provide information.[u]

Actually, perhaps before we wrap that undertaking up, we were asking questions earlier about the operation at the Goose Bay incinerator which we knew about. Do you have any comments on that in terms -- that might be enlightening in terms of the success of that demonstration of that technology in Goose Bay?

MS. DOBER: Certainly we had inspectors on the ground and they monitored on a daily basis that operation. My understanding is that we would have considered the operation to be successful in that the amount of waste was destroyed and they operated in compliance with their permit.

THE CHAIRPERSON: Now, we've asked the proponent, I believe, to provide us with some of that information. What might you be able to provide us with in terms of actual written reports?

MS. DOBER: We would have a file on the project, and I'm not sure what -- the level of detail it contains, but I would suspect that it contains things like inspection reports and whatnot.

MR. CHARLES: Would you have information

indicating how well the incinerator worked in terms of how often it broke down or how often there were exceedances of the emission levels?

MS. DOBER: That I'm not entirely sure of. We will go back into our records and check, and the information that we do have available we will make available to the panel.

MR. CHARLES: And would that information also include the type or the manufacturer of the incinerator, because I guess ---

MS. DOBER: Yes.

MR. CHARLES: --- that would be useful, as well. Thanks.

THE CHAIRPERSON: Well, then, for the record, I will take that as a formal undertaking that -- I realize we're asking for the same information from two different sources, and you might wish to confer with the agency, but what obviously the panel wants is the fullest amount of information we can. So whoever can do the best job, please -- and we'll excuse the other party.

Can I ask, because this has been asked on a number of occasions, what is a mobile incinerator?

MS. DOBER: In our regulation, a mobile incinerator is described as something that's really not quite descriptive, but let me give you the exact words.

Here in our federal regulations it means "a mobile equipment that is capable of destroying PCBs by thermal means."

THE CHAIRPERSON: Well, I take it that -- that does require interpretation in every case, so can I take it that the proposal that's before us, were it to be regulated by you, were it to be on federal lands, you would definitely regulate that as a mobile incinerator?

MS. DOBER: Yes.

THE CHAIRPERSON: And I don't know how far to take this, given that the proposal is that the incinerator not be sited on federal lands, but the lands are federal right now, so you've said that the regulations are out of date, and are being -- did you say that?

MS. DOBER: Yes.

THE CHAIRPERSON: Yes. You looked up suddenly and I thought "My goodness, I got that wrong." So you said they're out of date, and that they've been revised. So were the project to continue with incineration located on federal lands, is it your understanding that it would be that the new regulations would be ready?

MR. ABRAHAM: I expect that the new regulations would be ready. My understanding, though, is

that the standards the EIS has done were the Canada-wide standards, which are pretty consistent with what the new regulations will be.

THE CHAIRPERSON: I think I will now give my colleagues a chance.

DR. LAPIERRE: Good morning, and thank you for your presentation.

I'd have a few questions in relations to the monolith. I guess I'd like to have your views on what the function of the -- how do you see the function of the monolith, that's that big block of cement that -- in the stabilization and ---

MS. DOBER: I'm not sure that I really understand the intent of the question.

DR. LAPIERRE: Do you see the monolith as having a function of stabilizing the chemicals in place, or do you see it as a platform on which you can develop the land later on, and it would have a meaning -- you know, a less important factor in containing the chemicals or the pollutants in place.

MS. DOBER: I think we heard the proponent say earlier this week that the primary purpose for the solidification and the stabilization was really the solidification part of the equation, a need to build some strength to support the cap and any intended future use

of the site.

Their suggestion was that the contaminants that are already there are not moving, and from my perspective, the stabilization component just enhances that. So I see it being an incremental benefit because of the fact that, for the most part, the contaminants do not migrate.

DR. LAPIERRE: So you -- I just want to -- according to your understanding is, the stabilization is not an essential component of containing the chemicals -- the pollutants within the Tar Ponds.

MS. DOBER: It's an additional benefit that comes from the solidification and stabilization procedure.

DR. LAPIERRE: Okay. The second question I have relates to the -- I wonder if you could explain the BACT, the best available control technology, and the MACT, the maximum acceptable or achievable control technology in relations to the Canada-wide standard.

MR. HINGSTON: I probably have to go back to get some very specific information.

Both the term the best available control technology and the maximum achievable control technology actually come out of US EPA procedures, and again they are based on the acceptable level of control technology

and would be based on the existing, I guess, air quality in areas.

So if you have an area that actually already has good air quality, the best available control technology is what one would use.

If you have an area that actually has poor air quality, and again that's all specifically defined as the level of air quality, then you would actually have to go to a different level of control technology.

If you do wish, I can find the specific reference to that, to the US EPA, if you'd like.

DR. LAPIERRE: No, I guess that's okay for the moment. I may have a question later on on this, particularly as it relates to stale air that might stay in an area over some time.

The other question I have relates to mercury. Are you in agreement with the proponent that the mercury criteria developed through the risk assessment is the appropriate emission limits for this project?

MR. HINGSTON: The development of the emissional limit was actually based on the Human Health Risk Assessment, and sort of, I guess, we'll it take as far as the environment. Once it gets into the emissions based on the human health, that one will have to be

passed over to the health specialists.

DR. LAPIERRE: Okay. Well then, are you reasonably confident that the mercury criterion can be met and monitored? I think you know what the 1.1 ---

MR. HINGSTON: Yeah, I mean, our experts, they have looked at it. They do believe it's achievable. It's not easily achievable, but it is technically achievable, and yes, it can be monitored, as discussed previously.

Mercury's very difficult at these levels to monitor in real time but can definitely be monitored during stack testing where you're actually collecting gas from the stack and analyzing it sort of in a laboratory off site. Can be done that way.

DR. LAPIERRE: Okay. And I guess another question that I would have relates to the deposition at sea of contaminants. What process kicks in the process for disposal-at-sea permit?

MS. DOBER: I'm going to ask you to maybe paraphrase your question so that we can actually understand.

DR. LAPIERRE: Well, does the fact that the land is owned by the federal government implicate that you would have to look at it for disposal at sea if anything was disposed.

MS. DOBER: Are you talking about the deposition of materials that comes from the stack?

DR. LAPIERRE: No. From the materials that -- for example, yesterday we got an answer to a question that the federal government owned the land within the Tar Ponds.

Does simply owning the lands within the Tar Ponds initiate a deposition of materials -- disposal at sea of the materials?

MS. DOBER: So, you are talking about the excavation and testing of contaminated sediments.

DR. LAPIERRE: Yes, yes.

MS. DOBER: The regulations do not place a restriction on who owns the property, so regardless of whether the land is federal or not, if there was a requirement for an Ocean Disposal Permit, that would come through to Environment Canada for approval.

DR. LAPIERRE: I guess another question that I have is -- that will be my final question for now -- is do you have any concerns with the exchange of water from the site with the harbour and possibly the flow of contaminants in the harbour from the site, either presently or once it's capped?

MR. ERNST: Yes, we've reviewed the information in the EIS, and we have some unanswered

questions with regard to that, and one of them being the estimated increase in flux of contaminants to the harbour that have been estimated there.

So, to address some of these uncertainties, we would like to have a higher level risk assessment done in the harbour, so that we can get a better handle on what we think is going to happen there. Additionally to develop a monitoring program that could be more focused by identifying critical components in areas.

So, we do have a concern for that and we would like to see additional work done there in order to satisfy some of the uncertainties that we think currently exist.

DR. LAPIERRE: If I understand correctly, you would like to see the modelling work undertaken prior to the establishment of the monitoring parameters or program.

MR. ERNST: We'd like to see an additional risk assessment done, a more quantitative risk assessment done for the increase in contamination of the harbour.

Whether that involves additional modelling or not is probably a decision of how the risk assessment is being approached.

In our opinion this is not a large task at

this point. It's probably something that can be done with available information.

There's a lot of information around, probably within a few or several months' worth of work. So, it's not a tremendous task to do this, we believe, at this point. And that risk assessment then would serve to really focus the monitoring strategy that we would like to see in place subsequently.

DR. LAPIERRE: Okay. Thank you.

THE CHAIRPERSON: I'm just going to leap in before Mr. Charles gets his chance.

Just for clarification here, this discussion about the Disposal at Sea Permit -- I mean the reference is the first page of your presentation. This is what brings this to our attention, and it says:

> "In addition, it is possible that a Disposal at Sea Permit, Part 7, CEPA, may be requested for the disposal of material."

Do you mean in the active tense that it is possible that Environment Canada may request a Disposal at Sea Permit, or who's requests?

MS. DOBER: No, the Proponent or their contractor would request the permit and Environment Canada issues the permit.

If I could clarify, my intent was not -- my intent was to say that the regulations are not only applicable to federal lands, they would apply to whoever was proposing to do the work.

THE CHAIRPERSON: Under what circumstances would the Proponent need to request this permit though?

MS. DOBER: They generally need to request a permit when there is some movement and disposal of sediments.

We would require some further details on the design of the program and the construction methodologies, before we knew if a Disposal at Sea Permit would be required.

THE CHAIRPERSON: So, you can't tell from what's already been presented in the EIS in terms of their -- I mean, what's the likelihood from what they presented in terms of how they are going to be moving sediments in North and South Ponds.

MS. DOBER: I'm willing to speculate on the likelihood, but we do need some further design details, before we can make a determination.

THE CHAIRPERSON: Thank you.

MR. CHARLES: I have a question regarding one of your recommendations.

It's the recommendation on page 5, which

reads:

"That it is recommended that the Proponent upon completion of the final Project design be required to demonstrate that the Project will be capable of meeting all emission requirements, and this would include documentation of the successful operation of the specific technology at other sites similar to the Tar Ponds."

And then you've already discussed the -- one or two incinerators.

My question is, to whom is this demonstration supposed to be made? Is it to Environment Canada, is it to the Province, is it to the independent engineer, or is it to all three?

MR. HINGSTON: At this time, I guess we are somewhat in a little bit of limbo with being in a process where some of the design details will come later on in the process, which maybe at that time, you know, possibly -- you know, the approval process is developed solely by the Province.

We do feel, I think, that there is value in having a broader set of stakeholders to actually look

at that.

So, I know we would like to have the opportunity to look at it ourself and possibly, I think, at the discretion of Panel, even in an recommendation, to identify other interested parties that should be able to look at that.

MR. CHARLES: And a second question relating to the same recommendation, the reference to documentation of the successful operation of specific technology at other sites.

Now, you're not just referring to incineration there, I don't think. I think you're talking about the technology used in the Project as a whole, which would include stabilization and solidification.

And my question is this, we were supplied by the Proponent with material relating to other sites where a solidification and stabilization technique had been used. Now, that's in IR -- I think it's 42.

And I just wondered, were you satisfied when you looked at that material that you had sufficient information to allow you to make an assessment of how successful this process was?

MR. HINGSTON: The majority of the emissions is dealing more with the incinerator.

MR. CHARLES: I see.

MR. HINGSTON: We were fairly comfortable in the emission estimates from remediation, which is mostly the digging in that part of the land.

The one possible area that was raised is during the solidification process the Proponent had stated that there would be an exothermic reaction, increases temperature, likely increases the emissions of volatiles, and again they did provide us with an estimate of what that temperature would be or would likely be.

And again I think once that design estimate is done, if we can sort of -- get a better sense to say that -- I believe they said 50 degrees in the EIS, if I remember correctly -- but a better sense of whether that number is actually conservative -- will be the number that you will reach, and then you'd get a good sense of what those emissions would be.

MR. CHARLES: Did you have any concerns about saltwater intrusion under the matrix?

MR. HINGSTON: Not from an air emissions standpoint.

MR. CHARLES: But from any other standpoint.

MS. DOBER: I'm not aware that there have been any studies which have documented difficulties with

respect to saltwater intrusion.

That's probably the best I can give you right now.

MR. CHARLES: The reason I raise it is, it's been raised at these hearings that there is a possibility -- and I think my colleague Dr. LaPierre has some concerns about saltwater interaction with the matrix and -- at a lower level and what it might do to the matrix, and what would result from that.

I just wondered if Environment Canada had noted that or it was a concern of yours.

But I guess the answer is "no," because you haven't really talked about it very much.

MS. DOBER: Well, if we're looking at it from a contaminant movement point of view in terms of the deterioration of the matrix, as we've already indicated the stabilization process is an added benefit to the solidification, because the contaminants are not moving appreciably at this point in time.

So, I'm not sure that having some deterioration in the matrix will cause any contaminant movement.

MR. CHARLES: All right. Then a question about the cap. Is it your understanding that the cap is designed to perform more than one function?

MR. ABRAHAM: More than one function with respect to -- the main function being capping the contaminants but ---

MR. CHARLES: Well, I mean I think we've heard and I've read in the EIS that, at least initially in the EIS, the cap was referred to as necessary in order to prevent a certain amount of moisture coming in from outside and then there's a concern about moisture coming in from the bottom.

MR. ABRAHAM: Exactly.

MR. CHARLES: And we've heard from the Proponent about how they're -- this is the Tar Ponds now ---

MR. ABRAHAM: Yes.

MR. CHARLES: --- how they're providing for a series of trenches that will help to try and take care of the liquids or anything coming up -- groundwater coming up from down below.

And I'm still trying to get a clear idea myself, you know, if a cap is supposed to do two things. And I guess this is before the trench remedy was brought in I had a vision of the cap trying to prevent stuff from coming in from the top and it allowing stuff to go up from the bottom. But I assume that if the trench system works then anything coming up from the bottom won't have

to go up through the rest of the cap, then all will be well.

MR. BICKERTON: With regard to the groundwater aspect that's correct. If the draining system that they're proposing is intended to divert the groundwater away from that cap. And I believe, if I recall correctly, there is a geosynthetic membrane of some sort on top of that, too to restrict the movement of groundwater up to interact with the cap.

MR. CHARLES: And I realize you have to be careful when you're talking about the cap because it consists of several different layers but initially the EIS sort of talked about the cap as performing the function of allowing mechanical devices to go over the top or I may be wrong, maybe that was the stabilization or the solidification aspect of it. And that the cap has nothing to do with that. I'm just wondering if you had a clear idea of whether the cap performs one function and that is to keep any contaminants away from the receptors who might come onto the land. Is that your understanding?

MR. BICKERTON: That's my understanding, yes.

MR. CHARLES: Okay. The -- my colleague, Madam Chair has discussed the disposal at sea regulations

and when that might come into effect. And I think -- I'm downgrading him today from Doctor to just Mr. Shosky -- indicated that there would be some side-casting going on during the whole process and I've had further explanation of side-casting in the context of the Tar Ponds operation which means that at some point the material in the ponds will be thrown up on dry land and at some point into other areas of the Tar Ponds. And you can yes or no if that's not true.

But side-casting is one of the aspects -- and I'm wondering if the -- if this provision for disposal of goods or contaminants at sea has anything to do with side-casting in the sense of taking material from one part of the ponds and putting it into another, you know just for temporary purposes while you work? Or is it all going onto the land? I'd like to get a clear idea of that if I may.

MR. SHOSKY: I'll just take a minute if that's okay.

THE CHAIRPERSON: I was -- yes, I think it would be helpful before you ask your question to the Presenters if the Proponent would just clarify what it is that will be happening so we'll know the relevance.

MR. SHOSKY: Thank you, Dr. Charles, for asking me the question and downgrading me today. The

intention of the side-casting basically is for the initial channel construction which will remain open for the remainder of the time.

So the idea was, what we put on the table so far was the barrier coffer dam is going to be installed now. There'll be a series of sheet piling that'll go in prior to the channel dredging to occur. Basically without getting into all the details for containment structures within sheet piling and the shore side-casted sediments from the channel would be placed into that system which would consist of the barrier wall and the sheet-piling.

We've also looked at the possibility as a second alternative of putting it on dry land and trucking it but the one we're proposing right now is to basically side-cast that material inside the stone coffer dam that's being installed and the sheet pile. So in our mind it's a contained system.

MR. CHARLES: With that description -- and I guess I'm putting you on the spot here because I'm asking for an interpretation of the disposal at sea regulations. Does that sound like something that would trigger a requirement for a permit?

MS. DOBER: We would still need additional details in terms of whether there was still tidal action

going back and forth and what the details of the containment of those sediments would be.

MR CHARLES: So your answer is it might?

MS. DOBER: It might.

MR. CHARLES: All right. Well, let's leave that for awhile. We'll cast that aside and move on. My next series of questions has to do with the role of Environment Canada, if any, in the development of the project itself going right back to the JAG process and the comparison and evaluation of the costing of the RAER alternatives and subsequent to that. Is it possible to give us a brief description of how you were involved, if you were, the department?

MR. ABRAHAM: Well, Maria's been involved certainly much longer than I and so Maria has some good background on that so she'll share that with us.

MS. DOBER: Maybe I can start by giving a little bit of a context. From 1996 to 2004, Environment Canada was the Federal lead on activities related to the Sydney Tar Ponds. As part of our role in that, we certainly participated in the majority of activities that took place, be that at some point in actually issuing contracts for work that might have been done or participating in the development and review of contracts that others would have led.

We did participate in the review of the remedial action evaluation report. I think that's a matter of public record that our department was involved in that. And subsequently when we received the recommendation from the Joint Action Group the -- we participated with the other government agencies in the review of that recommendation and the review of all of the information that we had had available at that time in developing some proposed options that could be put forward to our senior managers.

MR. CHARLES: And I take it that Environment Canada then, would have approved the process that was ultimately put forward for this project, which involves partial excavation and destruction of PCBs and stabilization and bioremediation, that sort of thing?

MS. DOBER: There was agreement between all parties to the former cost share agreement that this would be the recommendation that was proposed to governments.

MR. CHARLES: Thank you.

DR. LAPIERRE: I would just like to ask one question regarding toxic waste. Once the -- and it relates to the ash in the incinerator. Once the ash is removed from the incinerator, if it was to exceed guidelines on concentrations of certain metals and I

don't know which guidelines those might be right now because you indicated the CCME might be locked away someplace and no more available.

I imagine the guidelines would be guidelines that would have been agreed to. But how -- if you burn and you produce waste that would be above and beyond the exceedance for certain chemicals, would that ash become toxic waste? And if so, then how would it be treated for permitting and removal and transportation?

MS. DRAKE: In that case, with it being disposed of on Federal land, what we would ask for is that the treated ash, after it was stabilized, be subjected to a leachate test which is how we define hazardous waste under the Canadian Environmental Protection Act and the Transportation of Dangerous Goods. And that would look for metals. We'd do a leachate test on the treated material and test for metals and that sort of thing.

DR. LAPIERRE: So where would the treatment tests be conducted because the incinerator is not going to be at the same location where the ash might be stabilized. So would you require a test prior to it leaving the incinerator and would that be data that you would use for permitting and transporting on either a rail or a roadway?

MS. DRAKE: For the purposes of transportation it would have to be tested before it would leave the incinerator site. And if it was leachate toxic, it would have to be transported as a hazardous waste. From the purposes of disposal, ultimately, it would be tested after it was treated. So I guess both -- I should try to clarify that. It would be tested both -- two times.

DR. LAPIERRE: It would have to be tested both times?

MS. DRAKE: Yes.

DR. LAPIERRE: And depending on the toxicity then it would be permitted for travel.

MS. DRAKE: Yes.

DR. LAPIERRE: Thank you.

THE CHAIR: I'm sorry. If I may, Mr. Charles, I just want to jump in there on that. Are you saying that the -- that Environment Canada has a role in regulating the disposal of -- if by any chance the bottom ash from the incinerator were deemed to be hazardous waste that you would have a role in regulating its disposal within Nova Scotia?

MS. DOBER: At this point there are no Federal regulations for the disposal of hazardous waste. What we would do is make recommendations as to an

appropriate method of disposal. The jurisdiction obviously becomes an issue. If it's not -- if the waste is not produced in an incinerator on Federal land, obviously our role is much smaller than it would be otherwise.

DR. LAPIERRE: I guess the question, then, is the Transportation of Hazardous Waste Act implies only if you move material, if I understand you correctly between provinces. And it wouldn't apply if you move it within a province?

MS. DRAKE: The Transportation of Dangerous Goods Act does -- what has happened, if it's transported in the province by road, it's a provincial regulation. If this material is being transported by rail, I believe that still falls to the Federal Government so -- but essentially the Provincial and Federal regulations are very similar. So I would expect that the requirements for transportation -- I mean, you'd have to ask the Provincial colleagues but it would fairly similar in terms of the waste manifest and that type of thing.

DR. LAPIERRE: By rail, you mean -- if the rail was privately owned would it make a difference?

MS. DRAKE: That's something I'd have to follow up on with my colleagues with Transport Canada.

MR. CHARLES: I just have -- or I shouldn't say that -- I won't commit myself. I have one question at least. On the Stockholm Convention, you mentioned that May the 6th is an important date because -- is this the date when Canada's National Plan gets presented? I may have misunderstood ---

MR. ABRAHAM: I think it was May 17th but the plan, if I understand correctly, has to be in the hands of the parties by two years after the signing of the Convention. And that date is May 17th, in two weeks time.

MR. CHARLES: Okay, I guess my question is would that plan become public -- available to the public at that time?

MR. ABRAHAM: I would expect so, yes.

MR. CHARLES: Because if it has policies in it regarding disposal or control or whatever of PCBs for example, it would have a bearing on this project I would think.

MR. ABRAHAM: That plan would be available.

MR. CHARLES: That would be available. Okay. And this is my final question. You've mentioned in your report that there are information gaps in the material provided, particularly in relation to estimated

cumulative ambient air concentrations. And I guess my question is this, are these gaps significant enough if they're not filled that we should have concerns about significant adverse effects from the project. Even allowing for conservative modelling and all the rest.

MR. HINGSTON: We've got no information right now that would allow us, you know, to have I guess this level of concern about that. I think, again, it comes down to two things. One it still comes down to some limitation on the project details. And then recognizing the concerns are built in. I think we're really just trying to increase our level of comfort.

What we see is actually a very appropriate way forward and I think on Tuesday Dr. Walker actually mentioned a project like this it would be a reasonable step forward that once you do get all of the design details pulled together to actually do that remodelling and then I think that increases everybody's comfort level.

So I think we'd sort of like to see at that time -- we'd say, "Okay, at that time you do the remodelling", I think we've pointed out, both in our presentation and in questions where we see some of the gaps. In some cases I think it's areas where information simply hasn't been presented. The Proponent has said

they've looked at it and they don't believe it's an issue. And I think, you know, upon remodelling once you have the final details and seeing that information presented, it's more than likely that we will be comfortable with that -- you know, again, in the results of that information, because I see right now -- I think it's more a gap in information that was presented, not necessarily a sense that there is something very significant to worry about.

MR. CHARLES: So, in a sense it comes down to faith and trust?

MR. HINGSTON: There is some of -- there -- I think that's where we're trying to actually get a little bit away from the faith and trust and into a final set of information before the approval is given.

MR. CHARLES: Yeah, I understand that.

MR. HINGSTON: Yeah.

MR. CHARLES: But I'm saying at the present time we're having -- you're having to, and to some extent the Panel is having to, accept certain things on trust because we don't have the information.

MR. HINGSTON: Yeah. I mean, in our case there is a certain amount of, I guess, professional judgment where I would lean strongly towards saying, you know, I don't see a very large, significant issue but I'd

have to temper that with the fact that, no, there's still a little bit of missing information that I would like to see.

MR. CHARLES: That's fine. Thank you very much.

MR. ABRAHAM: Just to highlight that, though, we have asked that these details be provided before we can -- before we're comfortable enough to give regulatory approval, so -- or so that regulatory approval is given. So, based on our expertise, you know, Michael's and others', we don't have any suspicions but we do want the details.

MR. CHARLES: Sure, I can understand that. And when you make your decision will be in a different time frame than when we make our decision. Thank you.

THE CHAIRPERSON: I am very soon going to call a break -- that's the carrot -- but I would like to just explore a little bit further.

You've indicated that you were really one of the parties to the development of the current proposal as a remediation approach and I would like to ask you to reflect a little bit, tell us a bit more about the strategy around removal and destruction of PCBs and which PCBs from the Tar Ponds, especially in light of Canada's various commitments and the development of this national

plan and so on. How does this fit in?

What we have learned is that -- the Proponent has indicated that of the areas that they have delineated where PCBs are over 50 parts per million they're going to -- proposing to remove 89 percent of those, and we've had some questions, as you've probably been following, about -- and we're waiting for some undertakings to come in with respect to total mass and so on and some other questions about PCBs at depths that may not have been sampled and so on.

Setting that aside, can you tell us a bit about how you interpret Canada's national approach to this and how this project fits in with it.

I'll give you the second question right now, too, so you've got it. I'm going to take the next big step and say there'll be PCBs left in the North and South Ponds. When we get our undertaking on total mass we'll have a better sense of how much of the mass, it may be in low concentrations, it'll still be there.

Why remove some and leave others?

MR. ABRAHAM: Well, I'll let Maria get to the details, but when I talked about the toxic substance management policy, it's not cut and dried. So, there's some assessment that has to be done basically minimizing the overall impact on the environment, and more or less a

cost benefit kind of analysis and other analysis with respect to environmental risks.

But Maria may have more details with respect to how we exercise those kind of decisions, those kind of analytical processes, in particular in this case.

MS. DOBER: As we went through the evaluation process for trying to determine what methodologies to put forward we did consider carefully the recommendation that came out of the Joint Action Group, and they had expressed a preference for full removal and destruction of all of the contaminants.

I think we've heard over the last few days that that can be prohibitively expensive, and we felt that by making a recommendation to remove the PCBs that we would, in fact, be removing the most toxic, persistent biocumulative, the Track 1 substance, in concentrations greater than 50 which is the generally accepted standard in terms of regulations from the environment, and that is resulting in the removal and destruction of 120,000 tonnes of material which is no small thing.

In terms of how that relates to our national policies and international obligations, it fits within those.

Also, the leaving in place of residual PCB concentrations also fits within those policies, because

they're not prescriptive, they recommend remediation where waste already exists in the environment, but as we have heard they also allow a cost benefit analysis of some of the issues surrounding those. And as long as there are ways to minimize the potential migration and risks associated with those chemicals, management is an accepted approach to do that.

So, from our perspective the containment and -- the treatment and containment of the remaining PCBs is consistent with our policies and obligations.

MR. ABRAHAM: I may just take the time just to read from our website, right from the policy. There may be some details that I didn't -- that weren't in my presentation. And it says:

> "Remediation may be undertaken when a Track 1 substance..."

And I've pointed out that PCB is a Track 1 substance.

> "Remediation may be undertaken when a Track 1 substance is already in the environment. For sites under federal jurisdiction that are contaminated by a Track 1 substance, management plans will consider the elimination of that substance based on an analysis of

risks, costs and benefits."

That's what Maria was saying.

"Where the benefits to the ecosystem or the human health of removing the substance outweighs the cleanup costs, including the possibility of further environmental degradation, remediation will be considered. Otherwise..."

So, there is another option.

"Otherwise, management strategies will focus on minimizing the exposure and the site's potential risks."

So, it gives you some flexibility of what makes sense.

THE CHAIRPERSON: What's happening in the rest of the country? There must be other sites contaminated with PCBs. I take it that the mobile incinerators are not being used. We don't have many examples.

MR. ABRAHAM: Well, there are too many contaminated sites in this country for sure. The strategies -- and I don't have a lot of experience, I've only got, you know, limited experience in dealing with some of these contaminated site issues, but just the two

that I have been dealing with in the last year have been in the Great Lakes, as a couple of examples of contaminated sites.

One was in Cornwall, Ontario and it was sediment in the harbour, or the river bed there, and the decision by the community, by the governments, by First Nations and by science was to leave the sediments and manage the sediments -- because that was the best approach to minimizing the impact on the environment -- and having a sediment strategy, a very well-defined sediment strategy in place.

There's another very contaminated site, probably the most toxic site in the Great Lakes off of Hamilton Harbour, it's called Randall Reef. That area -- the strategy that's being proposed there, but the money is not available at this time -- but the strategy is a containment strategy, a kind of a capping and containment strategy, and, in fact, the end result of that strategy would end up being an infrastructure that would be used by the port authority in the City of Hamilton. So, there would be use made of the actual structure that would contain the contamination that now resides in Randall Reef in Hamilton Harbour.

So, they're all -- they're individual, the approaches taken are quite individual, but I'm not aware

of, within federal jurisdiction, why we don't have a lot of use of these mobile PCBs myself. Unless Maria has something?

MS. DOBER: There is a remediation project that has been conducted over the last few years in Saglek in Labrador, and the preferred and chosen remediation option for that, for the PCBs greater than 50, was excavation, removal and transport to an incineration facility in Saint-Ambroise, Quebec.

THE CHAIRPERSON: I think I'm going to call a break now. Thank you very much for your presentation. We will take a 20-minute break and then when you come back it's possible the Panel may have one or two more questions, but then it'll be time for us to open up questions to other participants.

So, it is now 10:40. We'll resume again at 11 o'clock. Thank you very much.

RECESS: 10:40 A.M.

RESUME: 11:04 A.M.

THE CHAIRPERSON: If we can resume this session, please. I just have a couple more questions for the presenters before we go to the questioning from other participants in the hearings.

I would like to just ask Environment Canada, now the sediments that are going to be removed

from the Tar Ponds and destroyed, I think, correct me if I'm wrong, that it would be fair to say that this would be considered to be federal waste.

MS. DOBER: It's a somewhat difficult question to answer because, at this point in time, the Tar Ponds have several different owners of various components of the Tar Ponds, and I understand that the proponent was providing a map which identified which areas they were.

THE CHAIRPERSON: Fair to say that probably a significant proportion of the sediments are -- likely originate from federally-owned property?

MS. DOBER: Some of the sediments would originate from federally-owned properties, yes.

THE CHAIRPERSON: You're going to be careful about how much you claim to?

MS. DOBER: Until I see the actual boundaries of the site properties, I wouldn't be able to determine.

Certainly, from my understanding of the ownership, the material that's located in the south pond is not on federal property at this point. The block of PCBs in the north pond, there would be some distribution between different owners.

THE CHAIRPERSON: And nonetheless, the

Federal Government is paying the larger share of the remediation for this project.

MS. DOBER: The Federal Government has committed up to 280 million, which is being administered through Public Works.

THE CHAIRPERSON: So then the proposal for the project is that the sediments will go to be destroyed in an incinerator that's on lands that are currently in federal ownership.

However, just before this -- and if, indeed, it remains in federal ownership, then the Federal Government would be regulating the incinerator under your regulations. And you've told us this morning that, in fact, it would be regulated presumably under your new and improved regulations, yes? And I'm not aware but that -- we'll be talking with the Provincial Department of Environment and Labour but I'm not aware that they have anything comparable in their regulatory toolbox, and yet the land that the incinerator is proposed to be installed on is -- the proposal is that it be transferred to the province, and so that then you no longer have either the ability or the responsibility to regulate that activity.

I don't know, would you like to reflect on that? I'm going to say that -- suggest that there's some people might say that the optics of that don't look all

that good.

MR. ABRAHAM: It is -- I understand exactly what you're saying, and the optics are not that good, but we would expect that the Provincial Government would insist on the same standards within the regulations of the Federal Government. So that would be our position on that.

MS. DOBER: My understanding, and you'd have to confirm with representatives from the Nova Scotia Department of Environment and Labour, but my understanding is that there's been a commitment by the government that they will adopt the use of the Canada-wide standards in their activities.

THE CHAIRPERSON: Sorry, just related to that, we have had some discussion earlier in the hearings to -- with respect to long-term liability and future uses, and who ends up with the liability and so on, and could you -- and even as I ask the question, I think probably this belongs with Public Works and Government Services Canada, but I'll ask you and you can give your answer, and then they can file it away and know that I will ask them or somebody will ask them at some other point, but what is your understanding of what liability the Federal Government will retain with respect to remaining wastes anywhere? And in this project, I know

the idea is to transfer lands to the province, do you get to transfer your liability?

MS. DOBER: You mentioned that you should really be directing that question to Public Works, and I think that's correct.

THE CHAIRPERSON: I shouldn't have said that, should I!

MR. ABRAHAM: We would have given you that answer anyway!

THE CHAIRPERSON: Dr. LaPierre has a question for you.

DR. LAPIERRE: One question relating to groundwater. In the Coke Oven Sites there's a programme for deviating groundwater, and there's also a programme in place in EIS for pumping and treating groundwater.

The results of the risk analysis on the area seems to indicate no problem, you know, with the process once you've deviated the groundwater and deviated sufficient flow. Why would you continue a groundwater pumping programme? What would be the rationale for a groundwater pumping programme if the risk analysis shows no problems?

MR. BICKERTON: I'm not sure what you're referring to, the pumping programme, what -- I recall there's an aspect that they mentioned, the proponents had

mentioned, that they could use pumping technology, and there certainly was a pumping component in the collection system. Is that what you're referring to?

DR. LAPIERRE: Well, I'm trying to understand why you would pump and treat water from the Coke Oven Site if your risk analysis -- once you've deviated the groundwater table, once you've deviated the surface water, why would you continue a pump and treatment of that area?

MR. BICKERTON: My understanding, and you should confirm that probably with the proponents, is that the pumping of the groundwater came from their interceptor trench system.

So that's kind of a passive system that collects groundwater that normally would have been migrating of the site. That was my understanding.

And I think there was some indication, if my recollection is correct, that they could, if they had to, institute some other pumping for a hydraulic control area, some preventative measures. But I thought the main aspect of that was in the collection system, but perhaps you could ask the proponent to confirm that.

DR. LAPIERRE: Sure, if -- I just want to clarify it.

MR. SHOSKY: I just want to make sure that

I understand the question before I answer, and the question was what additional controls, besides just the diversion devices that we have there, will be in place.

DR. LAPIERRE: Well, I guess the question is more specific, why would you pump the groundwater once you have your diversion mechanisms in place? What's the reasons for doing it?

MR. SHOSKY: There's a few of the diversion items that we have in there that are also collection systems or near-collection systems. So it's a combination of diversion and collection and, in some cases, those collection systems would need to be pumped if anything is found in them.

Right now, several of those areas we don't anticipate, at this point in time, once they're installed, that we have any collected DNAPL or anything like that in it, but they're there in case we do come across it in the future so that that material can be pumped.

Originally, that area called for some shallow wells. The results of our conductivity, our pumping test, had indicated that there is not as much water in that area as was originally anticipated, and that's when we went to these collection trenches in those areas as opposed to a series of wells. But the intention

is is if anything is found in those trenches, or in the proximity of those trenches, and it makes sense to pump those trenches out, then they will be pumped out in order to maintain that hydraulic control in the fully-contained system.

DR. LAPIERRE: But the risk analysis that you've conducted indicates that there wouldn't be any -- you don't anticipate any problems in those areas.

MR. SHOSKY: That is correct. And as you'll see with a lot of the things that we've done, a lot of times the risk analysis took into account the state of events without a lot of additional engineering controls. Once the engineering controls come into play again, in a number of different media that we are dealing with out there, that's an added level of control and safety that's put on the construction project.

DR. LAPIERRE: Okay. Thank you.

THE CHAIRPERSON: This is a quick question.

You indicated in your presentation that you are currently a responsible authority. If and when the land, the incinerator site is transferred to the province, you would cease to be a responsible authority. But I guess the question is, we had some discussion about the possible need for disposal-at-sea permits. If

there's a need for a disposal-at-sea permit, do you now become a responsible authority again?

MR. ABRAHAM: Yes.

THE CHAIRPERSON: For the duration of the -- for 35 years.

MR. ABRAHAM: I would assume so.

THE CHAIRPERSON: Sounds like a significant sentence, doesn't it? Thank you for that clarification.

I would now like to open up the questioning to other participants in the hall.

I see a few more faces here, so my apologies to people who have heard me say this over and over again, but as I'm sure you all know we expect, and have always achieved, that all the questioning be carried out in a concise and courteous manner. I'm sure that will happen today as well.

The procedure that we use is that I have a roster that I go through to ask if -- give priority to people on that roster, and the roster consists of people who are registered to present. Then I open it up to questions from other people who are not registered presenters, and, as time allows, we can proceed through to another round.

I did say that I am going to change around

the order of the roster so that the first shall be the last and the last shall be first, or something like that. So I will probably do a little bit of that today, as well.

I realize that we are going to stick to our schedule in the sense of putting on Health Canada at 1 o'clock, as they are in the schedule.

At the lunch break, which will be at 12:00, we will -- the panel will reassess where we are in terms of providing enough time for the other participants to have questions, and we'll consider what we should do and make arrangements as necessary. So don't despair at the moment.

So I am going to -- I will ask the proponent, at this point, if they have any questions. I may come back to them a little later on, as well, to give them a chance, but I think it might be appropriate right now to see if there are any matters that they would like to ask to clear up that would help the rest of the questioning.

MR. POTTER: Thank you, Madam Chair, we don't have questions right now. We may come back with some later on.

There are two points I think might add some clarification that we would like to bring up. One

we are actually ready to go with right now, if you can spare us a minute or two, and one we'll have a little later on, I'm not sure if we'll have it before -- well, depending on how the rest of the day goes. I'd like to turn over to Dr. Magee right now to address one of them.

THE CHAIRPERSON: Yes, please go ahead, Dr. Magee.

DR. MAGEE: If you'll excuse me for -- I'm trying to get some materials here.

I did some quick calculations here as we walked into the group -- just walked into the room, just as an example.

For instance, if we look at the Response to IR-72, of which I know all the Panel as well as Environment Canada is well aware of that series of 12 or 13 tables.

Just a couple of quick examples where total suspended particulate, the highest total cumulative annual average was 51 micrograms per cubic meter, as shown in those tables. Of that, our predicted site activity was responsible for eight micrograms, the background from our monitoring over the last five years or so contributed 43.

We then looked at the incinerator predictions, looked at the isopleths. The isopleths that

we could get our hands on -- these are the graphs that show how the incinerator emissions drop, as the geography proceeds towards downtown -- we didn't have the numbers any further than Grand Lake, but the number at Grand Lake for the annual average total suspended particulate was .01, so by the time we get to downtown, it's going to be two, three, four more orders of magnitude lower, as an example.

We did naphthalene as well. Again, in the tables in Response to IR-72 the highest annual average naphthalene number at any location around the Ponds was 1.7 micrograms per cubic meter.

If you look at our table there in that Response that was -- 1.65 of that was predicted by our site activities from the proposed project. 0.07 was contributed by local background from whatever sources.

Again for the incinerator we predicted naphthalene. All we have readily available is what the level would be by the time you get to the close edge of Grand Lake. It was 0.0001.

So, just in a short period of time we just wanted to give the Panel and Environment Canada some sense of how the overlap is really quite insignificant.

THE CHAIRPERSON: Thank you, Dr. Magee.

MR. HINGSTON: Could I just make one very

quick response to that?

Besides that I think he did mention the annual -- and I do appreciate the quick calculations. We're also very interested again -- I don't think it's needed today -- but before the approval stage you do have the 24 hours average where in some cases. For example, your TSP do have exceedances and do talk about per decitabine, 200 percent of the allowable limits.

So, you know, in the process we would be interested in the 24 as well as the annual.

DR. MAGEE: Well, we have all the numbers, so it's quite easy to pull them together.

THE CHAIRPERSON: I will first ask if we have any representatives of either the federal government -- other federal government departments, provincial government departments or agencies or the municipal government, CBRM -- anybody present here today who has a question for Environment Canada.

I'm seeing nobody. I'm now going to move on to my roster here, and bear with me, I have to do what I have to do every day, which is I probably -- go through the list, so that I know who may be present, so that I can offer them an opportunity.

What we're going to do is -- we have 40 minutes -- I'm going to on this first round, depending on

how many I see, I'm going to offer you five minutes to ask questions. I know that that may not seem like a lot, but, as I said, we will try and fit your questions in at a later stage, if necessary.

So, I'm going to -- I will go from the top this time. Mr. DeLeskie is not present, I don't think, Return to Sender Coalition. Save Our Health Care Committee? Yes, you would like to ask questions. Five minutes.

ENVIRONMENT CANADA AND GOVERNMENT SERVICES AGENCY

--- QUESTIONED BY SAVE OUR HEALTH CARE COMMITTEE

MR. ARGO: Thank you very much, Madam Chair. My name is Jim Argo. I spoke to you -- a couple of you at break.

My particular specialty is medical geography.

THE CHAIRPERSON: Mr. Argo, I think it would be better, if you speak to me, then you will be facing the microphone.

Because when you face that way, we're losing you.

MR. ARGO: My apologies.

THE CHAIRPERSON: So, I'll ---

MR. ARGO: Okay. Is this better?

THE CHAIRPERSON: That's just great.

MR. ARGO: Thank you. My name is Jim Argo. My specialty is medical geography. I'm particularly concerned with how a person's health today is affected by where they have ever lived.

So, I'm -- I've applied that in this situation in Sydney.

My main concern is carcinogens, cancer, end point, but I consider quite a few other end points.

Now, one of the problems that I have is with the Canada-Wide Standards, and that's why I'm speaking to Environment Canada who administer it.

The Canada-Wide Standards are -- I went into the CCME site this morning, and I cannot find any indication that the Canada-Wide Standards are what we call risk based.

I'm looking -- in looking at the Canada-Wide Standards for dioxins furans, it allows the contractor to release 80 nanograms of international TEQs, toxic equivalent per cubic meter -- oh, sorry, picograms of -- per cubic meter of dioxin.

Now, the dioxin -- dioxin has been identified as a carcinogen. The International Agency for Research on Cancer identified dioxin as a carcinogen in 1997.

In Canada we treat the release of cancer

-- of carcinogens in a way that says we will allow -- since there is no minimum concentration that is acceptable down to the last molecule -- so, we will accept that you release a carcinogen with the proviso that it must have -- it must be at a level that will create a risk of one in a million for cancer. That's Canada.

My question to Environment Canada with respect to the Canada-Wide Standard for dioxins is how does the 80 picogram per cubic meter -- the Canada-Wide Standard that they have established -- how does that relate to a risk of 1 in a million for the people around?

MR. HINGSTON: I can provide part of that answer and the rest will sort of have to divert to health specialists. But by their very nature a Canada-Wide Standard on emission limits at the picogram per meter cubed on its own cannot sort of fall into a risk assessment.

Now, to give you a simple example, the Canada-Wide Standard says nothing about, if we have one facility here with an 80 picogram per meter cubed limit and we build another one next door, there's another source for that, all the information you would need to get a health based risk assessment.

So, in its own, the Canada-Wide Standard,

recognizes that there's health effects from dioxin furans, there's value in minimizing them, and it's a -- that's a number that says, you know, you shouldn't go above this number.

Further to that, and this is where I should pass it over to Health, it would be very appropriate to look at the given situation, the geography, what other sources, to decide whether it's appropriate to have a facility in an area or what extra controls would be on that. But again the details of that would have to go to Health.

DR. ARGO: I accept that definitely Health has to have an input here.

In follow up, I would like to know -- one of the problems with grey hair -- is that sometimes they disappear.

THE CHAIRPERSON: You don't have to have grey hair to have that problem,I assure you.

DR. ARGO: I'm not unique, I realize.

May I ask another question on the same -- a slightly different aspect.

THE CHAIRPERSON: Yes. If it can be a fairly brief question.

DR. ARGO: Yes, it will. Why incineration?

MS. DOBER: Incineration is still recognized as one of the most appropriate technologies to destroy organic material of this nature.

DR. ARGO: From a health perspective it could not be a worst choice. It just could not have been worse. Thank you very much.

THE CHAIRPERSON: Okay. Thank you, Dr. Argo.

The Cape Breton -- I'll have to go through the list, so I usually only get to do this once a day.

The Cape Breton District Health Authority. Kipin Industries, not present. Grand Lake Road Residents. Do you have a question, Mr. Marmon?

MR. MARMON: My name is Ron Marmon. I apologize if I appear to be asking the same question, as I asked yesterday, but under this presentation and additional information, Federal Mobile PCB treatment and destructive regulations were given, but what we would like to see is the federal regulations covering temporary incinerators, including the definition of what Environment Canada deems temporary.

And as a follow-up, the 1500 meter set-back was described today as only a general guideline, but we were told that the most stringent guidelines would be followed, and I believe that was confirmed yesterday by

Public Works Canada.

So, we would like to know if Environment Canada considers the 1500 meter set-back a fair definition of the most stringent guideline -- and I believe the following are the most stringent guidelines, is a condition of federal money being committed to this Project.

MR. MARSHALL: With respect to the question on the definition of a temporary incinerator, the only definition that we have in our regulations is the definition of a mobile PCB destruction system, which states that this means, mobile equipment that is capable of destroying PCBs by thermal means.

MR. MARMON: Madam Chair, I believe there was a qualifier there that -- under definition of temporary it was to be in operation for weeks or months.

MR. ABRAHAM: But we have given commitment though that we would be applying the regulations in this Project with our understanding of temporary, being applied to this Project.

THE CHAIRPERSON: Yes, I did ask that question this morning, and I think we were satisfied with the commitment to that, if, of course -- if the incinerator were operating on federally owned land.

So, could you clarify you ongoing concern

on this issue?

MR. MARMON: The ongoing concern is back to the set-back -- our understanding is that it's a temporary incinerator and the rules are just not quite as strict, but the definition of "temporary" defines temporary as only used for weeks or months. So, therefore, the restrictions wouldn't be as strict.

THE CHAIRPERSON: I'm sorry. Can you remind the reference that you are quoting with respect to temporary comes where?

MR. MARMON: I believe Marlene Kane had a definition in the CCME guideline that she had listed.

I would have to ask her for ---

THE CHAIRPERSON: So, we're talking about something that's in the CCME citing guideline?

MR. MARMON: I think it was under destruction of PCB materials, 1990, I believe, she told me.

THE CHAIRPERSON: Can you shed light on this, please?

MS. DOBER: Could I ask that the question be repeated? I was conferring with my colleague.

THE CHAIRPERSON: Well, I'm trying to ascertain -- we had discussion this morning about the definition of mobile with respect to the mobile TC

incinerator regulations, and I got an answer that was satisfactory for the Panel's purposes.

Mr. Marmon is talking about a definition of "temporary" and I'm trying to just find out where this definition is. It would be helpful to know exactly where it appears.

Perhaps you could just obtain that and come back ---

MR. MARMON: I will.

THE CHAIRPERSON: Yes. Thank you.

MR. MARMON: But whether the incinerator is temporary or permanent we have commitments that the most stringent guidelines would be followed, and I -- you know, I really don't want to get hung up on definitions, but I heard today where a 1500 meter set-back was only described as a general guideline indicating that this guideline is not to be followed, or it doesn't matter or -- because the proposed location at the VJ site would put no less than 20 homes within a distance of 1500 meters.

So, we are quite concerned as to, are we going to stick to the guidelines or are we not. And who's going to enforce it.

MR. ABRAHAM: Well, with respect to the 1,500 it's like anything. The earlier guidelines in absence of science and technology such as monitoring and

modelling, are applied as a rule of thumb. And I suspect, although I don't know, that the 1,500 metres was a mile that was applied you know, in past times as a reasonable guideline.

And of course in our metric world it became 1,500 metres. And in the -- in our information age now we do have significant science and modelling and monitoring information that allows the Proponents and ourselves to assess guidelines that are based on that science. And we're comfortable that it was these approaches that were being -- are used now for the guidelines that are now in force.

MR. MARMON: Madam Chair ---

MR. ABRAHAM: Do you have something to add there?

MS. DOBER: Well, I'd just like to reiterate that we have been advised by CCME that those guidelines are out of date. And that appropriate methodologies to determine the need for an extent of a separation distance from proposed incinerators can best be addressed through the use of emissions modelling coupled with risk assessments.

THE CHAIRPERSON: I guess as I hear it, the -- but the other issue for -- that has presented towards us, is that residents feel that a commitment was

made to them to proceed under a certain set of guidelines whether or not they subsequently were determined to be out of date, I -- that's what I hear Mr. Marmon saying that you feel a promise was made to you.

MR. MARMON: Well, Madam Chair, we feel the problem -- or the promises were made to us but not only that, I mean why would we automatically assume that these guidelines were -- would be less stringent in the future. I mean, ordinarily CCME guidelines -- we're hearing now that the 50 parts per million are going to be reduced to 30 parts per million, whatever else we might be hearing.

So until a definite guideline is put in place we are only dealing with, you know suppositions. We assume that things are better today than they have been all along so therefore the guidelines would be less stringent. But in actuality, like we've been requesting to show us an incinerator like the one that's going to be used out there, give us some history, give us some technical data on what type of problems you've been having so that then we can say, "Well, yeah, we feel safe living near this piece of equipment or we don't."

We're going through all this assessment and we're saying but we don't have -- we expect the guidelines to change but as of today, they're not

changed. So therefore let's use guidelines that we think might be coming. And we don't agree with that.

THE CHAIRPERSON: Yes, thank you, Mr. Marmon.

MR. MARMON: Thank you, Madam Chair.

THE CHAIRPERSON: I would like to go to our next questioner, the Cement Association. Or the Portland Cement Association, are not here. Cape Breton University. Dr. Ron MacCormick. Sydney Academy. Cape Breton Chapter, JCI. Sydney and Area Chamber of Commerce. Cape Breton Partnership. Eco Canada. Sierra Club of Canada. I know you're here. Excuse me, did I miss -- sorry, just hold on a second, Mr. Marcocchio -- I'm advised that somebody else put their hand up. Were you on the list as requiring -- no, sorry about that.

ENVIRONMENT CANADA

--- QUESTIONED BY SIERRA CLUB OF CANADA

MR. BRUNO MARCOCCHIO: It's all right. Just by way of clarification on a point that was raised by the last questioner, I believe Marlene Kane read into the record yesterday the definition of a temporary incinerator from a guideline. And I will endeavour to see if we can produce a hard copy for the panel.

MS. DOBER: Madam Chair, we have a copy of the guideline here if it -- if that would serve the

purpose.

THE CHAIRPERSON: And the guideline is ---

MS. DOBER: It's the guidelines for mobile polychlorinated byphenyl destruction systems. The CCME 1990 guidelines.

THE CHAIRPERSON: All right. Thank you very much.

MR. MARCOCCHIO: Perhaps when you get a moment you could read the reference to the incinerator -- temporary incinerator being one that operates for days or weeks or months, because that was the -- that's the issue at hand here. Because clearly that would indicate that that an incineration that would operate from three to five years is, in fact, not a temporary incinerator.

MS. DOBER: The description in these guidelines reads:

> "Although the systems are classified as mobile, a six to eight on site set up and shakedown period can be required and a minimum job size on the order of five thousand tonnes of waste could be required."

I'm not sure if that's the exact reference but it's ---

MR. MARCOCCHIO: No, but that's another

germane one. It seems to me that 120,000 tonnes clearly exceeds 5,000 tonnes which again points to the fact that this is not a temporary incinerator. Thank you Madam Chair. You may be aware that in the past the Federal Government has committed that CCME guidelines will be adhered to as a minimum and The Sierra Club of Canada has put on the record yesterday letters from The Honourable David Anderson and The Honourable Sergio Marquis that made that commitment to us as a community as a minimum.

So it's clear, then that we must comply with those CCME guidelines or exceed them and I would have to agree with the last questioner that that commitment is firm. It's in writing. It's before the record and should be complied with by Environment Canada and it's rather shocking that they're willing to backtrack from that now.

Site specific considerations and risk assessments, well part of the CCME process typically result in less stringent guidelines. However, arguably their application in this circumstance, where there is a significant number of contaminants above generic CCME guidelines, both on site and in residential community adjacent to the site is debatable.

Can you please undertake to provide the community with certainty that the actual generic CCME

soil quality guidelines will be applied by Environment Canada and that all contaminated sediments greater than 50 parts per million of PCBs will be excavated from the Tar Ponds site and that the minimum siting requirements of 1,500 metres be complied with?

THE CHAIRPERSON: Did you get the parts for that? There were several parts to that question?

MS. DOBER: I didn't actually get the question. I'm sorry.

THE CHAIRPERSON: Actually, just a point. When you're reading something, if you can just slow it down a little bit. Our brains are not -- so we're trying to hear what you're saying but could you just get to the -- specify those questions again please.

MR. MARCOCCHIO: Yeah, thank you. Can you please undertake to provide the community with certainty that the actual generic CCME soil quality guidelines will be applied by Environment Canada? That all contaminated sediments greater than 50 parts per million of PCBs will be excavated from the Tar Ponds and that the 1,500 metre set back set out in the CCME guidelines for siting be complied with.

MS. DOBER: In terms of the generic CCME Environmental Quality Criteria, they're generally used for how much clean up is required. There will be some

removal and destruction at this site but the majority of the site will be managed and in that instance the Environmental Quality Guidelines -- really what you're trying to do is to make sure that there's no migration off of those sites that would exceed those concentrations. If you're not cleaning up, you're not -- or if you're not removing the material then you'll -- the guidelines are not really applicable.

THE CHAIRPERSON: I'd like to ask a clarification. What does the Sierra Club mean in that first instance? What do you mean by applying those generic soil quality guidelines, applying them in what way to what?

MR. MARCOCCHIO: We refer to applying them as a minimum standards. That is, that the site specific target levels should not be less stringent than the CCME health and risk based guidelines.

THE CHAIRPERSON: Do you mean at the surface?

MR. MARCOCCHIO: I think the point is that the CCME guidelines would drive the clean up across the Coke Oven site. Those generic guidelines, particularly with respect to perspective light industrial and residential land use in the future. They seem to be clearly the only ones that can be applicable given those

end uses.

THE CHAIRPERSON: But I think what I need to know is do you mean that -- I mean what the proposed remediation is is to cap the soils, the contaminated soils with a clean cap so at the surface -- and I'm sure the cap is going to meet those guidelines -- is that not what you mean? That doesn't -- that's not what you would like to see happen? You want all the soils, at what depth cleaned up to meet CCME guidelines?

MR. MARCOCCHIO: Those areas that have been identified that will not receive any remediation, if light industrial and recreational use is contemplated, the need to comply with those minimum guidelines for those projected land uses, future land uses.

THE CHAIRPERSON: Do you mean Mullins Bank? Do you mean the areas that there's no proposal not to -- there's no proposal to do any remediation in the means of vamping or ---

MR. MARCOCCHIO: Yes.

THE CHAIRPERSON: Okay. All right. Thank you. I've got that clear. I think you're just about at your five minutes. But do you have a quick follow up question?

MS. DOBER: Excuse me, Madam ---

THE CHAIRPERSON: Like a one-part

question.

MS. DOBER: Madam Chair, could I offer some clarification? The CCME Environmental Quality Guidelines are generic criteria that could be applied to contaminated sites. The CCME process also allows for -- and in some cases encourages the use of risk-based site specific remediation objectives. And that is what has been done in this case.

THE CHAIRPERSON: Yes, thank you.

MR. MARCOCCHIO: Madam Chair, there are a number of questions that we would like to ask that come out of the direct evidence this morning. And also questions that were raised and suggestions from DFO yesterday that those would be more appropriately put to Environment Canada. So we certainly hope that we will have an opportunity to do that but I will ask a question now.

In -- on February 1st, 1990 the Goose Bay, Labrador temporary incinerator, as a result of several malfunctions exploded and resulted in the hospitalization of several of the workers at that incinerator facility. Can Environment Canada please elaborate on the background and the outcome of those and indicate whether they thought that that complied with the permit requirements for the Goose Bay, Labrador incinerator?

THE CHAIRPERSON: Well, what I will do with that question is, since we have already asked -- as you know earlier, we've asked a question for more information about the operation so we'll roll that question into the panel request and we will -- I'm sure Environment Canada will provide information. Thank you very much.

MR. MARCOCCHIO: Thank you.

--- QUESTIONED BY THE PUBLIC:

THE CHAIRPERSON: Mr. Ignasiak, do you have a question?

MR. LES IGNASIAK: Madam Chair, I first would like to convey to the panel that I personally was quite impressed with the technical depth of the presentation from Environment Canada, and also to most of the answers to technical questions, except for those which were related to Environment Canada involvement in the technology selection process. This is actually quite confusing.

I have in front of me a letter which is dated July 22nd, 2004 which is written by the chief negotiator of the agreement between the Federal Government and the Nova Scotia Government.

THE CHAIRPERSON: Has this letter been tabled with us? Has it been part of your presentation?

MR. LES IGNASIAK: Yes. This letter is tabled with the panel, yes.

THE CHAIRPERSON: Yes, thank you.

MR. LES IGNASIAK: I would like only to mention what is relevant at this stage, that this letter from the chief negotiator states clearly that the selection of technologies is exclusively the problem for the Sydney Tar Ponds Agency.

Now, the other thing that is confusing to me is that I sense from some of the answers here that essentially Environment Canada actually contributed to the selection of technologies. That's the impression I've got when I listened to those specific responses.

Well, again I would like to be very specific in response to that. In May ---

THE CHAIRPERSON: You are going to develop this into a question for Environment Canada?

MR. LES IGNASIAK: Yes.

THE CHAIRPERSON: Thank you.

MR. LES IGNASIAK: On May 5th, 2004 Mr. Parker Donham, who is the spokesman for the provincial Sydney Tar Ponds Agency stated:

> "With encouragement from Environment Canada, that promotes a Cadillac clean-up solution with dubious

feasibility and affordability. In-house risk analysis carried out in the last three weeks concluded the actual cost will approach 1 billion dollars. "

This is related to the cost of 521 million dollars estimated by the Remedial Action Evaluation Report. Over three weeks it appeared that this cost was actually approaching 1 billion dollars.

Now, I believe Environment Canada was really involved into selection of technologies, and this is associated with selection of technologies. Obviously there should be some explanation. Have actually Environment Canada contributed to this cost estimate increase from 521 to 1 billion dollars?

This is a particularly relevant question in view of the fact that one year before the Sydney Tar Ponds Agency received an offer, that the whole project, without incineration -- incineration would be not required, solidification would be not required, 95 percent of the contaminants would be removed and destroyed off site -- this project would costs 392 million plus/minus 5 percent, and this offer was guaranteed, for which never, never the offer received any response.

THE CHAIRPERSON: Yes. I need you to now place your question, please, Mr. Ignasiak.

MR. LES IGNASIAK: My question is, is Air Canada really -- sorry, is Environment Canada really -- was really involved in the cost estimates for this project?

MS. DOBER: As I mentioned in one of my answers this morning when I tried to put context around Environment Canada's involvement, we led the Federal initiative from 1996 to May of 2004. We participated in the recommendation of remediation approaches that would be put forward to senior managers.

The document that the witness is talking about, I cannot speak to.

THE CHAIRPERSON: Thank you.

Mr. Ignasiak, if you have a very quick follow-up question please, otherwise we would ask you to bring forward this information you wish to share with the panel during your presentation, and we'd be very pleased to hear it. But do you have a very quick follow-up question?

MR. LES IGNASIAK: Madam Chair, I think that if I wanted to give a background for the next question then I probably wouldn't be able to do that, so I count that perhaps we will be allowed to ask additional

questions in connection with the Environment Canada presentation perhaps at a later date, because I cannot make it in half a minute.

THE CHAIRPERSON: The panel is certainly going to review that possibility, and will inform you probably after the break.

MR. LES IGNASIAK: I appreciate that very much.

THE CHAIRPERSON: Is Bennett Environmental here? New Waterford and Area Fish and Game Association?

We have an additional registered participant, just recently registered, Mr. Ben Christmas, from Membertou. Do you wish to ask a question at this time? No? Thank you.

Are there questions from anyone in the public, who is not a registered participant? Yes, I have two. I will take Mr. Harper first.

MR. HARPER: Thank you, Madam Chair.

THE CHAIRPERSON: Just a moment please. Can I make sure I'm seeing everyone. I see Mr. Brophy at the back. I'm sorry, I didn't see you, Ms. Ouellette.

MR. HARPER: My question is does the existence of buried infrastructure and deep bedrock fractures on the Coke Oven site cause any concerns to Environment Canada with respect to an accurate

understanding of groundwater flow through and off that site, especially with respect to neighbouring properties?

MR. BICKERTON: I'll handle the first one regarding the buried infrastructure first.

If the project proceeds as it is described, we don't -- Environment Canada does not have any concerns as long as the monitoring that we've recommended to the panel, and that we can participate in this development, can be included.

I think Mr. Shosky described quite well, in the sense that, during the installation of what they're proposing, they would capture that infrastructure during their construction, at least that we're reasonably confident that that would occur.

Returning to the bedrock fractures, that is an aspect that we have raised in our submission to the panel, and we do consider that there's still considerable uncertainty about the contaminants in those deeper fractures, although we do recognize that the majority of the contamination is in the upper parts of the fractured bedrock, which is the focus of the project that is being proposed. But we would like to have aspects of that addressed in the monitoring that we were recommending.

MR. HARPER: As a follow-up to that, you've indicated that you recommend some monitoring.

Do you have any -- have you given any indication as to what specific monitoring you would require, you know, how often and where the monitor well should be located, things of that nature? Or have you just left it as a simple request for monitoring, and you will then evaluate it once it comes in?

MR. BICKERTON: At this stage those particulars we haven't included, but we would like to participate in that component where we will have some recommendations on it.

Once the final design and stuff is laid out, then, yes, we'd like to have some input on the frequencies, the locations and the parameters that are being monitored for.

MR. HARPER: My last question, then, is with respect to the length of time that you're expecting the monitoring to occur, we've got a system set up in which there are solidification stabilization in the Tar Ponds, we've got some trenches and some groundwater control structures being set up in the Coke Oven site.

The concern -- well, I'll ask you if you have any concern as to how long this monitoring should go, whether or not it should be stopped at a 25-year period after the operation is complete, or whether it should continue onward beyond that point.

MR. BICKERTON: The answer as to how long it should continue is really dependent on what you observe in the period beforehand, but I would think it's safe to say that if monitoring has indicated there's still issues, the monitoring should continue. But if the monitoring has indicated to the contrary, then I think it would be appropriate to relax the monitoring requirements.

I mean, I guess the short answer is it will depend on -- what is being observed during that period would to a certain degree dictate what your actions should be after that point.

MR. HARPER: Thank you.

THE CHAIRPERSON: Thank you. Mr. Brophy

MR. BROPHY: Thank you, Madam Chair.

My name is Eric Brophy, and my question is very simple.

In the draft scoping document in the project description I find the term "baseline" used quite frequently. I'll give you an example, Project Description page 39, article 2, Environmental Description, a description that the existing environment is necessary for four reasons, the second one being "to provide a baseline for identifying environmental changes in the future."

I would just like a brief explanation for the record of what the term "baseline", how it's interpreted by Environment Canada.

THE CHAIRPERSON: As applied to -- generally throughout the Environmental Impact Statement or some specific aspect you're particularly interested in?

MR. BROPHY: I would like it for the record, because I intend to question Health Canada on that very term this afternoon.

MR. ERNST: Well, the proponent could probably speak to this as adequately as I, but our understanding for environmental impact evaluations, baseline simply means the conditions that are present in whatever component of the environment you're interested in prior to the initiation of whatever activity it is you are initiating. So that's the whole intent of what is collected as characteristically baseline information.

MR. BROPHY: I would take it, then, that a simple explanation would be a starting point?

THE CHAIRPERSON: I'm sorry, could you ask ---

MR. ERNST: Could you repeat the question, please?

MR. BROPHY: I said I would take it, then,

following your explanation, that a simpler explanation might just be baseline is nothing more than a starting point?

MR. ERNST: That is correct.

MR. BROPHY: Thank you very much, Madam Chair.

THE CHAIRPERSON: Ms. Ouellette, and then we will take a break for lunch.

MS. OUELETTE: Hi, my name is Debbie Ouellette, a former Cedric Street resident, and my question is what is the difference between Environment Canada and the Department of Health?

MR. ABRAHAM: What is the difference?

MS. OUELETTE: What is the difference between the two departments, the Department of Environment and the Department of Health.

THE CHAIRPERSON: Do you mean in terms of their mandates?

MS. OUELLETTE: Yes. Like what's the difference between the two.

MR. ABRAHAM: Well, the Department of Environment is largely dealing with the environmental impacts, and the Department of Health on human impacts, human health impacts.

We work very closely together, obviously,

in the areas of environmental protection. So, for example, probably the best example would be the Canadian Environmental Protection Act where there is a risk assessment on impacts of a toxic substance, for example, on the environment as well as on human health, and we work together on that risk assessment.

On the risk management, which is what you do with it, that's where Environment Canada has the legislative mandate. So that's probably as well as I can do it. Perhaps Health will have a different perspective.

MS. OUELLETTE: All I'm saying, I understood that the Department of Environment are there to protect the people, the soils, our waters, our animals, the food that we eat, am I right?

MR. ABRAHAM: I would -- in general, our mandate includes the protection of the environment which includes human health, but the specifics of who takes the leadership role with respect to food would be another agency, but we share those responsibilities, and I would rather look at it as the Government of Canada is responsible for all of the areas that you suggested, and we work together within our mandates to ensure all of those areas are covered.

MS. OUELLETTE: So basically the Department of Health and the Department of Environment

work together as a team.

MR. ABRAHAM: Absolutely. And the Canadian Environmental Act is the best example.

MS. OUELLETTE: And now I'll ask you my question.

Are Departments of Fisheries & Oceans -- why are they allowing the owners of the Coke Ovens and Tar Ponds, who contaminated our fish and water in Sydney Harbour daily and for years, why are the owners not being charged heavy fines for doing so?

MR. ABRAHAM: Well, of course, I just arrived here today and my involvement, and our involvement, in this review is basically focusing on anticipated effects on the environment, and not necessarily dealing with the past, although the past is important.

The focus of the presentation I made today is basically on anticipation and not on an historical problem that we all shared over a long period of time. And certainly since the pollution was discovered, basically the efforts of our department was to clean up the site, and that's been the priority.

The enforcement aspects fall within our enforcement policy, and I guess looking forward, as I mentioned in my presentation, we will have an Enforcement

Officer in place here in Sydney, and we will be ensuring that the project moving forward falls within the environmental regulations within the Fisheries Act, as an example, that will be managed by or overseen by our Compliance Officer here in Sydney.

Maria, would you like to say anything else?

MS. DOBER: No, the only thing else that I can add is that enforcement actions by our department are done in accordance with our enforcement and compliance policy, and I'm not an expert in that and can't speak to that.

THE CHAIRPERSON: Ms. Ouellette, do you have a quick follow-up question?

MS. OUELLETTE: Yes. My question was, and it wasn't answered, I'm asking why are the owners not being -- why are the owners of the Department of -- of the Coke Ovens and Tar Ponds not charged heavy fines for polluting our fish and waters as they are today? And I'm pretty sure the Coke Ovens and Tar Ponds are still polluting our waters as we speak.

THE CHAIRPERSON: Do you have anything to add to your previous answer?

MR. ABRAHAM: Well, I really don't have the background information to actually answer the

question why charges weren't laid if, indeed, they were justified. So I don't have that answer.

THE CHAIRPERSON: Okay.

MS. OUELLETTE: Just one quick one.

THE CHAIRPERSON: Very quick, please.

MS. OUELLETTE: Yeah. My concern is that if I had an oil tank and it leaked into Sydney Harbour, Environment Canada and the Department of Health, they would be at my door, and I would be liable to clean it up, or the same thing if it was my next door neighbour's property, and I would be charged heavy fines for doing so. Why do the same standards not apply to these owners of the Coke Ovens and Tar Ponds?

THE CHAIRPERSON: Well, thank you very much for your question and your points.

Before we break for lunch, I'm just going to touch base with the Sydney Tar Ponds Agency to see if there's anything that they wish to ask of Environment Canada, or any point of clarification. Or would you prefer to have lunch?

MR. POTTER: Was that a hint? We have no questions at this point in time. We would like, as we mentioned before, to come back with some follow-up information and we'll see when that perhaps can happen.

THE CHAIRPERSON: Thank you very much. It

is now just about five past 12:00, and we will resume at five past 1:00.

We will ask Health Canada to come forward and make their presentation, and we'll let you know what we're going to do about more questions from Environment Canada. Thank you very much to Environment Canada for your presentation and for answering the questions.

We'll see you again, I'm sure.

MR. ABRAHAM: Thank you very much.

--- Upon recessing at 12:06 p.m.

--- Upon resuming at 1:03 p.m.

THE CHAIRPERSON: Good afternoon, ladies and gentlemen. We will begin this afternoon's session now. We have presenting to us this afternoon -- we have Health Canada. I know that there were more questions that people have for Environment Canada. I just thought of one myself just a moment ago.

Anyway, if by any chance we do not take the full afternoon in asking questions of Health Canada, what I will do is ask Environment Canada to come back and we can resume.

In the event that we do not have that opportunity this afternoon, the Panel has agreed to add a session on Thursday, May 11th -- is that right, 4 and 7 is 11 -- on Thursday, May 11th, at 9:00 p.m., and we will

ask Environment Canada to come back at that point and we will resume questioning.

So, I'd like to welcome our presenters from Health Canada, and it's all yours.

--- PRESENTATION BY HEALTH CANADA (MS. SHARON CHARD)

MS. CHARD: Thank you, Madam Chair. Good afternoon to the Panel Members and the ladies and gentlemen of the audience. My name is Sharon Chard, I'm the regional director of the Healthy Environments and Consumer Safety Branch of Health Canada in the Atlantic Region.

It is my pleasure to have the opportunity to provide members of the Panel and other stakeholders in the room with a general overview of Health Canada's mandate and role and our areas of expertise as they relate to the Environmental Impact Statement and a summary of our comments on the Environmental Impact Statement.

In addition, I am pleased to have with me today several of the key experts who participated in Health Canada's review and who also assisted in the preparation of the technical brief which we submitted to the Panel approximately 10 days ago.

The technical brief goes into more specific details regarding the areas that concern Health

Canada, and while this presentation will be general in nature I will touch on these concerns in later slides.

Before commencing with the presentation, please allow me a few moments to introduce the team with me. To my right I have Nellie Roest, who's the regional health risk assessor and toxicology expert. To her right, or beside Nellie, I am pleased to introduce Cheryl Lettner who is an expert in air quality. Farther down, next to Cheryl, is Stephen Bly who's our acoustics expert, and finally at the end Richard Carrier who is our expert in drinking water.

A little bit on our mandate and authority. Health Canada is the federal department responsible for helping Canadians maintain and improve their health while respecting individual choices and circumstances.

As the federal Department of Health, Health Canada subscribes to the belief that human health is influenced by the health of the environment. As such, in reviewing the Environmental Impact Statement, we closely examined the key components of the physical environment and their relationship to health.

In fulfilling our mandate, we ensure that health services are available and accessible to First Nations and the Inuit community, we also work closely with other federal departments, as Environment Canada

mentioned this morning, but other federal departments as well, agencies and health stakeholders, to reduce health and safety risks to Canadians. In such areas as environmental health, for example, Health Canada provides advice upon request to the provinces and other federal departments.

The Federal Government also helps to fund the health care system and regulates delivery within the system through the Canada Health Act.

I think it is also very important to talk for a moment about the limitations of our role as a federal health department. As the third bullet on my slide indicates, provinces have the jurisdictional authority over the provision of health care services. In addition, they have the constitutional right to make laws regarding health care programs and services within their own region.

Therefore, provinces have the responsibility for such critical things as hospitals and the medical system in general and, further, provinces have primary responsibility for public health, which includes such things as disease outbreaks at the local and provincial level, immunization and ensuring health services are acceptable for all residents within their province.

Health Canada was asked by the Panel to review the Environmental Impact Statement in our capacity as an expert department under sub-section 12(3) of the Canadian Environmental Assessment Act. As such, we provided independent advice and technical expertise in our review of the document.

As an expert department having scientific expertise and technical information, Health Canada receives numerous requests to evaluate human health risk assessment and to participate in panels related to the Canadian Environmental Assessment Act and federal contaminated sites projects.

As is always the case with our evaluations, our over-arcing goal throughout this review process has been to ensure that the potential health impacts of this project are identified and mitigated to minimize risks to human health.

The technical experts with me today, along with others, considered the potential environmental effects on human health of the proposed activities and provided advice, comments and recommendations to the Panel, and ultimately the project Proponent, for consideration.

We will endeavour today to respond to all questions, but I may need to request additional time to

consult with the experts who could not be here today.

In addition -- I just want to provide a little bit of a highlight. In addition, the team that's with me today will only be available in Sydney, as they have to return to Ottawa for tomorrow. However, I will undertake to have the responses to questions that may arise later in this process responded to as quickly as possible.

For the purposes of our review we drew upon expertise from several key areas, environmental health for the general public, which included expertise in the areas of air quality, human health risk assessment, drinking water quality, local produce or country foods, noise and radiation.

Additionally, we also examined workers' health relative to contaminated sites remediation activities. I would like to take a moment to elaborate on each area that we considered.

In considering air quality we looked at such things as potential cumulative effects and appropriate monitoring of emissions during the remediation and incineration.

In terms of drinking water quality we considered ground and surface water in the context of the Canadian Drinking Water Quality Guidelines.

Local produce and country foods were also an area of focus. Country foods are defined as foods not purchased in a grocery store or retail outlet, such as garden produce, wild berries and game.

Our review of noise related to the proposed project and examined the acoustic environment on and off site during routine activities and specific acoustic events. And, finally, radiation was also an element contained in our review.

A large portion of our efforts were focused upon the human health risk assessment contained within the Environmental Impact Statement in recognition of their criticality for assisting government agencies and scientists in identifying potential health impacts and in developing strategies for reducing exposure pathways.

As a review team we considered the full Environmental Impact Statement, but emphasis was placed on the areas which related most directly to human health.

Specifically for the Tar Ponds and Coke Ovens Site we examined the construction during remediation, for the Victoria Junction Site the operation of the temporary incinerator was our main focus. The other aspects of the Environmental Impact Statement such as maintenance and monitoring on the Tar Ponds and Coke

Ovens Site and the decommissioning of the temporary incinerator was also considered.

I would now like to take a few moments to discuss the review process more specifically.

Health Canada reviewed the Environmental Impact Statement with the express purpose of confirming the human health statements made by the Proponent in the document. As such, it was important for us to focus on the two human health risk assessments contained in the document, as mentioned on the previous slide.

As you are aware, a human health risk assessment is a tool used to estimate whether or not a chemical in air, water, soil or sediment might pose a risk to human health, and, if so, under what circumstances. Ultimately health risk assessments help us ensure there are no significant health threats to the public.

Many of the questions raised by Health Canada's team were satisfactorily addressed by the Proponent. However, as my next slide will explain in greater detail, from Health Canada's perspective there remain outstanding issues related to air quality. These outstanding issues were previously raised but have not yet been fully resolved. For example, our conclusions depend upon the resolution of these issues.

As previously indicated during Environment Canada's presentation, there are outstanding issues with regard to some of the input data used in the air monitoring -- or air modelling, excuse me, by the Proponent. Health Canada is dependent on the acceptance of the modelling results in order to confirm our conclusions from a health risk assessment perspective.

The action levels or acute numbers for benzene and naphthalene used by the Proponent in the Environmental Impact Statement are based on, or are similar to, levels from the US Department of Energy and American Industrial Hygiene Association. These numbers are to be used for emergency response scenarios, accidental releases and rare occurrences.

While the intent in using these acute limits may have been to address rare peaks in exposure, we are concerned that the action levels could result in prolonged exposure to high levels. Given the projected duration of this project, a chronic period of time, Health Canada has issues with the use of these numbers for both benzene and naphthalene.

Within the scope of this project cumulative effects are defined as effects which could occur as a result of the potential interaction between this project and other present or future projects.

In order for Health Canada to confirm our conclusions with respect to cumulative effects, we would require the Proponent to provide information on the expected results of combining existing air quality with remediation and incineration along with effects on air quality from other issues.

In other words, these three components must be blended together to better determine what, if any, cumulative effects might occur.

Health Canada is generally comfortable with the mitigative measures outlined in the Environmental Impact Statement and would further recommend the Joint Review Panel require the Proponent to report such things as real time air quality exceedances. We are of the opinion that exceedances do occur. Both frequency and magnitude should be reported to provincial authorities and appropriate response plans should be in place. These recommendations are a critical link to our conclusions.

It is the opinion of Health Canada that all issues raised in this presentation and in our technical brief may be addressed through the Joint Review Panel process and resolved through clarification, evaluation, appropriate planning and mitigation.

Therefore, in summary, Health Canada

generally concurs with the conclusions related to human health in the EIS provided that the mitigative measures detailed in the document and included in our comments are utilized throughout the project and that the department's outstanding issues are appropriately addressed.

We feel the recommendations we have provided warrant the consideration of the Panel and the project Proponent. In addition, if requested, Health Canada will be pleased to assist the project Proponent in the development of monitoring programs.

With that summary, we would welcome the opportunity to respond to your questions, Madam Chair.

THE CHAIRPERSON: Thank you very much, Ms. Chard, for your presentation. My colleagues have some more detailed questions. I will just start off with one general question.

HEALTH CANADA

--- QUESTIONED BY THE JOINT REVIEW PANEL

THE CHAIRPERSON: When looking at human health risk assessment as a tool in the broader scope of environmental assessment, it seems to me it differs somewhat from other tools that might be used to predict outcomes inasmuch as the follow-up monitoring -- well, this is what I'd like you to help me with -- the follow-up monitoring is not -- if you're dealing with the

effects, say, of air emissions, you would be -- the follow-up monitoring would be probably mostly related to the actual air emissions that occur rather than to the health effects.

Is that true? When you're dealing with human health, is there any follow-up effects monitoring that you can do?

MS. CHARD: Madam Chair, I'll ask our health risk assessment specialist to answer that, Ms. Nellie Roest.

MS. ROEST: Can I ask the Chair to clarify what she means by "effects monitoring"?

THE CHAIRPERSON: If you have predictions of -- that releases of contaminants into a stream over the length of a project will be -- you know, will be at a certain level and the prediction is it will be at a low enough level that there will not be any significant effect on the biota there, it would be possible to develop an effects monitoring program. I mean, you can monitor the releases.

That would be a compliance kind of a -- more performance monitoring, but you could also -- if you wanted to, you felt it necessary, you could devise a monitoring program that would -- at whatever, periodic intervals or something, that would actually examine the

health of the fish.

I'm not quite sure what -- so I guess I'm asking just generally, is that sort of thing possible with respect to human health?

MS. ROEST: In terms of health of the fish that's not our jurisdiction, but certainly in terms of human health we had recommended in our technical brief that there be an environmental monitoring program put into place that would analyze four levels of various contaminants in items such as fish, the water, and such. So, it would be a bit more than just an air monitoring program.

THE CHAIRPERSON: Now, my use of the fish was an example. I'm not saying that that would be your responsibility.

What I mean is that with -- if you're dealing with activities and there are predictions with respect to the resulting effects or lack of effects on human health, I'm just struggling with whether it's, in fact, in parallel to something where you could -- potentially the project could have effects on fish, it could have effects on trees and so on. You can go and look at the trees, you can go and look at the fish.

What I'm trying to say is, is it possible, in fact, to do long-term follow-up monitoring in which

you actually ascertain that there has been no impact on the health of the population? I am suggesting -- this is from a totally inexpert point of view -- that that might be difficult to impossible. So, I'm just -- that's what I'm asking.

MS. ROEST: In terms of disease surveillance and that type of thing, that would be a provincial jurisdiction. We have no jurisdiction in that area.

THE CHAIRPERSON: I mean, do you understand, though, my question? How can I put it to make it clearer? I'm not sure.

I just want to understand if there are any tools -- whether you wield them or somebody else wields them, are there any tools -- I think the Panel just needs to know. We're dealing with something different here, aren't we, when we're dealing with human health risk assessment and prediction? It's that it's a bit more difficult to know what the results are.

And so on a long term with health risk assessment studies, you know, for this project and other projects, it's harder to go back and track and say, well, you know, this was absolutely right with confidence because we could see no health effects.

MS. CHARD: Madam Chair, I see that Cheryl

Lettner has her microphone on. I'll ask her to respond.

MS. LETTNER: There are methods to assess health ---

THE CHAIRPERSON: Would you just come a little closer or bring it closer to you. You need to be about three inches.

MS. LETTNER: There are methods to assess health effects in the long term. Epidemiology studies can be conducted, there are such things as biomonitoring that you could take blood samples or urine samples from individuals that may have been affected and you can definitely conduct a health study under the proper jurisdiction. Those kind of things can be done.

THE CHAIRPERSON: Okay. Well, thank you. But you -- in this instance you have no recommendations that such things would need to be done?

MS. LETTNER: I think that in our recommendations we were keeping within our mandate and within our jurisdiction, so we didn't make those recommendations.

MS. CHARD: Madam Chair, if I could also respond on that. A lot of the monitoring that we recommend actually looks at exceedances and being able to take immediate action and having an action plan for any contaminants that may be out there either in the air

quality or water quality type of things.

So, it's a matter of having a plan in place that if you do detect any health impacts of the project as it is going forward that they actually address it at that moment in time and move forward on it.

THE CHAIRPERSON: Yes, I can appreciate that that's always a better way to go, though I don't think you're detecting the health impacts or detecting the increase in the circumstances that might lead to a health impact.

Anyway, I will turn that over to my colleague now.

DR. LAPIERRE: Good afternoon. I guess a general question to start off with. What role has or is Health Canada playing in the establishing of the air monitoring stations?

MS. CHARD: Again, as I indicated during my presentation, Health Canada has an advisory role and we do make recommendations on that. I haven't -- I think one of the things that we did as an undertaking is indicate -- I'm sorry, am I -- okay -- that we did indicate that we -- as they are developing their environmental monitoring that we would be prepared to participate in taking a look at it.

DR. LAPIERRE: Have you participated in

the past?

MS. CHARD: On air monitoring? Yes, we have, in previous times with our involvement in the previous projects.

DR. LAPIERRE: Are you satisfied that your recommendations were implemented?

MS. CHARD: I think we've had exceedances reported, we've had fairly good reporting on that. The actual persons that took the activity on that was the provincial departments involved.

DR. LAPIERRE: Thank you. In Table 6.1-1 of the EIS we are told that in 2010 the Canada-wide standard for PM2.5 will be 30 micrograms per cubic metre and that the averaging time period will be 24 hours, 98th percentile over three consecutive years. I guess the -- I have a few questions relating to that.

The first one. Are there -- is there a corresponding criterion for PM10? And what do you -- I'd like to really understand that averaging period, what it really means. I think I have an understanding, but I'd like for you to explain it to me. And I guess could you also explain the relationship between TSPs, PM10s and PM2.5s, and then I have a few other questions.

MS. CHARD: Okay. I'll ask Cheryl Lettner to answer that.

MS. LETTNER: There's no standard for PM10 from the Federal Government, and that was a decision based on the fraction of particulate matter that we thought was most important, and that was PM2.5. So, the differences between TSP, PM10 and PM2.5 are based on the size of the particles.

PM2.5 is 2.5 microns in diameter, PM10 10 microns, and TSP is total suspended particulate matter. From a health perspective, PM2.5 is of most concern.

And your question about the averaging times, it's the 98th percentile of all measured -- so each 24-hour period must be below 30 micrograms per metre cubed over a three-year -- any three-year period.

DR. LAPIERRE: So, these all have 24-hour monitoring parameters, that's correct?

MS. LETTNER: That's correct.

DR. LAPIERRE: And you average them out over three years and you have to fall within the 98th percentile?

MS. LETTNER: Correct.

DR. LAPIERRE: Okay. How does -- how do these criteria -- or how does one use there criteria for monitoring projects where the community could be exposed to short-term exposure in particulate matter which is, I think, somewhat the case with this project? Because

three years is a longer time.

MS. LETTNER: Agreed. The Canada-wide standard of 30 micrograms per metre cubed is not a health-based standard, it's a technologically-feasible standard and the current science recognizes that there are probably health effects down to background levels of particulate matter. So, at this time there's no regulation that would -- there's no one-hour or one 24-hour period time standard that we could compare ambient concentrations to the standard.

But part of the Canada-wide standard for PM2.5 is also the principle called keeping clean airs clean and continuous improvement and it requires that you maintain as -- you minimize your ambient emissions as much as possible, to the extent possible, and that you keep the ambient environment as close to existing as possible, and that's also written into the standard but it's a non-numerical part of the Canada-wide standard for particulate matter, 2.5.

DR. LAPIERRE: You're not saying that there couldn't be any effects on a shorter one-hour basis?

MS. LETTNER: No. I agree there could be health effects at a shorter time period.

DR. LAPIERRE: Okay. Thank you. The next

question I would have relates to an issue that you have with the additional information. I think it relates to cumulative effects, particularly as it relates to the present air quality. I'd like to understand that statement.

Do you not have enough data on the present air quality within the area over -- I imagine what you're looking at is the assimilative capacity of the air shed over a period of time -- if not, you can tell me -- and I guess maybe data on when that air shed may not have any -- or, I guess, I could pose that question.

Is there a time when you think that the air shed does not have any capacity to assimilate any additional byproducts within the air shed? That could be maybe a period during the summertime when you have stale air staying over the area for some time. Can you explain what you mean by additional data?

MS. ROEST: That was one of my comments. In looking at the background air data that they used, from what I understand, they only looked at the years 2003 to 2005. And they only looked at certain chemicals and as far as I know, the ambient air monitoring program covers quite a few more chemicals so we were unclear as to why they chose only certain chemicals on those dates.

DR. LAPIERRE: So you would like to see a

wider spectrum of chemicals assessed in the air quality data?

MS. ROEST: We would like to see a rationale for why those particular chemicals were chosen and others were not and why those dates were chosen.

DR. LAPIERRE: Do you have any concern at all with the air shed being fully loaded at certain times of the year and not having any capacity even for a short time to assimilate any additional chemicals.

MS. LETTNER: I don't think that was a concern of ours in our review. Our concern with cumulative effects was an understanding of what had been considered in the existing air shed and what projects -- and other concurrent projects had been considered in what was called cumulative effects.

DR. LAPIERRE: And a final question is -- and you may not be able to answer it but often times we do get health alerts for air quality. In the past years the data that you have looked at, have you seen for this area specific dates and times where health alert were issued on air quality? Or that could be a Provincial -- something I might ask the Province tomorrow.

MS. LETTNER: That would be a good thing to do. We didn't review that in our assessment. We were only looking at the Environmental Assessment as it is.

DR. LAPIERRE: And did you find that -- I didn't look at that detail, but having your knowledge base it might just jump at you. Did you find any of that information in the EIS report?

MS. LETTNER: No, I did not.

MR. LAPIERRE: Thank you.

MR. CHARLES: Good afternoon. The EIS significance criteria for air quality states that -- this is in quotation marks -- "A significant adverse effect on air quality is one that involves predicable sustained or frequent..." and they give an example of frequent being ten times a year for 24 hour criteria. So "significant adverse effect on air quality is one that involves predictable sustained or frequent exceedances of any applicable regulatory criteria or objective." And I just wonder what Health Canada thinks of that particular definition, I guess you'd call it of a significant adverse effect.

MS. LETTNER: I would say that that sounds like a reasonable definition based on this project. For example, we just discussed the PM2.5 and you wouldn't be in exceedance of the standard unless you had exceeded the 98 percentile over three years. So a significant adverse effect over a predicted -- or over a reference concentration just once we wouldn't consider a

significant effect but sustained frequency of ten to 100, I tend to think we would agree with that definition.

MR. CHARLES: What would you think predictable exceedance means?

MS. LETTNER: My understanding of predictable would -- predictable probably -- I would relate back to being not infrequent. These words together, this definition together, what would mean the most to me is the frequency of the exceedances. So I'm not sure that you could predict when your exceedances would be but frequency would be related back to predictable. If you were to see an effect more often, you might be able to predict that it would happen again.

MR. CHARLES: So it doesn't mean something similar to likely possible or probable, those kinds of words?

MS. LETTNER: Once again, I think likely possible or probable could be synonymous at times with all of these words considered together. I mean, if something is frequently occurring, it's probably likely probable -- it's likely probable that it would occur again and you could perhaps predict that if it's occurred several times it would occur again in the future.

MR. CHARLES: So it's not just -- I guess what I'm trying to get at is, does predictable when it's

used like this mean that on the basis of experience you can expect something like this to happen or is it just a theory? Just a hypothesis.

MS. LETTNER: I would agree with your first definition and further clarification would have to come from the Proponent, I guess.

MR. CHARLES: Okay. Thank you very much. All right. The second question is, in the response to Information Request 51, the Proponent indicated that the number of predicted exceedances of the 24 hour benzoate pyrene criteria at the worst case receptor location within the Whitney Pier neighbourhood was up to 14 exceedances in a particular year which was year 5. Now would you consider that a significant adverse environmental effect?

MS. LETTNER: I think that's why Health Canada has recommended a rigorous monitoring program to ensure that those -- that any mitigation and minimization of benzoate pyrene could be averted.

MR. CHARLES: So it ---

MS. LETTNER: Yes.

MR. CHARLES: --- would be, in your view, a significant adverse effect?

MS. LETTNER: Yes.

MR. CHARLES: The same Information

Response indicates that -- or indicated that the only predicted exceedances from the proposed project activity are exceedance of the 24 criteria for benzoate pyrene, the 24 hour criteria for naphthalene and the 24 hour criteria for TSP. Just three, three items. But then if you read on, or if you look at the EIS at page 6-13, you'll find this statement:

> "Over the span of the entire project a very few exceedances of the PM10 criteria are predicted to occur twice, once in each of years four and five in the north end neighbourhood near Victoria Park Armoury. Ten times, twice in each of the years four through eight in the north end neighbourhood near Ferry Street, once in five years -- or in year five, sorry, in the Victoria Road neighbourhood and up to 14 times six in each of the years nine and ten in the Whitney Pier neighbourhood."

The quote goes on to say:

> "These exceedances are not likely to be perceptible an are not considered

to be significant effects on air quality."

The paragraph that follows that quote deals with PM2.5, particulate matter 2.5 and identifies predicted minor infrequent exceedances of the relevant air quality. I guess what we were stuck with and noticed was that the first portion of the report indicated there were only three things where you're going -- three types of materials where you're going to have exceedances and then they go on to explain that there are other exceedances as well and I just wondered if you had the same sort of reaction to this and this is important because they note that these other exceedances which are beyond the three that were mentioned are not likely to be perceptible or not considered to be significant.

MS. LETTNER: We did note in our review that the Proponent most often addressed the TSP, total suspended particulate instead of PM10 and PM2.5 and we do consider that a concern simply because from a health perspective the smaller fractions are -- should have a greater effect on human health. And those are definitely two of the substances that weren't considered in the cumulative effects assessment that we would like to see data for.

As far as exceedances go, if the

definition that they give is a frequency of ten to 100 is significant, then I think that's an inaccurate statement in the environmental assessment if they're PM10 and PM2.5 exceedance is greater than that.

MR. CHARLES: And just in case there are people in the audience who don't grasp the significance between smaller particles and bigger particles, could you just indicate why the smaller particles of 2.5 are more dangerous to health than the tens?

MS. LETTNER: Sure. The smaller particles can get deeper into your lungs so they can affect your respiratory system more greatly. And they've also been shown that they can move further and affect other systems in your body, for example, your heart and cardiovascular system and the larger particles will be filtered out at the top of your respiratory system. So say by your nose and they won't get so far into your body.

MR. CHARLES: All right. Thank you very much.

THE CHAIRPERSON: Yesterday, Dr. LaPierre asked this question of Public Works and Government Services Canada and they said "Oh, no, ask that of Health Canada" so you're the lucky recipient of this question. But it's appropriate clearly because as you indicated in your presentation you have responsibilities with respect

to health in jurisdictions First Nations and Inuit peoples. If you -- and this relates to the Mi'kmaq Ecological Knowledge Study. Then Schedule B of the -- of this study there is a map which shows the area that the -- that was covered by the study in terms of identifying areas that were important to the Mi'kmaq people for -- and for reasons, plants, tools, art resource sites and areas.

That's what they were mapping and that's a figure. And when we look at that we see that there is an area that's been identified that is, as far as we can tell, bordering the VJ site that is meant to be the place where the incinerator will be located. And this area has been identified as a plant/tool/art resources area. And I guess my question is did you see this and do you have some comments on the proximity of that area as identified in the -- in this -- the Mi'kmaq Ecological Knowledge Study and the overall assessment that's been done.

MS. CHARD: Madam Chair, yes we did see that. I had people within our First Nations and Inuit Health branch look at that for any concerns. We did recognize that the EIS did look at all receptors in and close to their particular sites. I can -- I'd take an undertaking to come back and have their opinion but they did not identify to me, personally, any concerns related

to the health impacts of that particular evaluation.

THE CHAIRPERSON: Well, I think just for completeness I will take that as an undertaking for the record that Health Canada is going to provide us with information on the results of that review of that issue. [u] Well, relate to this, the same study, the study -- the area boundary for this study only essentially encompassed the VJ site.

I mean it encompasses the Tar Ponds and the Coke Oven sites and it goes round the boundary of the study, in fact, just about. Goes around the edge of the VJ site. And it did not encompass the Phalen site, the significance of that being that the Phalen site has been identified as an alternative means of carrying out the project by the Proponents and therefore there is some environmental assessments obligations associated with that. So on the strength of that study I -- Health Canada is presumably unable to indicate whether you think there's any particular concerns regarding health and the First Nations peoples?

MS. CHARD: That's correct, Madam Chair. Well, we put it back, if that's of interest back to the Proponent to conduct that study with the community.

THE CHAIRPERSON: Okay, thank you. I think that's -- oh, no I have another question. Sorry.

Workers health and safety, could you -- or perhaps before I ask the question, maybe I don't have to ask the question, but could you remind me -- you did sort of address this, I think but what are your responsibilities with respect to workers health and safety?

MS. CHARD: I'll ask Nellie Roest to respond to that.

MS. ROEST: Worker health and safety would be a provincial jurisdiction. However in the risk assessments they did evaluate the human health risk to workers at the site without the proper protective equipment. And they did identify some risks for workers so as a result we did recommend that they ensure that workers wear personal protective equipment.

THE CHAIRPERSON: Do you have any obligations when work has been carried out or people are being employed on Federally owned properties?

MS. CHARD: That is another department of government. If you like, the Department of Labour, that's within the HRSD but we do provide guidance on the health effects if there's -- if we're requested to do that.

THE CHAIRPERSON: So that department would have jurisdiction over any activities that are taking place on Federally owned lands, is that right?

MS. CHARD: It's my understanding that the Canada Labour Code does apply to workers on Federal lands. But I will verify that.

THE CHAIRPERSON: Are you able to reflect on -- probably you won't want to -- are you able to reflect on the differences between the Canada Labour Code and Nova Scotia Provincial Labour Code? Are they significantly different or do we have to ask somebody else that question?

MS. CHARD: Well, I think that you have the Nova Scotia Department of Environment and Labour doing a presentation. That may be more appropriately addressed with them.

THE CHAIRPERSON: All right. Thank you. We'll do that. Well, thank you. I will now ask -- this morning, I will -- we'll move to questioning by other participants. And I will start off, I'll just ask the Sydney Tar Ponds Agency if at this point you've got something you'd like to say by way of clarification or you have questions for Health Canada.

MR. POTTER: No questions at this point. We have a clarification. I'll ask Mr. Gillis to address the point.

MR. GILLIS: With respect to the questions posed by Mr. Charles, with respect to -- particularly

information contained on pages 614 and -- 613 and 14, the predictions that are in here to deal with exceedances, there's a follow on paragraph which it's available, with appropriate mitigation the exceedances we see are virtually eliminated from the -- in the receiving atmosphere. And I'll ask Dr. Brian Magee to talk to another few of the points that were raised during your discussion if you wouldn't mind.

DR. MAGEE: Yes, I'd like to draw your attention, if you would allow me, to our response to IR-51 where the question about those exceedances discussed in that paragraph came up. And we noticed when we were responding to your information request that we had made an error, first of all, PM10 was an error. We corrected it in this response. It should be PSP.

But secondarily the ten to 100 or whatever those numbers were in that particular section were referring to a very close in on site location. They were not referring to off site exceedances. So if you would allow me just to read a quick couple of sentences here:

> "The only predicted exceedances for the proposed project activities are exceedances of the 24 hour criterion for benzoate pyrene, naphthalene and TSP. The quantitative discussion of

benzoate pyrene exceedances in the EIS is in error. The text states that there could be up to 32 exceedances in year 5 and 100 exceedances in years six through eight at Whitney Pier. These values refer to an on site work area, not the receptor locations within the Whitney Pier neighbourhood. Last two, the number of predicted exceedances of the 24 hour benzoate pyrene criteria at the worst case receptor location in the neighbourhood are up to 14 in year 5, ten to 11 each in years six through eight."

And those are the data that are then added to the response to IR-72 where we went further and added in the diesel exhaust and so forth and so on. So all of the numbers in the tables to the responses to the IRs are the correct tables.

MR. CHARLES: Thank you for that clarification. I'd just like to observer that to err is human.

DR. MAGEE: We made the error in the first

place, sir.

THE CHAIRPERSON: All right. I think we have enough time that I can now give ten minutes allotments to people for their questioning. Feel free to take less. Anyway, the -- I will ask again. Any -- do we have any Federal, Provincial or Municipal government representatives have a question for Health Canada present? I'm going to -- and do we have any additional registered participants this afternoon who have not been in attendance at any other time.

If you registered to make a presentation at some point but this is the first session you've been at? No. All right. Got my same list. So therefore I'm going to go backwards on the list. So I guess if you're in the middle you never change but I'll do something about that. So I don't -- is Mr. Christmas still here from Membertou? I don't believe so. So Mr. Ignasiak, do you have a question for Health Canada?

HEALTH CANADA

--- QUESTIONED BY THE PUBLIC:

MR. LES IGNASIAK: Madam Chair, if I did follow with the presentation and then the following discussion, my conclusion is that really the air quality is the key issue as far as this project is concerned. Is that reasonably correct?

MS. CHARD: In our presentation, yes it is.

MR. IGNASIAK: Thank you very much. Now I can ask a question. The project as proposed suggests one technology that according to United States Environmental Protection Agency, risk evaluation department, were released during the solidification, 90 percent of VOCs and in the next 30 days of curing were released the remaining nine to ten percent of VOCs. If we could replace this technology with an alternative that essentially has zero emissions would that help or would that make the things worse?

THE CHAIRPERSON: I'm just going to interject here. You've cited a document or a conclusion. Is this something that has been -- that the panel has? Is it in your -- is it in anything that you have already filed with us?

MR. IGNASIAK: Yes, Madam Chair, this is filed with you, yeah.

THE CHAIRPERSON: Would you like to make it clear to Health Canada that you are referring to the proposed stabilization and solidification technology?

MR. IGNASIAK: Yes, I didn't want to say that but in fact I'm referring to a stabilization technology. Solidification stabilization. That's

exactly what I'm referring to, yes.

MS. CHARD: Madam Chair, if I understand the question, you're asking for a comparison between two types of technology usage. What we did was evaluate what was in the Environmental Impact Statement and I don't believe that was there at the time so I'm not sure that I can answer that question.

THE CHAIRPERSON: I'm sorry, what was not in -- when -- the quotation that Mr. Ignasiak -- yeah, I was just going to ask Mr. Ignasiak. I think you need to give us exactly where this came from and just can you tell me a little bit more or put it on the record what you're quoting. You're quoting USEPA in what?

MR. IGNASIAK: I'm quoting US Environmental Protection Agency, risk evaluation department that did work on results of solidification stabilization and with respect to material that contains VOCs, volatile organic components. Based on the studies, they came to the conclusion that during the solidification up to 90 percent of all volatile organic components would be released to the atmosphere. And subsequently during the next up to 30 days of curing the remaining nine, ten percent will be released too. My question was, would that not be an indication that we should rather use the technology that will not be

characterized by such high release or will not eventually have releases?

THE CHAIRPERSON: Was this study in fact, cited in the EIS? Can you give me the title. Can you put that on the record. At the moment I just know that it's from USEPA.

MR. IGNASIAK: I -- the only thing I ---

THE CHAIRPERSON: I think we need a title and we need a date.

MR. IGNASIAK: If you allow me to provide this information after that because I don't have it with me.

THE CHAIRPERSON: Yes, I think we need to ---

MR. IGNASIAK: I certainly will provide you with it.

THE CHAIRPERSON: You're now asking Health Canada to comment on something that was in a document in a report they haven't seen. I'm somewhat uneasy at asking them to do that. You understand that, I'm sure.

MR. IGNASIAK: Yeah, I fully understand it and I will comply with this request that I provide specific reference to that.

THE CHAIRPERSON: Do you have another question?

MR. IGNASIAK: Yes, I do have another question on very similar subject. And again, it's a problem of air quality which is the key issue here. And I believe that if I sense correctly that the incineration is one of the potential problems here. Is that correct? When we are talking about really particulate emissions 2.5 microns.

Well, there are other technologies available. Some alternative technologies that would really not require -- that would really -- would not require application of incineration. Therefore if we do not have to incinerate this material in Cape Breton or specifically near Sydney, then we don't have a problem with any gaseous emissions from incineration and we don't have a problem with particulate emissions.

MS. LETTNER: In our review of the incineration, we agreed with the conclusions of the environmental assessment that there were no health impact to the residents around the area.

MR. IGNASIAK: Well, if I understood correctly, a question was raised here about the impact of particulates below 2.5 microns, and there was specific answer to Dr. Charles question. So there probably, based on my best understanding, there is a problem here, isn't it.

MS. LETTNER: Right. The emissions of particulate matter were at the remediation site, not at the incineration site.

MR. IGNASIAK: I see. I see. And this were coming from what?

MS. LETTNER: From -- I can't tell you in particular but I would assume from the traffic and from the dredging ---

MR. IGNASIAK: Oh, from the traffic okay. Because certainly they could not come from the sediment because the sediment is wet.

MS. LETTNER: Agreed.

MR. IGNASIAK: Thank you very much.

THE CHAIRPERSON: Thank you, Mr. Ignasiak.

MS. CHARD: Madam Chair, could I just make one statement that it was our assumption that all -- and has been that all technologies have been proven safe and effective that have been part of the Environmental Impact Statement. And therefore, I'm not sure if the question really was about comparison of other technologies there but we did not address that at the time.

THE CHAIRPERSON: Thank you for that clarification. Sierra Club.

HEALTH CANADA

--- QUESTIONED BY THE PUBLIC

MR. BRUNO MARCOCCHIO: Thank you, Madam Chair. Does Health Canada agree that the chamber studies on adults exposed to concentrated ambient air particulate matter, that is PM2.5, two hour exposures, showing effects on heart rate variability can be used to develop real time ambient air quality guidelines for short term acute exposures to PM2.5 for the proposed project?

MS. CHARD: Madam Chair, I'm not sure what the reference is to but I don't remember that we actually, actually saw that study as part of the Environmental Impact Statement.

THE CHAIRPERSON: Actually, I'm just going to ask the practical matter, can you just swing the microphone just a little closer to you. I found that a -- just the head of the microphone -- I found it a little bit hard to hear you then, Mr. Marcocchio. You heard the question, did you? Okay and ---

MR. MARCOCCHIO: We can -- there are dozens of these studies and we would be glad to provide you with specific references to them and perhaps you could respond in an undertaking to the question.

THE CHAIRPERSON: I'm sorry. Can we start so that I understand because -- what was the study -- could you just start again and a little louder, a little slower for ---

MR. MARCOCCHIO: Okay.

THE CHAIRPERSON: Thank you.

MR. MARCOCCHIO: The question is, does Health Canada agree that chamber studies on adults exposed to concentrated ambient particulate matter, PM2.5 two hour exposures showing effects on heart rate variability can be used to develop real time ambient air quality guidelines for short term acute exposures to PM 2.5 for the proposed project?

THE CHAIRPERSON: What was the study that you said?

MR. MARCOCCHIO: They're chamber studies where adults are in a room in a chamber are exposed to particulate for lengths of time and the -- and their heart rates are measured for responses to various particulate ---

THE CHAIRPERSON: So these are types of studies. And are these studies ones that were cited or referred to in the EIS?

MR. MARCOCCHIO: No, but we would be glad to provide a listing of those studies that provide a useful and well established tool for measuring impact of particulate matter on human health.

THE CHAIRPERSON: Just as a general rule, I think it's difficult for the panel and probably

difficult for the presenters being questioned -- this refers to Mr. Ignasiak as well, when they're being asked about other studies. But I understand, you're asking about a generic type of study. I do appreciate that.

MR. MARCOCCHIO: Yes.

THE CHAIRPERSON: Anyway, I will ask Health Canada, you -- do you wish to make a comment at this stage or do you need more information?

MS. LETTNER: I'm familiar with the type of studies that you're discussing. But Health Canada wouldn't develop -- we don't develop guidelines based on one study or one study type. It's a lengthy process and all ambient air guidelines are provincial jurisdiction. They often adopt what the Federal Government has put forward. But it's under provincial jurisdiction. So we wouldn't develop any monitoring guideline based on a single study or a single type of study.

MR. MARCOCCHIO: So you don't think that this would be an appropriate tool to implement to gauge the impacts and to set reasonable limits on particulate emissions?

MS. LETTNER: No.

MR. MARCOCCHIO: Thank you. Can you please provide the panel with Health Canada's knowledge that contamination of the Coke Ovens and the Tar Ponds is

continuous off site into the residential communities above CCME soil quality guidelines, specifically as illustrated in the Health Canada individual property reports conducted in the Nelco area, north end of Sydney and Ashby and that in some cases this contamination is present in the sumps and basements of homes?

MS. LETTNER: I'm not sure what the question is.

THE CHAIRPERSON: Yes, I'm sorry, I'm not quarrelling with your question but I -- it's not getting in to my head so you're going to have to do it slower and then perhaps there'll be a question of clarification and we can get that.

MR. MARCOCCHIO: Perhaps I can make it a little clearer. There were a number of risk assessments done on individual homes, on homes continuous with the Coke Ovens and Tar Ponds property conducted by Health Canada. There were individual risk assessment reports that documented the continuous nature of the contamination from the site into these communities.

And I think it's germane to considering the impacts and the extent of remediation impacts on the community to use as a guideline. The extent of the continuous emissions that we now know to exist in soils and in sumps and basements throughout the community.

Perhaps Health Canada would like to put those risk assessments on the public record.

THE CHAIRPERSON: And the continuous -- it's the continuous that I'm not grasping. Continuous effects coming off the properties in their current state, is that what you're saying? Or ---

MR. MARCOCCHIO: Yes, the properties are adjacent the contamination around the Coke Ovens and Tar Ponds. And the levels of contaminants clearly show that the emissions are continuous from the site into these residential properties. In some cases they have resulted in remediation of a particular homes in the Nelco area in particular and in the north end of Sydney on Intercolonial Street and in other places.

THE CHAIRPERSON: But what does continuous mean, that's what I'm struggling with. Continuous meaning over time or continuous -- what does that word mean?

MR. MARCOCCHIO: No, spacially continuous. From the contamination in ---

THE CHAIRPERSON: So you can spot contamination here and then all the way back the trail back to ---

MR. MARCOCCHIO: yes.

THE CHAIRPERSON: --- that's the

assertion?

MR. MARCOCCHIO: Yes.

THE CHAIRPERSON: Are you now -- I'm a little clearer. Are you ---

MS. CHARD: Madam Chair, could I just ask for clarification. We -- I don't see any of those reports cited within the Environmental Impact Statement and we actually did the risk assessments and information on human -- the risk assessment process within the project as it exists and was -- I'm not sure where the question is going on this.

THE CHAIRPERSON: Would you like to give us some clarification, the connection from this question to the assessment of the project as it stands. That would just help us understand. It would help Health Canada to understand the question and maybe respond to it.

MR. MARCOCCHIO: I'm not quite sure I understand the question, the link between the ---

THE CHAIRPERSON: To make the connection between the question that you're asking ---

MR. MARCOCCHIO: Yes.

THE CHAIRPERSON: --- and the project that's -- that we're reviewing. I mean how does the ---

MR. MARCOCCHIO: Oh, I thought I -- I'm

sorry, I thought that -- I'll try again. The continuous nature of the contamination from the properties under remediation and the adjacent communities getting some indication of the impacts in the past and will clearly give some indication of the potential for impact during remediation activities in these adjacent properties that these risk assessments have been done by Health Canada and perhaps should be put on the public record.

THE CHAIRPERSON: All right. Now I'm with you. And the dates of these health assessments. You know which health assessments have been referred to?

MS. CHARD: Madam Chair, I guess my confusion in this is that we basically -- and the people that I have with me reviewed what was in -- contained within the scope and within the project that we're looking at today. I think those are other projects that were done a number of years ago and my experts and -- neither I or my experts have detailed knowledge of that. So I guess I'm just wondering at the appropriateness of the question.

MR. MARCOCCHIO: The contamination in this community shows that there has been a movement of contaminants from the site into those homes. And there is currently no plans for any barriers during the remediation to that ongoing movement in contamination

into the community. So it speaks to the need for developing remedial measures to effectively prevent the ongoing migration into the adjacent properties.

THE CHAIRPERSON: Health Canada, how would you respond to that please and then we'll ---

MS. CHARD: I guess I will have to ---

THE CHAIRPERSON: --- figure out what we're going to do.

MS. CHARD: --- go back and look at the Environmental Impact Statement. I don't recall that we had any kind of explanation within the human health risk assessment in the process that we looked at that was talking about the off site contamination but maybe I could put that back to the Proponent but otherwise I would have to take that as going back into the Environmental Impact Statement to look at it.

THE CHAIRPERSON: Well, I'm not -- right now, I'm certainly not prepared to ask you to make a -- whether you're willing to make an undertaking with respect to this. I would like to confer with my colleagues before we take this further. I'm going to make a note and I will do that and then I will -- we will get back to you on that. Do you have ---

MR. MARCOCCHIO: I have another short question.

THE CHAIRPERSON: -- an additional question?

MR. MARCOCCHIO: Yes. Does Health Canada have any concerns with respect to the siting of the incinerator and do you feel that the current CCME guidelines, that is 1,500 metres from residential dwellings should be applied for this project to be protective of human health.

MS. LETTNER: In our review of the EIS once again agree with the conclusions that there were no risks to human health. The receptors around the incineration site and it's -- that was what our job was here, was to review the health impact not the siting of the incinerator. We saw no health effects and we agreed with the conclusions of the EIS.

MR. MARCOCCHIO: Thank you.

THE CHAIRPERSON: Thank you, Mr. Marcocchio.

MR. POTTER: Madam Chair, if I might for a moment.

THE CHAIRPERSON: Is it a point of clarification?

MR. POTTER: Yes.

THE CHAIRPERSON: Just to clarify, I believe the assumption that the witness is suggesting is

that there's documentation of off site migration to residential neighbourhoods. Just to be clear, the EIS report does not state that.

THE CHAIRPERSON: Thank you. We will be considering your question and we will get back to you on that. Mr. Marmon, do you have a question?

HEALTH CANADA

--- QUESTIONED BY THE PUBLIC

MR. RON MARMON: In the conclusion that the incinerator would have no health effects on the people living around it. Was there any estimate of the number of upset conditions that might occur at the incinerator that would put anything above the guidelines?

MS. LETTNER: In the Environmental Impact Statement the Proponent did do an upset condition and when we reviewed that we saw no health effects with the situation presented.

MR. MARMON: Would you be concerned in the number of upset conditions? Was there anything in EIS that would more or less give you some definition of what could be expected in the number of upset conditions in the run of a year let's say?

MS. LETTNER: Well, I can't give you any indication of what I saw for the number of upset conditions and just to point out that there will be a

program in place to ensure that the incinerator is operating it must meet code and to address it that way which is not under the jurisdiction of Health Canada.

MR. MARMON: I understand that and like we do have some question on what codes are going to be followed. And that's why there was some mention by the previous questioner on what the 1,500 metre distance but what we, as a community, have a problem with, is we understand that in theory incineration is a very good method of destroying, we think. We have no examples of here is the incinerator that's going to be put there, here is an what you can expect in upset conditions. Here is the number that you might expect during here and we really don't follow how Health Canada can say that you don't see a problem with this incinerator causing a health problem in the area if you don't really know yourself what type of incinerator or what problems can be expected.

MS. LETTNER: I completely understand where you're coming from and I think that that follows from what Environment Canada said earlier today that they would like to have the numbers remodelled once all of the design is complete and that follows also a caveat that Health Canada has that if those numbers change we would like the health numbers remodelled because we don't know

right now what the design criteria are.

MR. MARMON: Okay. Thank you, Madam Chair.

THE CHAIRPERSON: Thank you. Cape Breton Save Our Health Care Committee.

HEALTH CANADA

--- QUESTIONED BY THE PUBLIC

MS. MARY RUTH MACLELLAN: Having looked around the room, I think I'd like to tell you this morning as I drove in here I felt fairly well. When I rounded the corner and drove up the street by the train -- old train station, up Dorchester and George, I immediately got a headache when I detected a real bad odour in the air. When that happens to me I'm a person with very sensitive system to toxins. When that happens it triggers PCBs in my heart and I've been feeling really bad today but I'm wondering on the incinerator site itself if that's turned over to the province where does Health Canada fit in?

MS. CHARD: I think, Madam Chair, in my presentation we did indicate that Health Canada does offer scientific expertise and advice upon request and a number of times we have been requested by provincial and municipal governments if they have a question on health impacts. I ---

MS. MACLELLAN: So ---

MS. CHARD: I don't know at this moment whether we will be requested to provide that kind of assessment but we have in the past in other situations.

MS. MACLELLAN: So what you're saying is you will be there to advise only if asked by the department of Nova Scotia's Department of Health.

MS. CHARD: In the area of human health risk assessment and health impacts, yes, if requested.

MS. MACLELLAN: Only if requested? But you did say you were responsible for drinking water, correct?

MS. CHARD: I will turn to Richard.

MR. CARRIER: Your question related to drinking water?

MS. MACLELLAN: Yes, in response -- you will still -- no matter if the site is owned by the province or the feds you will still be responsible for drinking water?

MR. CARRIER: In Canada drinking water is considered as a natural resource so i's a domain of provincial jurisdiction but we, Health Canada, work in collaboration with the provinces to establish drinking water guidelines so yes, we work in collaboration with provinces and territories but we don't have the

jurisdiction to intervene.

MS. MACLELLAN: So you won't have the jurisdiction to monitor Kilkenny Lake which is New Waterford's drinking source water once it's turned over to the Province?

MR. CARRIER: I'm not familiar with this change of ownership between -- are you talking about land that will be transferred to ---

MS. MACLELLAN: We've heard during the testimonies here or the presentations that they are looking for the Federal government to turn the Victoria Junction site which includes Kilkenny Lake which is New Waterford's drinking water source over to the provincial government.

MS. CHARD: It is my understanding that the -- this Kilkenny Lake is a source of drinking water at the present moment, or am I incorrect?

MS. MACLELLAN: That's correct.

MS. CHARD: Can I just mention that the -- as the source of drinking water it's under provincial jurisdiction as we speak and the municipality. Health Canada does, as Richard mentioned, develop in conjunction with the provinces and territories, the Canadian Drinking Water Guidelines. The implementation and enforcement of those guidelines are within the provincial jurisdiction.

MS. MACLELLAN: So in other words you won't be monitoring it on an ongoing basis to see that -- we've already heard testimony here that there will be days when the atmospheric conditions are so that there will be fallout from the stacks from the incinerator that more than likely, depending on the wind conditions will fall into Kilkenny Lake.

THE CHAIRPERSON: I think we've had the answer to your question about who ---

MS. MACLELLAN: So it will be the province ---

THE CHAIRPERSON: Excuse me. We've had the -- Health Canada has answered that question that it does fall within the province's mandate and you will have a chance to ask the province that question.

MS. CHARD: Madam Chair, can I be very, very clear that the monitoring of any of the drinking water as we speak today, with or without the project is under provincial and municipal jurisdiction.

THE CHAIRPERSON: Thank you.

MS. MACLELLAN: You said before that you -- once -- you're there to advise the province if it's turned over to the Federal government but you do have jurisdiction over the Inuits and the Mi'kmaq population?

MS. CHARD: Looking at the health effects

of the communities, the First Nations and Inuit health communities in this region, yes.

MS. MACLELLAN: Are there any kind of guarantees or reassurances that you can give us that if there is a problem here that Health Canada will come in and help us as a community with our problems -- our accumulative effects that will make us sick? Where will Health Canada fit in the picture in that? How can you reverse health effects?

MS. CHARD: Well, I guess one of the -- the information that we have done has indicated about the -- our concerns with the air quality, the cumulative effects, and there are information gaps at the present time and that we would look for further details from the Proponent as to their monitoring situation.

I'm not sure that I understood how we went from First Nations and Inuit health to the community, coming in and doing things in the community. I need clarification on that.

MS. MACLELLAN: Well, there are at least two First Nations communities in Cape Breton County, and as I see it the accumulative effects, especially with fallout from incinerators, will travel and they will affect the Inuit communities or the Mi'kmaq communities as well as our own communities, and there are a lot of

people with Mi'kmaq status or Mi'kmaq blood in them that don't live on the Mi'kmaq Reserves.

So, are you still responsible for them?

MS. CHARD: Within the role and mandate of Health Canada, the area of our First Nations and Inuit health is on-Reserve, are responsibilities for the health of on-Reserve -- the on-Reserve community of the First Nations and Inuit health.

The other area that I would just want to comment on is that my understanding from the Environmental Impact Statement is that they looked at all human receptors when they were doing their health hazard -- or health risk assessment, and that would have included the population living in close proximity to the various areas as they were doing the risk assessment.

So, I do assume from that -- but I'd go back to the Proponent -- that the communities of the two First Nations in close proximity would have been consulted.

MS. MACLELLAN: What I'm looking for -- and probably you probably can't give it to me -- is I want to know if there were any kind of guarantees or assurances that if there were problems with the monitoring or any follow-up -- for example, a few years ago a number of children tested positive for high toxin

levels in their blood, there were never any follow-up phone calls, visits or anything.

Some of these children were toddlers and today suffer from the ill effects of it, some have speech impediments and some have coordination difficulties, and nobody has yet to follow up with those children. Thank you.

THE CHAIRPERSON: Thank you, Ms. MacLellan. I think I'm just going to ask the Proponent if at this stage you have any clarification, anything you wish to say, and, if not, I'm going to suggest we take a break.

MR. POTTER: A break sounds good.

THE CHAIRPERSON: Thank you very much. I will ask you to come back after the break. Sorry. I may just see -- provide an additional opportunity for questions from other participants, probably a shorter round, and if we don't have very many I may then ask if Environment Canada would come back for the balance of the afternoon. But who knows, you may be there for the rest of the afternoon.

So, thank you very much. It is now -- we will return at quarter to 3:00.

--- RECESS: 2:25 p.m

--- RESUME: 2:49 p.m.

THE CHAIRPERSON: I'd like to resume the session, please. I'd like to begin. I wonder if Mr. Marcocchio would be willing to come back to the mike just so that we can address his question. Thank you.

I just want to let people know that Sierra Club has provided us with a one and a quarter page document in response to an undertaking that you undertook yesterday, is that right?

MR. MARCOCCHIO: Yes, that's right.

THE CHAIRPERSON: Yes. And the undertaking provides some further information regarding Sierra Club's -- some of the questions and points that you're raising with respect to contamination in the areas outside the project boundary. I'd just for -- and thank you very much for this. So, this will now go on the public registry.

So, I -- on the basis of this, I need -- I just want to ask again a clarification of what it is that you were asking Health Canada, and then we'll ask Health Canada about that.

But I'd just like to read for people just one part of this information that you've provided, and you make a reference here to the fact that -- the beginning of the paragraph says:

"There are also additional reports

and knowledge of contamination off site."

You provided -- earlier you provided some quotations, you cite some references from within the EIS relative to this issue.

"There are also additional reports and knowledge of contamination off site."

And then you refer:

"Health Canada produced several 'individual property reports' in 2001 which showed contamination in the soils, ground water, sumps and product in basements. Health Canada has said that the contaminants off site in other areas, aside from NOCO, is similar to that found in the NOCO area..."

And then there's a reference, "MacDonald, 2003."

"Some of these results were also published in Lambert and Lane, 2004."

My understanding was that you were asking Health Canada to provide to the Panel -- was it these reports that you were referring to?

MR. MARCOCCHIO: Yes, the risk assessments done on homes -- some of them were on homes, some of them were on vacant or public land, if you will, some of which were remediated in NOCO, and I think it's entirely appropriate and germane that those be on the record so that we can understand the nature of the continuous contamination from the site into the adjacent homes so that we can address the issue of putting -- at minimum, address the issue of putting remediation measures in place to limit or contain that ongoing process during remediation.

THE CHAIRPERSON: Well, I think the Panel looks forward to you presenting us with more information on this topic when you make your presentation, but right now I just want to understand.

You were asking Health Canada if they would make an undertaking to provide these reports.

MR. MARCOCCHIO: Yes.

THE CHAIRPERSON: You have these reports.

MR. MARCOCCHIO: We have some of them and we're willing to make them available, but it would be good to have Health Canada put them all on the public record, including the ones on public lands.

THE CHAIRPERSON: Well, I will ask Health Canada now if that's clear, as to what the question is,

and please give your response, and then depending what your response is the Panel will decide where to proceed from there.

MS. CHARD: Madam Chair, I guess I need clarification as to the scope of this undertaking, the Panel and the Environmental Impact Statement, as we were looking at and dealing with the project as outlined at the present time and going into the future, and that was what our risk assessment and human health impact assessment was based on.

So, I am not sure. Are we going back into history, long term, if it was not included in their baseline data for the environmental impact? So, I guess I just need some clarification as to where we're going with this.

THE CHAIRPERSON: Mr. Marcocchio, very briefly, if you want to say a couple more things about this, then we will just confer for a moment.

MR. MARCOCCHIO: Yes. I'm working from memory here, but I'm just referring to the section of the guidelines, the EIS Guidelines, that direct the Proponent to gauge all of the impacts from remediation activity on the surrounding areas, that is to say that the adjacent homes and the impacts on those adjacent homes are directly within the scope and mandate of the

Environmental Impact Assessment according to the guidelines.

THE CHAIRPERSON: Just a moment, please. The Panel is going to take a moment to confer about this.

I do feel a little foolish wheeling around in these chairs, but you were very polite and you didn't laugh when we all rolled off. Part of the difficulty is not doing it unintentionally.

Mr. Marcocchio, we've just conferred about this and this is -- we're not at this time going to ask Health Canada to produce those materials. You are very welcome to put anything you like on the public record.

And what I'm going to ask you to do is during Sierra Club's presentation to us -- and you do have quite a bit of time jointly to make presentation -- if you would be very -- would like to address this issue and be very clear in your argument around the connection that you are drawing about information about any putative contamination off site and how this relates to the Panel's mandate.

So, if you could do that during your presentation, then we will revisit this issue.

MR. MARCOCCHIO: Thank you very much.

THE CHAIRPERSON: Thank you. I had a sense that there were a lot of questions built up for

Environment Canada, so if at all possible -- it's now 5 to 3:00 -- I would like to bring them back for a while this afternoon.

But what I'm going to do is I'm going to ask -- I'm going to provide an opportunity for one more round of one question -- just one, please -- from the participants to Health Canada to make sure that we give some fair opportunities here.

And I would say in a general sense that obviously we do have time constraints on everything we do, and so sometimes we move on and you might still have a question that you wanted to place, and if you do then please provide that question in writing to the Panel and we will forward it and try to get an answer, get it into the record. So, there are other opportunities.

So, I'm just going to ask are any registered presenters in the room -- if anybody -- if you could show me by a show of hands if there is anybody who has -- would like to come back with one question each.

I've got Dr. Argo, Ms. Ouelette. Nobody else? And Mr. Brophy. I've got three. Dr. Argo?

--- QUESTIONED BY THE PUBLIC

DR. JIM ARGO: Thank you, Madam Chair. Am I speaking in the right direction?

THE CHAIRPERSON: That's the direction --

yes, as long as we can hear you, that's the most important thing.

DR. ARGO: This morning I asked a question to Environment Canada about Canada-wide standards which they administer. I'm going to ask the same question to Health Canada because there's a health component to this.

The Canada-wide standard for dioxin is 80 picogram toxic equivalents per cubic -- yeah, per cubic metre. This is the amount that the Proponent will be allowed to release in terms of dioxins and furans from the incineration.

Dioxins and furans have been identified by IARC, the International Agency for Research in Chemistry -- in Cancer, as carcinogenic. Carcinogenic chemicals have no minimum concentration that they -- any concentration is considered toxic.

My question then is, what is the risk that is presented by releasing 80 picogram/TEQ of dioxin per cubic metre which is allowed under the CCME, Canada-wide standards, and which, by the way, is not risk-based? It's an agreement. What is the risk that that poses to a person breathing that in, breathing it in?

MS. CHARD: Madam Chair, I'll ask Cheryl to answer that question.

MS. LETTNER: I can't give you an answer

on what the risk of 80 picograms per metre cubed is, but I can tell you that in the EIS there were health-based numbers because, as you said, the Canada-wide standard isn't a risk-based number, but health-based numbers developed by the World Health Organization and by the US EPA were used in the EIS, and when those numbers were used, which we agreed with in our assessment, there were no health risks identified.

DR. ARGO: Then what is the risk for a cancer posed to a person that is breathing -- that is ingesting and breathing that?

MS. LETTNER: The EIS considered both non-cancer and ---

DR. ARGO: No, I'm just talking about -- in this case I'm talking about a cancer. Though you're quite right, dioxins have non-carcinogenic end points.

MS. LETTNER: Um-hmm. The cancer end point was also addressed in the environmental assessment and the risk levels were within the acceptable range and, therefore, there are no health effects that were identified by Health Canada.

DR. ARGO: Okay. I'll leave it at that.

THE CHAIRPERSON: Thank you, Dr. Argo. Ms. Ouelette?

--- QUESTIONED BY THE PUBLIC

MS. DEBBIE OUELETTE: In the EIS health risks were identified for workers not wearing the appropriate personal protective equipment during remediation activities at the Tar Ponds and Coke Ovens Sites, right?

What were the risks to residents within metres away? Can you identify the risks that were there for the workers that were not wearing protective equipment?

THE CHAIRPERSON: If you could -- it's the same point I pointed out to Dr. Argo. If you could speak ---

MS. OUELETTE: I'm sorry.

THE CHAIRPERSON: --- directly into the mike, then we can all hear a bit better.

MS. OUELETTE: It states in the EIS health risks were identified for the workers not wearing appropriate personal protective equipment during remediation activities at the Tar Ponds and Coke Ovens Site. Can you tell me what them risks were?

MS. ROEST: In our review of the EIS, the Proponent had looked at the risk to workers, and just to clarify, this would be workers on the site who would be exposed, for example, to the excavated sediment, they would be ingesting the sediment, they'd be eating it,

they're not wearing personal protective clothing, so it would be getting on their skin and they're right there by the excavation, so they would be exposed to much higher levels than the residents would be in the risk assessment.

In addition, for the risk assessment to the area residents they looked at the inhalation pathway only.

MS. OUELETTE: No, my question was, in the EIS health risks were identified. What were the health risks? What were their health risks?

MS. ROEST: I'd have to look at the EIS, but they identified risks from various chemicals. I can't tell you off the top of my head exactly what they were, but these would be risks that exceeded a cancer risk of 1 in 100,000 or a hazard quotient of .2.

MS. OUELETTE: You're not getting my question, I'm sorry, but I just want ---

THE CHAIRPERSON: Excuse me, Ms. Ouelette. I think you're asking questions about content in the EIS which would probably be -- you may have the answer. I suspect you do. I suspect ---

MS. OUELETTE: I don't, and that's the -- the reason is I don't ---

THE CHAIRPERSON: You haven't found this

in the EIS?

MS. OUELETTE: No.

THE CHAIRPERSON: Well, then I think probably that the question is, in the first place, more appropriately directed to the people who produced the EIS to answer your question.

MS. OUELETTE: This is in their presentation that they have there. They have it on their site from Health Canada.

THE CHAIRPERSON: Health Canada's presentation that they gave to us today?

MS. OUELETTE: It's on the site. That's where I got that, and that's why I'm just -- I want to make it clarified. They state that the health risks were identified for workers not -- what were the health risks for workers not wearing protective personal equipment during the activities of the Tar Ponds and Coke Ovens? I just want to know what they were.

THE CHAIRPERSON: I see, yes. Could we find this on -- in the presentation, what page? That would be helpful. Do you happen to know?

MS. OUELETTE: It was on their site, it just said "Issues" on page 5.

THE CHAIRPERSON: Did you -- is this on your website?

MS. CHARD: I think it's in the technical report and as we submitted it to the Panel it would have been on the Panel website as part of our report. It's in the technical report on that, and I think ---

THE CHAIRPERSON: But it was submitted as part of the public comments?

MS. CHARD: Part of the public comments.

THE CHAIRPERSON: Yes. All right. Now we're getting there. So, perhaps -- I have a list of public comments. It would help to put the number on this. Would this be Public Comment 24, February 15th?

I just needed some help here. I now know what we're talking about, yes.

MS. OUELETTE: Sorry.

THE CHAIRPERSON: I don't have it in front of me but you are -- you now know -- we're all talking about the same thing.

MS. CHARD: Yes. I thought we had given you a copy of our technical report, but if not ---

THE CHAIRPERSON: No, I just -- I don't have it in front of me right at this second.

MS. CHARD: Okay. Okay.

MS. OUELETTE: Sorry I have to repeat the question, but I just want the answer, that's all.

THE CHAIRPERSON: Well -- so now we know

-- I know where you're citing this. Are you -- Health Canada, are you able to shed some light or make an undertaking to provide anything?

MS. ROEST: I think, if I understand her question correctly, you're trying to understand what type of health effects are related with these health risks?

MS. OUELETTE: I'm going to read the question one more time. It said in the EIS health risks were identified for workers not wearing appropriate personal protective equipment during remediation activities at the Tar Ponds and Coke Ovens Site.

What were the health risks? What were identified? Did they have headaches? Did they have to leave the site because they were sick? Were they fatigued? Were they dizzy? Did they faint? What were the ---

MS. ROEST: The health risks are dependent on each individual chemical that was assessed, and off the top of my head I can't outline exactly what that would be. The Proponent may be better suited to answer that question.

THE CHAIRPERSON: I take it that you were quoting -- you were referring to information that was in the EIS regarding -- I'm going to turn that to the Proponent, and if you would like to provide a little bit

of information to see if you can answer Ms. Ouelette's question, please.

MR. POTTER: I'll ask Dr. Magee to address that question.

DR. MAGEE: Yes, I'd be happy to. Thank you very much. The non-cancer effects are driven primarily by the presence of naphthalene. Now, we don't know what that would truly do to humans, but based on the animal data the end point is nasal effects, it's metaplasia and dysplasia of the cells, changes in the structure of the cells of the nasal membranes would be what is predicted, and the cancer risk is driven by exposure levels to benzoate pyrene which is one of the polycyclic aromatic hydrocarbons.

There it's a little trickier because the animals get tumours of the fore stomach and humans do not have fore stomachs, so we're not predicting that humans will get fore stomach tumours, but we just assumed that if the animals got tumours in any organ that the humans might also get a tumour in some organ or another.

THE CHAIRPERSON: Yes. Ms. Ouelette, now my understanding of your question was that if there was a prediction that there could be health effects on workers if they were not wearing protective clothing ---

MS. OUELETTE: Absolutely.

THE CHAIRPERSON: --- but your question is residents living very close to the site ---

MS. OUELETTE: Would have the same effects, is what I'm trying to say.

THE CHAIRPERSON: --- could they have the same effects? I'm going to -- the question is -- we are in a questioning of Health Canada. I'm just going to go back one more time to Health Canada to see if you have any more comments that you want to make with respect to Ms. Ouelette's concern.

MS. ROEST: Again, I think there has to be a distinction made here between the exposure pathways that were looked at in the risk assessment for the area residents as compared to the workers.

Again, the workers would be -- they were assuming they weren't wearing any protective equipment but, you know, they would -- their arms would be exposed to the sediment, it would be all over their arms and their legs, they would be -- some of it would get into their mouths, they would be right there where the volatiles would be at their highest and breathing that. So, their risk would be higher than for a resident living some distance away who would not have those same type of exposures.

THE CHAIRPERSON: Ms. Ouelette, I know

you've -- I'm sure you've got more to say on this issue, so I -- the issue is registered and I'm going to ask you to pursue it when you make your presentation, and I'm sure there'll be some more questioning back and forth. So, thank you.

MS. OUELETTE: Another statement that they made ---

THE CHAIRPERSON: I was saying one question.

MS. OUELETTE: Oh, can I just say this one since that one took so long for them to understand?

THE CHAIRPERSON: Yes, quickly, please. I have to say that pathos won't work me every time, so don't all think that you can try that but ---

MS. OUELETTE: They also made a statement that no human health risks were identified for area residents as a result of an operation of a temporary incinerator.

Now, my question is, can you tell me when this temporary incinerator was operating, where and for how long?

THE CHAIRPERSON: I'm sorry, what are you quoting? You're quoting again. You're quoting from ---

MS. OUELETTE: I'm quoting from their ---

THE CHAIRPERSON: Okay.

MS. ROEST: This is based on the assumptions in the EIS which, if my memory serves me well, was they looked at both the VG Site and the Phalen Site and the incinerator was assumed to be operating 365 days a year for five years.

MS. OUELETTE: The question was, no human health risks were identified for area residents as a result of an operation of a temporary incinerator.

Now, my question is, can you tell me when this temporary incinerator was operating, where and how long for?

THE CHAIRPERSON: I'm assuming this statement refers to the predictions for the project, it's not to an existing. Okay?

MS. OUELETTE: Oh, I thought -- that's how I understood it.

THE CHAIRPERSON: Okay? That's how I would hear that.

MS. OUELETTE: Okay.

THE CHAIRPERSON: All right. Thank you very much, Ms. Ouelette.

MS. OUELETTE: Thank you.

THE CHAIRPERSON: Mr. Brophy? And then we will take a brief break and we'll bring back Environment Canada.

--- QUESTIONED BY THE PUBLIC

MR. ERIC BROPHY: Thank you, Madam Chair and Panel. My question is going to relate to the environment -- the EIS Guidelines as it pertains to human health.

Health Canada, do you have a copy of those that you can refer to? And I'll refer you to Article 9-4, "Human Health." Do you have that?

MS. CHARD: Mr. Brophy, just to make sure that I'm clear, that's in the Environmental Impact Statement Guidelines ---

MR. BROPHY: It is.

MS. CHARD: --- for the environmental assessment? And I don't see a 9.4, I see a 9.3.

THE CHAIRPERSON: It's there. It's the way it's printed.

MS. CHARD: Oh? Okay.

THE CHAIRPERSON: I just had that problem.

MS. CHARD: We have it.

MR. BROPHY: I will read that for edification of those in attendance here.

> "Assess health of residents of the areas affected by the project, employ appropriate qualitative and quantitative indicators regarding

elements of health that may be affected by the project to create baseline data..."

And I emphasize "to create baseline date."

The reason for that emphasis, Madam Chair, I think this morning we established through questioning Environment Canada of what we mean by "baseline."

In my questioning to the Tar Ponds Agency Dr. Magee's response to my question whether this guideline was adhered to -- his response was yes, they did two health risk assessments.

Health Canada is here as an expert advisory to this project. In that capacity as experts I would ask -- they do have the knowledge that there is a very distinct difference between a health risk assessment and a health assessment.

So, my question to them is, has this guideline been complied with?

MS. CHARD: I'd have to go back and just look at the EIS. We'd have to see that. I don't know that the -- you can -- Cheryl will answer.

MS. LETTNER: I just wanted -- you will probably have to go back to the EIS, but I -- for air, existing air quality was included. There was a specific IR response that the Panel asked in the second round, but

I can't speak to other media.

MR. BROPHY: If I may clarify what my intention is, my intention is here to state that a health risk assessment is very distinct from a health assessment.

A health assessment is what ATSDR in the United States does when they look at contaminated sites. That health assessment does provide a tool to assess the health of the residents and it is also the tool that can assess whether anything from remediation efforts that would be ongoing on those sites may affect the residents.

It is my contention that this is what this guideline calls for, a health assessment, not a risk assessment. Risk assessments are carried out, as Dr. Magee acknowledged, only to assess potential health risks, it is not there to do a health assessment. That is what a public health assessment does.

I would further add that when I was a member of the Health Studies Working Group that was what we wanted to do, we were working with Health Canada in the hopes of carrying out a public health assessment.

We were sidelined when Health Canada told us, "Well, just a minute, we're not going to follow the ATSDR Guidance Manual, what we are doing in Ottawa is we are developing a 'Sydney Model', a model that could be

used for contaminated sites right across this country."

THE CHAIRPERSON: Mr. Brophy, I'm going to interrupt you ---

MR. BROPHY: Having said that ---

THE CHAIRPERSON: Mr. Brophy, I'm going to interrupt you for a moment, because I think you're turning your question into a presentation. I know you will be making a presentation to us. I don't object to having some context applied around a question. I think we've got your context to it.

I'm not sure that -- I think we have an -- do we have an undertaking from Health Canada that you're going to look at and give your opinion on whether the baseline health information that was presented in the EIS, in your opinion, meets the guideline and is adequate to use as -- to assess health impacts?

And, Mr. Brophy, if you wanted to add anything to that question -- but I will have to ask you to carry on with your line of argument and statements -- and, believe me, the Panel wants to hear it, but I need you to do that during your presentation. This is a questioning phase.

MR. BROPHY: Okay. Then I do have another question, Madam Chair ---

THE CHAIRPERSON: Well, I ---

MR. BROPHY: --- if you would permit me just one last question.

THE CHAIRPERSON: Oh, yes, by all means.

MR. BROPHY: In response to Elizabeth May questioning a risk assessment, Dr. Magee replied -- and I'm reading this from an article in the newspaper:

> "First I would like to clarify that I am personally not aware that there are vulnerable adults that are any more vulnerable in this community than in any other. I would take that as a premise but I cannot testify to that being the case or not."

That health assessment I talked about would have provided Dr. Magee information that he could clearly indicate that. And I thank you very much, Madam Chair, and at the end of the day it will be the Panel's responsibility to see if that guideline has been adhered to. And I thank you once again.

THE CHAIRPERSON: Thank you, Mr. Brophy. I believe now that I have taken the questions I was going to take, and I've taken more questions but that's okay occasionally. And so I ---

MR. POTTER: Excuse me, Madam Chair.

THE CHAIRPERSON: Oh? Sorry, I don't see

-- yes, do you have a follow-up question or a clarification?

MR. POTTER: It's just a clarification before Health Canada leaves just regarding the uncertainty regarding the incinerator emissions.

The emission rates used in the EIS will form the basis for any tendering for the eventual incinerator. Suppliers that do provide the incinerator will have to ensure that that incinerator does meet those criteria. I just wanted to clarify that point.

THE CHAIRPERSON: Thank you. Thank you very much to Health Canada for your presentation and for answering questions. I'm now going to -- we'll take a five-minute break while Environment Canada comes back and we'll resume questioning for the balance of the afternoon.

--- RECESS: 3:22 p.m.

--- RESUME: 3:28 p.m.

THE CHAIRPERSON: I would ask that we begin the session again, please. What I'm going to propose is I will just check with the Proponent at the moment.

If you have -- with respect to Environment Canada, if you have questions or any statements of clarification, I will give you another opportunity, and

then after that I am going to just get -- find out who has questions for Environment Canada and then I will -- depending on the number, I will sort of give a time allotment.

These days are long and if it's possible for us to break at 4:30 I will try to do that. So, first of all, I will go to the Sydney Tar Ponds Agency. At this point do you have something you wish to say or ask?

MR. POTTER: Nothing at this point, Madam Chair.

THE CHAIRPERSON: Can I ask in terms of registered participants how many of you would like to pose additional questions to Environment Canada?

I see Sierra Club, I see the Save Our Health Care, that's two. All right. I will provide you with a maximum of 15 minutes each for your questions, which is -- oh, and to Mr. Harper. Oh, I'm sorry. Yes, that's what I was getting to.

So, additional members of the public, I have Mr. Harper. Anybody else in the room? So, we have three people with questions. I have four people -- Ms. Kane -- with questions. Four? Well, I'm going to say four at 10 minutes each and we'll see where that takes us.

Okay. I'm going to start with --

arbitrarily with Ms. MacLellan of Save Our Health Care.

ENVIRONMENT CANADA AND GOVERNMENT SERVICES

--- QUESTIONED BY THE PUBLIC

MS. MARY RUTH MACLELLAN: Thank you. I am feeling better. I'm kind of like the canary in a coal mine when it comes to toxins. If I fall over, you'll know to evacuate. And rest assured if the canary Mary is dead, Ruth, the voice of reason, will come back as a conscience.

THE CHAIRPERSON: That's right. As long as you're not the frog in the freezer. That was a ---

MS. MACLELLAN: My first question to Environment Canada is about the monolith and the seawall that is supposed to protect the monolith.

I'm wondering about the changes in the high tides and the high tide marks and the heavy storm surges that we've seen more and more in the last few years and the erosion that has -- as I said before to Transport -- Public Works, it even took a part of the causeway away. Well, it even uncovered a 17th century wall in Louisbourg.

How is that going to affect the monolith?

MS. DOBER: My understanding from speaking to some of our experts who are not here today but who have reviewed the document in terms of effects that the

environment may have on the project is that they did not identify any issues within the EIS that they thought needed to be addressed any further.

MS. MACLELLAN: So, they -- like have they taken in the fact that the weather patterns are changing and we're getting more storms more frequently and that our storm surges are at times five metres high? Will the seawall to protect the monolith be five metres high, or how high will it be?

MS. DOBER: In terms of design details that is really in the realm of the Proponent to provide that information.

With respect to our assessment of the Environmental Impact Statement, our specialists were from the Meterological Service of Canada and also from our climate change group, and as I said, they did not identify any concerns with respect to how that issue was addressed within the document.

THE CHAIRPERSON: Thank you.

MS. MACLELLAN: Thank you.

THE CHAIRPERSON: Do you have another question?

MS. MACLELLAN: Yes, just two short ones. You said that there was no leaching into the harbour at the moment this morning from the -- Muggah Creek?

MS. DOBER: I think the way I phrased it is the contaminants are not generally migrating, they're attached to sediment particles.

MS. MACLELLAN: If you walk along the coast from the edge out here on down through towards South Bar there's a tarry slick coming out of the bank and out of the rocks and going into the ocean. Do you know what that is?

MR. ERNST: I don't think we could say specifically what a slick was at this time, but just for clarification, I mean, there is currently a flux of contaminants coming from Muggah Creek that relates to the discharge from the Tar Ponds.

MS. MACLELLAN: So, that tarry slick that's coming out of the rocks that are embedded in the edge of the water, the bank as we would call it when we were kids -- you call it bedrock, we used to call it shale rock -- is possibly coming from Muggah Creek, then?

MR. ERNST: We have no knowledge or evidence of the fact that there's some discharge coming out from the bank.

MS. MACLELLAN: Have you walked that coastline recently?

MR. ERNST: I personally haven't walked it, no.

MS. MACLELLAN: Perhaps then you could investigate. I think it's important to know whether it's leaching into the harbour or not. The other question ---

THE CHAIRPERSON: I think if you require Environment Canada to look at something you would need to provide them with very precise information. Perhaps you could do that at the -- before you leave this afternoon, as to where they should go.

MS. MACLELLAN: Yeah. Well, it's just somewhere between here and South Bar. I can't tell you the exact -- without walking the coastline myself, you know, and pointing it out. It's in there, or out there.

The other question is, there's been some questions about the SYSCO site that was last used for the steel plant and whether or not Environment Canada looked at the linkage between the Muggah Creek and the most recently closed SYSCO site and the Coke Ovens.

Was there an environmental assessment carried out to see if -- like to my knowledge one impacts the other, because it's the same -- virtually the same land.

MS. DOBER: My understanding is that there's work ongoing at SYSCO which we are not privy to, it's not something that our department was involved in.

As part of the environmental site

assessments that were done in the past there have been some monitoring wells and boreholes in that area and perhaps that information is included within the documents that are already on the public registry.

MS. MACLELLAN: I don't believe I've seen in anywhere in the EIS about the present -- or the last -- or most recently closed SYSCO site, but like the slag heap and the tars that are under there is all along the coast, and wouldn't that be Environment Canada's responsibility?

MS. DOBER: There was work done under the prior cost-share agreement and I do believe that that information is currently on the public registry in terms of some of the documentation. I don't recall specifically at this time what those results were.

MS. MACLELLAN: So, basically then it's the Province that did the environmental assessment for that land before it was started to be remediated and Environment Canada didn't have any input into it?

MS. DOBER: We are not involved in any activity that's taking place on the SYSCO property at this time.

MS. MACLELLAN: Thank you.

THE CHAIRPERSON: Thank you. Thank you, Ms. MacLellan.

MS. MACLELLAN: Thank you.

THE CHAIRPERSON: Before I go to the next questioner, I wonder if I could insert a question of my own which I was going to ask this morning and didn't, and it relates to the information that's included in IR-17, follow-up.

Now, do you have access to those if I give you a moment or two?

MS. DOBER: Yes, it'll take a moment to track that down.

MS. DOBER: We have it.

THE CHAIRPERSON: Okay. I'm just -- this Information Request, and the information in it, for those people who don't have it in front of you, we had -- the panel had an Information Request in to the proponent with respect to asking how the -- or a follow-up to a question.

We were asking how the contaminants that remain on both the Tar Ponds and Coke Oven Sites are expected to change over the 25-year period following completion of the project, and amongst -- we were given a fair bit of information in reply to that, and we were -- we did receive a table from the proponent with respect to the half-life value, soil half-life values for a range of, I don't know, about 10 compounds, including various

metals and PAHs and PCBs, and there's a reference given from where these -- how this table was derived, and there were some cautions added saying that the metals take a long time to decay, the PAHs, PCBs and dioxins and furans have a significantly shorter half life, particularly if they're exposed to air or UV radiation.

And then there is a statement here above the table that says:

> "The values provided in the table IR-17.2 are theoretical estimates based on other studies and no site specific decay rates have been determined for the Tar Ponds and Coke Oven Sites."

And then there's a statement:

> "Based on these figures, the remaining treated subsoils of the Coke Oven Site after capping should not provide a risk to human or animal receptors after 25 years, even if they are exposed."

Which would lead me to believe, in fact, if that's correct, that the cap on the Tar Ponds and the Coke Ovens would need to last only 25 years at most, and that, after that, it sounds as though the sites would, in fact, natural process, be thoroughly remediated.

I am just wondering if you are -- Environment Canada has any comments or any reflections on the values that have been identified in that table and the conclusion that was reached, particularly with respect to the Coke Ovens Site.

MR. ERNST: Well, I'd offer the general comment that we've taken a look at the half-life table that's been presented, and, in our estimation, those are reasonable half lives for those contaminants in soils, but it should be acknowledged that that would be half lives for soils that are exposed normally to air, biological activity, a number of things that would serve to break down some of those substances more quickly than if they were sequestered in a matrix where those influences weren't as great, i.e. if they were covered up in deep sediments or bound up in materials that wouldn't allow air and biota into them.

So with regard to the risk upon subsequent exposure of those materials that had been subject to those time lines, i.e. 25 years, I think we'd want to take a look at that a little closer to see if there's more relevant information that could be used to make such a statement.

THE CHAIRPERSON: Yes, the statement refers to the Coke Oven Site, it doesn't refer to the

contaminants that will be left in the monolith that will be bound up in the matrix, and my understanding is that the KFOs would be significantly slower, but I guess I'm just exploring this issue on the Coke Oven Site.

So this would be soils that would be underneath -- some of the soils could be at some considerable depth, but they would be underneath a cap.

So your opinion is that that statement, in fact, should be treated with some caution. You couldn't, off the top of your head, endorse that right now.

MR. ERNST: I think that would be correct.

THE CHAIRPERSON: Thank you.

I am going to now go to Sierra Club for your questioning, please, of Environment Canada.

--- QUESTIONED BY THE PUBLIC

MR. MARCOCCHIO: Thank you, Madam Chair.

A series of questions about the concerns that were raised first with the Department of Fisheries and Oceans yesterday, and, as they pointed out, it's Environment Canada that's empowered to enforce the provisions of the Fisheries Act with respect to deleterious substances.

Our first concern relates to the Cofferdam design. In the latest iteration of the design of the Cofferdam, it appears that, in fact, there will be no

damming of the water across the mouth of the harbour, that the entrance will be restricted 10 metres, I believe it is, but that the end of that channel will continue to flow directly into Sydney Harbour without a barrier and without, obviously, any physical impairment for both the water and/or the contamination that go beyond there.

So the first question is, does Environment Canada have any concerns about the possibility that if anything goes awry with respect to the leaching of the monolith, the groundwater into the channel, that it will be discharged without delay through the weir structures and into the harbour?

MS. DOBER: I think in our recommendations we had identified the need to develop a comprehensive monitoring programme, and I would indicate that we would expect those particular issues to be captured within that monitoring programme, so that people can have a sense of if something is beginning to be captured within the water that will move through that system.

MR. MARCOCCHIO: Thank you. The monitoring programme is exactly the next question that I'd like to raise with you.

In the EIS, the proponent does not commit to anything beyond meeting the acute lethality provisions of the Fisheries Act, that is, they have not given a

commitment to produce effluent, a final product to be delivered into the harbour, that meets anything beyond the fact that the effluent will not directly kill fish.

There is clearly a world of difference between the acute lethality test and the deposition of deleterious substances as outlined in the Fisheries Act.

What and where does Environment Canada, in enforcing the Fisheries Act provisions stand on this issue, and to what standards will the discharge water be -- to what standards will that water be expected to meet?

MS. DOBER: I think, as Mr. Abraham mentioned in his presentation this morning, we would consider a compliance monitoring programme for the Fisheries Act to include both the acute lethality and the sub-lethal or chronic effects. So we would be expecting to see that in any monitoring programme.

MR. MARCOCCHIO: Can you outline what those parameters that the proponent would be expected to meet are?

MS. DOBER: At this point in time, all I can say is that we would look to develop those monitoring programmes with our colleagues from Fisheries & Oceans and Provincial Environment, and, at this point, I'm not sure what those specific tests are.

MR. MARCOCCHIO: The migration of leachate

from the -- migration of material from the Tar Ponds into Sydney Harbour has been documented for nearly 30 years now. To the best of my knowledge, there has never been any enforcement of the environment provisions of the Fisheries Act by Environment Canada.

How can we, as a community, have faith that Environment Canada will take its responsibilities under the Fisheries Act more seriously than it clearly has not for the past 30 years?

MS. DOBER: We indicated this morning that we will be diligently enforcing our regulations as this project proceeds, and to do that, in part, we have staff to position here in Sydney.

An Enforcement Officer has been hired, and will be fully functional here in July. He still has some training to do as part of his enforcement training programme.

MR. MARCOCCHIO: Am I to conclude from that that there has been no enforcement officers located here in Sydney for the past 30 years?

MS. DOBER: That goes beyond my time period with government. I do know that we have enforcement officers who travel all over the four provinces.

MR. MARCOCCHIO: Then that begs the

question why has there not been any enforcement.

THE CHAIRPERSON: I think the panel is -- for our purposes, we're interested in reviewing the environmental effects of this project from the mitigation and the enforcement ongoing. So I think we probably have information about that that's been provided just now.

MS. DOBER: And I think we addressed that question this morning.

MR. MARCOCCHIO: There has been some discussion about the PCBs that are known to exist underneath the slag pile. The proponent seems to think that there is an agreement that's been struck. The proponent has not yet been able to demonstrate the agreement.

We have, and are quite willing to enter into evidence aerial photographs going back 50-60-70 years that clearly shows that the area in question is part of the Tar Ponds.

There are several questions here. One, do you share the proponent's ---

THE CHAIRPERSON: Excuse me, I'm going to interrupt you, because I'm not quite sure what is this agreement that you're referencing here. If it was said yesterday, I'm sorry, I have forgotten. I don't know what you're referring to.

MR. MARCOCCHIO: It was the comment that Mr. Potter seemed to make that the Memorandum of Agreement seemed to draw a line at the western edge of the Tar Ponds for the scope of the project.

THE CHAIRPERSON: My -- let me just ask Mr. Potter if he would just like to respond to that.

MR. MARCOCCHIO: Actually, it was the eastern shore, my apologies, Mr. Potter.

MR. POTTER: The follow-up undertaking we introduced this morning with the map figure 1.3-1 shows the boundary of what we determined to be the project as defined in the MOA as the present-day boundary on the western and eastern shoreline as we would see it looking out the window.

THE CHAIRPERSON: Unless I'm wrong here, it was the panel's understanding that the proponent defines the boundaries of the project and then the assessment proceeds on that.

I mean, you may have some views with respect to what those boundaries should have been, but I think in terms of questions, which you feel free to bring forward to us, and your presentation, if it's -- questions to Environment Canada, should reflect the boundaries as defined in the EIS because it is the proponent's prerogative to define those.

MR. MARCOCCHIO: Yes, I understand. There very clearly is no dispute that the PCB contamination is continuous from the ponds underneath the slag pile and that's been clearly documented.

So the question is ---

MR. POTTER: Pardon me, Madam Chair, again there's a reference to information we do not have. We would be very interested in reviewing this information. If the witness could present the reference document, I'd be happy to review it.

MR. MARCOCCHIO: We'd be happy to do that. It's in the JDAC document on the public record, and I think you're quite aware of that, Mr. Potter.

THE CHAIRPERSON: Yes, can we just take this back a minute, please, because I don't think I'm going to be able to take -- I appreciate your question about this, but we're not going to have interruptions during questions, but please bring these things to the end of the question as needed.

Can we start again, please. What is your question to Environment Canada?

MR. MARCOCCHIO: The question to Environment Canada is do they have concerns about the PCB contamination that currently has been documented, on documents on the public record, to be under the slag

pile?

There are questions about the movement of groundwater that will continue to move through those unremediated sediments, and then directly into the harbour.

So there are two questions. One, is Environment Canada concerned about the impacts of groundwater and the ongoing migration into Sydney Harbour, and secondly do they believe that there should be a bentonite or some sort of barrier between the unremediated identified PCB hot spots under the slag pile and the remediated solidified Tar Ponds sediment.

THE CHAIRPERSON: So now I will ask you, Mr. Marcocchio, for our purposes the reference for the presence of PCBs, the delineation of them underneath the slag pile, is where?

MR. MARCOCCHIO: I believe it's in the JDAC document. I will provide you with the specific reference in the morning.

THE CHAIRPERSON: So that's an undertaking that you will provide that reference.

MR. MARCOCCHIO: Yes.

THE CHAIRPERSON: Thank you.

MS. DOBER: And I must admit I'm not entirely sure what those documents say, and would be

unwilling to offer any perspective without having had the opportunity to look at that information.

THE CHAIRPERSON: Well, what I would recommend, Mr. Marcocchio, is that you provide that reference in an undertaking, for the record, and if you wish to provide a written question, we'll make sure that that goes on the record, and we'll pass that on to Environment Canada and we can expect that you will provide a written response, is that reasonable?[u]

MS. DOBER: Sure.

THE CHAIRPERSON: Thank you. I'm going to go next to Mr. Harper. I have -- I'll allow you a brief question. I have also seen Mr. Ignasiak and indicate again a brief question at the end, and then that's -- I'm going to cut off questions for the afternoon. So, Mr. Harper.

MR. HARPER: Thank you, Madam Chair.

This is just a point of clarification. The gentleman this morning, whom I don't see any longer at the table, I believe indicated that the guidelines associated with the siting of PCB incinerators, the interim guidelines and the permanent siting guidelines, I believe he indicated they were out of date and were to be revised, something to that effect.

My question then is have either the 1990

or the 1992 guidelines been formally revoked?

MS. DOBER: I am not sure that the dates are correct on those references.

MR. HARPER: Well, the dates are not the important part of the question.

There are two guidelines, one dealing with interim -- the siting of interim incinerators, PCB incinerators, and another one dealing with permanent incinerators, and my question was whatever -- I thought they were 1990 and 1992, but have they been formally revoked by Environment Canada?

MS. DOBER: The references in question are CCME documents, the Canadian Council of Ministers of the Environment.

MR. HARPER: Okay.

MS. DOBER: It is not within our power or authority to revoke those.

We have consulted with the CCME secretariat. They have indicated to us that they are out of date, that they are no longer in print and that they no longer distribute them.

MR. HARPER: My question then is although they may no longer be in print or distributed, are those guidelines still in force?

MS. DOBER: They are guidelines. They

never had any force in law. They were a general guidance to be used in the development of programmes.

MR. HARPER: They may not be the force of law, but I think you can understand where I'm coming from.

The concern is there are guidelines that are out there. There's a suggestion that they're going to be reworked. Until they are reworked, are the guidelines that have been referred to, the CCME guidelines, I take your point, are they, let me put it this way, still applicable?

MS. DOBER: I think what we mentioned this morning is that there is still some valuable information in those documents which can inform remediation plans such as this.

In terms of still applicable, they are guidelines.

With respect to the 1500-metre criteria, there are other methodologies in terms of air emissions modelling coupled with human health risk assessment which can provide an appropriate determination as to whether or not a separation distance from a proposed incinerator would be necessary, and, if so, to what extent.

MR. HARPER: I won't belabour this, but my last point on this is from Environment Canada's point of

view, then, can I take it you're unaware that those CCME guidelines have been revoked?

MS. DOBER: I can't speak to that issue. That would have to come from the organization that developed the documents.

THE CHAIRPERSON: I'm not quite sure I quite understand that question, are they unaware that they have been revoked. Are you saying that they have been revoked and then -- what does that question mean, please?

MR. HARPER: I'm just -- Madam Chair, I'm just trying to determine, we've had reference to a set of guidelines.

There's been an indication that the various ministers have made representations that the most stringent guidelines would be applicable. I'm trying to get a determination as to whether or not those guidelines we referred to, the interim and final siting guidelines, they may not still be in print, but are they the last guidelines that are, I'll use the word in force, applicable to this site, or to any site in Canada, and unless and until they are formally replaced by something else that's what we have to go with. And I asked if Environment Canada was aware if they had been formally revoked by anybody.

THE CHAIRPERSON: Yes, I understood all your line of questioning till you got to the way you worded the last question, that was not clear to me, but I understand your questions and I think I understand Environment Canada's answers, and it sounds to me like you have a question that should be applied, perhaps, to CCME, whose guidelines they were.

MR. HARPER: One last question on something else, which is, in the event that the amounts of the PCBs on site in the Tar Ponds have been underestimated by the proponent, what concerns has that raised, if any, with Environment Canada?

MS. DOBER: Again, I think we spoke this morning about our obligations under the Toxic Substances Management Policy and the Stockholm Convention which permits the management of these types of chemicals in certain instances and, as such, we would find that particular approach to be satisfactory.

MR. HARPER: I guess my point was, though, if there's more to manage, does that heighten your concern or affect your concern in any way? More to manage meaning if there was more still on the site to manage, would that affect or impact your concerns?

MS. DOBER: Could the question be repeated, please?

MR. HARPER: In the event that the amount of PCBs at the Tar Ponds site have been underestimated by the proponent, does that -- how does that impact or affect Environment Canada's concerns?

MS. DOBER: The approach that was chosen for these sites is what's known as a risk managed approach, and the concentrations of PCBs should have very little impact on that.

MR. HARPER: Those are my questions.

THE CHAIRPERSON: Thank you, Mr. Harper.

I have -- before I get to Dr. Argo and Mr. Ignasiak, I have Ms. Kane.

MS. KANE: Good afternoon. I'm sorry I've missed most of the proceedings again today, so ---

THE CHAIRPERSON: You're just going to have to give up your job, I guess.

MS. KANE: Well, what I'm kind of surprised about is that Frank, you didn't put in a request for my boss to have me get some time off for this, so I could be here all day!

THE CHAIRPERSON: Would you take that as an undertaking, Mr. ---

MS. KANE: Well, that would be great, thanks!

I'm sure this has been asked at some point

in the day but if I could just ask it again, I'm wondering, is the Federal Government committed to abiding by the CCME guidelines as a minimum throughout this project?

MS. DOBER: If we're speaking specifically about the guidelines that we have been talking about today, I think we've already provided our answer to that.

THE CHAIRPERSON: We've had some considerable discussion about that in terms of -- and I think it's very clear where Environment Canada's position on that is.

MS. KANE: That is you are or you aren't, I guess I just need a yes or no, sorry.

MS. DOBER: I'm sorry, I missed that question.

THE CHAIRPERSON: The point of clarification was she would just -- Ms. Kane would just like you to confirm whether you are or you are not applying the CCME -- these are the guidelines with respect to siting.

MS. KANE: Not just, throughout the whole project.

THE CHAIRPERSON: The whole project.

MS. KANE: That was the commitment by the Federal Government, and the letters were provided earlier

-- were presented. I provided them to members of both governments, Provincial and Federal Governments, during the JAG process years ago before SSTLs were developed. And the commitment was there from the Federal Government, from Minister Anderson and Minister Marty, and I'm just wondering where that stands.

MS. DOBER: We acknowledge that previous ministers have endorsed the use of those particular guidelines. There were specific references to the 1992 Hazardous Waste Incineration Guidelines. As we've heard today, a number of times, those guidelines are now considered to be out of date.

With respect to other CCME guidelines such as the Environmental Quality Guidelines, they do endorse, and sometimes encourage, the use of a risk management approach for sites in the development of site specific target levels or remediation objectives. So yes, in that sense, we are applying those guidelines to this site.

MS. KANE: So I understand you're waiting for new guidelines to be developed, is that -- is that specific to incineration, Maria?

MS. DOBER: I'm not sure if there's any plans by CCME to develop new guidelines for hazardous waste incinerators. As we spoke this morning, most remediation programmes now use the combination of air

emission and dispersion modelling coupled with human health risk assessment to try and define specific distances from incinerators, and I'm not sure, as I said, that CCME would intend to do anything specific now with respect to incineration.

THE CHAIRPERSON: I believe the reference to if there was a reference to waiting for a revision was with respect to the revision of the federal regulations, is that correct, that that may be the reference?

MS. DOBER: There is an intent by our department to revise our own 1990 Mobile PCB Treatment and Destruction Regs in the near future.

MS. KANE: You will revise your own, or will it be CCME revising them?

MS. DOBER: No, Environment Canada has regulations at this point. They, too, are considered out of date due to the development of the Canada-wide standards, and it's the intent of the department to revise those to make them more consistent with those new standards.

MS. KANE: Okay. and you will apply those new guidelines as a minimum, then?

MS. DOBER: This gets back to the land ownership issue. Certainly if the land is Federal, those regulations will apply.

MS. KANE: Okay. Can I have another question or two?

Considering that much of the remediation work will not be conducted within an enclosure, do you have any concerns about how the emissions generated from excavating 120,000 tonnes of contaminated Tar Ponds sludge destined for incineration from performing the SS process on the Tar Ponds sediments, or from land farming on the Coke Ovens, and how those emissions may impact the residents living adjacent to the site?

MR. HINGSTON: Okay. In reviewing the EIS we are quite comfortable with the emissions inventory they actually produced to predict potential emissions from the site.

In terms again of effects on human health effects, again that goes beyond Environment Canada's mandate.

MS. KANE: In the EIS -- I'm sorry, actually it was IR-54, so it would have been a response to some questions from the panel, I believe, it is stated that:

> "No bench scale or field testing has been completed to date on potential volatilization of binding agents associated with the SS process. It

is anticipated that additional testing will be completed in association with final engineering design activities."

Given that, how can there be a certainty that there is a level of safety for the surrounding community residents?

MR. HINGSTON: I actually clarified -- the issue, I guess is a certainty versus the final design and was again also discussed this morning.

One of sort of Environment Canada's recommendations I think was, you know, to receive the pending remodelling and look at some of the emissions pending the final design information from the project, for that to happen sort of in the approval stage before construction.

MS. KANE: So it's still quite possible if you find that the emissions are exceeding what you predicted, you will provide enclosures for excavating at the Tar Ponds or land farming at the Coke Ovens.

MR. HINGSTON: The process would be not necessarily if emissions exceeded. If emissions significantly exceeded what was predicted, the next step then would be to carry through the analysis to sort of determine what those effects would be. That might be a

human health risk assessment. I think Health Canada made reference to that.

So it would be a stage. If the emissions were different, what might be the effects be; once you identify potential effects, and then you would look at what's appropriate mitigation.

MS. KANE: Another question -- can I keep going, Madam Chair?

THE CHAIRPERSON: You can keep going for another four minutes.

MS. KANE: Okay. Thank you. On a different subject, I'm wondering what has happened to the pool of leachate that's under the landfill, the landfill that's been covered?

MS. DOBER: That, I'm not aware of. That project was managed by the Cape Breton Regional Municipality in conjunction with the project manager for the project through 1998 to 2002 or 3, and I am not up to date on that information.

THE CHAIRPERSON: Did Environment Canada have a role, have any connection with that?

MS. DOBER: We certainly participated in the review of the documents, and it was one of the projects that was funded under the previous cost-share agreement.

MS. KANE: In IR-17 on page 2 it says:

"The containment system that is designed to isolate the contaminated groundwater quality on the site will operate in perpetuity."

Will there be funding to provide for that?

MS. DOBER: At this point in time, the funding arrangements are captured through the Memorandum of Agreement between the province and Public Works Canada. I can't speak to those issues.

MS. KANE: If I could just ask one question of -- with regards to this. Frank Potter said during his first or second day presentation that there would be some potential short-term risks to birds during land farming on the Coke Ovens.

THE CHAIRPERSON: You're now directing a question to whom?

MS. KANE: Well, it was in relation to emissions from land farming on the Coke Ovens. I remember hearing -- and I guess I wanted to understand what the short-term risks were, and from what, to birds during land farming on Coke Ovens.

THE CHAIRPERSON: Well, let's get some clarification from the agency as to what may have been said about that, and then you can direct a question to

Environment Canada about that.

MR. POTTER: If you can just give us a minute. We're running into the category where a lot has been said and we're just trying to clarify who said what at what point in time.

THE CHAIRPERSON: Do you know when this was, Ms. Kane, exactly, like which ---

MS. KANE: I usually reference my ---

THE CHAIRPERSON: Yesterday?

MS. KANE: No, it was either -- I'm trying to remember when this all started -- Saturday or Monday.

And if they'd like to come back with a response, that would be fine. I have one more question following that.

THE CHAIRPERSON: Well, you've read your question into the record, and you may need to -- if it still needs to be something you want to ask of Environment Canada, we'll have to find a way to get them the question based on that, but you don't have -- you do?

MR. POTTER: I'll ask Mr. Gillis to address it.

MR. GILLIS: The comment related to an existing risk to migratory birds on the site itself.

During land farming, there will also be some risk to migratory birds. And we went on to say that

what you need to do during a land farming operation and subsequent activities is ensure that habitats are not there so that bird nesting occurs during the construction and remediation process.

So that's what the reference was, as I recall, in the presentation. Thank you.

THE CHAIRPERSON: So it's with reference to disturbance of habitats and destruction of nests, so you don't -- you avoid the -- deter them from nesting. You remove the habitat, is that what you're saying, such that they won't nest?

MR. GILLIS: That's correct. Now, first of all, you have to be careful to do any clearing of vegetation outside the nesting season, and that's a recommendation we clearly carried forward.

And then subsequent to that, because of the duration of the activity, you want to ensure that that nesting habitat does not recreate itself, so you have to control that, as well. And then once the remediation is done, let the thing come back.

THE CHAIRPERSON: Okay. So that's the reference, and if you have a question now for Environment Canada with ---

MS. KANE: I don't, now, regarding that.

THE CHAIRPERSON: You do?

MS. KANE: I don't, no. That was the clarification I needed.

THE CHAIRPERSON: All right.

MS. KANE: I have one other question, though, if I could.

THE CHAIRPERSON: All right.

MS. KANE: I think it was the panel who asked this question of STPA and I don't think they received a response. It was regarding where the emergency dump stack is located on an incinerator. And while we got a description of the whole incineration process, I don't actually remember seeing them point out whether it was at the top of the primary chamber or the top of the secondary chamber. And it makes a big difference where it's located. And I'm wondering where Environment Canada would expect that to be located.

THE CHAIRPERSON: Can I ask first -- or was that the subject of an undertaking? I'm looking for my undertaking list.

I remember the discussion and you showed the diagram and there was nothing shown, and you said that you needed to get closer to the design stage, but did you make an undertaking, do you recall?

MR. POTTER: We believe we made an undertaking to come back with a map clarifying the bypass

location.

THE CHAIRPERSON: A figure to show the -- yeah, so there will be something coming on that. With that in hand, do you still have a question for Environment Canada?

MS. KANE: I would still like them to answer the question I asked, and could I also ask that once they come back with that undertaking would I be permitted to ask a question of their response?

THE CHAIRPERSON: A question to the agency?

MS. KANE: Yes.

THE CHAIRPERSON: Oh, I'm sure there'll be an opportunity for that.

MS. KANE: Thank you.

THE CHAIRPERSON: And in all of that discourse, I have forgotten what your question was, so has Environment Canada. You ask the question and then we'll move on to our next questioner.

MS. KANE: Okay. I'm asking where Environment Canada anticipates that the emergency dump stack will be located, the top of the primary combustion chamber or the secondary combustion chamber.

MR. HINGSTON: That really will depend on the final design, so before we could answer that we'd

actually have to see the proposed design.

MS. KANE: Does it, in any way -- does Environment Canada feel, in any way, that it will impact on the emissions whether it's at the top of the primary chamber or the top of the secondary chamber?

MR. HINGSTON: Again, where those stacks are placed are a function of the design, and one cannot state which is better or worse until it's looked at the final design, and so I think there's no value in answering or trying to answer that question until we actually have a design.

MS. KANE: Thank you.

THE CHAIRPERSON: Thank you very much, Ms. Kane.

I am going to take questions from two more people, and just one question, if you don't mind, please.

Dr. Argo, you're right by there, so why don't you go ahead.

DR. ARGO: Thank you very much, Madam Chair.

Yesterday, I took time off -- sorry, guilty -- and I was doing some perambulations up in the Whitney Pier area. I came across -- I came down to the point where I was on the hill looking down about where the old blast furnaces used to be.

I was quite surprised to see a very new, very interesting structure taking place there, full of tubes, full of chimneys and what looked like a control room.

In fact, this morning, I filed a letter with your secretariat describing this and asking that it be identified.

Now, in the course -- this looks to me very much as if it's a setting up for something that has to do with a thermal process, a large scale thermal process.

My question to Environment Canada is how would the presence of another incinerator in the SYSCO Site affect their assessment of the present project.

THE CHAIRPERSON: I'm going to first ask the proponents, not that -- this is on a different site but if you can shed any light on this, otherwise we're kind of all guessing.

DR. ARGO: That would be marvellous, that was part of my questions.

MR. POTTER: We really don't know. We're not building an incinerator at the present time, we can rule that one out. Don't understand, can't identify what ---

THE CHAIRPERSON: This is on the SYSCO

site, is it?

DR. ARGO: It's on the SYSCO site. It's about -- presently, I would say that it's quite nice blue, it looks to me like about 30 feet square and about 20 feet high. The stack is at least 50 feet. I've taken pictures of it, I haven't had them developed, and when I get them developed I'll file them with you.

But this -- it raises considerable concerns because Environment Canada today has told us that they are not interested -- sorry, I paraphrased you but they don't seem to have any interest, whatsoever, in the actions that are taking place on SYSCO. This is in relation to the concerns of the Sierra Club and I think the concerns of the panel. Thank you very much.

THE CHAIRPERSON: Well, thank you. I have the letter now. I hadn't seen it. So we now have your letter, and talking about this I don't think I'm going to -- I don't think there's any point in having this question put forward right now.

DR. ARGO: No, not at all.

THE CHAIRPERSON: And I'm not quite sure who to ask, but if the agency or the proponent would be willing to perhaps do a little inquiry and to bring back that information -- I should think you might be interested yourself -- then we can determine whether this

is something that has implications to ---

MR. POTTER: We'll certainly go back and check around the site, but if it's big and blue, the stack, it's probably the former old incinerator.

DR. ARGO: No, I can assure you it's not old. The stack, 10 feet diameter, nice bright aluminum coating on the outside.

THE CHAIRPERSON: Well, I should think this is a mystery we should be able to solve.

DR. ARGO: I have no doubt.

THE CHAIRPERSON: I think so. We'd be very interested in what you find out.

DR. ARGO: Thank you, Mr. Potter. Thank you Madam Chair.

THE CHAIRPERSON: Thank you.

Mr. Ignasiak, just one question, please.

MR. LES IGNASIAK: Thank you, Madam Chair.

I noticed that during the last half an hour of questioning, Environment Canada took the stand that the contaminants locked in the monolith will, and I'm putting that in quotation, "not moving appreciably with time."

My question is, how can we really -- sorry, how can we really draw this conclusion when the results presented by the proponent, I'm talking about

table 13 G, Tar Cell Post Mix Analytical Results, are showing that the leaching of polycyclic aromatic hydrocarbons, in this case benzopyrene, is exceeding the criteria within the range of about 100 to 1700 times.

THE CHAIRPERSON: And before you go on, Mr. Ignasiak, sorry, what was the reference you just cited?

MR. LES IGNASIAK: I am sorry, I went too fast. I wanted to make it a quick question.

THE CHAIRPERSON: Oh, I appreciate that.

MR. LES IGNASIAK: But I will give you exactly what is the source.

THE CHAIRPERSON: Is it something that's on the public registry?

MR. LES IGNASIAK: Yes, yes. I am right here. This is in response to IR-60 submitted by the panel and it relates to solidification technical memory port prepared by ---

THE CHAIRPERSON: It's the Earth Tech report, yes. What page are you on? Do you know what page your reference came from?

MR. LES IGNASIAK: Oh yes, I'm sorry. Once again, this is table 13 G contained in this report.

THE CHAIRPERSON: And the page number?

MR. LES IGNASIAK: The page number, it's

written here "1 of 1" so I'm afraid I cannot answer that.

THE CHAIRPERSON: Okay. I can probably get there eventually.

MR. LES IGNASIAK: 13 G. If you look at table 13, then you go from A all the way to I, so G. Actually, this is the second last page before the photographs, is that going to help?

THE CHAIRPERSON: I have the page, I don't know if -- it doesn't have -- it's not in sequentially, but yes, it is table 13 G.

MR. LES IGNASIAK: That's what I'm referring to.

THE CHAIRPERSON: And I think you probably -- you have the table in front of you, so would you like to just point out the result in the table to which you're referring. Mr. Ignasiak, sorry, would you point ---

MR. LES IGNASIAK: You wanted me to point, I'm sorry.

THE CHAIRPERSON: Would you say again to both of us ---

MR. LES IGNASIAK: Look at benzopyrene heading, which is somewhere halfway through the page, and look at sample PS5 S-15, and you will see a number over there 790. This is the result of the leachability test, I understand PCLP test. And then look at the last column

which says "PCLP leachate criteria" which, for this particular compound, is one. Are you with me?

MS. DOBER: Yes, I certainly have the table. I am not entirely sure if this table represents the mixture that the proponent is proposing to use on the site at this time.

THE CHAIRPERSON: Well, I'm going to go to the proponents and ask you if you'd like to comment on this, and then we'll take it from there and see what we need to do.

MR. LES IGNASIAK: Can I perhaps make a qualification before?

THE CHAIRPERSON: Yes.

MR. LES IGNASIAK: As the table is entitled, it's Tar Cell Post Mix Analytical Results. It's not the mixture as far -- as a matter of fact, there is no mixture at all in those results. They are separate results for south pond, for north pond and for tar cells.

I am just giving you, as an example, that in case if the proponent did try to stabilize and solidify this particular material, the leachability is really significantly exceeding the criteria which, in this case, are 1 for this particular compound.

THE CHAIRPERSON: I'm not sure whether we should pursue this question because -- I understand that

you're saying this table refers to a -- does not refer to the project that we are currently reviewing.

MR. LES IGNASIAK: No, it does specifically refer to the project because the tar cell is part of the material which will be transferred from the tar cell to the Tar Ponds, mixed up in a ratio which I don't know what it is, the ratio, and solidified.

MR. POTTER: Madam Chair, there seems to be confusion over what we're doing at the tar cell.

I think we've made it clear that the tar cell is not going to the Tar Ponds. It's part of the excavation removal and incineration component.

THE CHAIRPERSON: That was my comment.

MR. POTTER: I will refer to Mr. Shosky just to clarify what this table's about and hopefully we can put this to bed.

THE CHAIRPERSON: Yes, that was exactly my comment, that my understanding was that this refers to something that is not proposed for the project.

MR. SHOSKY: That is correct. All of the samples that we collected in the stabilized mixtures that we did for the Tar Ponds part of the project all passed the leaching criteria and all of the requirements that we had set forth in the EIS.

This material we were asked to look at an

initial screening step just to run some tests for stabilization if this were to be carried further.

We did find that it would be possible to stabilize this material with further testing, but currently, and I'll repeat, currently, the tar cell is being incinerated and then once it's incinerated will be taken back, stabilized, after the organic compounds are removed and buried in the tar cell area from where it came from.

THE CHAIRPERSON: Can I just ask for clarification on your emphasis on the word "currently", what did you mean by currently? Do you mean that this is the project that's under review?

MR. SHOSKY: This is the project that ---

THE CHAIRPERSON: You don't mean that currently that's the plan but, you know, who knows three months from now.

MR. SHOSKY: No, this is ---

THE CHAIRPERSON: I just wanted to make that ---

MR. SHOSKY: That is correct. You're exactly correct.

MR. LES IGNASIAK: Madam Chair, I apologise if I mixed it up. However, if I see results of stabilization of something, I am -- I tend to really

interpret that is going to be stabilized. I'm sorry if that was a misunderstanding.

THE CHAIRPERSON: Okay. Thank you very much, Mr. Ignasiak.

I will just ask one more time to the proponents if you have anything else you wish to add.

MR. POTTER: I think we're good for the day.

THE CHAIRPERSON: Thank you. I would like to thank Environment Canada for coming and for your presentation this morning, and for coming back to answer questions.

Is anybody from Environment Canada proposing to be present during the rest of the hearings?

MS. DOBER: We will have representatives here for the entire hearings.

THE CHAIRPERSON: I assumed you wouldn't be able to drag yourselves away.

I want also to thank everybody who was present today, those of you who asked questions and spoke and those of you who are supporting the hearings by your presence, it was much appreciated.

We will see you back tomorrow at 9 o'clock in the morning. Thank you very much.

(ADJOURNED TO FRIDAY, MAY 5TH, 2006, AT 9:00 A.M.)

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Janine Seymour, CCR

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Gwen Smith-Dockrill,CCR

Thursday, May 4, 2006 at Halifax, Nova Scotia