

PUBLIC HEARING  
SYDNEY TAR PONDS AND COKE OVENS SITES  
REMEDIATION PROJECT  
JOINT REVIEW PANEL

---

V O L U M E 9

---

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: Monday, May 8, 2006

PRESENTER: Kipin Industries:  
Mr. Pete Kipin  
Mr. Don Bryant  
Mr. David Peterson

Grand Lake Road Residents:  
Mr. Ron Marman  
Mr. Henry Lelandais

---

Recorded by:  
Drake Recording Services Limited  
1592 Oxford Street  
Halifax, NS B3H 3Z4  
Per: Patricia Cantle, CCR

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

	PAGE NO.
THE CHAIRPERSON - OPENING REMARKS . . . . .	1582
KIPIN INDUSTRIES INC.:	
MR. PETE KIPIN - PRESENTATION . . . . .	1586
MR. DON BRYANT - PRESENTATION . . . . .	1605
MR. DAVID PETERSON - PRESENTATION . . . . .	1606
GRAND LAKE ROAD RESIDENTS:	
MR. RON MARMAN - PRESENTATION . . . . .	1652
MR. HENRY LELANDAIS - PRESENTATION . . . . .	1662

QUESTIONING

KIPIN INDUSTRIES INC.:	
Questioned by Joint Review Panel . . . . .	1608
Questioned by Frank Potter (STPA) . . . . .	1627
Questioned by Jonathan Kenyan (STPA) . . . . .	1627
Questioned by Debbie Ouelette . . . . .	1635
Questioned by Henry Lelandais (GLRR) . . . . .	1637
Questioned by Mary-Ruth MacLellan (SOHC) . . . . .	1638
Questioned by James Argo (SOHC) . . . . .	1642
Questioned by Les Ignasiak . . . . .	1646
Questioned by Cameron Ells . . . . .	1647
Questioned by Frank Potter (STPA) . . . . .	1649
GRAND LAKE ROAD RESIDENTS:	
Questioned by Joint Review Panel . . . . .	1672
Questioned by Bruno Marcocchio (SCC) . . . . .	1695
Questioned by Les Ignasiak . . . . .	1699
Questioned by Mary-Ruth MacLellan (SOHC) . . . . .	1701
Questioned by Debbie Ouelette . . . . .	1703
Questioned by John Fitzgerald . . . . .	1704
Questioned by Grant MacPhail . . . . .	1704

L I S T   O F   U N D E R T A K I N G S

NO.	DESCRIPTION	PAGE NO.
U-1	To provide contacts at Chattanooga and West Virginia where Mr. Kipin carried out the process and contact where Kipin was sending material to be burnt . . . . .	1642
U-2	To provide name of experimenters and who wrote papers on the equipment . . . . .	1675
U-3	To provide piece of dioxin monitoring equipment . . . . .	1686
U-4	To provide brochure on manufacturer of equipment . . . . .	1687

1 --- Upon commencing at 5:33 p.m.

2 THE CHAIRPERSON: Good evening, ladies and  
3 gentlemen. Welcome back to the hearings for the  
4 Environmental Assessment Process of the Sydney Tar Ponds  
5 and Sydney Coke Ovens Remediation Project.

6 We were certainly blessed with wonderful  
7 weather for our day off, and I, for one, was extremely  
8 grateful for that. I hope you were able to enjoy it as  
9 well.

10 For those of you, maybe, who were not here  
11 last week I'll just briefly introduce the Panel. My name  
12 is Lesley Griffiths. To my right is Mr. William Charles,  
13 to my left is Dr. Louis LaPierre, and the three of us  
14 make up the Federal/Provincial Review Panel.

15 We will start off -- we have housekeeping  
16 issues as always. We will then move on to our  
17 presentations. We have two presentations. There will be  
18 a 20 minute break in the middle of the evening, and we  
19 will -- after the presentation -- each presentation has a  
20 maximum time limit of 40 minutes -- we will have  
21 questions.

22 The Panel usually leads off with  
23 questions, and then I invite other participants to have  
24 questions and depending on, sort of, how many have  
25 questions, I then kind of allot time accordingly.

1                   We usually begin with the Proponent. We  
2 sometimes change the order of that, and then I give  
3 priority to people who are registered participants. That  
4 means anybody who's registered to give a presentation can  
5 ask questions first and after that I ask for anybody else  
6 who is in the room who has a question for the presenters.

7                   Can I reemphasize that the questioning --  
8 the purpose of the question period is for to ask  
9 questions for clarification and to learn more from the  
10 presenters and I would encourage you to ask your  
11 questions with minimal preamble, and get to the point as  
12 quickly as possible, if you don't mind. We don't have  
13 all that much time.

14                   And also genuine questions of what we need  
15 for the process to help the Panel understand, rather than  
16 kind of mini presentations. So, with just that word of  
17 clarification, I will now turn to the Proponent, Sydney  
18 Tar Ponds Agency, and ask if -- Mr. Potter, do you have  
19 any housekeeping issues, any undertakings?

20                   MR. POTTER: Yes, we do, Madam Chair. We  
21 have four. We're a little loud there, I think. There we  
22 go.

23                   We have two hand-ins for Undertaking No.  
24 10 and Undertaking No. 20. It's -- the No. 10 is the  
25 date of operation of the Goose Bay. Update, I think,

1 that should read on Goose Bay.

2 UNKNOWN VOICE: No, date of operation.

3 MR. POTTER: Date of operation on Goose  
4 Bay, and 20 is the successful operation of Goose Bay.

5 There is a verbal response that Mr. Kaiser  
6 is going to address to them. Undertaking 21, the  
7 realtime monitoring, and Undertaking No. 22, regarding  
8 bore holes -- PCB bore holes.

9 MR. KAISER: Thank you, Mr. Potter. Good  
10 evening, Panel.

11 In regard to the realtime monitoring,  
12 Sydney Tar Ponds Agency measures PM-10 and VOCs in  
13 realtime. We have a results turnaround time based on 24  
14 hours, and that was the nature of the question.

15 The time is required -- typically the  
16 technician would be in the field for eight to 10 hours  
17 collecting the sample, then would return to the office  
18 after to download the data from the instruments, format  
19 the data for distribution, perform QA/QC checks on the  
20 data, and then distribute the actual information.

21 Through our contracting we have given time  
22 such that the contractor is required to supply the  
23 information to us no later than noon the following day.

24 In regard to this, though, if there are  
25 any exceedances to the site action levels, the contractor

1 is required to communicate those situations to us  
2 immediately to the Sydney Tar Ponds Agency representative  
3 on site at the time. Thank you.

4 In regard to an undertaking that we  
5 undertook to identify the location and fate of the PCB  
6 material, identified in the bore holes that Mr. Harper  
7 asked about last week, and those would be bore holes in  
8 relation to follow-up to IR-12; namely, 7A-33, 7A-39, AB-  
9 70, AB-71 and AC-09.

10 The first two, Bore Hole 7A-33 and 7A-39  
11 are located in the PCB area to be excavated in the North  
12 Pond. Bore Holes AB-70 and 71 are located in the PCB  
13 area to be excavated in the South Pond, and the other  
14 Bore Hole, Bore Hole AC-09, that is located in the area  
15 indicated as other area "E," identified in follow-up to  
16 IR-12.

17 The sediment around the first four bore  
18 holes, of course, all of that material will come out  
19 because both of those areas are being addressed, and the  
20 sediment around the fifth bore hole will be stabilized  
21 and solidified in place to the till.

22 All of these areas, of course, are easily  
23 addressed with the typical construction equipment that  
24 we've been talking about that will be used on the site.

25 Thank you.

1 THE CHAIRPERSON: Thank you very much, Mr.  
2 Kaiser and Mr. Potter.

3 Once thing I should have said at the  
4 beginning, one housekeeping issue from us, is that the  
5 transcript that was prepared following Saturday's  
6 hearing, there were some omissions in those transcripts.  
7 So, those are going to be corrected and we will be  
8 reissuing those transcripts.

9 So that's the transcript for Saturday's  
10 hearing.

11 Our first presenter this evening is Kipin  
12 Industries, and we're very pleased to have you here.  
13 Thank you for coming and presenting at the hearings.

14 You have -- as I indicated you have 40  
15 minutes for your presentation and please begin.

16 --- PRESENTATION BY KIPIN INDUSTRIES (MR. PETE KIPIN)

17 MR. KIPIN: Thank you, Madam Chair, and  
18 members of the Panel. Good evening. My name is Pete  
19 Kipin. I'm with Kipin Industries out of Pittsburgh,  
20 Pennsylvania.

21 But I was born in Toronto. I feel like,  
22 basically, I'm at home, here amongst my fellow Canadians.  
23 I still have all my family in Toronto as well.

24 Now, Kipin Industries Inc. has produced  
25 synthetic fuels from waste materials for over 20 years.



1 The main feature of the synthetic fuels processing  
2 technology is that the waste stream does not require  
3 incineration or other destructive means or burial.  
4 Instead, the waste is processed into a synthetic fuel,  
5 which is marketed to the electrical utility industries.

6 The synthetic fuels process reduces costs  
7 and emissions. A second technology, Plasma Vitrification  
8 is selectively used to treat heavy contaminants. The  
9 combined result of the two technologies to safely and  
10 quickly restore the land at both sites to full community  
11 use.

12 Kipin can accommodate the cleanup of both  
13 of both the Tar Ponds and the Coke Ovens Site in less  
14 time and more cost effectively than the current proposed  
15 project, or any of its assessed alternatives. Moreover,  
16 Kipin costs is capped.

17 The Joint Review Panel's attention is  
18 respectively drawn to the presentation, to consideration  
19 and further analysis of the merits of the Kipin process,  
20 project alternative.

21 We submit that and objective analysis,  
22 when made in comparison with any of the other assessed  
23 technologies or projects, will show that the Kipin  
24 alternative provides the highest reduction in detrimental  
25 effects to the environment during and post-

1 implementation, the highest technological liability  
2 ratings; the greatest proven field application  
3 experience, the maximum minimization of health risks  
4 during the post-cleanup, the fastest cleanup time spent,  
5 and the maximum use of local labour/purchases by a  
6 considerable margin the least total project cost and the  
7 only guarantee of cost performance, including a cost cap  
8 to protect against cost overruns, elimination of the need  
9 and considerable cost of future monitoring and  
10 maintenance.

11 Now, we ask, "Who is Kipin?" Well, as we  
12 said at the beginning, Kipin Industries has been  
13 producing synthetic fuel from waste materials for more  
14 than 20 years.

15 The synthetic fuel process avoids the need  
16 for incineration. Kipin is also a leading remediator of  
17 heavy contaminants, toxic material, such as PAHs and PCBs  
18 in excess of 50 parts per million.

19 These are created separately in a proven  
20 plasma vitrification process. This process also avoids  
21 the need for incineration.

22 The company is Kipin Synthetic Fuels  
23 process in combination with other proven technologies  
24 such as plasma. It provides cost effective restoration  
25 of the areas.

1                   Kipin's cleanup projects and technological  
2 processes meet the highest regulatory standards of the  
3 USEPA, Federal, State and Municipal governments.

4                   The US EPA has sole sourced Kipin when it  
5 comes to coal tars. The projects are performed for both  
6 government and private sector clients.

7                   The company has emerged as a leading  
8 choice and have RFPs for some of the largest and most  
9 complex environmental cleanup projects in North America  
10 today.

11                   Kipin has emerged in first place after  
12 extensive competition, competitive technological process  
13 studies carried out by independent entities, charged with  
14 the responsibility for major cleanups.

15                   These independent, authoritative entities  
16 include: the US EPA, and the US Army Corps of Engineers.

17                   Private sector clients, include readily  
18 recognizable corporations such as Bethlehem Steel, US  
19 Steel, Philadelphia Coke, Citizens' Gas and Indianapolis,  
20 Sharon Coke Works, Fairmont Coke West Virginia and  
21 Saegerton, Pennsylvania and many others.

22                   Kipin's 37 most recent projects required  
23 remediation of coal tars, a coke plant and manufactured  
24 gas plant sites.

25                   These involve successful treatment of over

1 one and a half million cubic yards of coal tar  
2 contaminated material.

3 Now, Kipin has extensive references for  
4 clients and government regulators. Can I step aside a  
5 little bit there? I'm told I have to follow a script.  
6 And once more I want to adlib, to clarify something. Is  
7 that allowed?

8 THE CHAIRPERSON: Mr. Kipin, you have 40  
9 minutes and you can use the 40 minutes as you wish.

10 I will be indicated five minutes before  
11 the time is up to give you -- I wonder if you could -- I  
12 don't know whether coming a little closer to the  
13 microphone would help. I think that people may -- I  
14 think people are finding a little hard to hear you. So,  
15 possibly move a little closer.

16 MR. KIPIN: Okay.

17 THE CHAIRPERSON: And we'll see how that  
18 works.

19 MR. KIPIN: All right. Kipin's synthetic  
20 fuel process needs to be described in a greater detail.  
21 It can be used to treat approximately one million tonnes  
22 of mainly PAH contaminated soils at both sites.

23 The Kipin process uses waste coals, coal  
24 finds and coke found in the sites and the area in the  
25 treatment process, Kipin's process converts the tar and

1 the coal waste into a marketable, safe, synthetic coal  
2 product that is sold as fuel to power plants in North  
3 America.

4 This reconstituted coal product is made by  
5 processing the waste with the coal. It should be noted  
6 that the synthetic fuel process will process liquids,  
7 solids or sludges or combinations in solid fuel, as just  
8 described.

9 In addition, coke breeze in other wastes  
10 such as wood, petroleum oils and similar materials can be  
11 added. The process can be performed year around in a  
12 polyethylene lined areas.

13 The final synthetic fuel product is solid  
14 and uniformed and can be handled by all conventional coal  
15 handling equipment.

16 Kipin synthetic coal and solid fuel  
17 product is a safe valuable product has economic value.  
18 It's qualities can be adjusted to suit a buyer's  
19 specifications by the use of additives and reagents.

20 In the example above, we are using tar  
21 from the waste pond as a binder. We have a major project  
22 in West Virginia right now that we have passed 200,000  
23 yards of coal tar waste and every bit of that has been  
24 sold to a power plant.

25 Kipin proposes a combination of

1 technologies to clean up the Tar Ponds and Coke Oven  
2 sites. Besides use of Kipin's proven synthetic fuels  
3 process for more than one million tonnes of toxic  
4 contaminates like PCBs -- these include about 59,000  
5 tonnes of material impacted with PCBs rated in 50 parts  
6 per million.

7 As part of the process, the heavy metals  
8 are distributed to accept concentrations in the coal  
9 product.

10 Plasma vitrification has already been  
11 studied and tested and assessed as one of the acceptable  
12 technologies by the consultants in EIS studies and  
13 process reports.

14 However, it was only ever after  
15 considering -- considered as applied to treat an entire  
16 problem. Obviously, too costly. That is why Kipin  
17 proposes to use it in combination with synthetic fuels in  
18 order to cost effectively use it where it is required.

19 Now, here's what the STPA's own EIS report  
20 says about this process. The report is contained in the  
21 Alternative Assessment prepared by Earth Tech Canada  
22 Limited, pages 3-25, for managing the materials slated  
23 for incineration at the Coke Ovens and Tar Pond sites  
24 dated December, 2005.

25 Similar to a lightning bolt, this

1           technology uses electricity to create a high temperature  
2           plasma arc. Contaminated material is passed through this  
3           high temperature arc, in Kipin's case, at 7,000 degrees  
4           C.

5                           This breaks down the organics, then  
6           recombines them into simple gases, such as carbon  
7           dioxide.

8                           The remaining material is liquified and  
9           cooled to form the non-leachable slag-type that can be  
10          safety disposed, which actually basically looks like  
11          glass.

12                          Plasma technology is classified as a  
13          pyrolysis process because the plasma environment is  
14          oxygen deficient.

15                          Plasma units typically has low capacity.  
16          The largest unit has been identified as MSE Technology's  
17          24 tonne per day unit.

18                          Intensive use of electricity can make this  
19          process costly, and limits the capacity of the plant.

20                          SAIC tested plasma at the site as part of  
21          the TDP process. That was Vaughan in 2002. This test  
22          demonstrated that it's highly effective at destroying  
23          both low and high concentration of contaminates.

24                          This technology demonstrated that plasma  
25          treatment alone could treat PCBs and PAH materials with

1 very good results. TDP demonstrated that plasma  
2 treatment alone could be effective at destroying the  
3 contaminates in the Tar Pond and Coke Oven sites, and it  
4 is considered further as an alternate to incineration.

5 Kipin's synthetic fuel technology, in  
6 combination with plasma vitrification, is the only  
7 project alternative that can meet the Government of  
8 Canada's policy of dealing with toxic substances like PCB  
9 in concentrations greater than 50 parts per million.

10 In addition -- sorry about that. In  
11 addition, this combination of technologies delivers a  
12 superior alternative from every vantage point, and a  
13 criteria of comparison and requirement of the community  
14 and government at all three levels, and a proposed  
15 project by Sydney Tar Pond Agencies.

16 Kipin is the North America leader and the  
17 application of synthetic fuel process technology to  
18 environmental cleanups. Kipin's treatment projects to  
19 date total twice the volume of the Tar Ponds and Coke  
20 Oven projects in terms of tonnes to be treated.

21 The synthetic fuel process chemically  
22 reconstitutes the contaminates into safe, natural,  
23 reusable coal fuel by using waste coal, coal fines, and  
24 coal tars as a natural binder.

25 This recycled fuel is sold at commercial



1 cost recovery rates. Concentration of PCBs less than 50  
2 parts per million are destroyed in the process. This  
3 process does not involve incineration.

4 PCBs in excess of 50 parts per  
5 million are treated by plasma vitrification, another  
6 separate process which also does not involve  
7 incineration. The combination of the technologies is  
8 Kipin Synthetic Fuels process and Plasma Vitrification  
9 can deliver a cost effective overall project results that  
10 meets and exceeds all community and government project  
11 criteria.

12 Kipin Industries has extensive experience  
13 in estimating our cleanup costs and application of  
14 technology combinations required for sites similar to  
15 Sydney Tar Ponds and Coke Ovens. This experience  
16 translates into competence within the industry as to  
17 Kipin's performance and cost record.

18 As a result, Kipin is able to obtain cost  
19 caps backed by one of the largest insurance companies in  
20 the world.

21 Kipin estimates that the cost to destroy  
22 harmful PCBs and rehabilitate the sites to full use by  
23 the community within six to seven years is a hundred and  
24 eighty-five point four million.

25 The project alternative technology

1 proposed by Kipin meets and exceeds performance  
2 objectives and criteria established for the project by  
3 the EIS guidelines. This includes the environmental  
4 cost, public health and social criteria.

5 Kipin maintains that neither the STPA  
6 proposed project, nor its assessed alternatives, meet the  
7 criteria that's environmental, cost, public health and  
8 social, established by the EIS guidelines, nor the  
9 Federal Government of Canada's policy for dealing with  
10 PCB destruction and toxic chemicals.

11 Kipin's synthetic fuel alternative, in  
12 combination with plasma vitrification provides  
13 flexibility for appropriate levels of treatment at all  
14 sites for PAHs, PCBs and other toxic substances.

15 The Kipin project alternative can provide  
16 lasting benefits to the community and the environment.  
17 Kipin's application of technological choices has proven  
18 that it's economically and environmentally sound.

19 The Kipin project alternative meets  
20 Government policy for dealing with toxic substances. The  
21 superior performance of the processes reduces the  
22 detrimental effect on the environment during  
23 implementation.

24 No incineration is involved with either  
25 technology. Together, these technologies are a permanent

1 solution for the residents or CBRM. It can be  
2 accomplished faster, thereby providing benefits and  
3 relief sooner from the current effects of pollution on  
4 the population and environment.

5 The Kipin Project alternative improves  
6 marine and land ecosystems permanently by removing the  
7 threat of rising sea levels on STPA's proposed project at  
8 the Tar Ponds.

9 There, the caps and containment for  
10 solidification and stabilization are subject to the risk  
11 of climate change and rising sea levels.

12 The Kipin alternative is economically  
13 responsible for coming in at a lower cost than the  
14 proposed project, or any of the assessed alternatives.

15 Kipin brings a reliable and proven  
16 technology, while providing employment and purchases  
17 locally.

18 The Kipin Alternative Project is most  
19 health conscious, and eliminates risk to humans and the  
20 environment. It eliminates toxic PCB substances at both  
21 sites. It is not an incineration process. It minimizes  
22 dust and eliminates vapours.

23 The plasma vitrification process liquifies  
24 substances and reclaims heavy metals.

25 It is the most socially responsible for

1 providing long term and permanent benefits.

2 It employs local labour and suppliers, and  
3 minimizes construction time to less than the STPA  
4 proposed project, or any of the alternatives.

5 Based on Kipin's extensive industrial  
6 experience, we believe that incineration costs are  
7 realistically set at approximately a thousand dollars  
8 (\$1,000) a tonne. This is due to the complexity of the  
9 process equipment and maintenance, preprocessing,  
10 hauling, handling and testing of the material, and  
11 required monitoring to ensure it functions within  
12 acceptable stringent performance guidelines. Because it  
13 is incineration, the community will insist on stringent  
14 monitoring.

15 On top of these constraints must be added  
16 the cold weather fuel costs of plus 25 percent when  
17 temperatures fall below zero degrees.

18 The project is forecast to take seven  
19 years to complete, and fuel costs, increasing of late,  
20 are expected to rise quickly in the seven years period to  
21 2014, which comprises the STPA proposed project schedule.

22 On a positive note, incineration will  
23 destroy toxic substances in accordance with Government  
24 policies. However, it appears that the community has  
25 never been disposed to support on site incineration.

1 Kipin's research indicates significant  
2 cost and supply uncertainties with the STPA proposed  
3 project at the Tar Pond site. These are due to the  
4 material types and quantities required to solidify and  
5 stabilize the Tar Ponds after the toxic materials have  
6 been destroyed by incineration.

7 There is uncertainty about the cost and  
8 practicality of solidification and stabilization.  
9 Containment extends to the overall reliability of the  
10 project cost estimate, and the reliability of the  
11 technology.

12 Various estimates have an impact of  
13 climate change over the next 100 years, predicts sea rise  
14 levels up to two meters. This will be aggravated by  
15 storm surges. If scientists are correct in predicting,  
16 the storms and weather are becoming more severe and  
17 extreme. Such events could overwhelm the STPA proposed  
18 project during the seven year construction, or destroy  
19 the integrity of the cap containment later.

20 Either event would present a catastrophic  
21 failure with the potential to move toxic materials,  
22 including PCBs, into the receiving environment and  
23 harbour, where recovery and cleanup might be impossible.  
24 Human and other marine and terrestrial life and organisms  
25 would be exposed.

1           Even if materials are available and priced  
2           correctly, and there are no construction delays or  
3           problems, Kipin conservatively estimates the cost of the  
4           STPA stabilization and solidification containment in the  
5           -- at the Tar Ponds alone at a minimum of \$225 million  
6           dollars.

7           Kipin is concerned that the Tar Ponds  
8           capping and containment integrity will be under threat  
9           from rising sea levels and storm surges both during and  
10          post construction.

11          There is also a significant chance that  
12          the cost of this cap and containment will be  
13          underestimated, and actually, costs will increase.

14          It is also a risk that lime, as a  
15          stabilization additive, can cause release of gases. The  
16          material can still move horizontally through the cap  
17          between the bedrock and the cap walls.

18          Long term monitoring and maintenance costs  
19          could be a serious issue; so could the ultimate failure  
20          of the cap and containment due to rising sea levels and  
21          storm surge due to climate change and extreme weather  
22          predictions that indicate sea levels could rise in 100  
23          years, and storms severely increase, indicates that  
24          stabilization and solidification costs for the STPA  
25          project, proposed project, will be in excess of \$75.8

1 million dollars. This is due to weather dependent  
2 delays, some more pre-processing due to uneven  
3 consistency of the materials. Temperatures used to be  
4 above 5 degrees Celsius for treatment to work.

5 Use of lime will cause odours and release  
6 gases. Contaminated materials can move through the side  
7 of the cap between bedrock and cap walls.

8 Based on industry wide experience on  
9 similar sites, Kipin not convinced that the STPA  
10 technology solutions selected for the treatment and cap  
11 of the Coke Oven Site is effective, so will not meet the  
12 various objectives and criteria established for the  
13 cleanup.

14 The experience is that tars will surface  
15 through the cap in about three years, rendering the land  
16 unusable. The tars, in moving to the surface, will bring  
17 with them the buried toxic substances. If this is the  
18 case, there is no effective remedial solution other than  
19 different technology. This would be a new project cost,  
20 as opposed to maintenance and repair, and monitoring  
21 rough order of magnitude.

22 The Sydney Tar Pond Agency proposed  
23 project Kipin estimates is at a cost of at least a total  
24 of \$533.8 million. This cost does not include the money  
25 spent by STPA for work to date or future monitoring and

1 repairs. The incineration component is itself subject to  
2 uncertainties.

3 Kipin believes that the risk of failure  
4 for both caps is very real due to the choice of  
5 solidification and stabilization materials like lime,  
6 plus climate change and inappropriate capping and  
7 containment technology and materials selected.

8 There is more than significant doubt about  
9 the STPA's choice of proposed project technologies. This  
10 doubt extends to health and safety, reliability and cost,  
11 damage to the environment during and after the project is  
12 constructed.

13 STPA's proposed project and alternate  
14 technology, covered in the EIS and related studies do not  
15 evaluate synthetic fuels technology in combination with  
16 plasma vitrification technology. We're coming here to  
17 our conclusion.

18 There are serious doubts about the safety  
19 and integrity of the STPA proposed project as outlined in  
20 the EIS of December 2005, as well as the assessment of  
21 alternate technologies going back to 2002 which is --  
22 which it contains.

23 There is sufficient practical inexperience  
24 backed by regulatory evaluations to point to a high risk  
25 of failure and cost overruns from the STPA proposed



1 project and their assessed alternative.

2 The proposed STPA alternative to  
3 incineration is stabilization and solidification and  
4 capping.

5 Neither the proposed STPA project nor the  
6 alternate project is able to reasonably ensure they can  
7 meet the basic requirements of government policy. This  
8 policy calls for destruction of heavily toxic substances  
9 and safe treatment and containment of others.

10 If climate change is considered to be a  
11 real and present concern, as evidenced by Federal and  
12 Provincial Government policy measures, then rising sea  
13 levels and extreme storm surges will inject reasonable  
14 doubt about the choice of technology for the Tar Ponds.

15 This requires an assessment of the  
16 solidification and stabilization capping and containment  
17 technology at the Tar Ponds Site in the light of climate  
18 change, and incineration has its own technology problems.

19 The Coke Ovens Site is also questionable  
20 when viewed from current experience in North America with  
21 this technology.

22 The possibility of not destroying PCBs and  
23 heavy concentration of PAHs and heavy metals, should  
24 incineration be rejected, and on-site solidification and  
25 stabilization and capping and containment be the

1 alternate technology, then the threat of rising sea  
2 levels and storm surges could create a cap failure, and  
3 environmental and public health hazards of significant  
4 degree.

5 Kipin Industries has the benefit of 25  
6 years of research and practical experience in  
7 successfully dealing with sites like the Sydney Tar Ponds  
8 and Coke Ovens.

9 Unfortunately, the analysis and research  
10 constituting the assumptions, on which the STPA proposed  
11 project alternatives are based, has missed the assessment  
12 of the combination of technologies like those proposed by  
13 Kipin.

14 It would appear that many of the assessed  
15 technologies were assessed individually rather than in  
16 combination and without adequate field cost experience  
17 data. Kipin assumes that for these reasons this is part  
18 -- this, in part, may account for the fact that the STPA  
19 consultants have not adequately assessed the combination  
20 of proven cost-effective technologies advanced by Kipin  
21 in this presentation.

22 We are providing an index of various  
23 projects carried out by Kipin together with related data  
24 and reports.

25 With the Kipin process, wastes are gone

1 forever. Kipin produces a useful fuel product that is  
2 sold, providing cost recovery savings to the project.  
3 Kipin creates jobs and restores the land for the  
4 enjoyment and use of future generations.

5 Now, let me now move to elaborate on one  
6 of the unique aspects of my solution to the Sydney Tar  
7 Ponds cleanup, it's the ability to provide the project  
8 with an insured fixed price.

9 Let me introduce you to Don Bryant who  
10 represents a major insurance company.

11 --- PRESENTATION BY KIPIN INDUSTRIES (MR. DON BRYANT)

12 MR. BRYANT: Thank you, Pete. Good  
13 evening, Madam Chair and members of the panel.

14 My name is Don Bryant. I'm an  
15 Environmental Insurance Consultant with the Highland  
16 Group. I've been employed by the Highland Group since  
17 2004. Prior to that I was an environmental consultant  
18 and remediation contractor for approximately 20 years.

19 The Highland Group provides environmental  
20 insurance products to private corporations,  
21 municipalities and other government agencies to manage  
22 long-term environmental liability risks, and remediation  
23 cost overrun insurance to provide a form of performance  
24 cost guarantee for large cleanups.

25 We are currently developing insurance

1 solutions in support of Kipin at several sites. In this  
2 capacity, we have contacted an insurance carrier to  
3 evaluate the feasibility of obtaining remediation cost  
4 cap insurance for Kipin's synthetic fuel technology at  
5 waste tar sites.

6 One such carrier has performed a  
7 preliminary evaluation of the Sydney Tar Ponds and issued  
8 a letter to Kipin indicating their interest in further  
9 evaluation and in underwriting a cost cap policy for this  
10 project.

11 At another North American site with  
12 estimated tar volumes exceeding several hundred thousand  
13 tonnes, we have received preliminary engineering and  
14 estimating data from the underwriting community that  
15 validates Kipin cost estimates for processing waste tars.

16 Highland has provided a short PowerPoint  
17 description of cost cap insurance in the CD we provided  
18 to the panel.

19 Thank you for your time and consideration.  
20 Please do not hesitate to contact us if you have any  
21 questions or request further information, and David  
22 Peterson with Highland has a couple of comments as well.  
23 Thank you.

24 --- PRESENTATION BY KIPIN INDUSTRIES (MR. DAVID PETERSON)

25 MR. PETERSON: Good evening, Madam Chair,

1 distinguished members of the panel. Thank you for  
2 meeting with us this evening.

3 My name is David Peterson, I'm Executive  
4 Vice-President with the Highland Group, and I'm  
5 responsible for managing our North American environmental  
6 practice.

7 I'm here this evening as strategic partner  
8 of the Kipin proposal for the remediation of the Sydney  
9 Tar Ponds and Coke Oven Site Remediation Project.

10 Beyond eliminating a need for the  
11 incineration and removing of potentially catastrophic  
12 exposures associated with the containment and capping  
13 process in this unique part of the world, we believe that  
14 an additional feature of the Kipin proposal is the use of  
15 a customized insurance solution to provide a financial  
16 guarantee for this relatively complex remediation.

17 We have provided these insurance  
18 arrangements for a number of large cleanups across North  
19 America. The use of these insurance products in these  
20 scenarios is receiving broad interest, and increasing  
21 acceptance, from private and public entities alike.

22 Don Bryant and I will do our best to  
23 answer any questions you might have regarding our  
24 approach and, as Mr. Kipin said at the beginning of the  
25 presentation, it's never too late to do the right thing.

1 Thank you very much. I think that  
2 concludes ---

3 --- QUESTIONED BY THE JOINT REVIEW PANEL:

4 THE CHAIRPERSON: Mr. Kipin, Mr. Bryant,  
5 Mr. Peterson, thank you very much for your presentation.

6 You've told us a number of things  
7 obviously about your process, the Kipin process, and your  
8 concept of an approach to the Tar Ponds and Coke Ovens  
9 remediation.

10 You've also made a number of statements  
11 and claims about what you see as the weaknesses of the  
12 proposed project that we are assessing.

13 I am still, I have to say, quite -- I  
14 don't really understand what your process is. You've  
15 told us about the product that it produces, and from your  
16 presentation I see the words somewhere in there that it's  
17 a chemical process.

18 Can you just -- is it a heat-driven  
19 process? Can you tell me just a little bit -- I don't  
20 need to know a whole lot, can you just tell me a little  
21 bit about what the synthetic -- by what means you make  
22 this synthetic fuels process, and then I have a follow-up  
23 question.

24 MR. KIPIN: I'm sorry, do you have this  
25 book here?

1 THE CHAIRPERSON: Yes, we do have copies  
2 of this. We've not been able to go through it in detail,  
3 and I'm not looking for a lot of detail, I just would  
4 like just a very brief clear kind of description of just  
5 what are the elements that go into this. Is this a  
6 chemically-based process? Is it a heat-based process?

7 MR. KIPIN: It's a chemical base and  
8 there's a certain amount of heat that goes with it, but  
9 not high. You're looking at approximately 80 to 100  
10 degrees maximum. But with this, we do have an additive  
11 that is added to this, but we utilize the coal tar as a  
12 binder.

13 Now, when we use the coal tars with the  
14 binders, we'll get different strengths, and the percent  
15 of chemical change is in this document here, which was  
16 done by Dr. Pasbeck out of Cleveland, who specializes in  
17 these chemical changes, and this is a chemical change  
18 required to also prove to Uncle Sam that it is a chemical  
19 change, because we do get tax credits under the Synthetic  
20 Fuels programme.

21 THE CHAIRPERSON: So you add chemicals, or  
22 the chemical change comes about ---

23 MR. KIPIN: We do add ---

24 THE CHAIRPERSON: You do add chemicals.

25 MR. KIPIN: Yes.

1 THE CHAIRPERSON: What kind of chemicals?

2 MR. KIPIN: They're a basic proprietary  
3 type, but they do create the bond with the chemicals.  
4 There is -- there is a change in the chemical bonding of  
5 the coal and the tars.

6 THE CHAIRPERSON: Well, my follow-up  
7 question would be that you haven't said anything in your  
8 presentation about any of the waste residuals that this  
9 process might produce.

10 Now, in the proponent's Environmental  
11 Impact Statement, we have some very detailed information  
12 that's been provided in terms of the various residuals  
13 and various waste streams that come from the technologies  
14 that have been proposed, and how they plan to handle  
15 those, but I don't have any indication from you that your  
16 process produces any residuals, any waste. Can that be?

17 MR. KIPIN: There is -- the only waste is  
18 the water that comes out of this. It depends on where  
19 you're digging this out of and where the source of the  
20 waste materials are.

21 For example, if we're doing a project like  
22 Chattanooga Creek down in Tennessee, we removed the  
23 material out from underneath the water and hauled that in  
24 a waterproof container to the site where we process it.

25 When it was unloaded it came out at about



1 65 percent water and the balance of it solids, which is  
2 the tar and some coal. We were able to take that into  
3 the facility into containment, add our additives to it  
4 right on the containment. Within 24 hours that 65  
5 percent moisture was down to 15 percent, and that's  
6 without using any thermal units.

7           It's a reaction between the tars and the  
8 oils and the organics. The oils will attract the coal  
9 particles, and they will reject the water. When the  
10 water comes out of the coal pile, it's basically pretty  
11 crystal clear, then we can go to our next step and  
12 process it into beeson pellets, and within a matter of  
13 about one day we have beeson pellets. The next step is  
14 to run the analysis of it and then we ship it to the  
15 plant.

16           Now, we have strict settings that we  
17 require before it can go into a power plant, but we have  
18 shipped, I would say, 5,000 to 10,000 truckloads and we  
19 have not had one rejection, and the power plants have  
20 been asking us to make more and more faster and faster  
21 and we are trying to accommodate them.

22           THE CHAIRPERSON: Thank you.

23           DR. LAPIERRE: Good evening, and thank you  
24 for your presentation. I just have a few questions. In  
25 the process that you put in place you indicate that you

1 minimize dust. Is there dust that is produced from the  
2 product, and if so ---

3 MR. KIPIN: No. Well, only if we reclaim  
4 from a coal yard dust and coal fines that are on the  
5 ground, we can pick that up and put that in with the  
6 process and it becomes glomerated into the mix and it's  
7 no longer dusty.

8 Also, we reclaim coal silt fines. You're  
9 familiar with that in this area, you have quite a few of  
10 those. Some of them are wet but you get it exposed to  
11 the air, that will become dusty. We pick those up, we  
12 process them, they are not dusty at all from the time  
13 that they're discharged out of processing machine.

14 DR. LAPIERRE: So, to go back to -- I know  
15 there was a question a while ago and I didn't quite get  
16 the answer. On the waste water, you must have water that  
17 needs to be treated as a by-product of what you do.

18 MR. KIPIN: Yes, the water comes out  
19 pretty clean, but we treat it to the allowable discharge  
20 to like a lake, a sewer, or a river.

21 DR. LAPIERRE: So, how would you propose  
22 doing that? Do you build a water treatment plant?

23 MR. KIPIN: We have a mobile water  
24 treatment plant which we can add chemicals to it based on  
25 what the contaminants are. You may have some dissolved

1 chemicals in there suspended, or finely suspended, but

2 ---

3 DR. LAPIERRE: And I understood from your  
4 list of chemicals those are proprietarial, therefore I know  
5 you wouldn't tell us that, but do they -- are there any  
6 vapours that are released while these chemicals are  
7 applied?

8 MR. KIPIN: On some materials -- for  
9 example, if you're going to run across or you get  
10 involved in a light oil plant, you're going to have a lot  
11 of benzenes. If you're going to end up with applying  
12 some agitated sludge from a light oil plant, again those  
13 are the type of materials that you have to be very  
14 careful with.

15 And yes, we would have covers over the  
16 treatment plant and the processing unit and I would go to  
17 either a scrubber or an activated carbon system to absorb  
18 those, but those are not the norm, those are the specific  
19 areas of the plant that you have to be cautious and  
20 prepare for, but once we process them the odour is gone.

21 That project we're working on right now in  
22 West Virginia, we have removed 200,000 yards of material  
23 and the homes are within 50 feet of where we are  
24 processing and we have not received one complaint from  
25 any of the residences that live adjacent to where we

1 work.

2 DR. LAPIERRE: So, do you have a  
3 monitoring system that you monitor ---

4 MR. KIPIN: Yes, we have continuous  
5 monitoring. We have all four corners, as I say, then a  
6 fifth one as a spare or to use it if we have a concern  
7 that we're digging into something that could present a  
8 problem, but we are preparing and setting up monitoring  
9 before they even start work in the morning.

10 The same with the trucks coming in for  
11 receiving material to go to the power plants, those would  
12 be set up and everything would be calibrated and then we  
13 have the inspector routinely every other hour go around  
14 the whole surface and check these instruments to make  
15 sure that they are operating properly.

16 DR. LAPIERRE: In the plasma process you  
17 must use a fairly high spike of electricity to get the  
18 process going?

19 MR. KIPIN: We operate it with the  
20 generators.

21 DR. LAPIERRE: With generators?

22 MR. KIPIN: Yes.

23 DR. LAPIERRE: The last question I have  
24 is, in your document you mention the global climate  
25 change and possible effect it might have on the proposed

1 project. You indicate wave surges of 20 feet. Do you  
2 have data to support those ---

3 MR. KIPIN: No, it's not 20. I'm sorry,  
4 that was supposed to be corrected. That was 2 point  
5 something metres.

6 DR. LAPIERRE: Oh? So, it's not 20 feet?

7 MR. KIPIN: No.

8 DR. LAPIERRE: I was going to ask where  
9 you got that data.

10 MR. KIPIN: No. I thought that was  
11 corrected. I'm sorry.

12 DR. LAPIERRE: Okay. Well, thank you.

13 MR. CHARLES: Mr. Kipin, I'm trying to  
14 sort of get straight in my mind just how you'd go about  
15 dealing with the sediments in the Tar Ponds and in the  
16 Coke Ovens, and I guess I'm trying to figure out how  
17 you'd go about the excavation, not how you do it, but  
18 would you excavate all the sediments in the Tar Ponds  
19 down to bedrock? Because I notice on page 3 you talk  
20 about selective excavation to separate contaminated soils  
21 from uncontaminated soils.

22 MR. KIPIN: Yes, we have -- on many  
23 projects we would not excavate everything and stockpile  
24 it, we would excavate certain materials and using either  
25 our own lab or in association with the lab where we can

1 get fast results we would test the soils to see if they  
2 require processing. If they do not, we would -- and it  
3 passes, we would take that material, stockpile it and use  
4 it for backfill at a later time.

5 MR. CHARLES: When you say "determine  
6 whether they need processing or not," would you be  
7 governed by earlier reports, and are you working on the  
8 basis of, you know, PCBs with a concentration in the  
9 sediment of higher than 50 parts per million, you'd try  
10 to locate these and take -- or excavate those?

11 MR. KIPIN: Well, we would have an area of  
12 approximately, say, 100 square feet and we would take  
13 that as a working area and we would dig down until we no  
14 longer have any oil coming out of the side, and if there  
15 is we would make a determination on what that is and what  
16 it's contaminated with before we excavated it, and if  
17 it's found -- if we find that it's got a certain amount  
18 of oil or tar or chemicals which are beyond the quantity  
19 established for leaving on site, then we would take that  
20 and process that and ship it off site.

21 MR. CHARLES: So, you'd be looking for oil  
22 and where the oily stuff stopped, is that where you would  
23 stop?

24 MR. KIPIN: Yes.

25 MR. CHARLES: What about PAHs, would you

1 -- how would you determine where they are? By the same  
2 method?

3 MR. KIPIN: Well, the same method.  
4 Whenever we're testing, we're testing for the full amount  
5 of PAHs and ... metals.

6 MR. CHARLES: Okay. I'm trying to get a  
7 sense of whether when we're finished with your process  
8 we're left with dry ponds or wet ponds.

9 MR. KIPIN: Dry.

10 MR. CHARLES: Dry ponds?

11 MR. KIPIN: Yes.

12 MR. CHARLES: Okay. Then I must have -- I  
13 had the other impression. I thought you were -- we were  
14 going to be left with wet ponds. Because if you take the  
15 stuff out and you process it, do you put it back in then?  
16 Is that what you do?

17 MR. KIPIN: No, we process it -- it goes  
18 off to a power plant.

19 MR. CHARLES: I'm sorry?

20 MR. KIPIN: Whatever we process we send  
21 off to a power plant.

22 MR. CHARLES: So, if you take the stuff  
23 out, do you replace it with anything?

24 MR. KIPIN: Each project is different.  
25 Some are left open. If you're on a hillside or on top of

1 a hill you would dig down to the base, you could be going  
2 down 60 feet, we've gone as much as 80 feet, and they  
3 don't want that backfilled.

4 MR. CHARLES: I guess I was trying to  
5 figure out how you're going to stop the storm surge. In  
6 your proposal you suggested you're going to stop the  
7 storm surge, and I gather what you're talking about is --  
8 or the effects of the storm surge, and I guess what  
9 you're talking about is by eliminating stabilization and  
10 solidification and the problems that might be generated  
11 with that process by rising sea levels, by not going that  
12 route you wouldn't have those problem so a storm surge or  
13 rising sea levels wouldn't be a problem.

14 MR. KIPIN: No, I'm sorry, on that  
15 particular case I was thinking about projects that we  
16 have where you're upon a hillside and so forth.

17 But on this one we would -- depending on  
18 where the bottom of the material ends up in the Tar  
19 Ponds, if it ends up 50 feet below the sea level, yes,  
20 you would want that filled.

21 MR. CHARLES: You would want that filled?

22 MR. KIPIN: Yes, you would.

23 MR. CHARLES: So, you'd have to fill it  
24 with something. Would you fill it with the residue, the  
25 vitrified residue that you're going to have from the



1 process?

2 MR. KIPIN: It could be, yes. It could  
3 be.

4 MR. CHARLES: It could be?

5 MR. KIPIN: Yes.

6 MR. CHARLES: So, this is glassy-like  
7 stuff ---

8 MR. KIPIN: Yes.

9 MR. CHARLES: --- with PCBs of less than  
10 50 parts per million encased in it, is that ---

11 MR. KIPIN: Yeah, that's what the  
12 vitrification is, that it turns into glass.

13 MR. CHARLES: Okay.

14 MR. KIPIN: And you can use it also -- if  
15 you don't have a market for it, you can use it for  
16 roofing shingles, sandblasting. There's many things you  
17 can use it for.

18 MR. CHARLES: My colleague, Dr. LaPierre,  
19 was talking to you about dust and so on. I take it that  
20 any of your processes, when you process the sediment, is  
21 not going to be done within enclosed buildings under  
22 negative pressure?

23 MR. KIPIN: Depending on what the  
24 chemicals are it could be and should be, but others don't  
25 require it because you're not getting the emissions.

1 MR. CHARLES: In our particular ---

2 MR. KIPIN: Our operators, they all have  
3 monitors on them inside the equipment, the cabs.

4 MR. CHARLES: In our particular situation  
5 with the Tar Ponds we know that there are PCBs there and  
6 PAHs and they're going to be in the stuff that you're  
7 dealing with.

8 And the reason I ask is because earlier in  
9 these hearings we've heard great concern expressed about  
10 processing of materials in enclosed structures -- or not  
11 in enclosed structures and people worrying about volatile  
12 chemicals escaping during that process. So, that's why I  
13 was raising the question with you.

14 MR. KIPIN: Well, if we do have a problem  
15 like that, then we run into the -- well, the worst one we  
16 run into are the agitated sludge with the pH of .5 and  
17 it'll have a benzene level of anywhere from 3 to 7  
18 percent. Well, as soon as you start digging that up or  
19 expose a hole you know it's there and it's pretty  
20 dangerous.

21 And we ran into a case of that nature in  
22 -- I believe they did have agitated sludge on this  
23 particular plant. We will process that in situ and  
24 stabilize it before we take it out to actually finish  
25 processing it somewhere else.

1 MR. CHARLES: Okay. And the prices that  
2 you're quoting are in Canadian dollars, are they, rather  
3 than American dollars?

4 MR. KIPIN: I believe they were American  
5 dollars.

6 MR. CHARLES: They're American dollars?  
7 Of course with the ---

8 MR. KIPIN: The dollar -- both dollars are  
9 getting so close ---

10 MR. CHARLES: I was going to say, with the  
11 comeback of the Loonie maybe it's not going to make that  
12 much difference.

13 MR. KIPIN: Yeah.

14 MR. CHARLES: But it would be -- I just  
15 wanted to clarify which was which. I had one other  
16 question but it's gone from my mind at the moment, so  
17 I'll put it in the back of my mind and maybe it'll come  
18 up later on. Thank you very much.

19 MR. KIPIN: Thank you.

20 THE CHAIRPERSON: I think now I would like  
21 to ask a question of clarification to the Agency with  
22 respect to this.

23 The presenters have asserted that they are  
24 bringing forward a combination of two technologies, one  
25 of which was assessed during the RAER process and, I

1 believe, the Earth Tech process as well and one of which  
2 they say was not assessed during either of these  
3 processes.

4 So, I'd just like to ask the Tar Ponds  
5 Agency if you could shed some light on this for the  
6 Panel.

7 MR. POTTER: I'll attempt to, I guess.  
8 We've spent, oh, three/four years, I guess, evaluating  
9 technologies, we've tried to bring the best consulting  
10 firms we could find pretty much across North America to  
11 assist us in doing that.

12 We think we've done a pretty thorough  
13 evaluation of all the technologies, and to be honest, I'm  
14 not quite sure I understand part of the process here, the  
15 synthetic fuel component, but we've done a very -- what  
16 we feel is a very thorough evaluation and we're quite  
17 confident of the technologies we've picked.

18 We've looked at the process for -- we see  
19 tonight the plasma vitrification process and it was  
20 evaluated, it was deemed to be unacceptable for a variety  
21 of reasons, whether it's cost, technical or community  
22 acceptance, there were a number of reasons why, but we  
23 think we've given this process a thorough review, the  
24 technology evaluation process a thorough review, and  
25 we're quite confident of the project we have before us,

1 and it's a project guided by the MOA between the  
2 Government of Canada and the Province of Nova Scotia, and  
3 we're quite confident that we've done a thorough  
4 evaluation using experts that are intimately aware of  
5 every technology that's on the market.

6 THE CHAIRPERSON: So, this particular  
7 proprietorial process did not -- for whatever reason, did  
8 not cross the radar of -- during the evaluation process  
9 or the development of alternatives?

10 MR. POTTER: No. No, we didn't see this  
11 one. It's -- you know, we didn't look at that one in  
12 particular.

13 THE CHAIRPERSON: Thank you, Mr. Potter.  
14 I'm now going to ---

15 MR. CHARLES: Madam Chair ---

16 THE CHAIRPERSON: Oh, you've remembered  
17 your question?

18 MR. CHARLES: My question has come back.  
19 It relates to the use of the plasma technique. What's  
20 the largest amount of material that you have used or  
21 treated with the plasma technique in the past?

22 MR. KIPIN: In relationship to tonnes per  
23 hour, tonnes per day or ---

24 MR. CHARLES: In relation to -- I'm sorry,  
25 I didn't quite ---

1 MR. KIPIN: Tonnes per hour or ---

2 MR. CHARLES: Whatever way you want to put  
3 it, except that in the proposal that you've put forward  
4 here you've got something like treating 59,000 -- I'm not  
5 sure if it's tonnes, of PCBs.

6 MR. KIPIN: Yeah, that was based on the --  
7 let's see, that was based on a certain period of time of  
8 the project while we were running the synthetic fuel  
9 process, we were also simultaneously processing materials  
10 for the vitrification unit.

11 MR. CHARLES: Yes, the plasma  
12 vitrification. I guess I'm wondering, have you -- in  
13 your past history of your operation have you ever had to  
14 handle this large an amount of PCB material or anything  
15 like that?

16 MR. KIPIN: No, the projects that we've  
17 done -- and we've done quite a few large projects -- none  
18 of them have ever revealed or showed the amount of PCBs  
19 that this one is indicating that there may be.

20 MR. CHARLES: And what one has been the  
21 largest that you have done that required plasma  
22 technique, whether it's PCBs or something else, heavy  
23 metals?

24 MR. KIPIN: I'd say, several hundred.

25 MR. CHARLES: Seven hundred?

1 MR. KIPIN: Several hundred.

2 MR. CHARLES: Several hundred.

3 MR. KIPIN: Yes.

4 MR. CHARLES: So, that's quite a jump from  
5 several hundred to 59,000 tonnes. But you're confident  
6 that the process can handle that, given enough time.

7 MR. KIPIN: Yes.

8 MR. CHARLES: Okay. Thank you very much.

9 THE CHAIRPERSON: I would now like to turn  
10 to the -- provide other participants an opportunity to  
11 question the presenter.

12 I will, I think, transfer to the Tar Ponds  
13 Agency. Do you have any questions? I think -- I'll ask  
14 you to keep yourself within five minutes to begin with.

15 --- QUESTIONED BY THE SYDNEY TAR PONDS AGENCY (MR. FRANK  
16 POTTER)

17 MR. POTTER: Thank you. We have a few  
18 questions. We'll try to keep them brief. Mr. Kenyon  
19 will address the questions in a minute.

20 Just a couple of points in response to the  
21 specific nature of the -- this technology that we were  
22 talking about a minute ago, in terms of evaluating it.  
23 We -- I should clarify we did look at the generic aspect  
24 of generating a coke burning fuel. We didn't look at  
25 this particular proprietary one we see tonight. So, I

1 just want to clarify that a little bit.

2 I would also indicate that governments did  
3 look at the option or the alternative of an insurance  
4 fixed cap approach to the Project. Again, that was  
5 considered and ruled out for a variety of reasons, but we  
6 did look at the possibility of going with that approach.  
7 It was not deemed to be suitable for our situation.

8 THE CHAIRPERSON: Can I just ask a  
9 question about that, Mr. Potter.

10 MR. POTTER: Sure.

11 THE CHAIRPERSON: Does that appear  
12 somewhere in the -- anywhere in the EIS or the supporting  
13 documents, anything about that?

14 MR. POTTER: No.

15 THE CHAIRPERSON: I don't have a memory of  
16 it, but ---

17 MR. POTTER: I don't think it would have.  
18 We did that very early on around -- early -- late 2000,  
19 early 2001, very early in the preparation of the Project.

20 We had a number of large companies that  
21 deal with that situation or offered that approach, came  
22 in and met with us, some of our people talked to some of  
23 the major insurance firms in New York, and we brought in  
24 some expertise in evaluate the option of doing that, and  
25 after weighing all the pros and cons, it was deemed to



1 be, as I say, not suitable or undesirable for this  
2 situation.

3 Perhaps the most prominent reason was  
4 because of the relinquishing of lack of control of the  
5 Project. If we pass it off to somebody for a fixed price  
6 capped situation, it gets difficult to control how the  
7 Project would be actually carried out.

8 But we did look at that. As I mentioned  
9 we're very confident of our Project. We are guided by  
10 the MOA and the Project suggested here that it would not  
11 fit within the approach of the current MOA.

12 With that, I'll pass it over to Mr. Kenyon  
13 for just -- we'll try to keep it short, but then I think  
14 we have five or six questions.

15 MR. KENYON: Thank you, Madam Chair. I'm  
16 Jonathan Kenyon, I'm counsel for the Agency.

17 I just have, as Mr. Potter has indicated,  
18 probably about five questions.

19 --- QUESTIONED BY SYDNEY TAR PONDS AGENCY (MR. JONATHAN  
20 KENYON)

21 MR. KENYON: Basically, our understanding  
22 is Kipin's plan is to excavate the sediments with PCB  
23 concentrations of less than 50 parts per million, then  
24 blend the sediments with off-site materials, and then  
25 that blended waste is going to be taken to -- off-site to

1 a power plant where it's going to be burned or  
2 essentially incinerated. Is that correct?

3 THE CHAIRPERSON: Mr. Kipin, is that  
4 correct?

5 MR. KIPIN: We don't consider that  
6 incineration. This is -- actually goes to the fuel  
7 system, and it's used as the -- the same as the coal that  
8 they buy.

9 MR. KENYON: It is, in fact, burned.

10 MR. KIPIN: It is burned, but it is --  
11 meets the same spec as the coal that you normally burn.  
12 There's no difference.

13 In fact, we usually give them a better  
14 product than what they're buying on the open market.

15 MR. KENYON: Does Kipin have a buyer in  
16 place for this blended fuel waste product?

17 MR. KIPIN: We have several potential  
18 buyers, yes.

19 MR. KENYON: If they do have these buyers,  
20 as they say, who are the buyers and are the buyers aware  
21 that the blended fuel waste product comes from the Sydney  
22 Tar Ponds?

23 MR. KIPIN: We are very open with them.  
24 They know where it's coming from, of course. The one  
25 that we have from West Virginia, that is Grand Tower

1 Power and that is a twin power plant to the one that you  
2 have locally here.

3 MR. KENYON: Is Kipin aware of the great  
4 difficulties that the Agency has experienced in finding  
5 locations that are willing to take any waste products  
6 from the Sydney Tar Ponds?

7 MR. KIPIN: The discussions we have had  
8 with several of them, when I was here the last time -- I  
9 believe it was approximately a year ago -- their attitude  
10 was, "Meet with them and then come back to us, and we  
11 will discuss the requirements that they have for taking  
12 the material into their facilities."

13 MR. KENYON: Is Kipin aware of the  
14 difficulties that the Tar Ponds Agency has recently  
15 experienced in sending chipping-out material form the  
16 Domtar tank?

17 MR. KIPIN: I am familiar with the  
18 particular problem. If they had contacted us they  
19 wouldn't have had the problems today.

20 We do those things in a matter of days,  
21 those particular tanks, and we would have had a process  
22 right at the tank and it would have gone off as a solid  
23 material or it could have gone back to our own facilities  
24 where we could have used it in one of our recycling  
25 plants.

1 MR. KENYON: My understanding is that  
2 Kipin has remediated numerous sites over the past 20  
3 years, yet Kipin has also indicated in their presentation  
4 this evening that Kipin has only remediated twice the  
5 volume of contaminated sediments contained at the Sydney  
6 Tar Ponds and Coke Oven Site.

7 Is it safe to assume that Kipin's  
8 technology has never been used to complete a remediation  
9 project of the size of the Tar Ponds?

10 MR. KIPIN: Oh, I was going to ask you to  
11 repeat that, but it's a long statement.

12 We have processed over a million and a  
13 half cubic yards of tar sludges, over the life, and we  
14 are processing the same materials on a day-to-day basis  
15 at facilities that we have on a permanent basis, like ABC  
16 Coke in Birmingham and Citizens' Gas in Indianapolis, and  
17 we bring tars in from all -- quite a few audit facilities  
18 that don't have recycle capabilities.

19 MR. KENYON: Now, the PCB sediments lower  
20 than concentrations of 50 parts per million, which will  
21 be used with the blended fuel product that you will be  
22 producing, you will be shipping that to the United  
23 States, is that correct?

24 MR. KIPIN: Well, that we have to  
25 negotiate with you.

1 I would prefer to process everything at  
2 one location near the Tar Ponds. That's the best way we  
3 can operate in and it's the safest.

4 MR. KENYON: Are you aware that it's  
5 illegal to transport PCB sediments to the United States  
6 at any level?

7 MR. KIPIN: At 50 parts per million or  
8 less? No, I would have to check that.

9 MR. KENYON: One last question, Madam  
10 Chair.

11 As Mr. Potter has indicated, the Agency  
12 went through an extensive review of various remediation  
13 technologies over several years, and this included  
14 Kipin's plasma vitrification technology and coal burning  
15 technologies.

16 Why should the Agency follow the advice of  
17 a technology vendor over that of several independent,  
18 reputable consultants.

19 MR. KIPIN: Do you want me to reply to  
20 that?

21 THE CHAIRPERSON: If you'd like to reply  
22 briefly to that, yes, Mr. Kipin.

23 MR. KIPIN: Well, the product that we make  
24 we have marketed that and it brings the cost of the  
25 entire project into a -- what we consider -- a reasonable

1 cost.

2 It's not high, like a thousand dollars  
3 (\$1,000) a tonne. When we take that material we may sell  
4 that for forty dollars (\$40) a tonne, plus you take the  
5 coal that you put in with that, plus the material out of  
6 the Pond, so you end up with two parts. So, if I sell it  
7 for forty dollars (\$40), I got eighty dollars (\$80), and  
8 that goes a long way in covering a lot of the cost on a  
9 particular project.

10 If it is good material, it -- sometimes we  
11 exceed the spec. They may state they want 8,000 BTUs, we  
12 will give them 10,000 BTUs.

13 MR. KENYON: Thank you, Madam Chair.

14 I believe Mr. Potter has one point to  
15 make.

16 THE CHAIRPERSON: Well, I have a question  
17 of clarification, first of all. Well, I got two  
18 questions. I'm getting quite confused.

19 But your last -- the statement that  
20 preceded your final question, could you just repeat that.  
21 I presume you have it written down.

22 You made a statement about what had been  
23 evaluated, and it didn't sound quite like what I heard

24 ---

25 MR. KENYON: You had heard from Mr. Potter

1 that plasma vitrification has been evaluated as part of  
2 the process. You had also heard from Mr. Potter that  
3 coal burning technologies were evaluated as part of the  
4 process.

5 THE CHAIRPERSON: Okay. The way you put  
6 it, you started off with Kipin's. I thought you were  
7 putting the two together. It sounded like a different  
8 statement.

9 And the second thing I'm confused about,  
10 where is the location of this processing, these two types  
11 of processing taking place?

12 Did I hear you say something about you'd  
13 prefer to do the processing close by?

14 MR. KIPIN: Well, right ---

15 THE CHAIRPERSON: What processing are we  
16 talking about? I'm now losing track of this.

17 MR. KIPIN: The processes that we have  
18 right now, we have one large one that's in West Virginia,  
19 at the old Sharon Coke Plant, in Fairmont, West Virginia.

20 THE CHAIRPERSON: You mean this is a place  
21 where the synthetic fuel would go? That's what you're  
22 talking when you say "processing."

23 MR. KIPIN: Well, we're processing that as  
24 synthetic fuel right at that particular site.

25 We have several others that are mobile

1 units. We have two stationery units, one at Citizens'  
2 Gas in Indianapolis, and the other one in Birmingham,  
3 Alabama, where wastes are brought in from Big White  
4 Carnie Wall[?], and other coke plants, and also Wylie  
5 Tar[?], they bring their waste to us.

6 THE CHAIRPERSON: But in this instance you  
7 were proposing that all the processing, the synthetic  
8 fuel processing and the vitrification processing, would  
9 all happen on site.

10 MR. KIPIN: The economics are best if we  
11 do it right on site.

12 THE CHAIRPERSON: Okay. Thank you.  
13 Sorry, Mr. Potter.

14 MR. POTTER: Thank you, Madam Chair.

15 I just want to wrap up by requesting if we  
16 could get a chance, perhaps near the end, if we feel  
17 there's a need to raise some other questions based on the  
18 questions that come from other representers, or other  
19 questioners.

20 THE CHAIRPERSON: Well, let's see how the  
21 time goes, and if by any chance we run out of time, you  
22 always have the option as other people do to present  
23 additional questions in writing, and we will -- but I  
24 will now like to ask if there are other people who have  
25 questions and as you know I look first to the people who



1 are registered presenters, who are going to be presenting  
2 -- either have presented or are going to present later --  
3 and so let me -- if I could just see hands raised from  
4 those people.

5 So, I see Ms. Ouellete. I see Mr.  
6 Lelandais. I see Ms. MacLellan. Let me write this down,  
7 because otherwise, you know, I get muddled. Dr. Argo,  
8 yeah, I remembered, and Mr. Ignasiak, and -- no, I didn't  
9 miss anybody there.

10 All right. I'm going to ask you to limit  
11 yourself to two questions, please, and we are running  
12 close to our limit here, so if you could make them really  
13 crisp, I'd appreciate it.

14 I'm going to go right to left. Now, so,  
15 Ms. Ouelette.

16 --- QUESTIONED BY MS. DEBBIE OUELETTE:

17 MS. OUELETTE: I just wanted to know your  
18 technology. Where you here to present this to the STPR  
19 Agency, like, just before today.

20 Did they see your -- how you used your  
21 technology before today?

22 MR. KIPIN: Are you talking about the  
23 STP?

24 MS. OUELETTE: Like what I'm saying --  
25 like you're coming out with a technology and they said

1 they looked at all the -- the best technology so far to  
2 date. I'm just -- were you here to demonstrate your  
3 technology to them?

4 MR. KIPIN: No, we did not have a local  
5 demonstration.

6 MS. OUELETTE: Okay. Because it said here  
7 today:

8 "The Sydney Tar Ponds Agency  
9 spokesman, Parker Donham, said Mr.  
10 Kipin has come to the game too late.  
11 At this point ... to come forward  
12 now, and to use my technology instead  
13 would be well beyond the point in  
14 this process."

15 Mr. Donham said -- like, I don't  
16 understand, like here he is trying to promote a  
17 technology and we're trying to see, as a community, which  
18 ones will work, how can he say that?

19 THE CHAIRPERSON: I think you're now  
20 directing a question in a different direction, Ms.  
21 Ouelette.

22 MS. OUELETTE: Yeah, because I just want  
23 to know ---

24 THE CHAIRPERSON: I'm going to -- I'm just  
25 going to ask the Agency at the moment to make a note of

1           that.

2                           I think we'll come back to that. Do you  
3 have no more questions for Mr. Kipin?

4                   MS. OUELETTE: No, thank you.

5                   THE CHAIRPERSON: All right. Thank you  
6 very much.

7                   Mr. Lelandais? A couple of questions,  
8 please.

9           --- QUESTIONED BY GRAND LAKE ROAD RESIDENTS (MR. HENRY  
10           LELANDAIS):

11                   MR. LELANDAIS: Thank you, Madam Chair.  
12 I'd like to ask through you to Mr. Kipin, if I understand  
13 correctly, and it will probably clarify many things for  
14 all of us, your process Mr. Kipin, as I understand it to  
15 be -- is to convert all of the Tar Ponds sludge into a  
16 usable fuel that can be then sold to other users such as  
17 power stations, boilers and so on -- steam boilers and so  
18 on -- that would use your converted synthetic fuel to  
19 fire up their boilers, so-to-speak ---

20                   MR. KIPIN: That is correct.

21                   MR. LELANDAIS: --- and the cost that you  
22 would receive in selling them this fuel would go to  
23 mitigate the costs of the whole process of remediation.  
24 Is that correct?

25                   MR. KIPIN: That is correct.

1 MR. LELANDAIS: And during that -- my  
2 second question, Madam Chair, then -- during this process  
3 any of the areas in the Tar Ponds sludges that contain  
4 PCBs over 50 parts per millions, you would correct the  
5 problem in those areas by vitrification, using a plasma  
6 electrode sunk down to the bottom -- let's say to  
7 bedrock, if necessary -- and that would vitrify within a  
8 certain area -- range from the electrode, and convert the  
9 PCB containing material to a glassy substance that would  
10 then be rendered inert. Is that correct?

11 MR. KIPIN: What we would do, we would  
12 excavate the material and put that into -- this looks  
13 similar to an electric arc furnace, with one -- the  
14 material would be excavated and placed into this cabinet  
15 that's got a ladle in it, and then we would lower the  
16 electrode into the unit and then alter it.

17 MR. LELANDAIS: I see. And this would all  
18 be done on site.

19 MR. KIPIN: Yes.

20 MR. LELANDAIS: Thank you very much, sir.  
21 Thank you, Madam.

22 THE CHAIRPERSON: Thank you Mr. Lelandais.

23 So, Ms. MacLellan.

24 --- QUESTIONED BY CAPE BRETON SAVE OUR HEALTH COMMITTEE

25 (MS. MARY-RUTH MACLELLAN)

1 MS. MACLELLAN: Thank you, Madam Chair. I  
2 actually have all kinds of questions, but I will limit  
3 myself to two quick ones, and perhaps somebody else will  
4 pick up on the other ones. If not, maybe there'll be  
5 time at the end to ask a couple. You've already asked  
6 some of the ones that I was going to ask.

7 My two quick questions. You mentioned the  
8 lime and the stone dust and the gases that come off of  
9 it. Having had a coal miner for a father, who always  
10 maintained that part of the problem in the coal mine was  
11 the gases that came off of the limestone, when it was put  
12 on -- the dust, I wonder if you have documentation about  
13 this?

14 MR. KIPIN: I'm sorry. I didn't hear  
15 that.

16 THE CHAIRPERSON: What do you mean -- by  
17 documentation you mean more information, more written  
18 information about what comes off during the process.

19 MS. MACLELLAN: Exactly. Because it sort  
20 of sent off alarm bells. I didn't realize the fact that  
21 they were going to spread lime dust all around on the  
22 dust.

23 THE CHAIRPERSON: Mr. Kipin, can you  
24 provide -- did you understand the question? Ms.  
25 MacLellan is looking for more information about the dust

1 and the use of ---

2 MS. MACLELLAN: Well, he said that when  
3 his process is used, it's not -- it will not use lime  
4 dust, but the other process will use limestone to be put  
5 on the dust.

6 I'm wondering -- and he said that he  
7 believes that gases will come up, when I do that process  
8 -- I'm wondering if he can provide me with some  
9 documentation about that, because it would not only be  
10 useful here, but would also be useful to miners who are  
11 fighting black lung.

12 MR. KIPIN: Now, this could be the comment  
13 that we made to one of the other processes, when you're  
14 doing stabilization, you could be putting lime into it,  
15 but not in our process.

16 MS. MACLELLAN: I understand it's not your  
17 process, but I'm wondering if you have information about  
18 the gases that come off when limestone is used on dust.

19 THE CHAIRPERSON: Are you asking Mr. Kipin  
20 to provide information about another process?

21 MS. MACLELLAN: Yes.

22 THE CHAIRPERSON: Well, I'm not sure that  
23 that's ---

24 MS. MACLELLAN: Not actually another  
25 process. He said he doesn't -- his process because he

1 doesn't have to use limestone and stuff on the dust --  
2 so, I'm wondering where does that come from? Does he  
3 have information about it?

4 THE CHAIRPERSON: Mr. Kipin?

5 MR. KIPIN: If you're dealing with -- for  
6 example, you've got ashage on the ground, and you could  
7 have that in some parts of a Coke Plant around the  
8 agitators, around the ammonia facilities where you're  
9 making ammonia sulphite, you add lime to that and you  
10 could have a little bit of dusting.

11 But that's not really prevalent as to a  
12 very large mop. If you have a lime-like system, that  
13 lime is wet, and it will not give you any dusting.

14 But if you're going to put it on a spill,  
15 for example, you've got an acid spill, you want to put  
16 lime to it, you've got to be very careful on the amount  
17 and how you put it on there so that you don't get a  
18 heated reaction with both vapours and other nasties.

19 THE CHAIRPERSON: Ms. MacLellan, I think  
20 probably if you -- it might be time to move to your  
21 second question, and I think if you can keep it focused  
22 on the presentation and material that Kipin Industries  
23 has made.

24 MS. MACLELLAN: The other question is just  
25 quite a simple one. He mentioned Chattanooga and West

1 Virginia. I'm wondering if he could provide us with a  
2 contact in both of those areas where he carried out the  
3 process? And also, and a contact in the area where he's  
4 sending the materials to be burnt so that we can check  
5 into it? [u]

6 THE CHAIRPERSON: Ms. MacLellan would like  
7 some references.

8 MR. KIPIN: We can provide that.

9 THE CHAIRPERSON: Thank you.

10 MR. KIPIN: We'd like to invite people to  
11 come down and see it. We're very proud of it. It's --  
12 the property is already sold. It's been sold for two  
13 hundred million dollars (\$200 million) -- actually, four  
14 hundred million (\$400 million). It will be the world's  
15 largest indoor swimming -- or water facilities.

16 THE CHAIRPERSON: Thank you. I look  
17 forward to getting the information.

18 MR. KIPIN: Okay.

19 THE CHAIRPERSON: Thank you, Ms.  
20 MacLellan. Dr. Argo?

21 --- QUESTIONED BY DR. JAMES ARGO

22 DR. ARGO: Madam Chair. I've said on a  
23 number of occasions that this topping I have is honest.  
24 In other words, I've earned it by being fortunate enough  
25 to work in places when I was a youth.



1                   One of them was the National Research  
2                   Council of Canada. I spent a summer there with a man by  
3                   the name of Ira Puddington (sp) and Red Fioriane (sp)  
4                   where we did a process of what's called -- what we called  
5                   spherical agglomeration. And we were extracting -- using  
6                   -- we were developing a process to extract things out of  
7                   minerals -- upgrading minerals.

8                   It's -- your -- Mr. Kipin's process sounds  
9                   remarkably like the spherical agglomeration that we used.  
10                  It was a spectacular process, it's spectacularly  
11                  efficient, practically no deleterious products. That's  
12                  just a comment.

13                  Mr. Kipin, I'm interested very much to  
14                  find out what temperature you work at. You -- I heard  
15                  one reference, and I thought it was 1,000 degrees C. And  
16                  I heard another reference, and I think it said 100  
17                  degrees C. And I'm wondering if you could clarify for me  
18                  that.

19                  MR. KIPIN: Sure. On the synthetic fuel,  
20                  we operate at a maximum of 100 degrees Fahrenheit.

21                  DR. ARGO: Fahrenheit?

22                  MR. KIPIN: Yes. A lot of time we may --  
23                  we do have heating jackets on the equipment to keep it  
24                  from freezing.

25                  In fact, one of the things that we had

1 found and we do use, advantage of the cold weather. We  
2 get freezing weather and you -- and people that deal with  
3 cold know that it's very wet, sloppy, can't work on it.

4 We found that we have a freeze drying  
5 effect when we have wet cold, and that actually helps us  
6 quite a bit. We find that within a couple of days of it  
7 being frozen, we can stockpile it and put it through the  
8 conveyors, and all the coal handling equipment, without a  
9 problem. It's when you get lower temperatures in the  
10 winter that it creates problems.

11 But yes, the process you were talking  
12 about is spherical agglomeration, which is a process that  
13 you can be -- pelletize the material wet.

14 DR. ARGO: Yeah. It's marvellous.

15 Second -- may I have a second question?

16 The -- one of the constant beefs I've had  
17 about this project since it was -- since I first looked  
18 at the EIS was that they -- there's no indication that  
19 they want to even look at the Mullins Bank.

20 I have had -- spoken to many people in  
21 STPA about that. They have always hidden behind the risk  
22 assessment, saying there was no indication from the risk  
23 assessment that anybody to the south of the lands,  
24 Mullins Bank, Ashby, anything like that, need be  
25 concerned.

1           There is a lot of coal that is either in  
2           seams or on the surface, and the soil is quite dirty.

3           Now, am I to understand -- now, the  
4           Mullins Bank is a part of the terrain -- of the Coke  
5           Ovens plant that is towards the south. The place that  
6           everybody wants to remediate is the actual Coke Ovens  
7           Plant.

8           But believe it or not, when there is a  
9           plume, and there is wind blowing from the north, things  
10          go to the south. And so, logically, the Mullins Bank and  
11          places in that vicinity are going to be contaminated.

12          Now, would your process be applied to a  
13          process that is -- the area that is presently being  
14          considered by the proponent, or would it be able to be  
15          applied to a larger area, such as what we call the  
16          Mullins Bank? There's another probably 20 acres to the  
17          south of the -- of where the actual -- the Coke Ovens  
18          were.

19          The question being, can you apply yours --  
20          within the costs that you have given us today, would you  
21          anticipate including all of that terrain?

22          MR. KIPIN: We could, based on the specs  
23          of the material. We'd put it to a short prox, looking at  
24          moisture, sulfa ash volatility. Those are important, and  
25          if they fit within that -- the spec, of course. The more

1 volume you have, the better it is, and more to market.

2 DR. ARGO: Thank you very much.

3 THE CHAIRPERSON: Thank you, Dr. Argo.

4 Mr. Ignasiak?

5 --- QUESTIONED BY MR. LES IGNASIAK

6 MR. IGNASIAK: I just wanted to make a  
7 brief comment. I have watched the development of this  
8 process from the very beginning, which was about 20 years  
9 ago, and it's based on scientific principles, exactly  
10 what Dr. Argo said.

11 And what Dr. Argo was talking about was a  
12 technology which was developed over 100 years ago and it  
13 was really brought to the stage of full commercialization  
14 in Canada by the National Research Council, and then the  
15 Alberta Research Council.

16 While this process was not really tested  
17 by STPA, the process which is called green soil process,  
18 which is improved version of this process, was  
19 extensively tested by STPA, and I don't think I --  
20 further questions, because there was a lot, a lot of  
21 confusion.

22 THE CHAIRPERSON: Well, thank you for the  
23 comments. I was asking for questions, but anyway, thank  
24 you.

25 Now, I will -- we are beginning to really

1 run out of time, but I am going to ask, are there some  
2 other participants who have a question for the presenter?  
3 Yes, Mr. Ells? And can I encourage you, please, to ask  
4 -- no, come forward, but can I encourage you to make it a  
5 question, please, rather than statements or comments.

6 --- QUESTIONED BY MR. CAMERON ELLS

7 MR. ELLS: Thank you, Madam Chair. The  
8 presentation this evening seemed to base a request for  
9 the Kipin technology to be considered, based on a cost  
10 analysis, and they offered a range of costs from I think  
11 one fifty to six hundred U.S. per tonne, based on what  
12 was being done. And a -- and that this should be  
13 considered as a cost effective comparison to other  
14 technologies.

15 My question was, in evaluating and finding  
16 information about real proven costs in the area, did  
17 Kipin have an opportunity to take into account some of  
18 the real proven costs at the property next door, at  
19 Sydney Steel, where they put out to tender and got bids  
20 for treating materials very similar in a methodology not  
21 undifferent from what's proposed in the EIS, and in cost  
22 -- and in the final costing, that was significantly less  
23 than the low end of the range that was being provided.  
24 And I say that knowing, from my own conversations with  
25 three different contractors who were -- who had costs

1 that were less than the low end of that, but who were  
2 still high bid and didn't get the project.

3 THE CHAIRPERSON: Mr. Kipin, were you able  
4 to follow that? No, I thought perhaps not.

5 But I was -- but I don't want too much  
6 more -- I think you were actually, possibly, giving us  
7 something more of a comment in the form of a question,  
8 but can -- if you could very briefly put that a little  
9 more clearly to Mr. Kipin, then I'll give him a chance to  
10 -- you were asking whether Mr. Kipin had any chance to  
11 actually look at some of the costs involved with the  
12 cleanup of the SYSCO property, is that right? Do you  
13 want to clarify my paraphrase a little bit more?

14 MR. ELLS: Yes. In ---

15 THE CHAIRPERSON: Briefly, though, please.

16 MR. ELLS: Some costing that was recently  
17 done on an adjacent property using similar technologies  
18 have unit costs that were significantly less than the  
19 range of -- that you were presenting for your own  
20 technology.

21 In that sense, it would not appear to be a  
22 cost effective alternative to what can already be -- that  
23 has already been contracted to be done here locally.

24 THE CHAIRPERSON: Well, let me just ask,  
25 were you aware of any of the costing of the SYSCO

1 cleanup?

2 MR. KIPIN: No, I -- no.

3 THE CHAIRPERSON: No?

4 MR. KIPIN: No, I have no idea what  
5 they're doing or what materials they're dealing with.  
6 There's some materials that are real easy to work with.  
7 Others are out there, there are quite a few that take a  
8 lot of work to produce something out of it.

9 MR. ELLS: Okay. Thank you.

10 THE CHAIRPERSON: Okay, thank you, Mr.  
11 Ells.

12 If there's nobody else, I am just -- I  
13 will go back for one last question if the proponent -- do  
14 you have one more question for the -- for Mr. Kipin of  
15 the Kipin Industries?

16 If not, I think we will move to a break.

17 --- QUESTIONED BY SYDNEY TAR PONDS AGENCY (MR. FRANK  
18 POTTER)

19 MR. POTTER: Just more of a summation,  
20 perhaps, than a question.

21 We've heard, upon questioning tonight, a  
22 lot of uncertainties. I'm certainly not clear what the  
23 project is they would be suggesting we could acquire for  
24 a given price. We understand that they're talking about  
25 taking the byproduct, the coke burn materials, synthetic

1 fuel, to a -- to some unknown incinerator or power plant  
2 somewhere else.

3 We've spent a tremendous amount of time in  
4 the past week probably talking about air emissions and  
5 pollution control aspects of our proposed incinerator,  
6 and it doesn't appear that a normal power plant would be  
7 anywhere near the level of emission control we've been  
8 discussing in the past while, so ---

9 Other than that, I guess the -- we'll go  
10 back to the point that we do have an MLA which defines  
11 our project and I would -- I'm not sure on the question  
12 from Ms. Ouellette. I'm not sure when you wanted to go  
13 back to that and Mr. Donham's comment in the paper. You  
14 wanted to clarify that at a later point.

15 THE CHAIRPERSON: I'm sorry? What was  
16 that? Whose question?

17 MR. POTTER: Debbie Ouellette's question  
18 about the newspaper article today.

19 THE CHAIRPERSON: Oh. Clarification in --  
20 yes, do you want to answer that briefly?

21 MR. POTTER: Thank you. Just very  
22 briefly.

23 We've probably spent five years evaluating  
24 technologies. We can't stop and go back and do that  
25 every time a new technology or new venture comes along



1 and wants to make a suggestion.

2 It's an exercise we entered into a number  
3 of years ago knowing that at some point in time we had to  
4 make a decision, and governments have made a decision and  
5 we're here today to talk about those.

6 THE CHAIRPERSON: Thank you, Mr. Potter.  
7 And now the sun is shining for -- I -- you're totally  
8 invisible on that side of the room, so I'm sorry, I'm  
9 completely blinded.

10 But I would like the -- maybe I can do  
11 that.

12 I would like to once again thank our  
13 presenters from Kipin Industries.

14 What I would suggest is I -- we really  
15 have run out of time. We do have to move to our next  
16 presenter. But I would suggest that if you -- if there  
17 are any items that's -- clarification you feel would be  
18 helpful to the process or to the panel, that please, by  
19 all means, submit them in writing. Just make sure you  
20 get them in before May the 19th, which is the cutoff  
21 date.

22 So thank you very much. We are now going  
23 to take a -- I think we'll take a ten minute break, and  
24 we will be back -- well, slightly more than ten minutes.  
25 We'll start again at 7:45. I'm sorry for the delay for

1 the next presenter, but we'll return at 7:45.

2

3 (10-MINUTE BREAK)

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

THE CHAIRPERSON: And we have our next --  
before I introduce our next presenter, I've been advised  
that we now have the corrected transcript for Saturday  
with the omissions now back in there, and so we will --  
the secretary will be e-mailing that out very shortly.

So our next presenters, Mr. Marman and Mr.  
Lelandais from the Grand Lake Road Residents. And so, as  
you know, you have 40 minutes, and I'll give you a 5-  
minute warning.

--- PRESENTATION BY GRAND LAKE ROAD RESIDENTS (MR. RON  
MARMAN)

MR. MARMAN: Thank you, Madam Chair.

Good evening, Madam Chair and panel  
members. My name is Ron Marman and I have with me Henry  
LeLandais, and we have been authorized to make a  
presentation to the Review Panel on behalf of a group of  
residents that attended meetings to discuss the proposed  
incineration of tar pond material at an incinerator site  
to be located in our community.

We must stress that while we are opposed  
to incineration, we want this project to proceed as  
quickly as possible using one of the alternate means to

1 handle the tar pond material.

2 We strongly feel that incineration is not  
3 an acceptable solution to this problem, and we do not  
4 want incineration in our community, nor do we want it in  
5 any other.

6 We maintain that public opinion is  
7 extremely important, and an incinerator located anywhere  
8 in the Cape Breton Regional Municipality would have an  
9 adverse effect on the whole area.

10 While it is stated that during the JAG  
11 process the community showed a preference for a  
12 combination of oxide incineration, in combination with  
13 encapsulation, most people felt off site meant off Cape  
14 Breton Island to an existing incinerator.

15 I received a telephone call asking me if I  
16 was going to fill out the questionnaire about which of  
17 the three options I preferred, and these were distributed  
18 during the JAG process, at the end of the process, to  
19 determine what the feelings were in the community.

20 First of all, the lady that phoned me was  
21 quite surprised that I was even in possession of one of  
22 the questionnaires, and was even more surprised when I  
23 told her I would not be picking one of the proposed  
24 methods of destruction as I did not have the  
25 qualifications to make that sort of decision. Do we base

1654 Grand Lake Road Residents  
(Presentation)

1 the method of handling the \$400 million on a public  
2 survey?

3 So what are the problems with the plan?  
4 First of all, let us look at a common-sense analysis of  
5 what we are dealing with, and we are told that other than  
6 the migration of material into Sydney Harbour, the  
7 material in the Tar Ponds is relatively stable. Now, we  
8 are told this. Whether it's true or not, we have no way  
9 of confirming that.

10 The clay bottom and water seal on top  
11 basically seals the toxic material. The harbour  
12 migration will be taken care of by the man-made channel  
13 through the Tar Ponds. Does it make sense to take this  
14 material, that we are told is stable, dig it up and  
15 expose it to the air, de-water it on the shoreline, again  
16 exposing it to the air, transport it a distance of  
17 approximately 5 kms with all the problems associated with  
18 transportation, and then try to incinerate this material?

19 The transportation of material is a  
20 serious problem. Thankfully, it was realized that having  
21 trucks hauling toxic material on Grand Lake Road is not  
22 acceptable. The high traffic volume and high action rate  
23 could only spell disaster. Any government body that  
24 would issue a permit to haul this material on this road  
25 would be irresponsible, to say the least.

1655 Grand Lake Road Residents  
(Presentation)

1                   We are then left with rail transportation.  
2                   If the existing rail line that is present at Grand Lake  
3                   goes out of business, is STPA prepared to purchase the  
4                   business? And, if so, at what cost?

5                   How can the cost of transportation be  
6                   estimated given the current world oil crisis? Is it  
7                   environmentally safe to haul toxic material on a rail  
8                   line that crosses several brooks and a portion of Grand  
9                   Lake? Keep in mind that these brooks and the water from  
10                  the lake ultimately finds its way into Lingan Bay.

11                  The proposed site of the incinerator is  
12                  totally unacceptable. This site is in the middle of 6  
13                  freshwater lakes, and if we look at the map that is up  
14                  now we'll see Grand Lake, and just to the west of that is  
15                  the proposed site, and all around that area are lakes.  
16                  Do we not recognize the value of freshwater resources?

17                  The procedure used to pick the incinerator  
18                  site has several flaws. Let us look at Appendix B, page  
19                  9 of the original AMEC report titled "Project  
20                  Description" and dated December 2004.

21                  Section 2(b) is a comparison of the number  
22                  of permanent, and by that we mean year-round flow, water  
23                  courses from 100 to 500 meters from the site.

24                  The 100 to 500-meter distance from lakes  
25                  and waterways has no significance as being a contributing

1 factor to site location. The possible connection of  
2 lakes through underground springs is not studied, and  
3 anyone familiar with these lakes knows there are  
4 temperature variances in different areas of the lakes  
5 indicating spring feeds. Is one lake connected to the  
6 other by this means?

7 Section 2(e) is a reference to vegetation,  
8 aquatic habitat, terrestrial wildlife habitat on the site  
9 and within 500 meters. The VJ site is given the highest  
10 rating in this category, which is a 6. This seems to  
11 indicate that there is no vegetation or animal life to be  
12 concerned about.

13 However, Volume 6 page 47 and 48 states  
14 there is a species of conservation concern in close  
15 proximity to the site, and Volume 6 page 43 states that  
16 no fish were present in the upper reaches of Northwest  
17 Brook, one of the tributaries that drains Grand Lake.  
18 Indeed, this is the only connection of Grand Lake to the  
19 ocean which drains from Grand Lake and runs into Lingan  
20 Bay.

21 Contamination from the previous VJ site is  
22 evidenced in the brook, note Volume 6 page 42 in which  
23 the fish sampled in Grand Lake are described. One  
24 species mentioned is gaspereau which hatch in fresh water  
25 and migrate to the sea. Therefore, fish must be present

1 in the Northwest Brook, and, just as the VJ operation had  
2 an influence on this brook, the incinerator will also  
3 have an effect.

4 Section 3(d) deals with the number of  
5 buildings along the primary and secondary roads to the  
6 potential site. There is no consideration given to the  
7 number of people along this route at any given time.

8 What must be considered is the number of  
9 people travelling the highway in this area. The number  
10 of buildings is only one indicator. The presence of  
11 public buildings, such as churches, as well as malls,  
12 were not even taken into consideration.

13 Traffic volume on Grand Lake Road is an  
14 indication of the number of people in proximity to the  
15 site on a daily basis.

16 If we review the exclusionary criteria on  
17 page 3 Table 2.1 of this report, we see that the VJ site  
18 should have been taken off the list of considered areas.  
19 Section 2(b) states that an outdoor recreation area will  
20 not be considered.

21 The Environmental Impact Study, Volume 6,  
22 page 42, describes Grand Lake as "an area popular for  
23 recreational fishing".

24 When questioned on this, the response was  
25 that only areas deemed a recreational area by the

1 province or the municipality are deemed a recreational  
2 area in the assessment.

3 It must be noted that the Nova Scotia  
4 Department of Fisheries stock Grand Lake for recreational  
5 fishing. This would indicate that the province  
6 recognizes this area as an outdoor recreational area.

7 Section 3(b) states that it cannot be  
8 established in 100-year flood plain or watershed, note  
9 Volume 6, page 43 and 46 describing wetlands and marsh  
10 all around the area.

11 Also note Volume 6, page 42, which  
12 describes the VJ site as situated "within the Bridgeport  
13 Basin Drainage area."

14 Section 3(g) refers to areas where the  
15 surface does not have suitable characteristics to  
16 mitigate or contain potential spills.

17 If the soil in the VJ site area could do  
18 this, the multi-million dollar project now under way to  
19 contain the runoff from the stone dump left from the  
20 previous industrial activity at the site would not be  
21 required.

22 When questioned on the wetlands and marsh  
23 around the area, the reply was the site selection was  
24 based on a set of criteria that are assessed on readily  
25 available information, which was verified by visual



1 inspection, and we question whether this visual  
2 inspection was done during the driest part of the summer.  
3 Most of the year you need boots to walk around this area.

4 In table 2.1, Level 1 Site Selection  
5 Criteria, Category 3(b) states that watersheds and water  
6 supply areas will not be considered as a site, therefore  
7 the VJ site must be eliminated because it's positioned  
8 within provincial drainage basin IFJ9, which is part of  
9 the Bridgeport Basin watershed.

10 Section 5.6.2, page 5-80 under "Surface  
11 Water Resources" also takes special note of Kilkenny  
12 Lake, which is part of the water system for the Town of  
13 New Waterford, and Volume 6, page 44 of the environmental  
14 site assessment, and the statement that Kilkenny Lake was  
15 impacted from previous industrial activity at the VJ  
16 site.

17 Are we to assume that the VJ plant had an  
18 adverse effect on this lake but an incinerator at this  
19 location would not?

20 It is of special interest that, at the  
21 April 18th CBRM Council meeting, there was a discussion  
22 in which there was mention of the Provincial Government  
23 wanting to discuss Grand Lake.

24 It was surmised that this meeting would  
25 discuss Grand Lake as a water source for the SYSCO site,

1 and the possibility of water treatment plant being used  
2 to supply water to Whitney Pier and thus alleviate some  
3 of the pressure of supplying water from the Sydney Well  
4 Field Site.

5 Although this may, or may not, come to  
6 pass, it shows the importance of keeping Grand Lake as a  
7 potential water supply for the CBRM.

8 The citizens of the Cape Breton Regional  
9 Municipality have spoken out against incineration through  
10 the CBRM Council.

11 While it is felt that the tar pond  
12 material could, in theory, be safely destroyed by  
13 incineration, the history of incineration in this  
14 community has not been good, and I might mention that I  
15 spent 31 years in industry, and my job was to repair and  
16 maintain equipment, so I am well aware of equipment  
17 failure.

18 But getting back to the history of  
19 incineration in this area, the original incinerator that  
20 was built to destroy the Tar Ponds sludge could not be  
21 used, and millions of dollars was wasted. This was after  
22 all studies were done. In theory, this incinerator was  
23 capable of safely destroying the material. How was the  
24 presence of PCBs overlooked and what else was missed?

25 The CBRM solid waste incinerator is

1661 Grand Lake Road Residents  
(Presentation)

1 another example of why incineration is looked at with  
2 scepticism by residents. This unit had to be closed  
3 because it could not meet environmental guidelines. We  
4 could not safely burn garbage but we can burn toxic  
5 material?

6 We must take into account the general  
7 health problems of this community. After a long history  
8 of heavy industry, residents already have health  
9 problems. Black lung, as well as other various types of  
10 breathing problems, are common. Any amount of further  
11 air contamination is a serious problem.

12 The human problems as well as the  
13 mechanical problems associated with an incinerator is an  
14 unnecessary risk.

15 The social impact of setting up an  
16 incinerator anywhere in CBRM cannot be underestimated.  
17 Notice the reluctance of approved incinerators to accept  
18 materials from this site.

19 An incinerator can only hurt tourism,  
20 enrolment at Cape Breton University, as well as the  
21 assumption of a pristine environment at the Lingan Golf &  
22 Country Club.

23 It does not make sense to contaminate one  
24 site to clean another.

25 The VJ site has been left in the condition

1662 Grand Lake Road Residents  
(Presentation)

1 that indicates parts of this site has to be remediated,  
2 not further contaminated.

3 The location of the proposed incinerator  
4 site may well adversely impact Cape Breton Island's only  
5 university. In a depressed area with a declining  
6 population, this university is a major employer.  
7 Unfortunately, the university must attract students from  
8 outside the area in order to prosper. A PCB incinerator  
9 less than 2 kms from this institution would hardly be a  
10 selling point to attract new students.

11 If the only solution to the Tar Ponds  
12 problem was incineration, it would have to be used, but  
13 there are alternatives, as shown in the Impact Study,  
14 alternatives that are safer and probably more cost  
15 effective.

16 Please respect the wishes of the residents  
17 of the CBRM and get on with the cleanup minus  
18 incineration.

19 I will now turn over our presentation to  
20 Henry.

21 --- PRESENTATION BY GRAND LAKE ROAD RESIDENTS (MR. HENRY  
22 LELANDAIS)

23 MR. LELANDAIS: Thank you, Ron.

24 Good evening, Madam Chair, Monsieur  
25 LaPierre, Mr. Charles.

1663 Grand Lake Road Residents  
(Presentation)

1 I would like to continue the presentation  
2 in the vein of the incineration process itself, and the  
3 ramifications of such a development.

4 While the incineration system described in  
5 the EIS, particularly on Volume 2, pages 8, 9 and 10,  
6 should be able to capture most of the contaminants likely  
7 to exist in the exhaust gases, there is not sufficient  
8 detail to convince us that this is the safest and most  
9 efficient approach to destroy the organic contaminants in  
10 the Tar Pond sludge, or to assess the veracity of the  
11 claims made.

12 And I'm using the word "destroy" in a  
13 rather obnoxious-to-me sense when recalling Newton's laws  
14 that matter cannot be destroyed or created. When I hear  
15 the word "destroying the PCBs" and "destroying dioxins",  
16 what we actually mean is that we're re-arranging the  
17 molecular structure, the atomic structure, whatever has  
18 to be done, to change the composition to another product.  
19 We are not destroying. You cannot destroy PCBs, you  
20 cannot destroy dioxins. You rearrange to render them  
21 non-toxic.

22 At some point, the old expression in  
23 computers "Garbage in, garbage out" can apply to  
24 incinerators. What you put in comes out the other end,  
25 in some form or another.

1664 Grand Lake Road Residents  
(Presentation)

1                   There's no detail to judge the  
2 effectiveness of some of the control technologies, and I  
3 refer particularly there to mercury.

4                   It would be appropriate, I would say, to  
5 indicate what controls would be used, where they are  
6 presently used, I mean in other locations, other  
7 incinerators, and their history of operation and ability  
8 to achieve the standards to which the operation intends  
9 to commit.

10                  There is no performance data from  
11 facilities where a similar unit and controls are used to  
12 support the claims that they will meet the required  
13 incineration guidelines in the CCME standards.

14                  It is not clear if the reference to an  
15 oxygen concentration of 3 percent, which is mentioned in  
16 Volume 2, page 9, 4.2.1, paragraph 4.2.1, is at the  
17 outlet of the secondary combustion chamber, and if it is  
18 to be maintained, or a minimum of 3 percent volume.

19                  In order to ensure complete combustion an  
20 oxygen concentration should be maintained above 6  
21 percent.

22                  There is no reference to the residence  
23 time of the gases at temperature. The proponent needs to  
24 show that the operating conditions of 2 seconds  
25 retention, gas retention, at 1200 degrees with 6 percent

1 oxygen, will be maintained for the full and proper  
2 destruction of dioxins. Again, "destruction" is not my  
3 favourite word.

4 All the incinerators burning toxic waste  
5 produce chlorinated dioxins, although the mechanism by  
6 which they form is not known.

7 May we point out that there is two issues  
8 actually involved with dioxin formation in incineration.

9 There is an issue with the net formation  
10 of dioxins in the incinerator combustion zone itself, and  
11 there's a second issue with new dioxin formation in the  
12 post-combustion, or the after-burner section.

13 These are produced from certain  
14 precursors, mainly graphitic carbon, and the particulate  
15 matter entrained in the exhaust gases.

16 Now, some experiments have been carried  
17 out over the last couple of years, and have shown that  
18 dioxins can be produced from these precursors by surface  
19 catalyzed reactions on the fly ash particulates presented  
20 during the incineration -- present during the  
21 incineration.

22 Now, these experiments -- during these  
23 experiments, these gases -- these dioxins, rather, were  
24 produced in an incinerator in Ontario that had been freed  
25 from organic material. A flow-tube apparatus was used at

1           about 300 degrees Centigrade under a 10 millilitre per  
2           minute nitrogen flow.

3                         These experiments gave a direct measure of  
4           the extent of the catalytic reactivity of the fly ash  
5           surface. Lower amounts of chlorinated dioxins were  
6           produced in experiments with ash from a modern  
7           incinerator, whose effluents were normally very low in  
8           these compounds, and also only very small amounts of  
9           dioxins, in the form of octachlorodixin were formed using  
10          an empty flow tube for the reactive surface.

11                        All these indications of the degree to  
12          which oxygen formed related to the amount of the  
13          particulate matter being flowed in the relative ability  
14          of the particulate matter to act as catalysts for the  
15          formation of these dioxins.

16                        These results then indicate that the fly  
17          ash surface has constituents and properties that promote  
18          the production of chlorinated dioxins from chlorinated  
19          phenols, and they support catalyzed surface reaction  
20          mechanism.

21                        Such information can cause a false  
22          indication of adequate dioxin destruction in laboratory  
23          scale investigations of the conditions required to  
24          destroy dioxins in feed stock.

25                        For instance, many of the experiments used



1 to determine the efficiency of incineration in destroying  
2 dioxins were done under laboratory conditions.

3 Therefore, no account was taken into consideration of  
4 this excess formation of dioxins on the fly ash, false  
5 impressions were given of the ability of the incinerator  
6 in the primary combustion areas to destroy dioxins when  
7 this was not added to it.

8 Now, with respect to the proposed  
9 incinerator and the items that require additional  
10 information, there is no mention of the exact unit to be  
11 used on the site, in other words, who's making the  
12 incinerator, where was it used before and has it been  
13 used successfully, how is it performing, have there been  
14 any accidents or breakdowns, and, of so, how many and how  
15 are they corrected?

16 We know nothing about that, no mention of  
17 it is made. Therefore, how can we predict what the  
18 similar operation will be in our -- in use in our area?

19 It has been stated several times that  
20 incineration can be 99.9999 percent efficient to so-  
21 called DRE formula. Has it been proven that this can  
22 consistently be met? Now, our research has not so  
23 indicated.

24 While the references to the incineration  
25 system in the impact statement seem to indicate that they

1 should be able to capture most of the contaminants likely  
2 to exist in the exhaust, many operational details are  
3 missing that would allow us to assess the claims.

4 It would be appropriate, therefore, to  
5 include performance data from operating units where the  
6 technology is used to support the claims that the  
7 applicable CCME or CWS incineration guidelines will be  
8 met as well as the DRE, the sixty-nines.

9 Going on then to the incinerator site, in  
10 Table 2.1, the Level One Site Selection Criteria,  
11 Category 3B states that watersheds and water supply areas  
12 will not be considered as a site. Therefore, in our  
13 opinion anyway, the VJ Site must be eliminated because it  
14 is positioned within Provincial Drainage Basin IFJ9. And  
15 I'm sorry if I seem to be repeating here. I think Ron  
16 and I got this in both our selections. However, it bears  
17 emphasis.

18 When questioned about this, the Proponents  
19 replied that this area is not a protected watershed.  
20 Now, this answer to me is not really acceptable. A  
21 watershed is a watershed, and the stipulation in the  
22 selection criteria does not spell out the word  
23 "protection."

24 Therefore, if a watershed is used in any  
25 -- or if an incinerator is used in any sense in a

1669 Grand Lake Road Residents  
(Presentation)

1 designated watershed, whether it comes under the  
2 protection of the province or the federal department, it  
3 still should not be in that position.

4 Drainage streams from the wetlands around  
5 the entire area drain into the Bridgeport Basin and all  
6 these wetlands are downwind of the proposed incinerator.  
7 Oh, our map has disappeared. I was going to refer to it.  
8 But looking at the map we had on the screen, you can see  
9 the position of the incinerator site in Grand Lake.

10 The prevailing winds in this general area  
11 are from the south/southwest, and I'll have to agree with  
12 the Proponents that their wind rose is certainly  
13 accurate. As a hobby of mine I've followed weather  
14 patterns over the last several years, and actually for  
15 the last one whole year I took compass bearings and wind  
16 velocities of all the wind in that area. I live about a  
17 kilometre and a half from the site, and the winds are  
18 definitely predominantly from the south/southwest.

19 Looking again at the map -- I think you  
20 have the map with you, if I'm correct. The one on the  
21 screen is gone right now, but looking from Grand Lake, if  
22 you see in the upper portion of the map the Town of New  
23 Waterford, the Town of New Waterford is directly in line  
24 with the predominant south/southwest wind.

25 So that actually where Ron and I live

1670 Grand Lake Road Residents  
(Presentation)

1 we're not that much afraid of any emissions from the  
2 incinerator, we're completely south of it. But the Town  
3 of New Waterford will be getting emissions from the  
4 incinerator about 80 to 85 percent of the time during  
5 which the incinerator will operate.

6 I'm assuming that there'll be very little  
7 operation of the incinerator during the winter, and the  
8 winter season is the time when we mostly get any winds  
9 from other directions, particularly from the north, from  
10 the east directions.

11 The season of incineration, if I want to  
12 -- if I may put it that way, will be predominantly south  
13 to southwest. Therefore, the Gardiner, the Town of New  
14 Waterford and the River Ryan area would be predominantly  
15 downwind and in the path of the plumes containing  
16 emissions from the stacks of these incinerators. There  
17 are quite a few residents in those areas, believe me.

18 To go on again, then -- I'm sorry if I  
19 rambled a bit from the written proposal but I think we  
20 can overlook that, can we not, Madam Chairman? Thank  
21 you.

22 Criteria for the site selection included a  
23 residence limit of 500 metres from the site property, and  
24 again I think this was hashed over several times before  
25 and I don't want to arouse your ire, Madam Chairman, but

1671 Grand Lake Road Residents  
(Presentation)

1 since it's in front of me I'm going to read it over  
2 again.

3 The 500 metres from the site property.  
4 CCME guidelines previously guaranteed that no residences  
5 or public buildings would be within 1,500 metres of the  
6 incinerator site, which is a kilometre and a half. And  
7 our question is, why was this not complied with when  
8 there are at least 20 homes, at my last count, and a  
9 dairy farm within these limits?

10 When we asked this question of the  
11 Proponents, the answer was that this reference was to a  
12 1992 document that applies to permanent incinerators and  
13 not a temporary one that would be used for the proposed  
14 cleanup. And again we can get into contentions as to  
15 what constitutes a permanent incinerator versus a mobile  
16 incinerator versus whatever you name it.

17 Nevertheless, an incinerator is an  
18 incinerator and to haggle over the description of the  
19 name of an incinerator when we're dealing with the health  
20 of the people who live within a fairly narrow range from  
21 the proposed site, to me, is not kosher.

22 I would strongly recommend that the  
23 original 1,500-metre designation of distance would be  
24 adhered to in any kind of an incinerator on that  
25 particular site.

1672 Grand Lake Road Residents  
(Presentation)

1                   It's our contention that since the  
2 proposed incinerator will be in use for three years and  
3 on site for probably five years it must be considered as  
4 a permanent rather than a temporary incinerator. We  
5 maintain then that the Victoria Junction Site must not be  
6 considered.

7                   We also maintain that if incineration is  
8 to remain as a component of the remediation process all  
9 applicable parameters, including the guidelines,  
10 calculation, dispersion modelling, et cetera, would have  
11 to be updated to represent a permanent incinerator if  
12 this one is classed as a mobile or a transportable  
13 incinerator and if the guidelines or the CCME standards  
14 are different for those two categories.

15                   That ends our presentation, Madam  
16 Chairman. We didn't take up too much time after all. I  
17 thank you very much for the opportunity and I thank you  
18 for your indulgence throughout this whole presentation  
19 and your fairness to all the presenters. Thank you.

20 GRAND LAKE ROAD RESIDENTS

21 --- QUESTIONED BY THE JOINT REVIEW PANEL

22                   THE CHAIRPERSON: Mr. Marman and Mr.  
23 Lelandais, thank you very much for your presentation.  
24 I've got -- I've just got a few questions, then I will  
25 let my colleagues get going on theirs. I've got a couple

1 of sort of clarification ones.

2 My first one is -- this is very minor, but  
3 you have a reference in here to a May 18th meeting with  
4 respect to CBRM and the possibility of -- let me get my  
5 reference here -- it is of special interest that at the  
6 May 18th, Thursday, CBRM Council meeting, there was a  
7 discussion. You remember that reference.

8 Are we -- well, obviously we're not  
9 talking this year because we haven't got there yet. So,  
10 this was last year that this occurred, is -- what -- I  
11 was a bit confused about that reference.

12 MR. MARMAN: I must apologize, Madam  
13 Chair. We meant to put April 18th in there and we didn't  
14 correct it on our -- so it was the last Council meeting  
15 that was held and they were having a discussion on  
16 proposed water solutions to the problems they're having  
17 with their well field site at this time.

18 THE CHAIRPERSON: All right. That makes  
19 sense. It sounded like something that had happened  
20 recently, but I thought maybe you were being clairvoyant,  
21 you know.

22 MR. MARMAN: No. I apologize.

23 THE CHAIRPERSON: Anyway, my second thing,  
24 it's not so much a clarification but I think probably a  
25 request. Mr. Lelandais, when you were speaking on -- I

1 haven't got page numbers, but when you were making the  
2 references to some very -- fairly technical matters with  
3 respect to the production of dioxins and the concern  
4 about kind of false results obtained during laboratory  
5 scale investigations, now does that -- do you have a  
6 reference for that? Is there a paper that that came  
7 from, and, if so, is that something you could provide to  
8 the Panel?

9 MR. LELANDAIS: Yes, Madam Chair, there  
10 were experiments conducted over the period 1992 to 1995  
11 particularly, and I think they continued even after that,  
12 mainly in Ontario. I can provide the names, not right  
13 now, but I have the reference to the papers where a team  
14 was experimenting with the ability of the particulate  
15 matter to act as catalysts for the reformation, if you  
16 will, of dioxins in the -- past the afterburner stage,  
17 into the gas cleaning, the precipitators, in that area,  
18 under certain temperatures particularly.

19 If I may, the idea to prevent this  
20 formation is to cool the gases, particularly before they  
21 enter the baghouse, very rapidly down from the  
22 afterburning temperature of up around 1,100 - 1,200  
23 degrees right down to 300 degrees in a matter of seconds,  
24 and this apparently prevents the reformation of dioxins  
25 on the particulate matter in the slag gases, in the flow



1 gases.

2 If this is not done, then the catalytic  
3 reaction can take place also very rapidly and you get the  
4 reformation of the different types of dioxins for that.  
5 These experiments that I mentioned in the report with the  
6 varying degrees of cleanliness, if you want to put it  
7 that way, of the amount of chlorine in it, were conducted  
8 during that period, particularly the Ontario -- I can  
9 provide you with the names of the experimenters. I'll  
10 undertake to provide that for you probably in tomorrow's  
11 session.

12 THE CHAIRPERSON: Thank you. Are there  
13 papers that -- you have references to some printed,  
14 published results?

15 MR. LELANDAIS: Yes. I don't have the  
16 papers anymore themselves but I have the names of the  
17 experimenters and who made the paper, wrote the paper on  
18 the experiments. [u]

19 THE CHAIRPERSON: Well, I think I will  
20 take that as an undertaking for the record, that you will  
21 present that information. So, thank you.

22 MR. LELANDAIS: Yes.

23 THE CHAIRPERSON: Just switching gears,  
24 switching subjects, I'm just wondering if I can ask you a  
25 general question, either of you or both of you, about

1676 Grand Lake Road Residents

1 local residents' experience with the VJ Site in terms of  
2 the effects that have been experienced with the VJ Site  
3 and particularly, I think, on soils and water.

4 MR. LELANDAIS: Pardon me? With reference  
5 to the previous operation at that site?

6 THE CHAIRPERSON: Yes, that's right.

7 MR. LELANDAIS: Yes. Do you want to just  
8 go ahead on that, Ron, and I'll help you.

9 MR. MARMAN: We've had a lot of  
10 environmental problems from the start with the VJ Site,  
11 in particular the coal dust which we were promised --  
12 well, actually many promises were made to us at the start  
13 of the project down there.

14 One of the projects was -- one of the  
15 promises was that the coal trucks would not be a problem,  
16 they would leave the site on a staggered basis so that  
17 they wouldn't tie up traffic on the highways. We were  
18 also promised they would be washed before leaving the  
19 site and that in general any of our problems would be  
20 addressed very rapidly.

21 So, we didn't have too much choice in the  
22 matter, we were forced to go along with the project, and  
23 as a result we're quite leery of any other projects in  
24 our community, because the hauling of coal in our  
25 community was a total disaster.

1677 Grand Lake Road Residents

1                   DEVCO decided that early in the process  
2 they would contract out the hauling of this coal to  
3 independent agencies and then it became a matter of,  
4 "Well, it's not our problem anymore, you have to deal  
5 with each guy that's hauling the coal for us now."

6                   So, complaints were first dealt with a  
7 little bit, they established a wash stand and whatever  
8 else, but then all of a sudden it became, "Well, we can't  
9 operate -- you don't expect us to operate this wash stand  
10 in the winter, do you?" I mean, that was never mentioned  
11 in the promises we were made, that the winter would ever  
12 be a problem with dragging coal dust through our  
13 community.

14                   And I think anybody who has travelled the  
15 highway in our area, in particular in the winter, were  
16 just amazed by the amount of coal dust that was left  
17 behind. So, whatever -- you know, that -- as a result of  
18 that, whatever happened in our community as far as water  
19 being contaminated or whatever else, we have no idea of  
20 what could have happened there other than it was an  
21 unsightly mess and you didn't want to live in the area  
22 with all the dust. You know, that's some of the problems  
23 we had.

24                   But another problem was even at the start  
25 of this -- the remediation problem at the Coke Ovens

1678 Grand Lake Road Residents

1 Site, and I don't really know who was involved in it or  
2 whatever, but there was some tar bubbling up out of the  
3 ground or whatever and all of a sudden it was in the  
4 paper that these -- this amount of tar or whatever  
5 material it was was going to be put in the 45-gallon  
6 drums, sealed and brought out to our neighbourhood at the  
7 VJ Site and just conveniently tucked away.

8 So, I became quite involved at that time  
9 in finding out where are all the permits to move this  
10 stuff, because I was aware that if you were going to move  
11 any material it had to be to a recognized storage area or  
12 it had to be moved to a plant that would destroy it or  
13 whatever.

14 So, I actually started calling -- first I  
15 started with the person at DEVCO that was involved with  
16 environment, he told me they had the permits but wasn't  
17 quite sure who issued them. I then said, "Well, was it  
18 the Sydney office?", "Oh, yeah, it was," so I called the  
19 Sydney office, they told me they had nothing to do with  
20 it, it was going to be -- it would have been the Halifax  
21 office that would have issued that particular permit.  
22 So, I called a lady at the Halifax office -- they gave me  
23 her name -- and of course she was just totally upset by  
24 the whole deal because she had no idea what they were  
25 talking about.

1                   And within a matter of days all of a  
2 sudden it -- there was an article in the paper where it  
3 was decided that -- and I'm referring to the Cape Breton  
4 Post -- it was decided that these drums would not be  
5 stored out there.

6                   So, it seemed that if we weren't on top of  
7 the project, like wondering what was going on down there  
8 at all times, you just never knew what was happening down  
9 there, and that's the problem with have with any project  
10 that goes on that particular site.

11                   It's kind of off the road a bit but yet we  
12 live all around it and, you know, it seems to be that we  
13 can be made a lot of promises but yet try to decide if  
14 the promises are being kept or not. It's pretty hard.

15                   THE CHAIRPERSON: Thank you very much.

16                   MR. CHARLES: I guess this question is for  
17 Mr. Marman. I think some explanation was given earlier  
18 in our proceedings about the incinerator that was used to  
19 try and destroy wastes at the Tar Ponds some years ago.  
20 Remember that? And I think the explanation was that the  
21 incinerator itself worked okay but it was the pipeline  
22 and getting the stuff to the incinerator that was the  
23 problem.

24                   And I'm just wondering if you would agree  
25 with that, because your comments seemed to suggest the

1 incinerator itself didn't operate properly.

2 MR. MARMAN: Well, actually, Dr. Charles  
3 the problem with that incinerator was the transportation  
4 of material from the Tar Ponds to the incinerator site,  
5 and as I understand it the pipeline just wasn't capable  
6 of carrying that sludge. But, by the same token, the  
7 Provincial Government refused to let people transport  
8 that material by truck over their property to the  
9 incinerator site.

10 So, when we speak of that incinerator,  
11 that incinerator was designed to burn Tar Ponds sludge.  
12 Somewhere along the line somebody discovered that there  
13 were PCBs over the 50 parts per million in that sludge,  
14 and this was after all the studies were done to determine  
15 what was in that material or whatever else.

16 So, an incinerator was designed to burn  
17 the Tar Ponds sludge. This sludge contained PCBs that  
18 were over 50 parts per million which meant that that  
19 incinerator couldn't be licensed to burn that sludge, as  
20 far as -- from what I understand. So, therefore, that  
21 incinerator was not capable of burning the sludge that  
22 was contained in the Sydney Tar Ponds.

23 MR. CHARLES: And that's why you make the  
24 statement you do?

25 MR. MARMAN: Yes, sir.

1 MR. CHARLES: Yeah. Thanks very much. I  
2 guess my next question is -- well, whoever wants to  
3 answer it, I suppose.

4 On page 4 you make reference to the fact  
5 that the claims for an incinerator operating at, you  
6 know, the six nines of efficiency is stated many times  
7 and you say -- and you put it in the form of a question,  
8 "Has it been proven that this can be consistently met?",  
9 and then you say, "Our research has not so indicated."

10 Now, I'd be interested in any research  
11 that you have to support that statement that says that  
12 incinerators cannot operate consistently at these  
13 numbers. I mean, do you have specific instances in mind  
14 or have you got a report that sort of has done a survey  
15 of incinerators and how they've operated, that sort of  
16 thing?

17 MR. LELANDAIS: Yes, Mr. Chair. There I'm  
18 referring to extensive reading we've done over the last  
19 -- particularly the last year, on any incinerator site  
20 that we could learn about, and in any of the references  
21 we found numerous breakdowns, numerous failures, some of  
22 them temporary, some of them longer, at which the DRE  
23 equivalent, the DRE efficiency was not met. But at other  
24 times we found that in spite of the times when the six  
25 nines were met there was still -- monitors showed over-

1 emissions of the dioxins and furans from that  
2 incinerator.

3 Further investigations along those lines  
4 showed that there were further breakdowns either in the  
5 baghouse or in the controlling/cooling areas,  
6 particularly the ultra static precipitators. So that we  
7 drew conclusions from some of these, particularly the  
8 references we made to work at the Swan Hill incinerator,  
9 to the one in Quebec, and to one in the Massachusetts  
10 area.

11 The gist of it was that the DRE itself,  
12 the efficiency measured by the six nine equivalent would  
13 not guarantee that the incinerator was meeting the  
14 emission standards which it was supposed to be designed  
15 to meet.

16 So, what I'm getting at in the statement  
17 in the presenter -- in the presentation here, is that to  
18 us the figure of the six nines is not appropriate in  
19 determining whether the incinerator operation is meeting  
20 the emission standards of that installation. Does that  
21 help, sir?

22 MR. CHARLES: Well, yeah, I guess I ---

23 MR. MARMAN: If I just might add  
24 something, Dr. Charles. When we speak of the 99.9999  
25 percent efficient, that's not a hundred percent of the



1 time. All incinerators have conditions where, you know,  
2 they don't meet that standard, they have to be shut down,  
3 they have to be restarted, they have to be whatever --  
4 the problem fix  
5 ed.

6 But the problem is you're left to believe  
7 that they're 99.999 percent efficient, and that's not the  
8 case a hundred percent of the time. No incinerator can  
9 possibly be that efficient a hundred percent of the time.

10 MR. CHARLES: So, you're talking about  
11 exceedances and things like that when they don't operate  
12 the way they should?

13 MR. MARMAN: Yes, sir. There's no doubt  
14 that, you know, incinerators are being operated as safely  
15 as possible, but as with any other type of mechanical  
16 equipment there are failures.

17 So, to say that we're going to put an  
18 incinerator in your community and we will meet this  
19 guideline of 99.9999 percent efficiency, yes, in most  
20 cases you might but there are going to be times when you  
21 are not even going to come close to that and you can't  
22 tell us how many times that's going to happen.

23 There's no way of predicting that. I  
24 mean, you would have to be able to determine an equipment  
25 failure days in advance to be able to do anything about

1           that.

2                         MR. CHARLES: That's okay, Mr. Marman, I  
3 think I'm in the transcript as saying the same thing,  
4 that machines don't always operate as they should.

5                         My last question is with regard to these  
6 tests in Ontario that showed problems with the fly ash  
7 and giving false readings and that sort of thing. I  
8 guess my question is, even if some of the predictions or  
9 modelling was done on that basis, wouldn't any false  
10 readings and that sort of thing still be caught by stack  
11 emissions where they're testing to see what actually does  
12 come out the stack?

13                        MR. LELANDAIS: They probably would be if  
14 you had continuous monitoring of the emissions from the  
15 stack as to the content of dioxins and furans.

16                        In general, we have always been told by  
17 people who have investigated, who built incinerators --  
18 and I think it's mentioned somewhere in the EIS -- that  
19 there is no machine, there is no instrument capable of  
20 continuously monitoring dioxins.

21                        And I have to disagree, because I can  
22 undertake, if you wish, to produce for you a company in  
23 the United States who has developed a gas chromatograph,  
24 portable gas chromatograph, that can continuously measure  
25 the dioxin emissions from the stack.

1685 Grand Lake Road Residents

1           So, using that type of a monitor, yes, you  
2           could predict instantly when there was any problems  
3           anywhere in the incineration setup, whether it's in the  
4           glass cleaning area, the afterburners or even the primary  
5           ones, by monitoring the output and relating it to SO2  
6           emissions, to nitrous oxide emissions or whatever.

7           MR. CHARLES: We may get back to the  
8           Proponent on that and ask if they are aware of such a  
9           company, such a process.

10          MR. LELANDAIS: Very good. Okay.

11          MR. CHARLES: Well, I thank you both and  
12          thank you for all your participation in these hearings.

13          MR. LELANDAIS: You're welcome.

14          THE CHAIRPERSON: Just before -- why don't  
15          we just ask that question for a matter of clarification.  
16          Are you aware of such monitoring equipment?

17          MR. POTTER: I'll ask Mr. Shosky to  
18          respond. Thank you.

19          MR. SHOSKY: Thank you, Mr. Potter. And I  
20          want to just compliment the witnesses on the amount of  
21          research that they've done on these issues, and it's a  
22          pleasure to talk with them about it.

23                 I think, before I answer that continuous  
24                 monitoring question because it's kind of a loaded  
25                 question in a way, there are not really, in my opinion,

1 proven ways of monitoring that other than having actual  
2 lab results. We will take that as an undertaking, and we  
3 would be happy to.

4 But I'd like to put the whole idea of  
5 dioxin formation in perspective at least from my  
6 perspective when I started working with the Tar Ponds  
7 Agency on engineering a solution around this issue.

8 We knew when we started that -- based on  
9 the health risk assessment that dioxin emissions would  
10 still not trigger any significant health issues without  
11 controls. Early on in the program the question was posed  
12 to the Agency about the addition of dioxin mitigative  
13 measures as part of the emission control equipment.

14 I can say that the Agency insisted that we  
15 look at that very issue very diligently during the  
16 process of our evaluation and recommendations, and  
17 because it comes up as a regular issue and, in my  
18 opinion, because there is no continuous way of monitoring  
19 dioxin, those predicted methods of air emission controls  
20 using the carbon and other technologies that are  
21 available are additional insurance that those dioxins  
22 will not be formed during the process.

23 But we will take the undertaking for  
24 looking for this piece of dioxin monitoring equipment and  
25 would need some time to explain it in detail. [u]

1 THE CHAIRPERSON: I think I also should  
2 probably take -- put an undertaking on the record for Mr.  
3 Lelandais to bring forward his information. Are you able  
4 to do that? So, this would be your information ---

5 MR. LELANDAIS: Yes, I ---

6 THE CHAIRPERSON: --- on the manufacturer  
7 of this equipment.

8 MR. LELANDAIS: Yes, I can bring a small  
9 piece of brochure that I received from a corporation that  
10 manufacturers this piece of equipment. It's quite  
11 portable, it's based on a gas chromatograph type of  
12 analysis, and it doesn't measure the -- as a laboratory  
13 sample would be done but it measures parameters that  
14 relate directly to the emissions, to dioxin emission --  
15 contents of dioxins in the emissions. It can be used  
16 then as a continuous monitor to determine the emission  
17 control. I can bring that in tomorrow also.

18 THE CHAIRPERSON: Well, thank you. We  
19 will take that as an undertaking. [u] I guess you're  
20 both looking for the same thing or versions of the same  
21 thing. So, we will have two undertakings.

22 MR. CHARLES: Madam Chair, I'd like a  
23 little clarification, please. Mr. Shosky, I'd like to  
24 know who asked the loaded question.

25 MR. SHOSKY: There's a lot of loaded

1 questions, Dr. Charles. Thank you.

2 MR. POTTER: Madam Chair, if could for  
3 just a minute, we do actually have three undertakings on  
4 the topic.

5 If you recall, Save Our Health Care  
6 Committee was coming back with information from Europe  
7 that has continuous dioxin and furan monitoring, if I  
8 recall, a couple days ago. I don't recall the  
9 undertaking number, but if I am correct, I think we now  
10 have three undertakings on that same topic. So ---

11 THE CHAIRPERSON: Well, we've got a lot of  
12 brains working on this issue, so the Panel thank you for  
13 your efforts and we look forward to your various results.  
14 So, thank you for reminding me.

15 MR. LELANDAIS: Well, I have two. How  
16 many have you got?

17 DR. LAPIERRE: Good evening, and thank  
18 you. I have a few questions, short questions. One of  
19 them relates to the watershed. Could you provide  
20 additional information on the size of the watershed, and  
21 does it contain all of the six lakes that you mentioned?

22 MR. LELANDAIS: Is there any way of  
23 getting the map back up on the screen, please? Stephen,  
24 if you could.

25 MR. MARMAN: If I might, Dr. LaPierre,

1 when we talk of the six lakes we also talk about the  
2 possibility of some interconnection between these lakes  
3 with underground springs and whatever.

4 So, the fact that these lakes could be  
5 tied into Kilkenny Lake -- and I believe somewhere along  
6 the line during the VJ operation there was some concern  
7 that Kilkenny Lake was having -- was getting affected by  
8 some runoff from a proposed pond that DEVCO was putting  
9 in.

10 And I believe, if I'm not mistaken, it was  
11 a Mr. Musial (sp) from New Waterford who actually had a  
12 video of contamination entering that lake, and if I --  
13 I'm sure that there are copies of that video somewhere.

14 MR. LELANDAIS: Pardon me, Madam Chair,  
15 may I leave and go up to the map to point something out?

16 THE CHAIRPERSON: Yes, but of course if  
17 you're speaking once you're up there without a mike on  
18 you're not recorded but ---

19 MR. LELANDAIS: Ah! Yes, you're right.

20 THE CHAIRPERSON: Why don't you tell us  
21 what you're going to point out and then ---

22 MR. LELANDAIS: I'll tell you what I'm  
23 going to point out first, yes. In general the -- Grand  
24 Lake, as you see, the one nearest the very bottom, is the  
25 biggest lake in the area. That is the one that drains

1690 Grand Lake Road Residents

1 into what we call Nor'west Brook that goes -- if you look  
2 at Grand Lake, you see where the incineration site is  
3 marked with that long manmade area.

4 Sou'West Brook goes across due east of  
5 that and then turns sharply to the north and meanders  
6 down up toward the top of the map and eventually comes  
7 out into the Bridgeport Basin there.

8 That whole general area encompassing all  
9 those wetlands and the lakes called Brown's Lake and so  
10 on and Kilkenny Lake all form part of that watershed.  
11 So, almost the whole area you see on the map except the  
12 most northerly region is part of the Bridgeport Basin.

13 Now, the chap that Ron referred to, Mr.  
14 Musial (sp), was head of the Fish and Game Association  
15 for New Waterford and I did belong to that association at  
16 the time and we had many concerns over the years,  
17 environmental concerns about that area.

18 For one thing, the Provincial Government  
19 was always stocking fish particularly in Grand Lake and  
20 in Brown's Lake, and we wanted to make sure that we  
21 weren't wasting money restocking these lakes with fish if  
22 we were going to have environmental problems as well, as  
23 you can imagine. So, that is why we were quite concerned  
24 on that as a watershed and had it classed as a watershed.

25 Now, I really don't understand the answer



1691 Grand Lake Road Residents

1 I got from the Proponents when they say that it's not  
2 listed as a protected watershed if they are paying for  
3 stocking the fish. To me, it should be protected.

4 Pardon me, also the Kilkenny Lake part is  
5 a backup water supply for the Town of New Waterford.

6 DR. LAPIERRE: Thank you. And that helps  
7 me understand the size of the watershed. I guess,  
8 another question. How many people do you represent? Is  
9 it all the people that live in your area? How far do you  
10 extend? Like you're the -- you say you're Grand Lake  
11 Road Residents.

12 MR. MARMAN: Actually, we're probably -- I  
13 don't know -- anywhere from two to five kilometres around  
14 the area, and we've also had other -- people from other  
15 committees come into our meetings to talk to us, in  
16 particular the people that live on Lingan Road, and  
17 they're quite concerned because the incinerator will be  
18 very close to Lingan Road.

19 So, in general, the meetings that we've  
20 held, we might have 50 or 60 people that attend but then  
21 we get lots of calls from other people who couldn't make  
22 the meeting but want to know what's going on and what's  
23 -- you know, it was actually an informal type of  
24 committee that Henry and I with our councillor, Vince  
25 Hall, set up to try to get some input from the community

1 to decide what were the fears that they had with this  
2 incinerator coming to our area, and every meeting we've  
3 had more and more people show up. So ---

4 DR. LAPIERRE: Okay. Well, thank you.  
5 The next question relates to -- you did indicate that the  
6 people in the area fish in the lake. How important is  
7 the recreational value of the lakes within the watershed  
8 to the local residents?

9 I understand you did say that it wasn't a  
10 provincial -- but for the local people how important is  
11 it?

12 MR. LELANDAIS: I'm going to start that  
13 and let Ron finish it. I'd just like to say that since I  
14 was about four years old I've been fishing in that lake  
15 and I'm 76 now, so there was a lot of fish -- it was  
16 quite important. And when I was growing up all the  
17 children living within five miles of that area went  
18 fishing in Grand Lake.

19 Unfortunately, there's very few fish left  
20 in Grand Lake. For one thing, one of the last jobs I did  
21 in that area while I was still employed with Sydney Steel  
22 was to take acidic -- acid samples rather, water samples  
23 from Grand Lake to determine the acidity, and in certain  
24 seasons of the year it was down as far as 4.2. I recall  
25 at one time when the pH in that lake, at one end of that

1693 Grand Lake Road Residents

1 lake, was down to 3.9. That's pretty acid. And,  
2 unfortunately, the fishing died out.

3 But the other lakes, Brown's Lake, East  
4 Lake, there's fish in those lakes and it's still used as  
5 a fishing area. Ron is a little more ardent fisherman  
6 than myself, not much. Perhaps he can answer that.

7 MR. MARMAN: Personally I've spent a lot  
8 of time fishing the lake but what makes the lake so  
9 important as an area for recreation, in particular  
10 fishing, is that it's not that there's so many fish in  
11 the lake it's just that it's so close to Sydney.

12 So, you know, if you come home in the  
13 evening and you want to just get away for a few hours you  
14 don't have to spend a fortune on gas to drive somewhere,  
15 you can just head out the highway and all of a sudden  
16 you're in a lake with no houses around in a particular  
17 area, you can have a real nice evening there and whether  
18 you catch a fish or not that's of secondary importance.

19 MR. LELANDAIS: Don't say "no houses  
20 around."

21 MR. MARMAN: Well, not right on the lake.  
22 All the houses are a bit away from the lake, so it's a  
23 pretty secluded lake.

24 DR. LAPIERRE: Okay. My final question  
25 is, when you or your group requested information from the

1 VJ Site operators, was it readily available to you?

2 MR. MARMAN: It could be readily  
3 available, yeah. You just had to call and they would try  
4 to give you, you know, whatever information you were  
5 trying to get from them, but the problem was when they  
6 subcontracted things, and in particular the coal trucks.

7 When they subcontracted out, they just said  
8 -- their standard answer was, "Why are you bothering us?  
9 They're not our trucks." And I tried to maintain that if  
10 they were issuing the contracts this should be a part of  
11 the contract, but we just couldn't get anywhere with it.

12 And as a group, the problem you get within  
13 our area is that, you know, if you had 300 or 400 houses  
14 right in that area people would basically listen to you,  
15 because you have a lot of people that are now going to  
16 complain. But when you're one of maybe 20 or 30 houses  
17 in an area, it's a lot harder to get people involved and  
18 it's a lot harder to get people to listen to you when you  
19 have a problem, so that's what we found with that  
20 particular site.

21 You were referring, Mr. Charles, to -- Mr.  
22 LaPierre rather, to the previous operators of the  
23 Victoria Junction Site.

24 MR. LAPIERRE: Yes.

25 MR. MARMAN: Thank you. I was going to

1695 Grand Lake Road Residents

1 say we have a very good rapport with our gentlemen across  
2 the way and we have no problem with getting information.  
3 We don't always agree with them but we get it. Thank  
4 you.

5 DR. LAPIERRE: Thank you very much for  
6 your presentation and for the answers.

7 THE CHAIRPERSON: Thank you. I would now  
8 like to -- I think what I'm going to do is open -- invite  
9 some opportunities -- we're getting close to -- we'll go  
10 a little beyond 9 o'clock since we started late, but I  
11 think I will go first -- perhaps what I could do -- could  
12 I just get a show of hands how many people do have a  
13 question for the presenters?

14 So, I've got one, two, three, four, five,  
15 six, and I believe I've got four of the registered  
16 participants and two other members of the -- yes, I see  
17 you at the back, sir. So, I will -- I'll ask you to just  
18 keep it down to a couple of questions each, please, and  
19 if you can get by with only one that's great, too.

20 So, I will take Sierra Club first.

21 --- QUESTIONED BY SIERRA CLUB OF CANADA (MR. BRUNO  
22 MARCOCCHIO)

23 MR. MARCOCCHIO: Thank you, Madam Chair.  
24 And thank you for the presentation. I think the  
25 community most impacted should have their concerns taken

1 very seriously.

2 Ron, it was with interest that I heard you  
3 recounting that you were employed in keeping equipment in  
4 good stead, and I want to ask you a series of questions  
5 that will only -- should only require a "yes" or "no"  
6 answer. So, with the Chair's indulgence, there are a  
7 half a dozen or so questions but they're very short and  
8 to the point.

9 Do you recall that the boiler at the Tar  
10 Ponds incinerator malfunctioned and on several occasions  
11 that when it malfunctioned it lost all of the water and  
12 they had to shut down the incinerator system to repair  
13 the boiler on several occasions?

14 MR. MARMAN: I don't recall that  
15 personally because at the time -- my interest in the  
16 information pretty well ended during the first stages of  
17 the building project.

18 I had an electrical crew down there and we  
19 were going to be involved in heat tracing of pipes and  
20 whatever, but we weren't on the job very long when it was  
21 decided that our services were better needed at the upper  
22 end of the plant. So, they contracted out most of the  
23 work involved with the incinerator and SYSCO employees  
24 pretty well maintained the rest of the plant at that  
25 time.

1 MR. MARCOCCHIO: I was getting phone calls  
2 at that time from some pretty incredulous subcontractors  
3 who couldn't believe the goings on there, but I'll carry  
4 on.

5 Do you recall any of the problems with the  
6 baghouse when it was first built, that the nozzles  
7 weren't properly designed and the concrete had -- it had  
8 to be completely dismantled and the concrete had to be  
9 air-jacked out and the new nozzles put in to make the  
10 baghouse work?

11 MR. MARMAN: No. Once again, that would  
12 be a contractor that would be involved in that, but our  
13 involvement with the baghouse would be -- you know, like  
14 we had several induced-air fans that basically we had  
15 problems with and had to be taken to our shop for repair,  
16 and of course we were always around the area, you know,  
17 with other things that needed to be worked on.

18 But in general there was a crew that were  
19 stationed in that area to work in that area and they were  
20 more or less into the day-to-day operations of it and my  
21 job was more or less to get involved in anything that  
22 became extraordinary, such as the fires at the north and  
23 south sub and several fires we had at the reheat furnace,  
24 that sort of thing.

25 MR. MARCOCCHIO: Do you recall ---

1698 Grand Lake Road Residents

1 THE CHAIRPERSON: Excuse me. I have to  
2 note that the -- if you had a lot of questions, clearly  
3 they're not eliciting "yes" or "no" answers. So, I  
4 wonder if ---

5 MR. MARCOCCHIO: Okay. Well, I'll ask  
6 them all at once and then -- do you recall any of the  
7 following incidents. The ID fan bearings that blow --  
8 that move the air from the incinerator repeatedly burning  
9 out? Do you recall that the fuel feed system  
10 consistently malfunctioned?

11 Do you recall that the high-temperature  
12 refractory in the incinerator repeatedly burned out and  
13 had to -- resulted in high-temperature cement being  
14 ordered and with months' delays while that happened?

15 THE CHAIRPERSON: I think, let's stop  
16 there. Let's ---

17 MR. MARCOCCHIO: Do you recall ---

18 THE CHAIRPERSON: Clearly the ---

19 MR. MARCOCCHIO: --- that the high-  
20 pressure oxygen ---

21 THE CHAIRPERSON: Mr. Marcocchio, please,  
22 could you ---

23 MR. MARCOCCHIO: --- being installed  
24 underneath did not function properly and had to be  
25 replaced?



1699 Grand Lake Road Residents

1 MR. MARMAN: If I might answer, Madam  
2 Chair? I wasn't involved in the incinerator ---

3 THE CHAIRPERSON: Well, just a moment,  
4 please, Mr. Marman.

5 MR. MARMAN: I'm sorry.

6 THE CHAIRPERSON: Please, could you please  
7 respect the Chair when I ask you -- I'm just trying to  
8 ---

9 MR. MARCOCCHIO: I've finished with my  
10 questions.

11 THE CHAIRPERSON: Well, yes, you have  
12 finished. Mr. Marman, I believe you're being asked if  
13 you remember various malfunctions.

14 MR. MARMAN: No.

15 THE CHAIRPERSON: Could you just give me a  
16 general answer for that.

17 MR. MARMAN: No, I don't, because I wasn't  
18 involved in the operation of that incinerator. As I  
19 said, that was turned over to a different section of  
20 plant and I was involved in the other areas.

21 THE CHAIRPERSON: Okay. Thank you very  
22 much.

23 MR. MARCOCCHIO: I think my point, Madam  
24 Chair, is that there were ---

25 THE CHAIRPERSON: Mr. Ignasiak, did you

1 have your hand up?

2 --- QUESTIONED BY MR. LES IGNASIAK

3 MR. IGNASIAK: I promise it is one  
4 question and one question only. I need probably one or  
5 two sentences of introduction. Well, I'll start actually  
6 with question.

7 I understand that really you are not happy  
8 with the incineration and if there was an alternative you  
9 would like to know something about that. Is that  
10 correct?

11 MR. LELANDAIS: Yes, for both of us.

12 MR. MARMAN: Yes, for both of us, but our  
13 position has been that we don't want incineration to be  
14 part of this project and from there on we rely on the  
15 expertise of other people to choose the appropriate  
16 method of handling the problem.

17 MR. IGNASIAK: I just wanted to add that  
18 the Proponents tested a different method which is five  
19 times cheaper than the incineration, gave very good  
20 results during the demonstration, it's called pyrolysis  
21 and it's based on separation of the tar from -- sorry,  
22 separation of PCBs from the PCB-contaminated sediment, so  
23 instead of incinerating 50,000 tonnes you concentrate  
24 this PCB in 3,000 tonnes and you can do with that  
25 whatever you want.

1701 Grand Lake Road Residents

1 THE CHAIRPERSON: Mr. Ignasiak, I think,  
2 to be fair, I did stop Mr. Marcocchio because I felt he  
3 was making more comments than asking questions. I think,  
4 to be fair, I must say the same thing to you, too.

5 MR. IGNASIAK: Thank you very much.

6 THE CHAIRPERSON: Thank you. Ms.  
7 MacLellan, do you have a question?

8 --- QUESTIONED BY CAPE BRETON SAVE OUR HEALTH (MS. MARY-  
9 RUTH MACLELLAN)

10 MS. MACLELLAN: I have a couple of  
11 questions, and I assure you they will be in question form  
12 because I like to put my questions in question form so  
13 when you ask a question you can't always be sued.

14 MR. MARMAN: And, Mary, I have a lunch at  
15 10:30.

16 MS. MACLELLAN: Pardon me?

17 THE CHAIRPERSON: I ---

18 MS. MACLELLAN: Oh?

19 MR. MARMAN: I said I have a lunch at  
20 10:30.

21 MS. MACLELLAN: Oh, this is quick. I just  
22 want to ask you two questions about the VJ Site. The  
23 first one is, you recall when they started remediating  
24 the site. Did something happen to the fish at that time?  
25 Did they all die?

1702 Grand Lake Road Residents

1 MR. MARMAN: As far as the VJ Site goes  
2 with the fish, I don't know what happened at that time.  
3 I do recall an incident -- besides the VJ Site, Nova  
4 Scotia Power operates a turbine generator in that area  
5 and there was a spill of fuel at one time and this spill  
6 of fuel actually managed to work its way into the  
7 Nor'West Brook, and that's just an indicator of just, you  
8 know, what can happen when something spills.

9 But I have heard of, you know, problems  
10 with fish and I know at that time there were fish that  
11 were dead in the brook as a result of the fuel. But with  
12 the remediation, I haven't heard of anything lately that  
13 ---

14 MS. MACLELLAN: No, I'm talking about like  
15 -- but that's fine, if you don't know. I know people who  
16 know.

17 The remediation work, again back to the  
18 DEVCO site, do you recall any time when they took the --  
19 you know that pond that they built up on the hill. Do  
20 you recall a time when they were taking the contaminated  
21 waters out of that through a private contractor? And do  
22 you know where they went?

23 MR. MARMAN: I believe you're talking  
24 about the settling pond that they built, and I'm really  
25 not aware of what they did with anything in that pond

1703 Grand Lake Road Residents

1 other than to say that when that first pond went in there  
2 that was when all the disruption started over  
3 contamination in Kilkenny Lake and the indication that  
4 there could be some pollution from that settling pond  
5 entering Kilkenny Lake.

6 MS. MACLELLAN: That's when the fish died.  
7 And I got a call one day from one of your Grand Lake Road  
8 Residents who asked me to come and look at what was  
9 happening and asked me to follow the truck, and I did and  
10 I question to this day why they dumped it in an abandoned  
11 bomb site. Thank you.

12 THE CHAIRPERSON: Thank you very much.  
13 Ms. Ouellette, and then I am going to go to the other  
14 people who indicated an interest in asking questions.

15 --- QUESTIONED BY MS. DEBBIE OUELLETTE

16 MS. OUELLETTE: I just have one question.  
17 I'm just wanting to know if there's any farmland nearby  
18 the site and is the owner fearful of an incinerator being  
19 posted nearby?

20 MR. LELANDAIS: There is a dairy farm  
21 within 500 metres of the incinerator site. I can't  
22 answer whether the owner is fearful or not, but he's  
23 aware of the potential problem.

24 MS. OUELLETTE: Okay. Thank you.

25 THE CHAIRPERSON: Thank you. Could I see,

1 please, who was -- who else was interested in asking a  
2 question? I see one there, and two there. Is there -- I  
3 had three, did I not? No. Excuse me, the gentleman over  
4 there.

5 --- QUESTIONED BY MR. JOHN FITZGERALD

6 MR. FITZGERALD: I was just wondering for  
7 the proposed project, do you accept the proposed project  
8 if the incineration is taken out?

9 MR. MARMAN: At this point our biggest  
10 contention is to get rid of the incineration. After that  
11 then we really can't comment on the rest of the project,  
12 because they would have to go to an alternate method of  
13 handling the problem and there are alternate methods  
14 mentioned in the EIS, so I assume that one of those would  
15 be looked at, and at this point we're so busy  
16 concentrating on getting the incinerator off that we  
17 really haven't paid too much attention to the other  
18 methods.

19 MR. FITZGERALD: Thank you.

20 THE CHAIRPERSON: Oh, could you -- I  
21 forgot to say -- could you just say your name for the  
22 record.

23 MR. FITZGERALD: John Patrick Fitzgerald.

24 THE CHAIRPERSON: Thank you very much.

25 MR. FITZGERALD: Thank you.

1705 Grand Lake Road Residents

1 THE CHAIRPERSON: The gentleman at the  
2 back.

3 --- QUESTIONED BY MR. GRANT MACPHAIL

4 MR. MACPHAIL: My name is Grant MacPhail,  
5 and I was wondering about the watershed.

6 THE CHAIRPERSON: The taller mike might be  
7 the best one so we can hear you. You'd like the map back  
8 up? You'd like to put the map back up, of the ---

9 MR. MACPHAIL: Yes, please.

10 THE CHAIRPERSON: Okay. Just a second.

11 MR. MACPHAIL: Now, I live in the North  
12 End of the city and from near as I could find out one  
13 time you could go right through the steel plant out to  
14 Kilkenny Lake without getting out of your boat. Now,  
15 supposedly all the waterways, the lakes, are all hooked  
16 in, back into the harbour.

17 Now, with this plant that they're talking  
18 about putting out there, out by the wash plant or the  
19 university, would that stuff be coming -- still be coming  
20 in, into the harbour?

21 MR. MARMAN: Sir, there's no connection at  
22 present between any of those lakes and Sydney Harbour as  
23 such. The only connection with any of all those lakes is  
24 in the Bridgeport Basin. It's the watershed for the  
25 basin and they all -- the Keith's Lake and Brown's Lake

1706 Grand Lake Road Residents

1 drain into Grand Lake, which in turn flows through  
2 Nor'West Brook down into the Bridgeport Basin, but none  
3 of them actually go into Sydney Harbour on the complete  
4 west side.

5 MR. MACPHAIL: I ran across copies of old  
6 British military maps that show the whole area of the  
7 steel plant was a tidal marsh and it ran right out into  
8 Kilkenny Lake.

9 MR. MARMAN: Sir, at one time the area was  
10 a marshland. The mouth of the Sydney Harbour and what we  
11 call the North Pond now was part of the -- what they  
12 called Spanish Bay.

13 This is in the early military maps you're  
14 referring to probably back in the early part of the 19th  
15 Century, and when this Spanish Bay was all interconnected  
16 there was a lot of wetlands on both sides in this area  
17 and also on the Sydney side and they were interconnected,  
18 but I don't recall of any direct connection with Kilkenny  
19 Lake in the Sydney side.

20 MR. MACPHAIL: Yeah, you're saying in the  
21 19th Century. Mine are from the 17th Century.

22 MR. MARMAN: It's possible that that far  
23 back it could have been connected.

24 THE CHAIRPERSON: Thank you very much.  
25 I'd like to give an -- since I didn't go to them first,



1 I'd like to give an opportunity to the Tar Ponds Agency.  
2 Do you have any other questions to the presenters?

3 MR. POTTER: No questions, Madam Chair,  
4 just perhaps a point of clarification to repeat a  
5 previous point we've raised, but the -- on the details of  
6 the incineration, or the incinerator, when we get to the  
7 point of selecting the incinerator we've made a  
8 commitment to remodelling all the human health risk  
9 assessment work on the specific detail design of the  
10 actual chosen incinerator, so we're not operating on the  
11 basis of a few assumptions.

12 We'll repeat all the modelling on the  
13 exact parameters of the incinerator we pick. That's just  
14 a commitment we made before and I wanted to repeat it  
15 again.

16 MR. LELANDAIS: Thank you, Frank.

17 THE CHAIRPERSON: I think that now does  
18 bring us to the end of this evening's session. I want to  
19 thank again both sets of presenters and also for all  
20 other participants in the hearing for your questions and  
21 for your attention.

22 We will resume tomorrow. We start at 1:30  
23 in the afternoon. So, thank you very much and we'll see  
24 you tomorrow.

25 (ADJOURNED TO TUESDAY, MAY 9, 2006 AT 1:30 P.M.)

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

CERTIFICATE OF COURT REPORTERS

We, Philomena Drake, Ruth Bigio, Lorrie Boylen and Gwen Smith-Dockrill, Court Reporters, hereby certify that we have transcribed the foregoing and that it is a true and accurate transcript of the evidence given in this Public Hearing, SYDNEY TAR PONDS AND COKE OVENS SITES REMEDIATION PROJECT, taken by way of digital recording pursuant to Section 15 of the Court Reporters Act.

---

Philomena Drake, CCR  
Lorrie Boylen, CCR  
Ruth Bigio, CCR  
Gwen Smith-Dockrill, CCR

Monday, May 8, 2006 at Halifax, Nova Scotia