

NOVA SCOTIA ENVIRONMENTAL ASSESSMENT BOARD  
KELTIC PETROCHEMICAL AND LIQUEFIELD NATURAL GAS FACILITY  
NOVEMBER 2006

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HEARD BEFORE: Dr. Tony Blouin, Chair  
Dr. Ray Cranston, Member  
Ms. Penny Henneberry, Member

PLACE HEARD: Claymore Inn  
136 Church Street  
Antigonish, Nova Scotia

DATE HEARD: Wednesday, November 22, 2006

PROPONENT: Keltic Petrochemical Inc.:  
Mr. Shawn Duncan  
Mr. Kevin Dunn  
Mr. Derek Owen  
Mr. Rob Schonk  
Mr. Glenn Longert  
Ms. Janet Blackadar

INTERVENORS: Assembly of Nova Scotia Mi'kmaq Chiefs  
  
Nova Scotia Department of Environment and Labour  
  
The Concerned Citizens of Lincolntonville

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Per: Mark L. Aurini, Commissioner of Oaths

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an effect of increasing mercury levels in the water, either surface water or ground water. So there would be a monitoring programme set up that would carefully track those type of things in and around the site to ensure that we don't have those type of effects.

THE CHAIR

Okay. Thanks. Are we ready to go here?

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NS DEPARTMENT OF ENVIRONMENT & LABOUR PANEL:

MR. KIM MacNEIL, (Affirmed)

MS. SOLVEIG MADSEN, (Affirmed)

MR. DAVID SHEA, (Affirmed)

MR. JOHN DRAGE, (Affirmed)

MR. ANDREW MURPHY, (Sworn)

MR. JOHN THEAKSTON, (Sworn)

NS DEPARTMENT OF ENVIRONMENT & LABOUR - PRESENTATION

MR. KIM MacNEIL - PRESENTER

Good afternoon, Mr. Chair. It's a pleasure to be here representing the Nova Scotia Department of Environment & Labour and we'd like to thank the panel for allowing us to make the presentation this afternoon, myself and staff from Nova Scotia Department of Environment & Labour. My name is Kim MacNeil, I'm the Executive

Director with the Environmental and Natural Areas Management Division out of Halifax, and the department's mission is to promote and protect the safety of people and property, provide a healthy environment, provide employment rights and look at protecting consumer interests. The department mandate, we are the lead provincial department responsible for environmental protection, and environmental management, and some of our responsibilities include the development of regulations, policies. We have environmental monitoring networks throughout the province. We manage databases. We provide professional advice to the public and government, and we also do monitoring for compliance. The department is also the lead agency for occupational health and safety and public safety in the department. And just so that people know, there's some other groups or other divisions within the department. The Alcohol & Gaming Division, there's a Financial Institutions Division as well as several other divisions and agencies. What I'll be doing today is speaking on behalf of the Department of Environment & Labour, and we will be accepting questions from the environment side of the

Department of Environment & Labour and we will be accepting questions from the occupational health and safety side, or the public safety side, should they arise, and we can get back with those responses from staff that aren't currently here today -- that aren't here today. The environment side of the department is separated into two divisions, Environmental and Natural Areas Management Division that I'm involved with, as well as an Environmental Monitoring & Compliance Division, and we have Mr. David Shea here from our Antigonish office today who's representing that group. The Environmental and Natural Areas Management Division, or ENAM as we call it, looks after environmental assessment. We have a network of protected areas across the province. We monitor for air quality, we are involved with waste resource management, hazardous substance management, water resources and, as well, we have an environmental outreach programme. The Environmental Monitoring & Compliance Division, which is essentially our regional office network, is responsible for the majority of field operations that involve environmental protection, and they look at processing of applications, inspection

and monitoring of approvals, the response to public inquiries and complaints, as well as enforcing activities. And I think this may be a good time to explain there's two separate functions that are taking place here, separate but working together, between the Environmental & Natural Areas Management Division and the Environmental Monitoring & Compliance Division. The first part of the process is the environmental assessment, and after -- or should an environmental assessment approval, should the Minister provide a go-ahead on that, it would go to an industrial approval, and the proponent is then responsible for the detailed information and they then work with the regional offices of the Environmental Monitoring & Compliance group to come up with that industrial approval. So it's in two sections that it's done. So, water and waste water. This branch within the department looks after drinking water, ground water, surface and waste water. Several aspects of the project do have the potential to negatively impact water resources, as would any large project like this, but we feel that these impacts can be managed with appropriate mitigation measures and monitoring. Now, some of the

specific issues with this are site development activities, which include the blasting and excavation work, disturbance of historic mine tailings and any acid bedrock issues that may arise. A pre-blast survey would be required in order to document the existing well conditions and as well as we'd like to see mine tailings and acid bedrock being avoided, if possible, and, if not, contained or removed. Water supply development may affect surface water, wetlands and public safety. But we feel this can be managed by selecting the least impacting source options, provisions for protecting downstream water use and following appropriate dam safety guidelines. Both water quality and quantity of surface and ground water should also be monitored. Detailed mitigation and monitoring plans are required to address any potential impacts that are associated with the storage, handling and transportation of petroleum hydrocarbons and any other potential contaminants that are involved in the site -- with the site. These following items should be developed after the final stage design and include environmental protection plans, environmental monitoring compliance affects monitoring plans, and any



contingency plans that are required for the operation. Air quality, in this branch we are looking at the management and protection of outdoor air. Also looking at the regulations that are involved in air pollutants, as well as an ambient air monitoring network that the network has across from Cape Breton to the western part of the province. So, some of the recommendations on air quality, we are looking for a final detailed air dispersion modelling report that includes specific volatile organic compounds, or VOCs, and we're also looking at the local impacts of those VOCs on the environment and limits would have to be established once those are determined. We're also looking to have installation and maintenance of a continuous and permanent real time air monitoring network. We'd also like to see volatile organic compounds included in that monitoring network. And we're also requesting that the proponent undertake periodic stack testing that would ensure a proper calibration between the monitors that are on the ground and the actual emissions from the stacks. Pollution prevention, this branch looks after green procurement, reduction in toxic substances and the management of contaminated sites, dangerous goods,

pesticides, and they also are responsible for conducting emergency response planning. It's recommended that a pollution prevention approach start -- begin, I guess, with the project in the planning stage, and we'd like to see a focus on the reduction of hazardous raw material inputs and outputs using process integrated techniques. The EA release we would suggest requires submission of more details on the petrochemical facility prior to the application for industrial approval. There's a large volume of detailed information required, and as this is the first polyethylene facility in Nova Scotia there's a lot of information to catch up on, so to speak. There's also -- we'd also like to see a fully characterized chemical composition of all inputs, intermediate products and wastes from the facility, and we'd like to see predictions of the fate of all emitted contaminants, including those which can be produced during process disruptions, and looking, in this case, at the potential for long term or chronic toxicity, if that is applicable. We'd also like to see an environmental management system plan included in the pollution prevention options that takes into account a waste

management plan, environmental emergency plan and a monitoring plan. And that's the presentation.

THE CHAIR

Okay. Thanks very much. I'm going to ask -- at this point we are ahead of schedule, we have a lot of time for questions. Anyone with a question for Department of Environment & Labour?

NS DEPARTMENT OF ENVIRONMENT & LABOUR - QUESTIONED

MS. GAGNON

Chantal Gagnon, Ecology Action Centre. Could you just clarify, for the pollution prevention requirements for identifying the waste and the chemicals, is this needed prior to the proponent getting approval or after they've gotten approval?

MR. MacNEIL

Well -- do you want to speak to that, Solveig?

MS. MADSEN

We would like to see it as part of the submission for the industrial approval application, rather than, you know, after the proponent is released, if it is indeed released, from the EA process. So part of the IA process, industrial application.

MR. MacNEIL

Part of the reason for that is that the detailed information that will be required is specific to the operation as it's going to exist, and so we want all that -- as much information as we can get.

MS. GAGNON

I have another question. Could you just explain how the enforcement of Monitoring & Compliance will be -- I guess what is typically done, what is the procedure and how, and for local residents if they have complaints how the process is, how quick the response is. And in this case, since there is no liquified natural gas facility in Canada yet, this is something very new and you said the same for the polyethylene, so if we could just have a bit more information on that, please.

MR. MacNEIL

Yes. I think any resources that are required above and beyond what the department has on hand, we would access via an industrial approval. As far as the enforcement part goes, it would be enforced, there would be monitoring restrictions and those monitoring restrictions would be observed by the department as we would for any facility, and when limits are exceeded there is an enforcement policy within the department

that outlines an appropriate action for an appropriate problem. And depending on the nature and the severity of the problem, that would -- the enforcement action would sort of coincide with the nature of the issue. And there is a policy that's available from the department, the environmental enforcement policy and that's -- and that's how any project that was begun or exists in the province would be monitored.

MS. GAGNON

Environmental enforcement policy.

MR. MacNEIL

Yes.

MS. GAGNON

Thank you.

THE CHAIR

Maybe I can jump in, I've just got a couple of questions. One is, is your presentation available to the Panel?

MR. MacNeil

Certainly.

THE CHAIR

I don't know if we have it yet but -- we do, okay, thanks. You mentioned a couple of points in your

presentation that there are certain things the department would be looking for, it was in relation to the water and waste water issues, air issues, pollution prevention and so on, and you itemized a few things you're looking for. I just wanted to clarify are those items things that you, as a department, have the authority to require? Or are those things that you are looking for as a result of the environmental assessment process?

MR. MacNeil

We would rather have them through the environmental assessment process so the proponent is aware of those, but some of those items could be obtained through the industrial approval process. But obviously if we can identify as many of those requirements up front, it looks better for everyone.

THE CHAIR

My other basic question was I just want to get your views, to put you on the spot, I guess, where it's been mentioned by you and others, this is a new industry for Nova Scotia, we don't have a track record or experience locally with regulating and dealing with these industries. Is the department satisfied, and I guess

this is both on the environment side as well as the labour side, that you have the resources and expertise available to adequately monitor, enforce, assess and so on, all of the things that you would have to do to regulate this industry?

MR. MacNeil

Sure, I don't think that's putting me on the spot, I think that's a fair question. I can't speak for the Labour side but from the Environment side any deficiencies that we did have or would have would be addressed in the industrial approval, and we would look at having resources made available through that process to hire, if required, or obtain people from other departments and to compensate those people for their expertise.

THE CHAIR

So just to clarify, you're saying that you have the authority to require resources of the proponent in order to support those activities?

MR. MacNeil

That is correct. And that's been done in other approvals, as well, especially when it's -- the scope is so broad and it's a large project like this.

THE CHAIR

Okay. Any other questions for Environment & Labour? Maybe -- you mentioned that was on behalf of Environment. I think we'd probably ask for a similar undertaking from the Labour side.

MS. GAGNON

Chantal Gagnon, Ecology Action Centre. Don't worry, I do this every day. Regarding water, source water protection is usually the best number one way of ensuring clean drinkable water down at the tap, so I'm just wondering with what we heard at the first hearing - you weren't here - that the municipality has rezoned 3,000 hectares or so of land for heavy industrial and is looking at expansion, and with the proponent there would be a new wharf and all, which would open the area to future expansion. In the land that is expected to be developed into heavy industrial, I think there are two or three watersheds, I'm not 100 percent sure. So how or what is the government doing to work with the municipality on source water protection in the area or trying to protect, because there will be one watershed affected with this project, but with the expansion and the cumulative effects of



that, there would be two watersheds that would end up being surrounded or -- anyways, have a huge heavy industrial impact on it? So how or what is the government going to do or what does it work with for development water strategy on that?

MR. MacNeil

Okay. I'd like to take a shot at that question but we've got one of the best tetra-geologists in the province here so I'll get him up and he can explain this, Mr. John Drage.

MR. DRAGE

Hi, my name is John Drage, I'm a geologist with Nova Scotia Environment & Labour. I think to answer your question I can maybe break it into two parts because you spoke about source water protection, and then you spoke about watershed protection, and there are two different ways that gets looked at. In terms of the source water protection, there is a process in place now in Nova Scotia where the department is working with the municipalities to protect source water for municipal supplies. So that takes place where there is a municipal supply, where there is a source, say there's an aquifer that's being used as a municipal

water supply or a surface water, a lake or a river that's being used as a service water supply. So there is a process in place for those source waters to be protected, and I don't believe there are any municipal source waters in this area. So that's the source water side. On the other side is what about watersheds, what's being done to protect that. And so at this point, there's not a specific programme in place to -- like the source water protection, to protect all watersheds. That's something that we're currently looking at. But there are processes in place. For example, the process that we're going through now, the environmental impact assessment, where on a project-by-project basis we look at the possible impacts of each project, and then if there is anything that -- any conditions that need to be put into place to protect the watershed in general, they would be put into the environmental impact approval. So that would include ensuring that ground water is protected if there are any private water supplies nearby, and requirements to replace those water supplies if by chance they were affected.

MS. GAGNON

Thank you.

THE CHAIR

Okay. Thanks. Any other questions for Environment & Labour? No? Okay. Thank you very much. All right. We're well ahead of schedule so we have time for open forum. If anyone wishes to raise an issue, voice a concern, make a statement, or ask any further questions, I'd ask you please to come up. Last call, any further questions or comments? Okay. Well fine, thanks very much. We'll adjourn for now, then. We are here again starting at 6:30 this evening for a further session. Thanks very much.

--- Upon adjourning at 3:22 p.m.